

THE ESOTERIQ SOCIETY
CONVERSATIONS

SCOTT DOUGLAS JACOBSEN

FOREWORD BY
MASAAKI YAMAUCHI

In-Sight Publishing

The ESOTERIQ Society Conversations

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Scott Douglas Jacobsen

August 1, 2022

Foreword by Masaaki Yamauchi

The ESOTERIQ society was founded to create my own personal collection of extraordinary high IQ performers with one in one billion level theoretically on normal distribution and expand somewhat more open than the Giga Society by Paul Cooijmans.

The World Intelligence Network founder, Dr. Evangelos Katsioulis also founded the QIQ, GRIQ, CIVIQ, HELLIQ and OLYMPIQ societies (WIN five league), respectively. I was looking for the combination of the first six letters of an English word whose origin has Latin or Greek and IQ component as well as the league for the society name. Therefore, my societies, the ESOTERIQ and EVANGELIQ including the WIN five league also named as the WIN seven league.

I have no psychometrics knowledge and experience in my mind. Even though, I myself am the administrator. Hence, I appreciate several advisors, including Paul Cooijmans, Dr. Jason Betts, Dr. Evangelos Katsioulis, and Younghoon Kim for the admission policy owing to my ignorance.

Moreover, I have no idea about the current members' future potential ability of IQ score vs academic performance and social life functioning. No one knows who would become a great genius or criminal, but there is a strong certainty that almost all of them may end up just being obscure.

This is one of my purposes, what many people are misunderstanding about the relationship between IQ and cleverness. Additionally, high IQ people do not always imply holding morality, integrity, and emotional intelligence like Theodore Bundy (serial killer) or Theodore Kaczynski (Unabomber).

I would like all readers to understand that IQ is not human intelligence no matter how low or high the score, just statistical frequency on normal distribution in the whole population. There are lots of gifted, talented or genius people with very low IQ score, known as a savant syndrome. Aristotle said that all men by nature desire to know. Let me say that all men by nature can always have an absolute intelligence and existence.

Masaaki Yamauchi

July 2022

**IN-SIGHT: INDEPENDENT INTERVIEW-BASED
JOURNAL**

Administrator Conversation: Masaaki Yamauchi

Conversation with Masaaki Yamauchi on Japanese Background, Intelligence Tests, and Philosophy: Administrator, ESOTERIQ Society (1)

January 8, 2021

Abstract

Masaaki Yamauchi is the Administrator of ESOTERIQ Society. He discusses: growing up; an extended self; the family background; the experience with peers and schoolmates; some professional certifications; the purpose of intelligence tests; high intelligence; the geniuses of the past; the greatest geniuses in history; a genius from a profoundly intelligent person; profound intelligence necessary for genius; some work experiences and jobs; particular job path; the more important aspects of the idea of the gifted and geniuses; thoughts on the God concept or gods idea; science; some of the tests taken; the range of the scores; ethical philosophy; social philosophy; economic philosophy; political philosophy; metaphysics; worldview-encompassing philosophical; meaning in life; meaning; an afterlife; the mystery and transience of life; and love.

Scott Douglas Jacobsen: When you were growing up, what were some of the prominent family stories being told over time?

Masaaki Yamauchi: Not in Particular. I am ignorant of my old family background. My family was just a Japanese typical home and kept a family style. My father worked for a local government in a city hall and my mother was a housewife and Bento (Japanese lunch box) seller. I really loved Bento made by her. She passed away from a heavy disease in December 2017. If I am forced to say it, the person graduating from a college of the U.S.A. was only me, even though my grades were pretty poor as a child.

Jacobsen: Have these stories helped provide a sense of an extended self or a sense of the family legacy?

Yamauchi: I love my family, but I have never thought about my family legacy. Living and being are my family legacy, itself.

Jacobsen: What was the family background, e.g., geography, culture, language, and religion or lack thereof?

Yamauchi: My hometown is not a large city, just a countryside, which has kept only some 14,000 people as the population. 90% of the area is surrounded by rice and vegetable fields. I was there until graduating from high school. Almost typical Japanese people include my family, who belong to Buddhism in a superficial manner, but I personally have never held any religious dogma. Do you think that I have a lack of loyalty to a god?

I do not believe in a god because I know it. Honestly speaking, I myself am an extraordinarily spiritual person in spite of a lack of religious dogma. Spirituality is similar to religion, but not the same. It has no founder, no scripture, just believing myself no matter what happens in life.

Jacobsen: How was the experience with peers and schoolmates as a child and an adolescent?

Yamauchi: I pretty much enjoyed video games and comic books with my schoolmates. I really hated studying, especially Math and English. My academic grades were extremely low, almost the bottom rank of all students at the elementary and junior high school. Consequently, I had to go to the lowest grade high school in my hometown. When becoming a high school student, some inspiration and revelation came down into my mind, “Go to a college in the U.S.A, to study Math.” Hence, I began studying English very hard and read more than a few hundred books about math and physics in a library.

My parents were amazed at my change. However, I really loved reading many books. After high school, I chose the University of Central Oklahoma with a Math major and a Physics minor due to the cheap tuition. It is not well known, not a high ranking university, unlike the Ivy League, just a local college, but I pretty much enjoyed the campus life. Even now, I am appreciating lots of people I met there. At that time, I knew high IQ societies there too.

After getting a bachelor of mathematics from my college, I had a plan to go to a graduate school to get a master's degree in mathematical physics, but many unavoidable unexpected happenings fell down on my life and family. My hometown is Fukushima, the Great East Japan Earthquake happened on March 11th, 2011. My family and hometown had almost no damage, but I was so sad to know that many people passed away.

Jacobsen: What have been some professional certifications, qualifications, and trainings earned by you?

Yamauchi: No professional certifications and qualifications, except for a college degree and driver's license.

Jacobsen: What is the purpose of intelligence tests to you?

Yamauchi: No purpose, just a statistical frequency on a normal distribution. Whatever any score above 100 or below 100 on IQ tests, it is a necessary frequency on the distribution. Let me tell you one example.

If all current people on Earth, all 8 billion individuals, take an IQ test at the same time, only one examinee of them can automatically archive either as the highest IQ195 or the lowest IQ5, respectively, because the rarities are exactly equal to 1 in 8 billion. Should we judge IQ195 scorer is smarter than IQ5 scorer?

I don't think so.

If it does not happen to anybody subjectively, it always happens to somebody objectively in the world.

As the Esoteriq society administrator, I can profoundly guarantee that an intelligence value of IQ190 is absolutely equal to that of IQ10 because both of them occurs only 1 person in 1 billion on a symmetric normal distribution. It is nothing other than that.

Jacobsen: When was high intelligence discovered for you?

Yamauchi: Do you mean that I have high intelligence? I have never thought that I am a genius or gifted, so I do not claim I am intelligent or smart. I have never discovered my own high intelligence in all of my life yet. Just that I have continued inquiring about something interesting I like. I do not care; no matter who considers that I am an eccentric, an idiot, and a strange individual.

Jacobsen: When you think of the ways in which the geniuses of the past have either been mocked, vilified, and condemned if not killed, or praised, flattered, platformed, and revered, what seems like the reason for the extreme reactions to and treatment of geniuses? Many alive today seem camera shy – many, not all.

Yamauchi: To be frank with you, it has nothing to do with me.

What historical geniuses were misunderstood by many people is undoubtedly a fact. So what?

Do you think Thomas Edison promoted human happiness?

My answer is both yes and no, it is a fact that the electric light bulb invented by him made us live at night anytime.

However, how many people got sick with insomnia or depression owing to night work?

In terms of another view, Edison may be the most terrible serious killer in all history. All things have both advantages and disadvantages.

Consequently, the treatment of geniuses does not make sense to me, since no one knows who a genius, abnormal, killer and lunatic is.

Jacobsen: Who seem like the greatest geniuses in history to you?

Yamauchi: It must be too esoteric a question that I founded the Esoteriq society to seek the answer, so it all sounds Griq (Greek) to me!

Let me be clear, that this is a kind of joking phrase between Dr. Katsioulis and me.

Griq is a nickname of himself, so “It all sounds Griq to me” implies both “It all sounds Greek to me” as a similar pronunciation to “I scream Ice Cream!”, and includes Dr. Katsioulis himself as my greatest genius.

By the way, seriously speaking, there was not any greatest genius in my theory. I suspect that you expect some answers like historical mathematicians and scientists.

No matter what great academic performance was not achieved only by one person. For instance, Albert Einstein discovered the theory of relativity, so should we estimate he is the greatest genius in human history?

I am pretty skeptical about it. It is a fact that the theory itself was discovered almost only by himself. However, the process up to that point was created by incalculable mathematicians, physicists and all the people who ever lived on the Earth. Some one hundred billion people have ever lived on the earth at most, so far. We cannot lose even one person, no matter if any is a dictator. All people have an individual meaning to existence. So to speak, whoever is the greatest genius about something. No best player can play alone. No greatest genius can achieve alone, even if Nobel prize winners.

In my personal opinion, I was influenced by Alfred North Whitehead, his process philosophy, an organic cosmological system in a metaphysical concept.

Jacobsen: What differentiates a genius from a profoundly intelligent person?

Yamauchi: I do not regard IQ and great educational achievement as a genius or an intelligent person. An individual being able to seek and realize hope, happiness, and enjoyment anytime and anywhere no matter what happens in life is a profound genius.

Jacobsen: Is profound intelligence necessary for genius?

Yamauchi: Not necessary, but it may be important, sometimes, on a case by case basis.

Jacobsen: What have been some work experiences and jobs held by you?

Yamauchi: A math teacher in a tutoring school for several years.

Then, I have been working for several manufacturing industrial factories up to now.

Jacobsen: Why pursue this particular job path?

Yamauchi: Do you mean why I have continued the Esoteriq administrator? If so, there is no specific reason. A long time ago, I established a high IQ society for only Japanese people to spread high IQ societies in Japan, but unexpected trouble happened to me. I had no choice to abandon the continuation of the society. After a while, I had continued thinking about a high criteria IQ society like the Giga society by Paul Cooijmans. I turned several pages on a TOEFL text I used for studying abroad and discovered the word “Esoteric” on the page. Suddenly, an inspiration came down into my mind “ESOTERIQ” after QIQ, GRIQ, CIVIQ, HELLIQ and OLYMPIQ by Dr. Katsioulis.

Incidentally, EVANGELIQ also founded after it.

I call the 7 societies: the WIN seven league.

Jacobsen: What are some of the more important aspects of the idea of the gifted and geniuses? Those myths that pervade the cultures of the world. What are those myths? What truths dispel them?

Yamauchi: Generally speaking, in terms of psychometric definition, on the one hand, top 2% of people are called gifted or genius, on the other hand bottom 2% people are judged as an intellectual disability or mental retardation.

I have a different opinion about it.

If the top 2% of people are defined as a gifted person or a genius, the bottom 2% people also must be regarded as a gifted or genius because normal distribution is theoretically always a symmetry. Let me explain an easy statistical trick.

There are 1024 people in front of you.

All of them are separated into half as two groups (512 people×2).

Each half group would be playing the game of rock-paper-scissors.

The winners and losers would be separated into half as two groups again (256×2). If we repeat this again and again, a 10 times winner and 10 times loser would appear necessary.

Do the 10 times winner have more luck than the 10 times loser?

The answer is no because the probability of them is obviously the same as $2^{10}=1024$

The luckiness of the 10 times loser is absolutely equal to that of the 10 times winner. Both of them are just an apparent frequency on a binomial distribution.

The normal distribution can be used as an approximation to the binomial distribution. Check the relationship between them.

<http://mathcenter.oxford.emory.edu/site/math117/normalApproxToBinomial/>

<http://scipp.ucsc.edu/~haber/ph116C/NormalApprox.pdf>

Everybody is a genius, has infinite potential to be a great person.

There is no moron of all humans who has ever lived on this planet.

Jacobsen: Any thoughts on the God concept or gods idea and philosophy, theology, and religion?

Yamauchi: I am not a professional philosopher or theologian.

Additionally, I do not hold any religious dogma and belief as mentioned before. However, I know the existence of a god because all of us came from unconditional love, which is the beginning of our universe.

We are copy and child of a god, this is an afterlife knowledge mentioned below.

Jacobsen: How much does science play into the worldview for you?

Yamauchi: I have never thought such things. I really have no idea.

We cannot escape from the GAFAM (Google, Apple, Facebook, Amazon, Microsoft). I use them almost every day.

Jacobsen: What have been some of the tests taken and scores earned (with standard deviations) for you?

Yamauchi: No comment. It is a privacy question and I do not regard IQ score as human value and intelligence.

Jacobsen: What is the range of the scores for you? The scores earned on alternative intelligence tests tend to produce a wide smattering of data points rather than clusters, typically.

Yamauchi: It does not make sense. I ended taking and researching IQ tests more than 15 years ago and have no intention to archive higher score anymore.

Jacobsen: What ethical philosophy makes some sense, even the most workable sense to you?

Yamauchi: Sorry, I may not catch up with the meaning of ethical philosophy. Just I have no intention of committing a crime.

Jacobsen: What social philosophy makes some sense, even the most workable sense to you?

Yamauchi: Social sensitivity is the most important factor to develop a good human relationship in any community, group, company and organization even if high IQ societies.

Jacobsen: What economic philosophy makes some sense, even the most workable sense to you?

Yamauchi: Money is energy. Don't deposit out of fear for your future. Use everything to get a chance and change your future. Time is not money because time does not exist. Everything is an eternal now.

Jacobsen: What political philosophy makes some sense, even the most workable sense to you?

Yamauchi: I am uninterested in politics. I do not care no matter who become a president or prime minister. It is an imaginary story in another world to me.

Jacobsen: What metaphysics makes some sense to you, even the most workable sense to you?

Yamauchi: If you define metaphysics as a kind of spiritualism, all humans were born from the beginning of universe, 13.8 billion years ago.

Everything is a miracle, everything is a neutral, everything is for your future. Time will come from future to past, not past to future.

All causes occur by a reason from future, not a past event.

Jacobsen: What worldview-encompassing philosophical system makes some sense, even the most workable sense to you?

Yamauchi: You are the only one perfect existence of 8 billion people in the world. A unique sapiens in 100 billion of all humans who have ever lived on the Earth. Everybody is one in 8 billion, one in 100 billion on human history.

Jacobsen: What provides meaning in life for you?

Yamauchi: Meaning in life is to respond to an event you encounter.

An English word, "Responsibility" comes from the combination of "Response" and "Ability."

Every event is a neutral, so you have a responsibility to respond to it with your ability. This is my meaning in life.

Jacobsen: Is meaning externally derived, internally generated, both, or something else?

Yamauchi: According to "Tractatus Logico-Philosophicus" by Ludwig Wittgenstein, "The limits of my language mean the limits of my world."

This question is beyond my language limit.

As following the last proposition,

I cannot speak, therefore I must be silent.

Jacobsen: Do you believe in an afterlife? If so, why, and what form? If not, why not?

Yamauchi: We will never die since "Death is not an event in life, we do not experience death" on "Tractatus Logico-Philosophicus" by Ludwig Wittgenstein.

Anyway, talking seriously, I do not believe in an afterlife because I know it.

"Believe" still remains doubtfulness, but there is absolutely certainness on "know." We do not believe in the Sun because we know it!

I do not have any religious dogma or belief, but death is not actually the end of our life. This is not a metaphysical word trick. Death is just the beginning of the next life. Afterlife, past-life, and reincarnation undoubtedly exist. We can meet some important people again when we come back to this world. In terms of quantum theory, human consciousness does not come from our brain

itself. Our consciousness temporarily falls within a brain, then it will move into the non-physical world when we die, then the same consciousness will be pregnant a different body someday.

Where is our consciousness while we are sleeping?

It moves to a non-physical world, which is called an afterlife world, and does not keep staying in your brain itself.

The sleeping dream is regarded as a re-synthesis of a daily memory by a hippocampus in terms of neuroscience, but the nearest world to an afterlife.

When we wake up, our consciousness comes back to your brain immediately, so we die in every day for 8 hours and come back to the same physical body to live during another 16 hours. We have yesterday's memory because our hippocampus always keeps a bridging between past and future memory.

In my opinion, past-life-memory exists in the basal ganglia and cerebellum, which are controlled procedure memory.

Let me introduce strongly recommended books and webs about it

"The Emperor's New Mind" by Roger Penrose

"I am Not a Brain" by Markus Gabriel

"Proof of Heaven" by Eben Alexander

"Ultimate Journey" by Robert Monroe

"Afterlife knowledge Guidebook" by Bruce Moen

Afterlife TV with Bob Olson: <https://www.afterlifetv.com/>

The Monroe Institute: <https://www.monroeinstitute.org/>

Jacobsen: What do you make of the mystery and transience of life?

Yamauchi: As mentioned above, everybody has each own purpose of existence, no matter when and how we die. Every metempsychosis exists at the same time in different countries and eras in terms of quantum time.

My soul copies (not biological clone) are concurrently living both past and future on this planet.

An English word, "Remember" separated into two words "Re" and "member". You know why?

When you meet somebody somewhere, you remember past-life relationship with the person.

You remember a memory belong to the same group together a long time ago in a past-life.

"Re" and "member" stand for "again" and "meet together" respectively, so "Remember" implies "we have met already before a long time ago"; although, you meet the person for first time in all of this life.

If I die in this life, I will meet some important people again in my next life with a different body to "remember this life".

Jacobsen: What is love to you?

Yamauchi: The beginning and end of all things includes myself, yourself and everything itself.

Conversation with Masaaki Yamauchi on Esoteric, ESOTERIQ Society, JAPANIQ Society, OlympIQ Society, and Standards of Admission: Administrator, ESOTERIQ Society (2)

February 15, 2021

Abstract

Masaaki Yamauchi is the Administrator of ESOTERIQ Society. He discusses: other meanings or hidden properties of the title; the ESOTERIQ Society connected with the World Intelligence Network; the World Intelligence Network; ESOTERIQ membership; the Giga Society of Paul Coijmans; the OLYMPIQ Society (member or subscriber) and the World Genius Directory (member) as a requirement for membership; WAIS-IV and Stanford-Binet-V rejected as membership qualifiers; membership free in ESOTERIQ Society; current members of the ESOTERIQ Society; the oldest member and the youngest member; the norms to the tests; and verifying the scores.

Scott Douglas Jacobsen: You created the ESOTERIQ Society/Esoteriq/ESOTERIQ with “esoteric” in the implied meaning of the title with “ESOTER” containing the number of sigmas related to the number of letters above the mean for the qualification of membership in the society, which means approximately “1/1,000,000,000” people or 1 out of 1,009,976,678. Are there any other meanings or hidden properties of the title unstated so far?

Masaaki Yamauchi: None. Origin of almost English words comes from Latin or Greek. Esoteric has its roots in a Greek word “ἑσωτερικός”.

Jacobsen: How has the ESOTERIQ Society connected with the World Intelligence Network founded by Dr. Evangelos Katsioulis on January 1, 2001, as a “regeneration of the High IQ Community applied mainly on an internet basis with more interactive, meaningful and productive functions”?

Yamauchi: To tell the truth, I founded the JAPANIQ society for only Japanese high IQ people as the 22nd WIN society, but one unexpected trouble occurred between the last member and me. Therefore, I had to make the society be defunct.

That was a private issue, so no further information would be opened. After that, the ESOTERIQ was created instead of the society.

Jacobsen: Any thoughts on the World Intelligence Network?

Yamauchi: Greatest project from bottom of my heart.

This is one of my reasons to live in this life.

I will never leave the WIN by the end of my life.

Jacobsen: ESOTERIQ membership is separated into Giga Society members and non-Giga Society members. Why?

Yamauchi: The Giga society has a reliable strict policy as a 6SD IQ society, so I automatically accept a member from the society..

Jacobsen: Any thoughts on the Giga Society of Paul Cooijmans?

Yamauchi: I really look up to him as a test creator and society administrator. My Esoteriq purpose should be to build a high authority next to the Giga society.

Jacobsen: Why focus on the OLYMPIQ Society (member or subscriber) and the World Genius Directory (member) as a requirement for membership in the ESOTERIQ Society, where some can be considered outside of these on a case by case basis?

Yamauchi: Standardized level, reliability and validity are highly variant at each test. I have no idea that which tests should I accept as the membership because I am ignorant of psychometrics and tests creating process. It may sometimes cause losing the authority of the society. Hence, I almost depend on Paul, Dr. Katsioulis and Dr. Jason respectively to reduce my misjudgement risk. I can approve a candidate after each administrator accepts the one to each society. This is simple.

I can avoid the membership trouble. “on a case by case basis” would be applied to a non- belong candidate to the Giga, Olympiq and WGD due to a specific personal reason, but holds a credible score.

Jacobsen: Why are WAIS-IV and Stanford-Binet-V rejected as membership qualifiers for ESOTERIQ Society? Was this an issue in the past with extrapolated norms submissions from actual members or prospective members?

Yamauchi: Sorry, it was occurred by my own ignorance.

I have no purpose to be opened further information.

Such tests like WAIS and SB can indicate a positive correlation with high range IQ tests, but have different concepts, not suitable to sustain my society authority in my decision.

Exceptionally, I admit SB to only the 6th member, Dr. Christopher Harding who can be kept a membership of the Esoteriq society because he was officially recorded as “the smartest man in the world” on the Guinness World Record a long time ago.

Jacobsen: Why is membership free in ESOTERIQ Society?

Yamauchi: The ESOTERIQ is just my own collection, not for my monetary business.

Jacobsen: The current members of the ESOTERIQ Society includes the following 15 people: Evangelos Katsioulis, **Kenneth Ferrell**, Mislav Predavec, **Richard Rosner**, **Dany Provost**, **Christopher Harding**, Junxie Huang, Jose Molinero, Wen Chin Sui, Marios Prodromou, **Dong Khac Cuong**, **Matthew Scillitani**, **Thansie Yu**, **Heinrich Siemens**, and Yukun Wang. **The web page on the members of ESOTERIQ Society list the following members in the society:**

Since 01/01/2001 ESOTERIQ society accepted 15 members : The qualified IQ score (SD16), the test name, the test author and the taken year must be reported next to each member`s name as an undoubted evidence for the membership credential.

Evangelos Katsioulis (Greece) : 197 (raw 100/100)on QMC#3 by Paul Cooijmans in 2003

Kenneth Ferrell (U.S.A) : 196 (raw 32/32)on HIEROGLYPHICA by Mislav Predavec in 2010

Mislav Predavec (Croatia) : 198 (raw 19/24) on LS24 by Robert Lato in 2010

Richard Rosner (U.S.A) : 198 (raw 13/16) on MATHEMA by Dr. Jason Betts in 2012

Dany Provost (Canada) : 196 (raw 46/46) on PIGS-1° by Paul Cooijmans in 2004

Christopher Harding (Australia) : 197 on SBIS-Oxford-Analysis-New-Zealand in 1976

Junxie Huang (China) : 196 (raw 37/40) on CHALLENGER IQ TEST by Zoran Bijac in 2019

Jose Molinero (Spain) : 196 (raw 15/15) on FREE FALL PART-II by Ivan Ivec in 2017

Wen Chin Sui (China) : 196 (raw 36/36) on NUMERUS CLASSIC by Ivan Ivec in 2017

Marios Prodromou (Cyprus) : 196 (raw 30/30) on MACH by Nickolas Soulios in 2018

Dong Khac Cuong (Vietnam) : 196 (raw 29/30) on NUMERUS by Ivan Ivec in 2019

Matthew Scillitani (U.S.A) : 196 (raw 80/80) on PM-GROSSWORDS by Paul Cooijmans in 2019

Thansie Yu (China) : 196 (raw 48/48) on N-WORLD by Mahir Wu in 2020

Heinrich Siemens (Germany) : 201 (raw 28/40) on CIT-5 by Paul Cooijmans in 2020

Yukun Wang (China) : 201 (raw 0.9/1.0) on RIDDLES by Konstantinos Ntalachanis in 2020

Any comments on each particular member of the society, whether the individual, the age, the test, the test score, the test creator, professional accomplishments, and so on?

Yamauchi: None. I do not care each member's background.

Just I approve of anybody who archived the qualified score.

Jacobsen: Who is the oldest member? Who is the youngest member?

Yamauchi: I do not care about each age.

Jacobsen: Does the ESOTERIQ Society membership listing change the scores with the changes in the norms to the tests?

Yamauchi: Any membership would be not cancelled after an updated norm report becomes lower than before. However, if an updated norm report becomes higher than before, the new norms would be valid for the membership. For example, a member holding IQ190 on the 1st norm and IQ185 on the 2nd norm at the same raw score can keep the Esoteriq membership. No matter what updated norm report becomes lower than before, it does not affect the continuation of the membership. On the contrary, an individual holding IQ185 on the 1st norm and IQ190 on the 2nd norm or the future norm at the same raw score can join my society.

This rule must be a common principle in almost all high IQ societies as far as I know.

Jacobsen: How do you verify the scores?

Yamauchi: By a certificate candidates sent me.

Conversation with Masaaki Yamauchi on Thoughts About I.Q., Time, Consciousness, and Metaphysics: Administrator, ESOTERIQ Society (3)

May 22, 2022

Abstract

Masaaki Yamauchi is the Administrator of ESOTERIQ Society. He discusses: mother; the town of 14,000 people; the spirit; acquisition of a graduate degree; the high-IQ communities now; the concept of IQ increasing or decreasing in cultural importance; high-IQ societies self-destruct; life; math; manufacturing industrial jobs; the WIN seven league; no religious dogma; social sensitivity; metaphysics; a miracle; time; and consciousness.

Scott Douglas Jacobsen: What was the “heavy disease” killing your mother?

Masaaki Yamauchi: Sorry, that is a confidential information between my family and relations. My mother’s soul will be reborn at next body in the future. Then, I will meet her again someday.

Jacobsen: Did the town of 14,000 people on the countryside make life simpler for you, growing up?

Yamauchi: Yes, It was a simple life. Just I usually read many books in the library at the high school student. I had never felt that life was bored.

Jacobsen: What is the spirit to you?

Yamauchi: There are plenty of meaning about it, but it mainly implies non-physical existence in my definition.

Jacobsen: How are your studies progressing towards acquisition of a graduate degree?

Yamauchi: I wish I would go to a graduate school of Mathematical physics (almost same as theoretical physics) after just graduating from my college with Math major and Physics minor. I hope acquisition of a Master’s degree in social science or humanities, not natural science any more at the present.

Jacobsen: What do you think is needed from the high-IQ communities now?

Yamauchi: No needs. Just I keep my societies (ESOTERIQ and EVANGELIQ) by the end of my life.

Jacobsen: Is the concept of IQ increasing or decreasing in cultural importance? In that, are people taking it more or less seriously, and why?

Yamauchi: In 1996, one famous book, the Bell Curve by Richard J. Herrnstein and Charles Murry, was disputed in U.S.A. It does not make sense about the controversy because IQ is just a psychometric tool psychologically and statistical distribution mathematically. IQ is not factor of human intelligence. All current 8 billion people belong somewhere between 5 and 195 on normal distribution at any time. I am strongly certain that 195 scorer does not imply smarter than 5 scorer.

For example, there are two persons who won 33 times and lost 33 times in Rock-Paper-Scissors-world population championship respectively.

Is really the 33 times winner much luckier than the 33 times loser?

The answer is no because luckiness of both of them is absolutely equal to
 $1 \text{ in } 2^{33} = 1 \text{ in } 8.5 \text{ billions.}$

The frequency is just a statistical necessary on binomial distribution.

Let me say again.

“Supposing it never happens to anybody subjectively, it always happens somebody objectively in the world”

I have mentioned before about relationship between normal distribution and binomial distribution on the first interview.

195 scorer (highest IQ person) and 5 scorer (lowest IQ person) are to what 33 times winner (luckiest person) and 33 times loser (unluckiest person) statistically.

Somebody says “Albert Einstein’s IQ was 160, 180 or 200 over!”

So what?

All historical geniuses were recorded by great academic performance, not IQ score itself.

All people can have each own absolute luckiness and intelligence as in 1 in 80 billions.

Jacobsen: Why do most high-IQ societies self-destruct?

Yamauchi: Each founder has each own reason to sustain a society.

Jacobsen: What do you hope to get out of life?

Yamauchi: Living itself. I will leave from this planet and go back to my mother star Sirius after end of my reincarnation on the Earth.

Jacobsen: What kinds of math have you tutored?

Yamauchi: Elementary algebra to high school calculus.

Jacobsen: What are the manufacturing industrial jobs for you?

Yamauchi: Several kinds. Haulage, auto parts, pharmaceuticals, electronic components and semiconductor.

Jacobsen: What most impresses you about the WIN seven league?

Yamauchi: The EVANGELIQ society I founded for Dr. Evangelos Katsioulis’ 37th birthday gift was admitted to the 37th society. It made me so happy and it was such an honor.

Jacobsen: Even though, you have no religious dogma. What religious dogma seems reasonable to you?

Yamauchi: Almost all religion has a founder and scripture, but my dogma does not keep neither. My reasonable belief follows to my own inspiration, loving myself and enjoying life everyday.

Jacobsen: What is “social sensitivity” to you?

Yamauchi: Social sensitivity is one of emotional intelligence, an ability to detect the emotions of others. There is no correlation between succeeding at a project and the team’s average IQ.

Jacobsen: Why define metaphysics as a kind of spiritualism?

Yamauchi: Metaphysics is separated into two words “Meta (over)” and “Physics (matter)” which imply inquiring non-physical. Spirit is always non-physical life, so metaphysics is a kind of spiritualism to me.

Jacobsen: How would define everything as a miracle?

Yamauchi: I really love Albert Einstein’s quote which is “There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle.”

One second, one minutes, one hour and one day are filled with a miracle at the given mechanical moment.

The minimum unit of quantum time is made from plank time (5.391×10^{-44} s).

Therefore, every moment is momentarily created by the infinite series from the time.

Jacobsen: In our first interview, you stated, “Time will come from future to past, not past to future. All causes occur by a reason from future, not a past event.” Can you expand on this reasoning, please?

Yamauchi: Every event in our life is just a neutral fact even if war, terrorism murder, massacre and pandemic like corona virus on the Earth. A word “Responsibility” comes from combination of “Response” and “Ability”. We have nothing to fear because we can have responsibility to response all events by our ability. Our future will be created by our responsibility, not events themselves. We always hold two choices “Reaction” and “Response” which define negative judgement and positive judgement respectively when one event happens to our life.

For instance, getting a new job after dismissing from a company means what getting a new job is cause, not effect. Dismissing from a company is effect, not a cause.

Jacobsen: How does our consciousness fall into the brain? In this way, how are you technically defining consciousness?

Yamauchi: I suppose brain is to consciousness what matter is to mind. Bertrand Russell said “What is matter? Never mind. What is mind? Doesn’t matter” This is the best joke I like.

By the way, let me ask seriously. Does a line really exist?

According to the Euclid’s elements, “A line is length without breadth”

If so, nobody can see it!

We cannot prove the existence of line in this way.

Therefore, a line exists imaginary, but does not exist actually.

As well as a line, consciousness exists imaginary, but does not exist actually since brain is almost everything as far as our physical body sustains life activity.

However, consciousness separate from brain in a moment when we die (after brain disappear) then move to non-physical world (imaginary world).

I can tell you one pragmatic example in neuroscience field.

There was one famous man named H.M (a man without hippocampus).

<https://www.npr.org/2007/02/24/7584970/h-m-s-brain-and-the-history-of-memory>

The person had no concept about past and future because he was not able to keep any episode memory.

His consciousness was always on now and today when he woke up every morning, no yesterday's memory, no tomorrow's plan.

He was able to know how to ride a bicycle and use some tools even though he had no hippocampus.

That is, past training skill was recorded in different part whose name was basal ganglia and cerebellum as procedural memory.

Same as H.M story, almost all people can never keep past life memory since past life episode memory always disappears before hippocampus cell creates while we are growing up in mother's uterus, but past life skill can succeed to next body's basal ganglia and cerebellum as procedural memory.

Brain is to consciousness what egg-yolk is to egg-white in my theory. Brain itself (the Yolk) as a matter disappears, but only consciousness (the white) as a non-physical matter inherits to next difference body (Reincarnation) when we die.

It sounds impossible to separate the Yolk and white without cracking the cell, but we can temporally separate brain and consciousness by some specific religious ritual like meditation, long time fasting and psychoactive drug (LSD or cannabis)

Let me introduce strongly recommend two safety tools I have experienced before.

Isolation tank by John C. Lilly (origin of the movie, Altered States)

<https://www.samadhitank.com/>

Hemi-Sync by the Monroe Institute (founded by Robert Monroe)

<https://www.monroeinstitute.org/>

Furthermore, the beginning of our consciousness is introduced in Voyage to curiosity's further by Bruce Moen.

<https://www.bookdepository.com/Voyage-Curiositys-Father-Bruce-Moen/9781571742032>

In a nutshell, we all human came to the Earth to seek unconditional love energy, then we will leave from this planet to each home star like Sirius, Pleiades, Vega, Arcturus and Orion after we are sufficiently filled with it.

ESOTERIQ ID-01: Evangelos Katsioulis

Dr. Evangelos Katsioulis, MD, MA, MSc, PhD: Giga Society, Member; Consultant Psychiatrist, Psychotherapist, and CEO & Founder, Psycall.com; World Intelligence Network, Founder & CEO; IQ, GRIQ, CIVIQ, HELLIQ, OLYMPIQ, IQID, GREEK IQ Societies, and Anadeixi, Founder; Scientific Associate, School of Medicine, Medical Biology, Aristotle University of Thessaloniki

January 1, 2015

Abstract

Interview with Dr. Evangelos Katsioulis, MD, MA, MSc, PhD. In the following, he discusses: childhood through adolescence into young adulthood with extraordinary giftedness, some activities and memories from youth, and some distinctions in physics and medicine; highest national and international intelligence scores, first place in the *Physics National Final Exams* (Greece, 1993), *Cerebrals NVCP-R International Contest* (2003), and the *Cerebrals international contest* (2009), and examples of philanthropy through creation of high-IQ societies of varied rarity for entrance (first through fifth standard deviations); proposal for alteration to the educational system; identity crisis as the main global problem with discussion; building and running a society in the design of Plato; moral, intellectual, emotional, and spiritual development; the merger of machines and biology; the ultimate relationship between mind and reality; *Genius of the Year Award – Europe* in 2013 with reflection on desire for improving the life quality of others; and clarification on the term “miracle” and thoughts about the maximization of every moment in life.

Scott Douglas Jacobsen: How did you find developing from childhood through adolescence into young adulthood with extraordinary giftedness? Did you know from an early age? What events provided others, and you, awareness of your high-level of ability?

Dr. Evangelos Katsioulis: Thank you for your question. Well, I didn't have any forehead mark indicating that I have any special abilities, so my childhood was mainly full of activities that I enjoyed, such as reading literature, solving math, logical problems and puzzles, getting involved in discussions with adults and having rather many questions. I can recall an instance that I was a little boy and I made a reasonable for me at that point assumption that given that the white sheep produce white milk, the black ones should produce cocoa milk. I should emphasize that I enjoyed more spending my time on my own instead of socializing, which lasted till my adolescence. Teachers' feedback was positive and promising at all stages of my education. At this point, I should mention that I am very grateful to my parents, both teachers of the Greek language, who provided me a variety of mental stimuli and a proper hosting setting for my interests. During my adolescence, I had a distinction in the national Math exams in 1990 and in the national Physics Final exams in 1993 among some thousands of participants. I was successful

to enter the School of Medicine on my first participation in the entrance exams in 1993 and I was one of only six successful candidates who sat for the exams for the first time.

Jacobsen: You scored some of the highest intelligence test scores on record, nationally and internationally. In many cases, you scored the highest. For some of your scores on these tests, I recommend readers to your website: katsioulis.com.

Katsioulis: You competed in the *Physics National Final Exams* (Greece, 1993), *Cerebrals NVCP-R international contest* (2003), and the *Cerebrals international contest* (2009). You earned the best performance in all three. In light of this, when did you find your first sense of community among fellow ultra-high ability individuals?

Thank you for the impressive introduction to your readers. My ranking on the Physics National Final Exams is mainly the result of hard work and personal interest in Physics. Having scored quite well in some IQ tests and contests, I joined many High IQ Societies since 2001. I noticed that there were some difficulties in their proper functioning minimizing interactivity and subsidizing creativity. Therefore, I took the initiative in 2001 to form a pioneer organization focused on promoting communication and enhancing productivity for the individuals with high cognitive abilities. This organization is the World Intelligence Network, (<http://IQsociety.org>), standing as an international collective entity dedicated to foster and support High IQ Societies. Currently, 48 High IQ Societies are affiliated with WIN. Furthermore, I formed 5 core High IQ Societies covering cognitive performances from the 1st to the 5th standard deviations above the mean (IQ 115 to IQ 175, sd 15), (QIQ, <http://Q.IQsociety.org>), (GRIQ, <http://GR.IQsociety.org>), (CIVIQ, <http://CIV.IQsociety.org>), (HELLIQ, <http://HELL.IQsociety.org>), (OLYMPIQ, <http://OLYMP.IQsociety.org>), one High IQ Society only for children and adolescents (IQID, <http://Child.IQsociety.org>) and one only for the Greek people (<http://IQsociety.gr>). Last but not least, I started a Greek NGO about abilities, giftedness and high intelligence named Anadeixi (<http://aaaa.gr>).

Jacobsen: If you could, how would you change the educational systems of the world? In particular, how would you develop an educational system to provide for the needs of the gifted population?

Katsioulis: The development of a more personal, more accurate and proper educational system is one of the target goals of Anadeixi. I strongly believe that not even 2 different persons can have the exact same profiles, characteristics, needs, personalities, interests, abilities, backgrounds and goals. Imagine the diversity and variety of the students' profiles if you expand this hypothesis including all the students of any educational system. Any person is different from any other and should be treated as such. It is rather an unfair, conforming generalization all of the students to participate in the exact same educational program. There should be an introductory level of the basic sciences offered to anyone and on top of this an additional specialized education program based on the personal needs and potencies of any of the participants. Anyone should know how to read and write, to make simple math calculations and to have some basic awareness of history, geography and the rest main fields of knowledge. However, some of the students have specific preferences and interests and the educational system should take these into consideration and respond accordingly. Regarding the structure of such an educational system, there could be a 2-dimensional. The horizontal axis may include all the special fields of science, knowledge and interests and the vertical axis may demonstrate the various levels of performance and awareness. Thus, any participant can be allocated to the proper horizontal and vertical places

based only on his interests, preferences, goals and current expertise and awareness. In such an educational system structure, there is no place for any age or other restrictions or limitations.

Jacobsen: What global problems do you consider most important at the moment? How would you solve them?

Katsioulis: Identity crisis is the main global problem. People lost their identity, their orientation, their life quality standards. They don't care about who they are, they develop personalities based on the mainstream trends, they play roles and they waste their lives in their attempts to adjust to what some few others expect from them and their lives. People have neither time nor any intention to realize what life is about. They are born and live to become consistent and excellent workers, minor pieces of a giant puzzle for some few strong people's entertainment purposes and benefits. Therefore, they don't care about the quality of their lives, about other lives, about relationships and the society in general, about our children's future. It is indeed a pity, however it is a fact. Education could be helpful towards self-realization, awareness, knowledge, mental maturity, overcoming any external restrictions and limitations. As I usually say to my psychotherapy clients, the solution to any problem is to make a stop and one step back.

Jacobsen: Generally, many interacting systems operate in societies: political, economic, religious, corporate, educational, and so on. If you could build and run a society, how would you do it?

Katsioulis: I would say no more than what a great ancestor said 25 centuries ago. Plato suggested an ideal society based on the special abilities of the citizens. The most capable ones should be leading the society functions, the strongest ones should help with their physical powers, a meritocracy should be in place. We should all contribute to the society well-functioning, if we intend to live in the society and benefit out of it. The definition of one's prosperity should be defined only in the context of the society prosperity. If we act against our nest, how should this nest be beneficial, protective and supportive for us. We often see people who have no other than marketing skills or powerful backgrounds to guide societies, decide about millions of people, control people's future, when many capable and talented others live in the shadow. The most important element in any society is the citizen and people should realize their power. There is no society without citizens, there are no rules without people to follow them. People can claim their right to live their ideal society.

Jacobsen: If you do consider a general moral, intellectual, spiritual, and emotional progression or development, how do you view development from the basic to most advanced levels at the individual and collective level?

Katsioulis: [This is covered above].

Jacobsen: Do you think biology and machines will merge? If so, how might this happen? Furthermore, how far would integration occur?

Katsioulis: We do control machines (for now), however we cannot control or overcome biological rules. Machines could substitute some missing, mistaken or dysfunctional biological structures, however we are in no position to support artificial life at least for now. Having in mind the science progress and knowledge advancement within the last century, we may soon manage to understand much more about life and even copy biology principles creating a kind of life. There are no limits in this integration. From your question, I could assume that we both like science fiction movies.

Jacobsen: What is the ultimate relationship between mind and reality?

Katsioulis: Mind is an advanced personal processor, responsible for the perception, reaction and adjustment in reality. We need mind to live our reality. I suppose we all know what is the condition of a body with a non-functioning mind. Reality is an objective and independent set of conditions, events, happenings, incidents, people, principles, facts. Our mind personalizes this objective information to a subjective representation in us. Mind function is influenced by factors, such as perceptual ability, reasoning, previous knowledge and experiences, psychological status and mental state. For instance, we have all been present in an event and our understanding of what happened may significantly defer from what anyone else present states. So, we need mind to live our reality and we need reality to use our mind.

Jacobsen: You earned the *Genius of the Year Award – Europe* in 2013 from PSIQ. In your one-page statement on winning the award, you say, “I believe in the power of human mind and my works contribute to the facilitation of mind expressions, promotion of creativity and enhancement of productivity for a better life quality for everyone. Maximizing outcomes based on the appreciation and utilization of people’s potentials for the benefits of any individual and humanity in general.” What motivates this passion for improving the lot of others?

Katsioulis: Life is a continuous claim of happiness and satisfaction. There are plenty of distractions and attractions in life which can mislead and redirect people causing disorientation, targeting fake goals and resulting to low life quality. I am passionate with people and communication and that is the main reason I chose to be a Psychotherapist, Psychiatrist and a Founder of some communities and networks. I believe in self-awareness, self-appreciation, self-confidence and self-determination. Offering people an opportunity to look into themselves and grab the chance to evaluate their lives, attitudes and interests, is a challenge for me. I have undertaken this procedure myself and I offer the exact same to anyone interested. I support people and I believe in their abilities, talents and specialties. Psychologically speaking, I may provide what I would appreciate to have been provided.

Jacobsen: As a final note to your award statement, you state, “Humans are biological beings, life is a mystery, creation is still unknown. We live a miracle and we can only maximize this miracle’s impact in every single moment of our existence.” What do you mean by “miracle”? Can you elaborate on the maximization of every moment of our existence?

Katsioulis: Allow me to clearly mention that I do not wish to support any specific religion with my statement. I have the feeling that the advanced and complicated structure and function of life, considering even only a single cell, is itself a miracle. I am using the word ‘miracle’ since mathematicians have proved that it is rather impossible all cell components to accidentally find themselves in the proper position and start functioning as a cell within the total duration of universe existence. So the time elapsed since the creation of universe supports the non-accidental, thus miraculous nature of life. The specific rationale for this miracle, a specific power, God, destiny, even the nature itself, has been a fascinating topic for many other specialists throughout all human history.

The maximization of our life moments is a quality term, used to define appreciation of our time, life satisfaction and happiness. Since we know nothing about the reasons of our existence, we may solely take advantage of the fact that we are alive and experience the most out of it. In this

context, we need to define what makes us excited and content and we should target and claim satisfaction and happiness.

ESOTERIQ ID-04: Rick Rosner

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part One)

October 8, 2014

Abstract

Part one of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: geography, culture, and linguistic background, and attenuated Jewish cultural influence during upbringing; *Noesis* issue 57 article entitled *When Good IQs Happen to Bad People*, and early signs of being a child prodigy; experiences in grade school, junior high, high school, and college; long history of forging identities beginning in entering high school another time, and many more, motivations for the behavior, outcomes for him, and tease for upcoming book entitled *Dumbass Genius*; ideas on cosmology and physics beginning at age 10, coming to a realization at age 21, *Noesis* 58 comments on the equivalence, and subsequent development of the equivalence to the present day; discussion on a mathematical model to represent the equivalence and a layman analogy for this equivalence; coined phrase of “lazy voodoo physics,” definition of it, and relation of this to considerations about 20th and 21st century cosmology and physics; entrance into the ultra-high IQ community, the Mega Society, forging another identity, pseudonym of Richard Sterman, *Noesis*, and eventual amends for forgery; three trends in *Noesis* of high-level material across arts and sciences, mix of scatological material (circa 1990-96), and his time as an editor from 1990-1996, earning position of editor, and thoughts on fulfilling the purpose of the journal’s constitution; *My Problem With Black People* (1992), argument at the time for equivalent intelligence of the races, differing views of other Mega Society members, and current stance on the issue; current membership in societies and personal use through membership; Intelligence Quotient (IQ) pervading American culture, Raven’s Progressive Matrices (RPM) and the Wechsler Adult Intelligence Scale (WAIS), some independent researchers’ work and test constructors’ productions for those achieving maximum or near-maximum scores on mainstream tests, and this setting the groundwork for his obsession of IQ tests; *Titan Test* perfect score, and range, mean, and median for best high-range IQ test scores; criticism of some intelligence tests and solution through non-verbal/’culture-fair’ tests, and recommendations for identifying giftedness; and interest in health from a young age and the reason for it.

Scott Douglas Jacobsen: In terms of geography, culture, and language, where does your family background reside? How do you find this influencing your development?

Rick Rosner: I grew up in Boulder, Colorado, with my mom, stepdad and brother, and spent a month each summer with my dad and stepmom and their kids in Albuquerque, New Mexico. My ancestors came from Eastern Europe and the Baltics by way of Cincinnati and Shreveport. I’m Jewish, but out west, Jewish cultural influence is somewhat attenuated.

Jacobsen: In *Noesis* issue 57’s article *When Good IQs Happen to Bad People*, you describe some of your experience as a kid. Could you elaborate on some of the history before entering grade school?

I showed some signs of being a child prodigy – by the age of about 18 months, I’d learned the alphabet, and by age 3 $\frac{3}{4}$, I’d taught myself to read at a near-adult level, which was unusual for the era. I was good with puzzles and math – but this wasn’t encouraged. My parents thought I’d do better growing up as a normal kid, which did not go smoothly.

Some non-prodigy stuff – the theme music to *Perry Mason* scared me – I’d have to go hide behind the couch. My first crush was on Patty Duke on *The Patty Duke Show*, who I somehow conflated with my dad’s sister, Aunt Janice, whom I saw during summer visitation with my dad in Los Angeles. My first memory is of the Raggedy Ann & Andy curtains and bedspread in my room. We had a very nice cocker spaniel named Tinkerbelle, who died when I was four. (This is before cockers became overbred and high-strung.)

I was terrified of swimming, which was part of my generally being a wuss – had to be peeled off the side of the pool by the swim teacher.

Jacobsen: What about your time in grade school, junior high, high school, and college? In particular, what do you consider pivotal moments in each of these cross-sections of latter portions of your early life?

Rosner: I grew up nerdy and interested in science, deciding at a young age to make it my job to figure out the universe. At age six, I was left with a scary babysitter, which led me to start spinning clockwise, chanting to God, and to be sent to my first shrink.

I was uncoordinated. Each year, I’d enter the 50-yard-dash on track & field day, and each year, would come in last. (Maybe the other not-so-fast kids knew not to enter the race and avoid the embarrassment.) Even as a kid, I had gross caveman feet with weirdly long second toes. I used to take off my shoe to make girls scream and run away – I liked the attention.

In the 1970s, there was no such thing as nerd chic. If you were nerdy, you were probably lonely. But, like many misguided nerds, I thought my intelligence and niceness would inspire a girl to look past my nerdiness. I spent the second semester of ninth grade building a Three-Dimensional Gaussian Distribution Generator to demonstrate to my honors math class. The machine dropped a thousand BBs through a pyramidal tower of overlapping half-inch grids into a 24-by-12 array of columns. It was a supercharged Plinko machine with an added spatial dimension, forming a half-bell of BBs, thanks to the laws of probability. During its construction, I thought, “A girl will see this elegant experimental apparatus, think I’m brilliant, and become my girlfriend.” I completed the BB Machine in time to demonstrate it to the class on the last day of school. No one cared. Of course they didn’t – it was the last day of junior high, and a dweeb was pouring BBs into a plastic pyramid.

Realizing that my nerdiness was standing in the way of ever having a girlfriend, I began changing myself – lifting weights and wearing contact lenses.

Towards the end of high school, I saw my IQ test scores, which maxed out at about 150. I decided that a 150 IQ wasn’t high enough for me to become the world-changing physicist I wanted to be, so I decided to become kind of a meathead – a stripper and a bar bouncer. At about the same time I was beginning my meathead career, I started to take high-end IQ tests, scoring in the 170s, 180s, and eventually 190s. I also found out that among the reasons I’d never scored much above 150 on school-administered IQ tests is that the tests themselves don’t go much above 150. (This makes sense – if you’re a teacher or administrator trying to figure out whether a

kid needs educational enrichment, it doesn't matter much whether a kid's IQ is 150 or 165. With either IQ, that kid will go stir-crazy in a regular classroom.)

I'd never quit thinking about physics, but my new, high scores gave me more confidence that I might eventually be able to theorize productively. Of course, a few points should probably be subtracted from my IQ for basing my life on IQ scores.

Jacobsen: You have a long history with forging identities beginning with entering high school another time, and many more. What motivated this behavior? How long did you pursue this 'calling' of entering high school? In particular, how did each experience turn out? How many times did you do this?

Rosner: Though I had started trying to de-nerdify myself as early as ninth grade, it wasn't effective. In my small town, my classmates were well aware of my nerdiness – there was no erasing that. After years of trying to be cool and failing, I was very frustrated and had something like a freak-out. I decided that I would not leave high school a virgin. So after graduating high school with the class of 1978, using forged transcripts, I went back to high school for a second senior year (class of '79) with my other family in Albuquerque. I only lasted ten weeks and didn't come close to even making out with a girl.

A note on inappropriateness: I think standards have changed since I did this. The creepiness factor has increased. But since I was just 18 – still roughly high school age – and barely talked to any girls much less date them when I returned to high school, it was pretty harmless.

1980: Went on a double-date to a high school prom because my girlfriend (who, like me, was in college) had a best friend who was still in high school and thought we should all go to her prom.

Also 1980: I went to L.A. to try to sell my back-to-high-school story to a Hollywood producer. Thought it would help sell the story if I were back in high school at the time. Tried to talk my way into a couple of L.A. schools without any transcripts, just a class of '81 letterman's jacket.

I eventually spent several more semesters in high school, but rather than tell about them here, I'll just tease my forthcoming book, *Dumbass Genius*, which will detail my more than ten years as a sometime high school student.

Jacobsen: In terms of your ideas related to cosmology and physics, at 10, you began thinking about the universe. The reason for existence. At 21, you came to a realization. You note, "All the big theories are built around big equivalences." Namely, your realization of an equivalence between the operation of information in an individual consciousness and the operation of space & matter in the universe. Both have self-consistency. In addition to this, and later in response to a similar topic in *Noesis* 58, you state, "I believe in matter and space as information held in some vast awareness..." What do you mean by these? In particular, the idea of a great equivalence. How have you developed the idea from the original equivalence to the present day?

Rosner: I've continued to think about this stuff and think I have a pretty good theoretical framework, though it needs more math.

I believe that it's almost impossible to have a large, self-consistent system of information without that system having some degree of consciousness – probably a high degree.

Consciousness can be characterized as every part of a system knowing what's going on, more or less, with every other part of the system, within a framework that assigns (emotional) values to

events perceived by the system. (Of course there are processes which are peripheral to consciousness – most of the time, we're not aware of the finer points of breathing or walking or why we like looking at cat videos and butts.)

Plenty of people think that the universe is a massive processor of information. Quantum mechanics mathematicizes the limitations of the universe's information-processing ability. Being finite, the universe cannot observe itself with infinite precision.

Jacobsen: Provided the nature of these particular equivalences, especially related to the universe, do you have a mathematical model to represent this equivalence? Furthermore, do you have a layman analogy for this equivalence?

Rosner: I think the most efficient model of the information contained in a complex, self-contained and self-consistent system of information looks like the universe – locally three-dimensional (spatially) with linear time and particles and forces that transact business more or less the way they do in the universe itself.

I don't believe in the big bang – instead, I believe that what looks like a big bang is kind of a trick of perspective, based on the universe being made of information. Parts of the universe which have less information in common with us are more distant and red-shifted. The apparent age of the universe is a measure of the amount of information it contains (or has in play). Somewhat similarly, train tracks don't really touch at the horizon.

Kind of picture the universe as being at a slow boil. Some parts are energy-rich and expanding, while other parts are burned out and pushed to the outskirts by the expanding regions, waiting for their chance to expand again.

Jacobsen: You have coined the phrase “lazy voodoo physics.” How do you define “lazy voodoo physics”? Why resort to this form of considering major interests such as the structure and fate our universe, or existence of other universes, and other concepts arising from 20th and 21st century cosmology and physics?

Rosner: Lazy voodoo physics is my term for crappy metaphysical theorizing (which I've done some of, particularly as a little kid). I prefer to think that my current metaphysical theorizing is less crappy.

It is possible to think about the universe without a full mathematical arsenal. George Gamow, who came up with the big bang, was notoriously unschooled in math. Immanuel Kant was among the first people to endorse the idea of galaxies, and Edgar Allen Poe offered a reasonable solution to *Olbers' Paradox*. Einstein himself had to be pointed towards the mathematical framework for general relativity by his friends. Trying to imagine the processes of the universe with the math to come later is not voodoo physics. Metaphysics doesn't have to be voodoo physics, either.

Jacobsen: When did you enter into the world of the ultra-high IQ community? In particular, the Mega Society. In it, once more, you forged an identity. What motivated this resurgence of forging an identity? For instance, the use of the pseudonym Richard Sterman within the publications of the Mega Society journal, *Noesis*. To make amends, and needing stating, you did apologize to members and readers of the journal for the false identity portrayal.

Rosner: When I first qualified for the Mega Society in late 1985, I was depressed from a bad breakup and would try to make myself less depressed by doing stupid stuff. After receiving a score on the Mega Test that qualified me for the Mega Society, I wrote to Marilyn Savant (who must've been in charge of membership at the time) and asked, "Hey, can I join your club...and want to go on a date? I'm a stripper." Marilyn wrote back and said my score didn't qualify me for Mega. She had no response to the personal invitation. (Later, my score did turn out qualify me for Mega. My score's IQ equivalent jumped around as more scores came in and the test was repeatedly recalibrated.)

On the Mega Test, I had tied for the second-highest score in the country. The *CBS Morning News* called to invite me to be on the show. I asked the producer if I should wear my tux or my loincloth. She immediately cancelled me for being a crazy person. In my defense, I worked in bars until two in the morning and didn't wake up in time to see what morning news shows were like. I thought, stupidly, that the *CBS Morning News* would want somebody really fun. (Fun = loincloth.)

The other people with high scores were two Los Angeles math professors, Solomon Golomb and Herbert Taylor, and the Governor of New Hampshire. People seemed really annoyed that I, a roller skating waiter, stripper, bar bouncer, and amateur undercover high school student, was in their company.

In 1990, when the Titan Test came out, I remembered how appalled at me people were after the Mega. So I decided to take the test using my girlfriend's last name instead of my own, figuring that if I did well on the Titan, I could get a fresh start at talking to reporters without being tainted by being the person who shocked people the first time around. If this sounds dumb, it's because it was. My Twitter handle is [@dumbassgenius](#) because I tend to do a mix of smart and dumb stuff (not usually on purpose). I wasn't trying to fool anyone for test purposes, I was just trying to sidestep my stupid past.

I did really well on the Titan, finally joining the Mega Society and becoming editor of the Mega Society journal. After a few months, I told everyone, "Hey, I'm the same guy who did well on the Mega Test." I don't think anyone was outraged. (I also took the Mega Test for a second time as Richard Sterman. But I soon came clean.)

Jacobsen: In reading through the available literature of *Noesis*, i.e. available online, three trends persist to me. One, the range of high-level and engaging material across the arts and science, e.g. the lucid description of relativity by Chris Cole at the end of issue 69 entitled *Relativity – A Primer*. Two, the mix of the occasional scatological material in the writing, mostly c. 1990-1996. Three, the length of your time as the main editor from 1990-1996. How did you come into the world of the Mega Society? How did you earn the position of editor for six years? Do you think the journal fulfilled part of the purpose stated in the constitution to "facilitate interaction among its members and to assist them in gaining access to resources to accomplish their individual purposes"?

Rosner: When the editorship was offered to me, I was underemployed. I'd written for some TV quiz shows and thought that work would continue but didn't know how to get that work. The publisher of *Noesis* said I could have the subscription money if I'd edit it. It wasn't much, but everything helps when you're a bouncer and nude model who's trying to cover a mortgage and pay for hair transplants. I edited *Noesis* for six years because no one else was clamoring to do it.

Towards the end, I started getting TV work again, and became even less reliable about getting issues out on time. Other members volunteered to take over.

As editor, I didn't do too much editing. Most material submitted to me went straight into *Noesis*. I may have left out some crackpot submissions claiming to have disproved Einstein and perhaps some angry letters from people who thought they deserved to be admitted to Mega though they didn't meet the entrance requirements.

Some of the writing you term scatological may have been my writing about myself. While most of the material submitted to *Noesis* is at a high intellectual level or at least reflects striving in that direction, I was trying to be entertaining and tell the embarrassing and I hope funny truth about myself. I eventually became a professional comedy writer, and, without looking back on my writing for *Noesis*, I'm sure much of it was goofier and more obnoxious (and perhaps more entertaining) than the average article.

I'm fairly pessimistic about the effectiveness of most high-IQ journals, though I've seen some good ones. My editorship was at the very beginning of the internet era, so most communication was by snail mail. Now, of course, high-IQ organizations are online, which speeds up discourse. The Mega Society online journal has some good material and discussions.

Jacobsen: Amidst the busywork of editorials and organization of the material, upon reading *Noesis*, one article struck me regarding the title and content entitled *My Problem With Black People*. At the time, August 1992, other members of the Mega Society argued for the possibility of intellectual inferiority of blacks. You argued otherwise. In that, by your estimate, all races have about equal intelligence. Although in defense of all parties involved in the discussion of issue 72, the articles were written in 1992. Much work written in public discourse has progressed on the issue of intelligence and race: 'does race count as an appropriate scientific category?', 'do IQ tests measure intelligence?' and so forth. Where do you stand on this issue now?

Rosner: I don't have a problem with black people – in my juvenile manner, just wanted an attention-grabbing title. I believe that most work which tries to or claims to establish a relationship between intelligence and race has elements of creepy bullshit. Little good and lots and lots of bad has been done by people who claim that certain races or nationalities are mentally inferior to others.

Intelligence has a fluid relationship with environment, and all sorts of things can happen during an individual's lifetime which may or may not bring his or her intelligence to fruition. Sometimes, being imperfectly adapted to an environment may elicit the expression of intelligence – think of perfectly adapted jocks who never had to learn to think versus awkward nerds who, because of physical imperfection, have to follow the riskier strategy of original thought. So, people who want to eliminate or reduce the reproductive opportunities of groups that may be considered inferior (according to crappy, wobbly, arbitrary, prejudiced and culturally loaded standards) may actually be trying to eliminate one of the triggers for intelligence – being at odds with one's circumstances. More great art has been made by people who are ill-at-ease with their world than by people who are perfectly at home in it.

Furthermore, this is a particularly dumb time for arguments about racial differences in intelligence, as more and more of our effective intelligence comes from our interaction with technology. Tech is turning us all into geniuses, though it doesn't seem like it when you see so

many people behaving stupidly with their devices. Since World War Two, the average IQ of all of humanity has gone up by 15 points – the Flynn Effect. One of the main suspects in this upslope is the pervasiveness of complicated modern culture. Culture and tech will keep getting more complicated, and humans in conjunction with our devices will keep getting smarter. Tech that's built into our bodies isn't too far in the future. More than one percent of the population already has built-in computers – pacemakers, cochlear implants, etc. So who cares about some hard-to-measure few-IQ-point alleged difference among groups when we're all going to end up being increasingly augmented geniuses?

People who insist on racial inferiority are creeps. We can discuss cultural differences – for instance, there seem to be cultural differences in causes of passenger jet pilot error – but the idea that some races need to be babysat by other races is gross. We're all going to need to figure out how to work with each (augmented) other as tech reshapes the world.

Jacobsen: How many societies do you have membership inside of now? What use do you get from these societies?

Rosner: Don't know how many societies I belong to. People ask me to click on things on Facebook, and sometimes clicking means that I've joined something. Could be 8 societies, could be 15. I'm not very good at Facebook and don't live on it, as does your Aunt Angie, with her constant posting of cat and casserole pictures. Currently living on Twitter.

Jacobsen: Intelligence Quotient (IQ) pervades American culture more than most, based on my reading of the culture, with a litany of reactions ranging from reverence to laughter to skepticism – and serious scholarship. Many neuropsychological tests developed by those with appropriate qualifications have developed some of the most well-used and researched tests such as the Raven's Progressive Matrices (RPM) and the Wechsler Adult Intelligence Scale (WAIS). However, mainstream standardized intelligence tests tend to have maximum scores at 4-sigma above the norm (160/164/196; SD-15/16/24, respectively). In the development of this work, some independent researchers and test constructors began to make tests for those earning maximum, or near-maximum, scores on mainstream tests. In the process, tests and societies developed for the high-ability population. This environment set the stage for the flourishing of your obsession: IQ tests. For example, on a high-ability test called the *Titan Test* – one of the most difficult, you set a record score. In fact, you earned a perfect score. You have taken many more. What are some of the other tests? In particular, where does your range, mean, and median lie for the set of high-range IQ tests taken?

Rosner: It's hard to pin down what my actual score might be. It's silly to even think that people have one set IQ and that it's precisely measurable. My lowest scores probably reflect less than my maximum effort, and my highest scores probably grant me some extra points due to crazily high levels of diligence plus vast experience with these tests. It doesn't really matter unless we want to turn IQ testing into a reality show sport. And we should – why do we have a bunch of competition shows about people cooking from Mystery Baskets and none with IQ showdowns?

Jacobsen: In the testing of intelligence, much criticism exists towards the potential for bias inherent in the tests themselves. For example, the use of an examinee's non-native language in intelligence tests. If an individual speaks a different native language than the test provides, they may score low in the verbal section, which may decrease the composite score. To solve this problem, non-verbal/'culture fair' tests exist. However, many of these

culture fair tests have lower ceilings. What do you see in the future for high-range non-verbal tests? How will this change general intelligence testing and the identification of gifted individuals?

Rosner: Intelligence testing has always been kind of a mess, often arbitrary and unfair. I think the best, easiest thing to do is test kids repeatedly, using a variety of tests. There are plenty of good, long-established tests. Trouble is, school districts are broke and don't have the resources for repeated testing.

We can hope that tech will make schools more responsive to individual needs. Schools can be a little behind the curve. A century ago, school was the most interesting part of a kid's day – it's where the information was. Now, with the rest of our lives being so information- and entertainment-rich, school can be relatively uninteresting, which isn't helped by politicians and people who don't like paying property tax starving schools of resources.

School needs somewhat of a makeover – increasing automation and personalization, which the ongoing tech wave should help make possible. Don't know if a push for better giftedness-finder diagnostics needs a special push. Would guess that this won't be overlooked as part of high-tech changes to education.

Currently a crazy thing is the pressure on a few tens of thousands of high-end students, with endless AP courses and brutal study loads, for a seven percent chance of getting into an Ivy. When I was in school, the average AP kid took 1.3 AP courses; now it's more than 7. I assume our weird college admissions system will get somewhat straightened out by technological advances in education, or will become weird in exciting new ways.

Jacobsen: You have great interest in health. In fact, you had interest in health since a young age. Why the deep interest in the health from a young age?

Rosner: At first, I wanted to build muscles to impress girls. (This sort of worked, but it took many years of de-nerdification.) People were fit in the 70s – clothes were tight and high-waisted. The Arnold Schwarzenegger documentary, *Pumping Iron*, which came out in 1976, introduced many people to serious muscle-building. Weight training incidentally introduced me to some healthy eating habits, plus I've always been a little fat-phobic and perhaps over-disciplined.

Only much later did I read Kurzweil's book, Fantastic Voyage: Live Long Enough to Live Forever, and go from a few vitamins a day to a zillion. I don't buy Kurzweil's entire argument – that the Singularity will happen around 2040, and anyone who can live until then can live forever – but I do think there will be many biotech breakthroughs in the coming decades which may offer extra years of life. I want to stick around – the future is where you can find a lot of cool stuff.

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Two)

October 15, 2014

Abstract

Part two of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: health advice, longevity, mortality, Pythagoreans, Transhumanists, future scenarios of downloadable consciousness, aims for immortality, rewriting genetic code, partial/full mergers with biology, technological and medical futurists, United Nations on lifespans, Dr. Aubrey de Grey divided subproblems for solving aging, figuring out the mind as the ultimate longevity solution, consciousness and evolution, discounting of some animal consciousness by people, and the possibility of the same consideration for human consciousness; personal vitamin and nutraceutical consumption, considerations of efforts for longevity, aspirin and statins, and *Life Extension* magazine; possible negative interactions of nutritional supplements, curcumin, vitamin d, Metformin, Type 2 Diabetes, resveratrol, methylene blue, Fen-Phen, and flossing and inflammation; possible negative interactions with ingested nutritional supplements taken alone or together with another nutritional supplement, and the reasons for considering his current set of nutritional supplements safe; obscure and mainstream thinkers on the progression of technology, some thoughts to do with the Law of Accelerating Returns, Dr. Ray Kurzweil, extrapolations of current technological trends from the past and the trends' influence on us in the future, and relevant extrapolations beyond this century; entrance into the world of trivia, '*Who Wants to be a Millionaire?*', first and second times on the show, and *Noesis* issue 150's articles *Three Letters of Protest Regarding "Who Wants to Be a Millionaire?"* and *Request for Assistance from Mega Society Members*; rectifying the situation; mastering multiple intellectual fields, 12 years of university credit in one year at Excelsior College, and reason for pursuing this method of education accreditation; moving beyond academics into acting and physique building (bodybuilding), films with J.D. Mata, and reason for entering into this kind of work; and nude modeling, Obsessive Compulsive Disorder, and time spent at the gym.

Scott Douglas Jacobsen: Furthermore, many people in history followed health advice. Some provided it. Today this persists. Primarily for well-being with a secondary benefit of longevity. Although, most people in recorded history accepted mortality of the body as fact, but in most cases attended to ritual, scripture, incantation, sacrifice, prayer, meditative practices, and propitiation to a god, the gods, or God to attain immortality as a spirit, a disembodied awareness, an existence in another realm, or through continuous re-incarnation as a mortal creature in this world. These tendencies of thought wax and wane. For instance, Pythagoreans searched for immortality. Even today, an emergent sub-group of a modern school of thought, *Transhumanism*, aims for immortality through hypothetical future scenarios of downloading their minds onto computers, re-writing of genetic code for extended life, and partial/full mergers of biology with machines for bodies and minds immune to the present higher levels of degradation based on the degrading effects of time

on our bodies. Some people come to mind such as Dr. Ray Kurzweil, Dr. Terry Grossman, M.D, Dr. Aubrey de Grey, Dr. Peter Diamandis, M.D., Saul Kent of the Life Extension Foundation, and others. What do you think of the many ideas and arguments behind these various groups for longevity – even outright ‘immortality’? What makes their arguments and our situation different, and better, enough to have such possibilities arise in practicality?

Rick Rosner: It sucks to be among the last generations of humans who don’t have a choice about dying. Medicine will advance tremendously in the next century, and so will life spans. Even the U.N., which isn’t a hotbed of science fiction-ish speculation, says that living to 100 will become common.

Transhumanists like to argue that to be effectively immortal, you don’t have to live until immortality is possible. You only have to live until medical science can extend your life at a rate of one year per year.

Researchers such as Dr. Aubrey de Grey say that aging will be conquered by breaking it down into a set of sub-problems and solving each of them. While not part of de Grey’s sub-problems, figuring out the mind and consciousness can be seen as the ultimate longevity solution. If you can make the contents and actions of the brain transferable, then keeping your body going may become just one of a variety of longevity strategies.

But figuring out consciousness may be a good news-bad news thing. Consciousness constantly acts as an advertisement for itself, telling you that your life and thoughts and experiences are interesting. Evolutionarily, it has to do that. If you quit paying attention to your life, you make more errors, which might kill you. We come from millions of generations of ancestors who paid attention.

For instance, deciding when to cross at a traffic light. (Traffic lights seem to pop up in discussions of consciousness.) For you not to be killed crossing at a light, your lifetime error rate of observing and stopping for red lights has to be reasonably close to zero. If you weren’t sufficiently interested in not being killed, your error rate would rise dangerously. Of course we see this with digital devices being so interesting that people become insufficiently interested in clear, real-life risks (texting while walking or driving a car or even a train being the sadly typical example).

Once we figure out consciousness, it may turn out to not be so awesome. Consciousness may be seen to incorporate a bunch of sensationalistic tricks to keep your attention, like a Michael Bay movie, and there may be a letdown – we’re the saps who bought tickets to the movie.

We have little problem discounting consciousness in other creatures – the billions of chickens Americans eat each year, for instance, cows, pigs, octopi. The chickens live their short lives, they’re killed, no big deal. A minority of people say it’s the ultimate deal – that every creature’s experience is important. But what happens if our understanding of consciousness leads us to believe that human consciousness just isn’t that big a deal – not much more important than other animals’? That could be a bummer. (But this bummer might partially be addressed via biotech brain helper add-ons that make our moment-to-moment awareness more super-duper.)

We’re gonna live longer, we’re gonna get weirder, gradually turning into the augmented but still very human beings that will come after humans.

Jacobsen: Granted, death stands atop the mount of costly adventures. You take high-level double digit numbers of vitamins and nutraceuticals every day. Even so, these measures for slowing, potentially halting or reversing, aging seem excessive and even dangerous. For instance, do they all have FDA approval? Where do you base your efforts for longevity? What research and evidence?

Rosner: Mostly, I take vitamins and nutraceuticals, which may not do much – one way or the other. And most of the other stuff is apparently very safe and widely tested – aspirin and a half-dose of statins, for instance.

I research supplements and nutritional strategies on the internet, trying to separate the BS from the crumbs of actual information. *Life Extension* magazine is pretty good, even though it's trying to sell fancy vitamins. At least the claims in the magazine are backed up by some studies.

The purpose of the pills, of course, is to put off dying as long as possible. Will exercise, a semi-careful diet and mostly mainstream supplements increase my mortality? I hope not, and most statistics are on my side.

Jacobsen: For instance, which ones of these nutritional supplements have sufficient clinical testing in favour of their individual use? What about potential negative interactions of an individual supplement or drug? What of negative interactions between two or more of them?

Rosner: I mostly take nutritional supplements. Their effects are probably not as helpful or as potentially harmful as pharmaceuticals, though they haven't usually been through the same clinical trials as prescription drugs. (Some vitamins, however, have had more than a century of testing, and clinical testing is not a 100% guarantee.)

I take a big but not crazy dose of vitamin D and a lot of curcumin, both of which are currently very well-regarded. They're being studied extensively, and the studies are returning encouraging results. As with anything, future research may debunk them, but I don't think they're hurting me. People in India have been using curcumin for centuries, and this seems to be correlated with lower rates for some inflammation-based disease.

Some of what I take may be considered a little wacky. For instance, I take Metformin, a drug for Type 2 diabetes, even though I don't have diabetes. Among other effects, Metformin helps your body use insulin more efficiently. Along with resveratrol, it's one of only two drugs I know of which trigger some of the positive effects of calorie restriction (without the misery of calorie restriction). And Metformin is a more effective calorie restriction mimetic than resveratrol, because orally administered resveratrol gets knocked out by your liver.

Metformin is the most widely prescribed anti-diabetes drug in the world, with 48 million annual prescriptions in the U.S. alone. It's been used in the UK since 1958 and the U.S. since 1995. Negative side effects are rare. There is some evidence that Metformin may reduce the incidence of cancer. I like the stuff.

I sometimes take methylene blue, which may act as a detergent to loosen amyloid plaque in the brain. (Amyloid is sticky gunk thrown up by damaged brain cells.) MB is currently in Phase III trial for Alzheimer's and Parkinson's. (It turns urine a bright emerald green!) If I were in the NFL and taking a bunch of shots to the head, I'd use methylene blue like Splenda.

Most of what I take doesn't negatively interact. A couple of minor vitamin depletions are covered by a good multi-vitamin. (For instance, Metformin may reduce absorption of B12.)

You don't often hear about people dying early from vitamins. Occasionally, there's a study which might say something like, "People who take vitamin E might have slightly elevated mortality." Then you look at the study, and it's hard to apply to your specific situation, but you cut back on vitamin E. In the 70s, people went on the liquid protein diet. But it depleted potassium and caused heart attacks. A couple of people died – it was big news. In the 90s, Fen-Phen, a combination of diet drugs, killed people. Again, big news. If vitamins were knocking people off like crazy, we'd hear about it. So I take my chances.

Hey – here are two very safe things you should do to add years to your life – take half an aspirin or a baby aspirin each day, and floss your teeth. Unflossed teeth spread inflammation throughout your body.

In some sectors of the population, some obscure, and other more – as of recent – mainstream thinkers have extrapolations based on many highly complex technological innovations in society regarding the progression of technology. Some will use general hunches, e.g. things seem more complicated and, therefore, will become more complex. Others will use mathematical modelling through extensions of such things as Moore's Law, e.g. the Law of Accelerating Returns *a la* Ray Kurzweil. How do you see these technological trends and changes influencing us in the far and recent past? What extrapolations do you consider most likely for this century and past it?

Rosner: Many of the developments predicted by science fiction eventually happen, though often not as soon as science fiction predicts (the iPad, the atomic bomb, the internet and computer viruses, to name a few).

I think that will be the case with many aspects of the Singularity. (The Singularity is when, according to believers in the Singularity, artificial intelligence will be able to answer any question and solve any problem, and all our wishes will come true, sometime around the year 2040.) Humanity or some version of humans plus technology will get smarter and smarter, but it won't all happen at once or as soon as 2040.

But things will get weird. Good manners and considerate behavior will have an increasingly difficult time keeping up with changes in tech. It would be nice if people would stop being annoying or dangerous with their devices, but I can't see how manners will ever catch up with the accelerating development of technology. Tech will keep making people smarter but appearing to be stupider.

I don't think the future will be humans fighting robots. I think we'll become our own half-robots. We'll keep augmenting ourselves, adding devices around and to ourselves until our artificial systems do more information-processing than our natural systems. (We'll build expert devices of increasing sophistication, but for the near future, the most expert systems will be human brains plus tech. We already are expert systems – right now it's most effective to add onto us.)

Some people argue that the brain has hidden, possibly quantum, information-processing capacity and that we won't be able to emulate the brain. Obviously, the more complicated our brains turn out to be, the harder it will be to emulate them and interface with them. But we'll still keep going in that direction. We're already pretty good at piping information into our heads nonstop via our current devices.

One big though gradual change is we'll be able to change our drives, motivations, judgments and values. Much of what drives us is pretty thoroughly wired into our brains via evolution – sexual attraction, tastes in food, aesthetic preferences, to name some big ones.

Sex makes just about everyone crazy at one time or another, demonstrating that, to some extent, we're pawns of the need to reproduce. It's just weird that one of the primary engines of human progress is a compulsion for males to insert fleshy tubes into females' fleshy pockets. The entire history of the 21st century hinges on a few instances of oral sex, like this – Al Gore gets mad at Clinton for sullyng the Presidency with Oval Office BJ's. Gore underutilizes the still very popular Clinton in his Presidential campaign and narrowly loses some important states. And there you have it – President George W. Bush and the 21st century.

The fascination with and rituals around eating get pretty weird, too. And look at magazine covers – all the time faces – just pretty faces.

As we better understand our brains, we'll be able to change our drives and desires. Suppose your spouse has put on 160 pounds. Is it better to be resentful of your spouse or to rejigger your sexual tastes to fit your super-sized spouse?

I think by the end of the century, consciousness will begin to be transferable and average life spans will increase by at least 40 years. We can hope this will lead to a reduction in the rate of population growth. People who can look forward to very long lives should on average have fewer kids and have them later, if at all.

There will be glitches, of course. Nanotech will have to be watched. The benefits of increasing technology will have to be made available worldwide in such a way that it's more attractive to join the modern world than to try to take down the modern world.

I doubt that we can count on non-selfish behaviour to turn around the degradation of our planet. A conscientious Prius-driving, recycling American still generates a lot of waste. (On a related note, smug Prius drivers are almost as bad as Audi drivers. "Ooh, I'm making less pollution, so I can drive however I want.") And the world population will keep growing until living indefinitely (and, later, consciousness becoming digitizable and transferable) reduces the production of offspring.

Eventually, high-tech measures will have to be deployed to fix the worst messes we've made – wide-spread extinction, global warming and the acidification of the oceans, and the like. (This will be followed by more tech to correct the negative effects of previous high-tech fixes). Large swaths of the globe will be Disneyfied – artificially restored and made pretty and sweet – like what New York did with Times Square, but on a global scale.

At some point, you entered the world of trivia. In particular, professional competition of trivia via the game show *'Who Wants to be a Millionaire?'*. You did not have a good experience with them on your first, or second, time qualifying to compete on the show, which you recount, somewhat, in *Noesis* issue 150's articles *Three Letters of Protest Regarding "Who Wants to Be a Millionaire?"* and *Request for Assistance from Mega Society Members*. What happened, Rick?

Rosner: Every quiz show has occasional glitches in which factual errors survive the fact-checking process. (It should work like this: a writer writes a question and cites a source. The question goes to a fact-checker who finds additional legit sources to confirm what should be the

facts behind the question Fact-checkers, writers, and producers eliminate ambiguity and make sure the answer is “pinned.” I did an interview about the process.

On most quiz shows, most glitches don’t affect the outcome of the game. On *Jeopardy!* for instance, a glitchy question might come up, and no one answers it. The game goes on. Or someone gives an unexpected acceptable response. Judges check the answer during a commercial and perhaps award more points.

On *Millionaire*, however, since a player had to answer every question (at the time I was on the show) or withdraw from the game, a factually flawed question often knocked the player who received it out of the Hot Seat. It was *Millionaire*’s policy to rectify factually flawed questions, but they were getting sick of it – they’d had to do it many times. During our briefing, a contestant asked the executive producer what to do if we thought we got a bad question. A contestant had, very shortly before, gotten a bad question. The EP said, “Don’t worry about bad questions. Just play the game. If a question is wrong, we’ll look into it and make it right.”

In my case, they thought they could weasel out of it by claiming a non-straightforward and non-traditional interpretation of the question. The flawed multiple-choice question was:

“What capital city is located at the highest altitude above sea level?”

with the possible answer choices of Mexico City, Quito, Bogota, and Kathmandu. Because of faulty writing and fact-checking, *Millionaire* failed to include the actual correct answer of La Paz, Bolivia. (For people who’d like to quibble, Bolivia has two national capitals, and La Paz is one of them. It’s about four kilometers – two-and-a-half miles – above sea level.)

Millionaire tried to avoid responsibility for their error by arguing that they meant “Which of these four cities we gave you is the highest?” This interpretation goes against common sense and standard practice. I looked at 110,000 questions from productions of *Millionaire* in the U.S. and throughout the world, and their standard practice, as well as any other reasonable quiz show’s standard practice, is, if you mean “Which of these?” you write “Which of these?”

Since 1987, I’ve worked on a bunch of quiz shows, writing more than 10,000 questions. I co-created a quiz show which ran for a season on VH1, was co-head writer of the show, edited all its questions, and acted as a judge. Quiz show questions are my business. (Additionally, I’ve tutored the SAT and related multiple-choice tests since I was a teenager and have looked at more than 40,000 SAT-type questions. Multiple-choice questions are also my business.) I’m probably the person most likely and qualified to take a dim view of *Millionaire*’s ad hoc, disingenuous, self-serving, lazy and dishonest interpretation.

I concur with standard practice and common sense. No writer or producer would reasonably expect a contestant to know the relative altitudes of four arbitrarily chosen capital cities. It would be more reasonable to imagine that a contestant might have heard of the world’s highest capital city, but that city was absent from the answer choices.

The writer of the question (who’d never before written for a quiz show and who didn’t last very long) built the question from a list of altitudes of 30 random world cities in the *World Almanac*, apparently failing to realize that the omission of 96% of the world’s cities from the list might be a problem.

During legal proceedings, I saw *Millionaire*’s fact-checking notes on the question, which indicate that they wanted the highest capital, didn’t realize they didn’t have it, and fact-checked

only the altitudes of the cities they did have. Someone noted that he or she thought that Ecuador might have two capitals (that would be Bolivia), but this wasn't further pursued. Not knowing about La Paz, they had no knowledge of any quibbles about La Paz being a *de facto* capital – their research wasn't anywhere near that thorough. (Currently, a Google search for the phrase “La Paz is the world's “highest capital city” returns 97,800 results, while “Quito is the world's highest capital city” returns just 7 results, a ratio of 13,970 to one. Of course, back in 2000 when *Millionaire* was fact-checking the question, Google wasn't the go-to research tool.)

(And another thing – world cities have no official point from which altitude is measured. Quito's city limits extend down into river gorges and up the side of a volcano. Altitudes found within its city limits vary by a couple miles. Miles! From *Today in Ecuador*: “The Metropolitan District of Quito (DMQ) covers an area of 422,802 hectares (almost 1,050,000 acres), with altitudinal ranges from 500 to 4,800 meters above sea level.”

Quito has a single altitude like Olympic athletes have a single height. The facts behind the altitude question are messy and ambiguous at best. Had *Millionaire* done a better job researching the question, they would've been forced to throw it out before it ever got to a contestant.)

If *Millionaire*'s writers and researchers, with all their resources and unlimited time to check their work, can't come up with the correct answer, then they shouldn't expect some schmuck alone in the Hot Seat to be able to come up with the answer. That schmuck should be invited back (and many contestants were invited back, until I came along).

Eventually, I sued them, but no one has ever won a lawsuit against a quiz show. After I sued, *Millionaire* changed the official rules so that they're no longer obligated to come up with the correct answer. Contestants must choose the best answer from those offered, even if the correct answer isn't among them. Nice!

Discussing soccer, the executive producer of *Millionaire* said that people need to accept bad calls from judges and referees, in soccer and on game shows. This is a lousy parallel to draw. A call in a World Cup match would need to be reviewed immediately (with just a few angles captured on video). Changing a call after a game could affect the rest of the tournament, not just the teams but also billions of fans, so it's impossible to undo a call hours or days later. But a bad call on *Millionaire* affects just one person in the Hot Seat and his family. And researching a faulty question isn't like reviewing a soccer call – you're not looking at video in the middle of a soccer game – you can take time to do adequate research. It doesn't change anything for anyone else to rectify a bad quiz show call for one person. You don't even have to televise it.

Jacobsen: What would rectify the situation to you?

Rosner: This happened more than 14 years ago. The past 14 years haven't been the greatest for the world. Next to it all, the *Millionaire* thing is nothing. I can continue to be annoyed by it, but I would be a big baby to still be crusading for rectification.

Jacobsen: You have mastered multiple intellectual fields, especially with respect to having earned 12 years of university credit in one year at Excelsior College. In fact, you did this through a little-known system of taking tests, which continues your long-experience with the obsession of IQ tests into the domain of tests of general and specific knowledge. How did you discover this method of earning credit? Why did you pursue this means of earning tertiary educational credit rather than traditional classroom-based forms of education?

Rosner: In high school, I wanted to go to Harvard. (I almost certainly would've gotten in. My SATs were in the top 1% of Harvard applicants, grades were excellent (until my senior year meltdown), was student body co-president, came from a geographically underrepresented part of the country, and back then, Harvard admitted about 18% of applicants, compared to about 6% today.) Then I freaked out, scuttled my application, and ended up attending my hometown school, the University of Colorado, which I didn't take very seriously. Did well in classes I liked, blew off classes I didn't, so lots of As and Fs. Didn't graduate.

Years later, I'm underemployed in LA. My wife is working at a fancy company in Santa Monica. She comes home and talks about the flashy clothes and jewelry worn by the other women who work there. Can't afford to buy her jewelry from a store but I do some research and find out that jewelry is marked-up like crazy – sometimes 500 or 1,000 percent. Start making jewelry for my wife – the individual components are affordable. But I need access to equipment. Turns out CSUN, a local university, offers a jewelry-making class. I go back to college to make jewelry.

At CSUN, I think, "I'm in my 30s and more mature and would probably be a better student this time around." So I decide to sign up for real classes – astronomy, advanced stats, econ, group theory – and get my degree. Turns out I still hate sitting in a classroom, plus CSUN has a bunch of general education requirements I don't want to deal with.

About this time, someone in the Mega Society tells me about schools that let you test out of subjects, which leads me to Regents College of the University of the State of New York (now called Excelsior University), an accredited school that awards credit in a subject if you get a high enough score on the GRE test for that subject. (The GRE is the SAT for grad school.) The GRE comes from ETS, the same company that does the SAT, and I've always done well on their tests.

So I go on a rampage. There's an ETS testing center in Pasadena that offers GRE subject tests once a month. For a year, I take a test a month, studying for each test while working as a doorman at a bar called Mom's Saloon in Brentwood. (The loud music doesn't bother me – I used to study for *Jeopardy!* while bouncing.) I get good scores, earning a year's worth of college credit in each of 12 subjects and fulfilling the requirements to graduate with eight majors.

Jacobsen: Not limited to the academic domain, you have entered, somewhat haphazardly, into other domains of inquiry and human endeavor such as acting and physique building. In particular, you have some short films featuring you, directed by J.D. Mata. What compelled entering into yet another domain of work?

Rosner: I've always been a pretty decent actor but just didn't have the fortitude to go through all the rejection that usually accompanies trying to be a professional actor. (One key to acting is not going overboard with emotional intensity. Most moments aren't moments of extreme emotion.) Plus, I'm not overly photogenic. I act on the infrequent occasions when someone offers me the chance. (I've always hoped to sneak into acting by becoming famous enough to be cast in cameos as a curiosity or inside joke.)

Jacobsen: Furthermore, based on your work in nude modeling, and so on, you have years of experience with bodybuilding and sculpting. However, this seems to have come attached to a downside of Obsessive Compulsive Disorder (OCD). How many times do you go to the gym every week and month? How much circa 10 years ago?

Rosner: Currently go to five gyms a day. They're in a circuit, with a mile or two between each gym. Luckily for me, L.A. has a lot of gyms, and I have cheap membership deals. Takes about

two hours to do the circuit, which includes 80 to 100 sets. At my most OCDish, I was averaging nearly eight workouts a day, with a long streak of working out at least 50 times a week. At earlier, less-obsessed times, I averaged about ten workouts a week.

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Three)

October 22, 2014

Abstract

Part three of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: arguing for reinstatement of metaphysics into physics, their present estranged relationship, necessary relationship between logic and metaphysics, formal argument for the derivations from logic to physics and connection to metaphysics, unsuccessful attempts at metaphysical thinking, ancient Greece's lack of experimental science, the opposite trend today with much experimental science, the depth of understanding the business transactions of the universe on a macro scale, possible purposes for these transactions for the universe, brief overview of the universe's development, related objectives of organisms, purpose of laughter illuminated by George Saunders, and effective economy of thought for a possible grounding for the universe; methodology of science, derived facts from the methodology, and constructed systems of knowledge, a determined universe, free will as an internal sense of willing something, compatibilist and non-compatibilist free will, quantum mechanics, moral axiologists, free will and ethics implying moral accountability, considerations of this with an increased understanding of the world through science, framing the appropriate question for an accurate answer to the free will question, some peoples' arguments for the ability of free will based on quantum indeterminacy, impetus behind free will appearing to be not wanting restrictions "by genes, by creeds or institutions, by mental limitations," a better question for understanding the free will issue, evolved creatures not necessarily constructing the most accurate views of reality, evolutionary examples of hijacked thought, Plato's Cave, the 'freakout' over determinism based on Newtonian mechanics, technical rather than transcendent aspect of thinking, and lack of determinacy of the universe based on quantum mechanics; free will intrinsic to an individual consciousness, free will for the penultimate armature of the universe, derived-from-armature free will for an individual consciousness (or set of them), the more important angle of informed will, and targeted thinking; and set of mainstream physicists considering the universe to exist in 11-dimensional hyperspace in string theory, constraints of the universe's structure based on the specification of dimensions, implied limitations of a three dimensional universe, analogy of Donald Rumsfeld and Errol Morris' *The Unknown Known*, origin of the phrase with John Wesley Powell, John Keats and Robert Browning mentioning the phrase too, the universe as an optimized information map, commonalities of the universe exist close to one another while those far apart have less in common, 30% of the speed of light (.3c) of objects moving away from us equating to ~4 billion light years away, forming a sphere of that radius about twice the radius of everything moving away at 15% the speed of light (.15c) away from us with four times the area, further considerations and calculations with the reciprocal Lorentz factor from special relativity, redshift and information in common, Big Bang universe, size proportional to age of universe (look farther away, the universe appears smaller because

younger, or larger because older), Hubble redshift, a non-Big Bang universe having lack of uniformity with an active and burned-out center with collapsed outskirts clustered to $T = 0$ (Time equates to zero or absolute beginning of the cosmos), inverse-square law, and an economy of dimensions likely defeating an 11-dimensional universe posited out of string theoretic constructions.

Scott Douglas Jacobsen: You think metaphysics needs to be reinstated into physics. Yet, they have an estrangement. You mean physics and metaphysics together. Indeed, I would reason much further than this. Metaphysics needs logic; logic needs metaphysics. Furthermore, mathematics derives from logic, physics derives from mathematics, and hence – for a more comprehensive framework – physics needs metaphysics and vice versa. At root, we have a deep relation between physics and metaphysics. This estrangement seemed temporary before someone directed appropriate attention to the need for conscious reunification of the two.

Rick Rosner: Compared to science, metaphysics has been very unsuccessful, to the extent that few people, scientists included, do much metaphysical thinking. Science has helped us build the modern world. Metaphysics can't even definitively answer its own questions. Pondering "What is being?" doesn't bring us Apple products. Our era is kind of the reverse of ancient Greece, which was all "Why is everything the way it is?" and not much for doing experimental science. The Greeks should've performed some experiments. It's hard to do effective metaphysics if you don't have sufficient information about how the universe works. It's like solving a crime without evidence.

But perhaps by now, we have almost enough information, via physics, to come up with a system which has some "whys" as well as "hows." We've learned a lot of "hows" about the universe: how it transacts much of its business – on a macro scale, via fields and long-distance particles such as photons and neutrinos. We should be able to use our knowledge of these transactions to propose theories of how the universe might benefit from these transactions, asking "Why? – What does the universe gain?"

Via these processes, the universe becomes simpler in some ways – over billions of years, stars boil down – and more complex in others – across billions of years, life arises. The universe becomes more stable in some ways – matter accretes into galaxies and stars which are cradled in fixed orbits and gravitational wells and the universe clusters on a range of scales, adding to stability and informational compactness. As my friend Dave Dameshek likes to ask, "To what end? To *what* end?!"

Take a look at a business model for a system with "whys" – with goals we kind of understand – thought.

Thought has several related objectives – manage an organism's normal activities, look for exploitable regularities, and avoid error, all within the context of constructing a model of reality. The brain has a finite capacity, so it wants to compress information to reduce the chance for error and make room for more information. The brain likes finding analogies and shortcuts – they help compactify information.

Thought involves risk. If the brain can figure out how to make knowing fewer things as helpful as knowing more things, it can know those few things with greater certainty and less distraction and chance of confusion. Think of it in terms of sending a message – if you have a 15-word

message but can compress it to 5 words, better to send the shorter message 3 times to increase the likelihood the message gets through.

I view laughter as delight at finding a shortcut and as a signal to other people that a shortcut has been found. George Saunders has the same theory. “Humor is what happens when we’re told the truth quicker and more directly than we’re used to.” — George Saunders, *The Braindead Megaphone*

So we have a rough idea of the brain’s informational priorities and procedures. Similarly, we can speculate about what the universe is up to with regard to information.

The universe does what it does, which I believe is information processing – thinking, even – within some context. It’s grappling with – thinking about – some world beyond itself – a world that includes the physical structure that makes the universe’s information-processing possible. We can assume that the universe has objectives in that world. We can assume that the universe has an economy of thought – that its thinking is effective because some rules of information are in place. We can try to figure out those rules, dagnabbit.

Jacobsen: You think that people may be better able to answer philosophical questions today than in the past because of more accurate depictions of reality through the methodology of science, derived facts from the methodology, and constructed systems of knowledge: quantum mechanics, particle physics, chemical sciences, biological sciences, psychological sciences, and economic sciences onward with inclusion of every relevant discipline and subdiscipline. Of note, traditional ‘great’ questions can have placement in complementary scientific frameworks. For instance, in a determined universe, freedom of the will, ‘free will’, does not exist because determinacy reigns supreme. Either branch of determinism, compatibilist or non-compatibilist, bears little or no proper fruits. Why? Quantum mechanics shows either deterministic branch of the tree to be barren. Therefore, zero factual streams to hydrate and nourish the roots. Unless individuals defy the larger systemic laws (they would not) behind the hypothetical determinate universe. Furthermore, in an indeterminate universe, free will does not exist due to 1) no genuine point of contact for free will and 2) any utility of free will dissipates into meaningless randomness and noise. Peoples’ ability to freely will represents the fulcrum for each stream of reasoning, which makes intuitive and immediate experiential sense. Our universal, internal sense of willing something, of choosing one thought or act over another. Moreover, free will implicates ethics, morals, and legal systems, which binds upon bearers with the ability to freely choose right over wrong. Moral axiologists connect “right over wrong” to value systems. Value systems found in theological and non-theological contexts. Therefore, an important question for most people to consider with due ratiocination. In short, free will and ethics implies moral accountability. With increased understanding of the world through science, what do you think of this issue? What evidence and argument most convinces you of this answer/these answers?

Rosner: We can use physics to start to address whether we’ve even been asking the right metaphysical questions, such as, “Is there free will?” Free from what, exactly? From being trapped in determinism? Thanks to quantum mechanics, we know that the world isn’t pre-determined. (However, it’s easy to imagine that, even with quantum indeterminacy, our thoughts in any given situation could pretty much be pre-determined (unless we explicitly build in

randomness just to be contrary). I don't think that quantum indeterminacy has much to do with whether we think one thought or another. Other people disagree.)

"Free will" can mean "thought that is independent from material constraints." Under this definition, if thought takes place in the material world, then it's materially constrained. Material constraint doesn't bother me. I believe a more important question is, "Can we make decisions free of unconscious biases?" Are our conscious minds running the show, or are we puppets of our selfish genes? And can we overcome this puppetry?

In the past, some people thought there was ordinary matter, the tangible stuff that comprises the world and there was mind-stuff – special, as-yet-undetected twinkly stuff that does your thinking. (But even with two forms of stuff, there's still the question, is this mind-stuff free of material constraints? Are we free to think what we want to think without the material world constraining our mind-stuff?)

I think today, the situation is clearer. Our thinking consists of the information in our awareness and how we manipulate it with our hardware – our brains. We are our information. There's no mind-stuff that freely thinks independent of information.

When you ask the question, "Why am I me?" the answer turns out to be, "Because all of your information pertains to you." All your information came into your head, was processed by you, and pertains to you (if only because you perceived and processed it.) You can imagine jumping into someone else's head, Quantum Leap style, but in that case, you're taking your information and your mental history and the ways you process information into somebody else's situation. You're not taking some abstract mind-stuff that's free from information with you – you are your information and your mental tendencies.

So there's no free will (as I understand the question – there are other interpretations of free will) because there's no mind-stuff judging from afar, independent of information. To be clear, information is not matter, but neither is it independent, free-floating, twinkly mind-stuff.

Information in this context is representations of things presented in such a way that we can think about them – they're part of thought – they're mentally manipulable in our mind-space. This space isn't made of or facilitated by a special form of matter. Information is tightly coupled to and facilitated by our brains, which are concrete and material.

I'm vastly oversimplifying, but the impetus behind the interest throughout history in free will seems to be concern about whether thought is to some extent a sham – whether we have exalted powers to stand apart and above from the grubby, clockwork stuff of the world, and beyond that, whether can we avoid having our thoughts controlled – by genes, by creeds or institutions, by mental limitations.

We would want free will because that would mean we're not the beyotches of the pedestrian, earth-bound material world.

But the better question is, "Can we be in charge of our thinking?" That is, can we think without bias? Consciousness is always playing tricks on us, because consciousness is a product of evolution, not a pure product of a desire to give us the most complete and accurate view of the world. (But we don't need to be products of evolution for our brains and biology and consciousness to have hidden agendas. The biases are there, regardless of what put them there. Just ask any grad student in psychology about what must be thousands of experiments which

show that consciousness gives us a highly filtered and biased and monkeyed-with view of the world. Each of us is our own Fox News.)

There are a bunch of parasites that transact business by messing with the brains of their victims – parasites that make mice attracted to cats (toxoplasmosis) or bugs attracted to light – so they get eaten and pass on the parasite to the next host in their life cycle. The hosts' brains have been hijacked. To some extent, everyone's brain is hijacked by what our genes want us to do. Reproducing often runs counter to the well-being and continued existence of individual organisms, but the process that made us is based on reproduction, and it tends not to be denied. We are greatly manipulated by our sexual thoughts and drives. It's so crazy how fascinated we are with boobs and butts and symmetrical, easy-to-read faces, but all those things carry information about reproductive fitness that we're hardwired to scrutinize.

We can make and are making progress in understanding our thought processes. Figuring out the limitations and biases of our thoughts and perceptions and how to overcome them are how we slowly extricate ourselves from Plato's Cave. We can never get all the way out of the cave – never see and understand existence exactly as it is – but we can make unlimited progress, stacking up level upon level of scientific, philosophical, aesthetic and moral understanding. (If thinking entities are common throughout the universe, then not only scientific understanding is necessary. Thinking entities have narratives and morality.)

People freaked out over the idea of determinism which got a big push from Newtonian mechanics. They didn't like the idea of being locked into a perfectly predictable machine universe which seems to make consciousness unnecessary. How can we really be thinking and why do we need to think if our brains are just molecules bouncing off of each other in a completely predictable way? But thinking shouldn't have to be and isn't transcendent – it's a technical process involving considerable amounts of information simultaneously shared among a bunch of specialized subsystems. Doesn't matter if it's just electricity and bouncing molecules – the mental chatter is an unavoidable aspect of the processing. While not transcending mechanics, thinking, as an inescapable aspect of high-level information processing, may be the frame for all of physics (since the universe engages in high-level information processing), which makes thinking kind of transcendent, after all.

The universe turns out not to be deterministic – quantum events are, within their probability functions, perfectly unpredictable. (Future quantum events (which includes everything, really) precisely follow probability functions. We don't know the outcome of a quantum event. But we do know the probability curve that decides the outcome. That is, once we've narrowed down the possible outcomes as much as possible, what's left – the unpredictable, indeterminate part – is completely, inherently unpredictable except in terms of precisely defined probabilities.)

But this isn't good news for free will, because quantum unpredictability doesn't liberate thought from being a mechanistic process.

Consciousness is a technical thing, not a mystical in the realm of angels thing – it's a property of high-level information-sharing via bouncing molecules, etc. – not necessarily in a completely predictable way, but also not in a way that thought can bend or defy physics through thought itself.

Consciousness creates an information space (or mind-space) that owes itself to the physics of the brain but isn't comprised of the atoms of the brain. (It's as if your brain is running a video game

environment which contains representations that come from (processed) sensory information and from imagination (generally not the Willy Wonka kind). It hasn't built a physical world – a scale model of the outside world like a model train set – but rather a system that allows the mind to envision and manipulate mental representations. As we think, we don't see neurons firing – we see what is represented by patterns of neurons firing.)

But hey – if you have your mind-space – an abstract arena for the information in your awareness – why so serious about the physical foundation of the space? Your brain is made of stuff – get over it. Legitimate concerns related to free will include not being in charge of what gets to enter your mind-space, how information has been sharpened, simplified, amplified or otherwise tweaked on the way in, and unconscious glitches in your information-processing.

There's the ass-covering, bogus storytelling nature of consciousness. Your unconscious or some specialized subsystem pulls the trigger on a decision, followed by your consciousness telling itself a story after the fact about why it made the decision. Happens all the time. Your consciousness is always telling you, "It's cool – got it – I'm the boss." Sure you are, consciousness – you're the boss like Donald Trump or Michael Scott is the boss – you can be a blowhard with an exaggerated sense of your own skills.

If you observe carefully, you can spot some of the mechanics of consciousness and watch your thoughts being assembled. One small example – when there's a name on the tip of your brain, sometimes you get clues – it's five letters, it starts with a B or an M. You can glimpse some of the mental landscape where the little ball of inquiry is rolling around, trying to drop into the pit that's the answer. But now you've thought about it too much – you've scrambled the landscape – you have to forget your inquiry and let it settle. Come back to it a little later, and often, the answer is right there for you.

In addition to constraints on thought, there are constraints on existence itself. Our thoughts are fairly tightly bound to reality, and reality seems bound to some pretty inflexible principles of existence. Creatures that are the result of evolution in a natural (un-engineered) cosmos probably all live in three spatial dimensions with linear time and rules of physics which are fairly consistent among all the different possible universes. (I don't believe that the universe can take on any crazy dang form, with physical constants and number of dimensions at the mercy of 12-sided dice, and not just because the special effects department only has the budget to cover a couple of extras in blue body paint. There are reasons for gravity and 4D space-time, etc.) Whether advanced civilizations can circumvent these somewhat uniform conditions and construct truly weird universes remains to be seen.

Evolved creatures are persistent creatures – they've evolved to persist by propagating offspring across time. If the general scheme of the universe is decipherable – if we can decode its physics and metaphysics – then advanced civilizations (at least those which retain the will to persist that they evolved with) will figure out the universe and be forced to address it on its terms (which we have to anyway, even without understanding it). Every civilization cooks from the same Mystery Basket – the universe.

So civilizations are locked into a template – they react to the conditions of existence, constrained by their persistent characteristics and by physics, resulting in a limited range of possible paths for civilizations. You hear people say, "There are only seven basic plots for movies." Well maybe there are a limited number of basic plots for civilizations. Some might be empire-builders. Though maybe not – in the words of Enrico Fermi, "Where are they?" It might be more efficient

to stay close to home and exploit local resources for computing power – turning nearby planets into Dyson spheres and the like. Some might fall into decadence. Some might devote themselves to figuring out what the universe means and wants. Some might become artists, engaging in grand feats of beautiful, frivolous engineering. Maybe your standard advanced civilization is a mix of all the major reactions to existence, kind of like a TV lineup – comedy, drama, glitzy excess, hedonism....

The rules of existence will turn out to be fairly mathematical – not ordained from above, with God saying, “This is the precise and perfect Number One. It’s the basis of counting,” but hemmed in by slippery, iron-clad but fuzzy and evanescent tautological necessities such as non-contradiction – something can’t both exist and not exist (except when it can because of quantum uncertainty) – with existence entailing space and time and matter and their delineation via interactions – a big, messy ball of bootstrapped logic. (Numbers seem inherently exact, but that’s how we define and use them. We’re really borrowing an infinity of information (about the relationships among numbers) to do so. Numbers are as bootstrapped as everything else, but they’re amenable to procedures which hide that.)

Given that we’re constrained by math-like rules, it’s not unreasonable to think that we’re math-like entities, with our existences boxed and bound and constrained by having to belong to the set of all possible things.

Imagine, for example, the mind-space of a sponge, which has no neurons but which can respond to stimuli. (A sponge can sneeze when it gets filled up with schmutz.) It has a tiny-to-the-point-of-nonexistent, fuzzy mind-space – a pretty close to minimum-possible mind-space – which could probably be replicated with a simple mathematical model. Then there are roundworms with 302 neurons. It would take a much more complicated model, but you could still build one, once the math of mental spaces is understood, which would encompass all possible roundworm mental states. Which means that the mind of a roundworm is a mathematical entity.

Now imagine the brain of a chicken. The (always reliable) internet suggests it might have 100 million neurons. Hard to imagine precisely and accurately modeling a chicken’s mental space. But on the other hand, it’s a chicken. We’ll eventually be able to do this. We could build Chicken (and Pig and Cow) Heaven. Sorry we keep killing and eating you, chickens, but we’ve replicated all possible chicken mind-spaces in this computer. You’re in there somewhere, having what passes for a great time for a chicken.

There’s no way we won’t, in the next 50 years, try to build the mind-spaces of Abe Lincoln and Jane Austen and Shakespeare. “Have you read *Joy and Jealousy* by Jane Austen 3.3? Way too much sex.” Yes, *Star Trek* Holodeck, I can see you. You can put your hand down. Characters in video games will have their own mind-spaces. People who freeze their heads might find themselves brought back to fight World War Two over and over in *Shell Shock 4* for the Goopple PlayVerse.

But we’re saved from our constraints by infinity. Assuming (which we may never be able to prove) that possible universes can be of any finite size, and that the number of universes of any given size is proportional to the size raised to some exponential power, there’s an infinity of possible worlds and destinies.

Jacobsen: Free will might operate beyond present explanatory powers. It may exist intrinsic to an individual consciousness, or set of POVs, in the universe

overriding/incorporating quantum indeterminacy or exist based on an intrinsic characteristic in a larger system. For instance, an armature of the cosmos beyond present explanatory powers. What of this armature for the universe? What if free will for the universe inheres in this armature? Intrinsic freedom of the cosmos. In other words, what if conscious creatures relate to such an armature and have derived (intrinsic to them or derived from armature) freedom of the will?

[Asked in a Seinfeld voice] What's the big deal about free will? I'm not overly concerned about free will; I care about *informed will*. Consciousness can function to somewhat optimize mental resources, with the objective being, the better the model you have of the world, the better your understanding of that model and the more angles and tactics you can deploy based on that understanding, the better your chances are of achieving your goals.

This is not free thinking. This is targeted thinking, based on where and what we are in the world. We're not free – we're part of the world, and we have to think about it. We can think freely about philosophical issues – about whatever we have the mental chops to think about – but even this kind of thinking is some kind of strategic reaction to the world. I would rather think well than think free. Freedom comes from knowing what's up and being able to react effectively to it. But you're still anchored to what's up.

And about the universe's armature – I think the universe is thinking about the world that the armature is part of – the outside world that contains the mind or mind-like thing that is our universe. The universe's information processing or thoughts pertain to – are anchored to – its outside world. Everything that thinks is thinking about a world – it's thinking in an anchored context.

Jacobsen: Out of another set of mainstream physicists, even while some claim lacking direct observational evidence, arises the possibility of additional dimensions as postulated in, for example, string theory with everything in existence operating inside of 11 dimensional hyperspace. How do these conceptual and mathematical frameworks hold in your view?

Rosner: It takes information to build and specify dimensions. Where does the information contained in 11-dimensional hyperspace come from? Does the universe contain enough information to have all these extra dimensions? Maybe so, if the dimensions are small enough to not contain much information at all. But on a macro scale, the universe barely has enough information (from observing itself) to hold open three spatial dimensions.

I don't love string theory. Maybe if I knew enough math and physics to work with it, I'd like it better. But in my current ignorant state, it seems unnecessarily complicated. I hope there's a simpler explanation for the way the universe works, with string theory being one of a variety of helpful ways to conceptualize physics. I'm hoping we develop a toolkit consisting of a number of different but consistent angles on physics and the universe, each being handy for certain operations, and acting as cross-checks and sources of insight for each other. It would kind of suck for string theory to turn out to be the simplest way to understand the world.

Why does the universe have three dimensions? I think we live in a Rumsfeld universe. Donald Rumsfeld famously said, "...there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns — the ones we don't know we don't know." (Errol

Morris, who made a great-as-usual documentary interview with Rumsfeld called *The Unknown Known*, traced the idea of unknown knowns and known unknowns back to the explorer John Wesley Powell. He also notes that John Keats and Robert Browning also mention the “known unknown.”)

Suppose that the universe is an optimized information map (of itself, the same way we could imagine an information map of the mind, which when optimized would be a map of itself), with the distance between objects roughly based on how much information they have in common. Parts of the universe with almost everything in common will be very close to each other. (By “in common,” I mean shared information – they’ve been exposed to largely the same history – belonging to the same group of active galaxies – as the universe unfolds.) Parts of the universe with very little in common will be distant from each other (and red-shifted and time-dilated). (Dormant galaxies which are distant from and mostly uncorrelated with each other can be hauled into stronger correlation with each other by bringing them into the active center (kind of like popping open windows on a giant glass touch-screen on a cheesy *CSI*-type show).)

In an information-map universe, it takes information to hold space open. The number of dimensions depends on the amount of information available to specify the relationships among objects in these dimensions.

Every part of the universe at the same distance from us has about the same amount of information in common with our neighborhood. Say, for example, that we’re looking at parts of the universe that appear to be moving away from us at 30% the speed of light; they’re about 4 billion light years away. Everything that’s four billion light years away from us forms a sphere of that radius, about twice the radius of everything that appears to be moving away at 15% the speed of light, with four times the area.

Just for fun, say that the amount of information in common with us is approximately (at low v) the reciprocal Lorentz factor from special relativity: the square root of $(1 - v^2)$, where v is the redshift velocity (how fast that part of the universe seems to be moving away from us). For $v = .15$, information would be about 98.9% in common, or 1.1% not in common. For $v = .3$, information would be about 95.6% in common, or 4.4% not in common. For low redshift velocities, information not in common is proportional to the ratio of velocities squared.

This sets up a locally three-dimensional universe. At each redshift radius v , information not in common with our neighborhood takes up a region proportional to v squared, or the surface of a sphere of radius v . (Each redshift velocity corresponds to a (Hubble relation) distance from our galaxy.)

I’ve left out multiplying the information not in common by the information in common. The less information in common, the less you can distinguish the spatial relationships among distant objects, and space at that distance as we see it shrinks proportionately.

So here’s a Rumsfeld way of thinking about the dimensionality of space. Distances from us are the known known – we know how much information we have in common with other neighborhoods and objects in space. Spatial relationships among *other* objects shade from the known unknown to, at higher redshifts, the unknown unknown. We know a lot about neighborhoods with almost all information in common with us, but, having almost all information in common, they don’t spread out across a lot of space. The less information neighborhoods have in common with us, the more information space they could occupy, but the

less we know about them, the less we know about their spatial interrelationships and the less we can see those relationships, and space at large cosmological distances is effectively shrunken (and smeared out as we look at it).

In a Big Bang universe, we can see across nearly 14 billion light years. (Microwave background radiation has spent nearly the apparent lifetime of the universe reaching us.) But we're not looking at a sphere 14 billion light years in radius, because the background radiation comes from a very small, young, recently exploded universe. (There's a maximum radius we can see as we look across greater distances and farther into the past. Beyond that radius, we're seeing increasingly smeared-out images of our universe when it was younger and smaller. Of course, every image we see is of a younger universe, but it's usually only younger by a few billionths of a second – the time light takes to cross a room.)

If we could see to infinity, we wouldn't see Big Bang space as completely filling three-dimensional space. Looking farther and farther, we'd see the universe getting smaller and smaller (because younger and younger), until it's a point at $T = 0$. But that's just because we're looking back in time. Though we can't see it because of the finite speed of light, a Big Bang universe can be a fully three-dimensional surface of a hypersphere.

But I don't think we live in a Big Bang universe. Due to the nature of an information-space universe, it looks quite a bit like a Big Bang universe, and that it started with a Big Bang is a natural first conclusion to reach, based on general relativity and the Hubble redshift. Note that the idea of the Big Bang – space exploding from an initial point – while seeming indisputably established, is less than 100 years old, and has been the predominant theory of universal structure for less than 50 years.

A Big Bang universe is nearly the same everywhere – the result of a uniform outward expansion. But a universe that doesn't blow up all at once isn't the same everywhere. It has an active center and burned-out and collapsed outskirts clustered close to what looks like $T = 0$. This universe may not be perfectly three-dimensional – space is highly curved and riddled with collapsed stuff near the apparent origin, which may mean that space is effectively less than three-dimensional at great distances.

If space doesn't extend outward from any given point – if, on the outskirts, it tucks into itself – maybe it's lacking dimensionality. (Or maybe the scale of space is (relativistically) collapsed, allowing for space to be squeezed into less space. On the outskirts, you might be able to have an unlimited number of neighborhoods separated by high apparent relative velocities, because you can add relativistic velocities forever without reaching the speed of light – stuff just gets more contracted.) If the outskirts are less than three-dimensional, this might explain large-scale gravity not falling off according to the inverse-square law.

(If there's an actual collapsed outskirts not just a visual ghost of the early universe, can you build a rocket and travel close to $T = 0$? Probably not. For one thing, it's a many-billion-year trip, even at the speed of light. For another thing, space filled with collapsed stuff may have a smaller scale and contain even more distance than we can see from here. And there would be heavy radiation including lots of neutrinos.)

To get back to your original question about string theory and 11 dimensions – I think there's an economy of dimensions. Self-defining systems of information don't have enough information to

hold open a space greater than three dimensions (not counting gravitational wells) (and maybe not even three dimensions over great distances).

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Four)

November 1, 2014

Abstract

Part four of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: information processing as the basic operation of universe, 'transactional information processing', isomorphic operation *and* traits of humans and universe, operation through time, self-consistency and information processing as the traits, creation of a new field of endeavor called 'informational cosmology', and implications of informational cosmology; scientific study of the linkage with established scientific techniques, applying physics to thought and understanding of the mind to universe, mathematicising consciousness as a step to digitizing consciousness, implications of storable and transferable consciousness, the destiny of civilizations to make this linkage, and human civilization being one of them; calculated information-in-common/information-not-in-common based on various velocities (.15v and .3v), gravitational lensing across ultra-deep cosmic time, self-consistent and information processing areas of universe equating to subsystems and therefore consciousness, black holes not existing, "blackish holes" existing, considerations on consciousness of largely independently processing blackish holes, and complexity of the universe possibly taking the form of advanced civilizations; current theory of universe composed of ~4.6% baryonic matter, ~24% non-baryonic/exotic 'dark' matter, and ~71.4% non-baryonic/exotic 'dark' energy, *argumentum ad verucundiam*, theories with correct or incorrect nature based on the reasoning and agreement with the evidence; allowance for recycling of galaxies, young galaxies populating the expansive center of the universe (older galaxies on the outskirts), old galaxies as neutron heavy ("cooked"), and recalling of old galaxies to the center of the universe; *élan vital*, possible analogous ideas such as dark matter and dark energy, dark energy as a tweak on the inverse-square law of gravitation, steady scale of universe over billions and billions of years, "self-observing, self-defining universe" having flatness and in-built constant size, self-definition of universe maintaining a constancy of size, one cross-section of time or one moment and associated probabilities of history and possible futures; considerations on gravity; thoughts on the necessity or non-necessity for gravitons to have gravity; preliminary review of informational cosmology and interrelated concepts, commentary, calculations, and arguments for the field; discussion on informational cosmology and entropy; discussion on informational cosmology and subatomic particles; further extrapolations about black holes; linking the variegated concepts and arguments of the theory; the essential meaning of these linkages; discussion on informational cosmology and space & time; discussion on informational cosmology and the principles of existence ('laws'); concrete calculation about the age of the universe relative to the accepted canon age of the universe at ~13.77 billion years old, calculations based on estimations of human thought, unfolding of galaxies, structure for the universe, multibillion-year unfoldings of universe, and the derivations up to concluding of the universe not being only ~14 billion

years old; and the extension of informational cosmology to two new complementary fields called ‘informational cosmogony’ and ‘informational ‘eschatology’, information internal to universe arising external to it, and thoughts on such an armature external to universe.

Scott Douglas Jacobsen: You describe information processing for universe’s substrate of operation. This implies transactions. For precision, this means ‘transactional information processing’. I would like to plumb the well of reasoning. For example, ubiquitous information processing within and by universe. Consciousness emerges from self-consistency and information processing. Humans have self-consistency and information processing, and thus have consciousness. Therefore, we can extrapolate to universe based on isomorphism in operation *and* traits. Operation through time. Traits of self-consistency and information processing. An isomorphic geometry of universe and minds in universe. By extension, universe possesses localized and globalized consciousness. In addition to this, if we could provide an absolute measure of the degree of 1) self-consistency and 2) information processing capabilities of individual localized consciousness, then we could provide an absolute measure of global 1) self-consistency and 2) information processing capabilities of universe. Precision of this metric limited by information quality, computational capacity, and efficacy of calculation methodology. Therefore, we might both 1) consider universe reposed with consciousness at the fundamentals and 2) provide a metric of universe’s degree of consciousness. You call this “informational cosmology.” In a way, mind/brain sciences become physics/cosmology, and vice versa. A metric for the mind/brain could extrapolate – within reasonable consideration – into a metric of universe. Only differences in magnitude. Where else does “informational cosmology” lead us?

Rick Rosner: Informational cosmology smashes together two big areas of study – the mind/brain and the universe – in a way they’ve never productively been smashed together before – they’re the chocolate & peanut butter, the Han Solo & Chewbacca, the mac & cheese, the Lennon & McCartney, the Key & Peele, the Beavis & Butt-head, the Spock & Kirk, the Mulder & Scully, the Felix & Oscar, the Holmes & Watson, the Thelma & Louise, the Jonah Hill & Channing Tatum of tough things to think about. Three hundred years ago, Bishop George Berkeley said something like, “The universe is an idea in the mind of God,” but this didn’t lead to anything. There wasn’t yet enough scientific knowledge to work from.

But that was then. Now, linking information maps and thinking and the universe allows you to apply established scientific techniques across the linkage. We can apply physics to thought and information in the mind. We can apply understanding about the purpose and mechanisms of thought to the universe. We will soon be able to give mushy, loosely defined terms such as consciousness a solid mathematical basis.

And mathematicizing consciousness (developing a mathematical model of information processed in awareness) is the first step to digitizing consciousness (translating moments of consciousness into numbers) – to making it recordable, preservable, and transferable. That is a huge step – maybe the hugest step – towards saving our species and the planet. Storable, transferable consciousness eventually – within 100 or 150 years – frees us from the confines of our biological form. This is a big deal, if earth isn’t going to become a giant dump suffering from the effects of a 23-billion-person population. Science fiction writer Charles Stross imagines a future where, among many other things, most people/semi-people/robots are only three feet tall. Half-height people use less than half the resources – maybe less than a quarter of the resources – of full-size people. You can cram a lot more of them on the planet, if that’s what you want to do.

But that won't be all that we might want to do. Like-minded people might meld or marry minds and literally live as one. Many people will want to live almost exclusively in cyberspace, renting bodies when they need to go out into the real world. Population growth will slow. Maybe your rich grandma in a failing body offers you \$50 million to let her consciousness ride piggyback on yours. (Steve Martin made a movie about something like this 30 years ago – *All of Me*.) These are pretty unsurprising ideas in science fiction – people who think about this kind of stuff are expecting things to get weird. Even if my attempt to join thought and the universe doesn't gain traction – even if it takes someone else theorizing similarly, years from now, it's still coming – it's pretty much our destiny. It's the destiny of civilizations to make this connection and figure out the universe. (Just about every civilization figures out that its planet orbits its sun, that it's part of a galaxy, that there are other galaxies, that life evolved, etc. Figuring out that massively shared information-processing is essentially thought is another one of those things.)

There will still be plenty of normal human life. We'll still have the same drives (for sex, food, status, slightly taboo information), until we start messing with them. And then we'll have slightly more efficient and exalted drives, but nothing too terrible – ethical values will survive. People who want to live old-school will still be able to do it. But the drift will be towards control of our destinies via understanding ourselves and the universe – we'll improve consciousness, making it (and us) more informed and more complete, with fewer hidden biases. It'll be weird but also mostly great, and it's where we've been heading without knowing it since apes started using twigs to fish ants out of anthills.

Jacobsen: You calculated the information-in-common/information-not-in-common based on various velocities (.15v and .3v). We can symbolize them: I_c/I_{-c} . Gravitational lensing across ultra-deep cosmic time could form pockets beyond expected, i.e. calculated, arithmetic mean of derived spheres from I_c/I_{-c} at .15v, .3v, .45v, and so on. Insofar as calculated I_c/I_{-c} spheres with extensive radii in excess of .3v, multiple dispersions of information might converge on pockets of uneven areas of universe (and sufficiently large to make the empirical point) for statistically significant outliers of calculated information with expansive distances from one another. In an information theoretic framework, areas of self-consistency in an information processing universe might count among other subsystems. Units of sufficient individuation with self-consistency and information processing. Indeed, you have mentioned black holes, but “blackish holes.” You have said this for over 30 years. Moreover, you consider blackish holes universe's memory. If we fuse these arguments, we have outlier subsystems with capabilities for self-consistency and information processing called ‘black holes’ at present. Self-consistent and information processing subsystem equates to consciousness. Therefore, we have the possibility for sound consideration of consciousness emergent from blackish holes in universe.

Rosner: If blackish holes are (largely) independently processing information, then there's the strong possibility that conscious entities are doing at least some of the processing. Perhaps a place for civilizations or advanced beings to survive galactic cycling would be in the massive million-solar-mass blackish holes at the centers of galaxies. The universe is huge, ancient, and unavoidably complex (in part because every star with orbiting planets is an open system that can shed excess energy, which works against entropy and disorder). Some of that complexity probably takes the form of long-lived structures and entities and civilizations (or whatever civilizations tend to turn into).

Jacobsen: In the current theory of universe composed of ~4.6% baryonic matter, ~24% non-baryonic/exotic ‘dark’ matter, and ~71.4% non-baryonic/exotic ‘dark’ energy, your theory would shirk the current weight of astrophysical consensus. Although, we cannot disprove or by necessity deny the validity of the theory based on *argumentum ad verucundiam*, even authoritative authority. In addition to this, we cannot agree or disagree with the theory based on various high intelligence test scores, or credentials or lack thereof. Either correct or incorrect based on the reasoning and agreement with evidence. With these in mind, what do you make of dark matter and dark energy? Do they exist? How would your theory supersede present explanations?

Rosner: I think the universe isn’t inherently unstable in size, with overall stability being a characteristic of an information-based universe. That is, though parts of it can expand and contract, the universe isn’t going to keep flying apart to some cold, thin oblivion or collapse into an infernal dot. (At least without some outside agency acting upon it. The loss or degradation of the physical structure which supports the universe would result in the loss of the information within the universe. As the universe loses information, it would become less well-defined, which might look like a collapse and heating up of the universe – a big bang in reverse.) The scale and size of the universe should be roughly proportional to the amount of information it contains (with local scale and size depending on the information/matter distribution as viewed from each particular neighborhood).

Are dark matter and dark energy needed to help with the gravitational bookkeeping of an inherently flat universe? I don’t know. I’m more inclined to believe in dark matter than dark energy, with the dark matter made of non-exotic stuff – mostly old, burned-out, collapsed stars, many of which, I guess, would be orbiting on the fringes of galaxies, largely invisible except for their effect on the galactic rotation curve.

(Burned-out stars closer to the centers of galaxies could orbit the galactic center, largely undetected, or might collide with other stars (possible falling towards the massive black hole-like object at the galactic center), or during early-galaxy star formation might accrete enough hydrogen to light up again for awhile. I don’t know how old stars mixed into a young galaxy would mess with the dynamics of galactic formation. Wikipedia says there might be 10^8 neutron stars in the Milky Way, compared to 10^{11} regular stars. Red dwarfs, which have extremely long lifespans and are hard to detect, might make up three quarters of the stars in the Milky Way.)

What I’m saying is, if you allow for galaxies to recycle – to go through star formation, light up and burn out, over and over again – there’s room and reason for there to be lots of non-exotic, hard-to-see dark and dark-ish matter in and around galaxies.

Jacobsen: How would a burned-out galaxy be recycled?

Rosner: Young, active galaxies occupy the expansive center of the universe. Old, burned-out galaxies find themselves in more collapsed neighborhoods on the outskirts of the universe, due to subsequent expansions (in which they don’t participate). Old galaxies are neutron-heavy – they’re cooked – they’re done.

But conditions on the outskirts cause some old galaxies to become proton-rich again. Maybe an old galaxy gets flooded with neutrinos, which will be found in more profusion on the collapsed outskirts of the universe and which convert neutrons into protons. Maybe the hotter, denser

outskirts have more free-floating hydrogen to accrete. Maybe the increased curvature of space in the collapsed outskirts reduces the depth of the gravitational wells which keep neutron stars under pressure, allowing the surface layers of these stars to decay back into protons. Maybe collapsed structures can reignite themselves, based on their own information and processes or when detecting information that they specialize in (that may not be visible to the rest of the universe – collapsed galaxy as smoke detector).

The outskirts of the universe are hotter, denser, more spatially curved, more bombarded with neutrinos streaming from the active center. Here, it's harder for neutrons to remain neutrons. Here, I'm guessing that the crusty, neutron-heavy surfaces of the stars in an old galaxy can be eroded into protons, like a Lifesaver in your mouth. A galaxy that gets hit with enough proton-producing forces is rejuvenated and can become part of an active, expansive galactic center. Perhaps most of the collapsed matter on the outskirts exists in a hair-trigger state, ready to light up again on a moment's notice (with that moment being billions of years long).

An information-processing universe can reactivate old, settled galaxies, recalling them to the center, where they participate in new processing. The processing in the center helps but doesn't exclusively determine which galaxies will be next to be recalled. (The galaxies in the active center co-evolve over a rolling cycle. They form a bubble that might merge with other bubbles. The active center is probably more balloon than neck. That is, most galaxies would experience themselves to be roughly at the center of the universe, the way every galaxy is central in a Big Bang universe.)

Jacobsen: Science history presents examples of widely accepted substances. For a trite example, *élan vital* to explain the knotty operations of life. Time proved their possible veracity more or less false. Do you think dark matter and dark energy have analogous existence to older ideas like *élan vital*?

Rosner: Some of the finer points of dark energy will go away – for instance, I doubt the universe is undergoing accelerating expansion.

Dark energy can be seen as a tweak to the inverse-square law of gravitation (or at least there are theories which account for large-scale phenomena by tweaking the inverse-square law). I believe that over a sufficiently long time scale, the universe as a whole experiences very little net expansion – that the size of the universe is proportional to the amount of information it contains, and on the timescale of a few 14-billion-year cosmic blinks, the universe doesn't gain or lose that much information. I suppose the active center of the universe can vary in size quite a bit, but I doubt this is accomplished via dark energy.

Given that the overall scale of the universe should remain steady, the inverse-square law has to be violated – there's no stable solution to general relativity without throwing in a cosmological constant. According to GR, the universe can't just hang in mid-air (or mid-space-time continuum).

But in a self-observing, self-defining universe, flatness and constancy of size are built in. I believe that the universe observes and defines itself quantum mechanically. It's as if the universe is an enormous gunfight – every particle in the universe helps figure out where every other particle is by all the particles shooting particles at each other.

Imagine a uniform universe consisting of regularly spaced particles (all shooting at each other). Over time, the wave functions of the particles spread out, as the universe itself spreads out

(because the specifications of space itself are uncertain). There's not enough information from the gunfighting particles to keep them absolutely pinned down in space – they're fuzzy, and they get fuzzier. BUT the rate at which the particles get fuzzier is proportional to the rate at which the universe spreads out, so the scale of the universe – the ratio of the particles' fuzziness to the size of the universe stays constant. There's your stable universe, hanging in mid-air.

The universe defines itself, and, by defining itself with a constant amount of information (proportional to the number of particles in the shoot-out and the complexity of their relationships), the size of the universe remains constant (or grows or shrinks gradually as it gains or loses information).

(What collapses the wave function (if that's the way you want to talk about it)? Probability. Wave functions are either collapsed by observation or not. (I guess – it'd be nice if I'd studied advanced QM, but oh well.) Observation is done by the matter within the universe. (Sometimes people make the observations, but we're not particularly special in that capacity – we're part of the universe.) At each moment (as experienced locally, so you don't have simultaneity problems) particles are all in their various states, with their probabilities of interacting with each other or decaying or whatever else particles do. Subsequent moments reflect the playing out of these probabilities.

To be clear-ish: you have a moment, with its probabilities. This moment implies a set of possible subsequent moments, consistent with the information contained in the moment. Each subsequent moment (that is, an actual moment, not just a possible many-worlds moment) reflects the probabilities in the history that led up to it. But each moment is random and arbitrary to the extent that the universe has finite determinative information – a limited capacity to define the future. Every moment predicts the future, but not all the way. Each new moment has information that is filled in, not from out of nowhere, but from outside of the universe's determinative information. Like this – an hour before the end of a football game, your personal information space determines that the game will almost certainly have a final score. But your information space – your mind – can't determine that score. It can assign probabilities, but the moment that contains the final score includes information that was previously unavailable to your information space and had to be filled in from outside.)

Jacobsen: What about gravity?

Rosner: In our evenly spaced universe, there's no experience of gravity – everything's hanging in mid-air. But move a couple of objects closer together. You've raised the mass density in their region above the universal average. (Been thinking about gravity a lot and have managed to confuse myself a little bit, but...) By being closer together, they're not seeing as much of the energy flux that holds space open (or something). The space between them will expand considerably less than between the evenly spaced objects, and hey! – you've got gravity (when the overall expansion due to uncertainty (and photon flux?) is cancelled out). (Given that the average mass density of the universe is about one proton per cubic meter, two protons separated by a meter (in our hanging-in-mid-air universe) should experience no net gravitational attraction. Good luck testing that – the force or lack of force is more than 10^{40} times smaller than the smallest force ever measured.)

Jacobsen: Do we need gravitons to have gravity?

Rosner: There are arguments from quantum field theory in favor of gravitons, but if gravitation is an effect of the scale of the universe being information-based, gravitation might be entirely mediated by other forces and particles. Gravitation might be bookkeeping – other forces conduct their business, with the scale and shape of space (which includes gravitation) being a collective net result of this business. What I’m asking is – does the shaping of space require special space-shaping particles, or does the shape of space result from all other physics business? I guess this is the same thing as asking, “Does all the other business transmit all the information without the help of gravitation?”

This leads back to your question about dark energy. Dark energy seems like a spring-loading of empty space to make the universe conform to observation. I doubt that dark energy is a thing beyond that everything comes from the scaling of space based on information. In most of our observations, we see this as an inverse-square effect of gravity. But this doesn’t make inverse-square the law – it’s just the most observable effect. Overall, the universe probably stays roughly the same size over shortish periods of time (billions of years), which it couldn’t under universal inverse-square gravity. Effectively, there’s a cosmological constant. And there are probably a bunch of other tweaks to inverse-square gravity. But inverse-square and its tweaks all come from the same thing – the shape and scale of space being defined by the information it embodies. So, instead of a computationally very simple inverse-square law as a foundation, you have this principle that information shapes space which is probably computationally a pain in some of its aspects. In everyday situations, you can simplify it to inverse-square. In other situations, maybe it’s helpful to do the math as if there is dark energy or a cosmological constant. Does that mean that dark energy actually exists? Could be that it doesn’t – could be just a mathematical convenience.

Let’s go through a few questions that have been prompted by your answers to previous questions. What would you call a field which links the structure of thought with the structure of the universe?

Rosner: The idea that the universe is describable by information (is a humongous information processor) is called digital physics. I like “informational cosmology” better. (But suggesting a discipline be renamed is kind of a douche move.)

Jacobsen: What about entropy?

Rosner: In the words of a tweet from Christopher D. Long, “People shouldn’t expect phenomena at scales and energies far outside normal experiences to be analogous to those experiences.” We don’t have an understanding of how entropy might work for the universe as a whole. I think that the universe has ways to dump or hide or attenuate energy-depleted, high-entropy volumes. As a formerly active part of the universe burns out, it collapses and gets pushed to the side as other parts of the universe light up and expand. The effect is no overall increase in entropy. (The pushing to the side is a relativistic rotation out of the active center. I like thinking of relativistic shifts as rotational. Objects with a high velocity relative to you aren’t fully participating in your space-time frame, according to the equations of special relativity, which are trigonometric.)

Relativity, both special and general, has to do with information. Matter that (as information) has reduced relevance (that is, I guess, reduced information in common) with the matter observing it is relativistically rotated – shortened, time-dilated, red-shifted. The Hubble redshift acts like a correlation quilt across the universe. Neighborhoods that are highly correlated with each other are close to each other, with low relative redshifts.

Which kind of leads to inertia. Mach's Principle says that inertia is due to the stellar background. (That is, movement relative to all the galaxies in the universe – at the time Mach was writing, the existence of galaxies beyond ours wasn't well-established. And way before Mach, someone else who kind of thought this was Bishop Berkeley, the "Universe is an idea in the mind of God" fella. That guy was good.) What if inertia is due to gravitational attraction being relativistically attenuated, so that an object in motion is less attracted to the matter in its immediate neighborhood and more attracted to the neighborhood whose apparent velocity matches its own? (A friend of mine asked Feynman about something like this, and Feynman said it didn't work – the calculation ended up with a sign-reversal – a plus where a minus should be, or something.)

Jacobsen: What about subatomic particles?

Rosner: Of the dozens of subatomic particles, only five – the electron, proton, neutron, neutrino, and photon – can last for a long time and travel across large distances. I consider these the workhorses of the universe and all the other particles their helpers. Protons and neutrons encode information and shape space, with protons opening up space and neutrons collapsing it.

Not all information in the universe can be in play at the same time. The universe doesn't have enough processing capacity, and most parts of the universe are highly uncorrelated with each other – they're in neighborhoods that are vastly separated (in distance and Hubble redshift). But even when not in play, information in collapsed neighborhoods may help define the universe, perhaps with their gravitational vectors acting as 4D tent pegs, helping hold the whole universe open.

If you examine the contents of your awareness from moment to moment, you don't know that much stuff at any given instant (the moment you wake up, for instance), but you don't panic, because you feel that you can recall just about anything you need to know almost immediately (and because it wouldn't make sense to be in a constant panic – you're used to always almost knowing things). There's all this knowledge on the tip of your brain – it's imminent – ready to go and perhaps providing structure without being fully in your awareness.

The universe could be set up the same way, with shadow information – collapsed neighborhoods on the outskirts – providing structural support and helping define space and the matter it contains. Maybe in a very low-information universe – young, hot, fuzzy – the ratio of the proton mass to the electron mass is closer to one-to-one rather than our 1,836-to-one.

Could be that neutrons, acting as closed-off variables, serve to increase the precision with which matter is defined. Protons are free to act on other matter via electric charge – they're active. Neutrons are decided – they're locked into fixed correlations in a nucleus or in gravitationally collapsed matter. They can't interact with the universe via charge. But by being fixed (generally for the many-billion-year time being) they can provide a stable background – a framework of frozen, decided (for the long now) issues – against which the active center of the universe can work out the issues in play. The frozen background is the framework of assumptions that more precisely define the terms in play. The terms in play are the protons in the active center, made heavy, small and precise (because the heavier the particle, the smaller the DeBroglie wavelength) by all the collapsed matter in the background. The proton-electron mass ratio is proportional to the amount of collapsed, neutron-rich matter on the outskirts of the universe compared to the amount of proton-rich matter in the active center. It's an old universe, with a lot of collapsed matter.

The frozen framework can be brought back into play, but only a small fraction of it can be in play at any one time. It sits, waiting, an array of imminent knowledge – things resolved and removed from active consideration until needed. (Your mind pings against its frozen background, warming it up just enough to give you the feeling of being at home in yourself.)

Jacobsen: What about black holes?

Rosner: Black holes. I don't believe in black holes as objects that must necessarily crush themselves into singularities. Instead, matter moving towards black hole status is a ball of information/matter which, as the matter collapses, increasingly correlating with the matter within its own sphere, shares less and less information with the outside universe. But the information it contains doesn't have to be crushed out of existence. Circumstances can vary, and a blackish hole's information should usually be retrievable.

The information within collapsed matter has to generally be repeatedly retrievable as parts of the universe cycle from active to burned-out/collapsed and back to active. The crushing forces of gravitational collapse might be countered by a shrinkage of the scale of space within a sphere of collapsing matter, with the matter growing heavier and smaller until stasis is achieved, with shrinkage of space equaling energy gravitational gained, so that matter and the scale of space largely define themselves through interactions among the collapsed matter. The interior of blackish holes could be organized, which we couldn't see much of from the outside, or information could be lost, as the matter falls back into primordial chaos. (Wouldn't want too much of that. The universe would be losing its memory/framework.)

Jacobsen: How does this come together?

Rosner: Non-velocital redshift is an indicator of information not-in-common (I_c) with the observer.

(On my birthday in May, 1981, when I first got the idea of mental information maps (in the Libby Hall dorm cafeteria at the University of Colorado (may have been eating cubes of red Jell-O – I liked my Jell-O), I imagined that the ease with which something can be recalled depended on the geometry of the information to be remembered. Are there a bunch of angles from which it can be accessed, or is there just one angle – only one set of associations which can be combined to get to it (which means you can't get to it at all if you can't come up with those associations)? Then I realized that an optimal mental information map might look like the universe itself.

And then I imagined a mental map of what you know about how you and other beings go to the bathroom. (It's just where my brain takes me – sorry!) You know a lot about how you go to the bathroom – that's at the center of your map. Close to the center, you may know (too much, even) about how family and friends go to the bathroom. Further out, you have generalized knowledge and assumptions about how Americans and Canadians go to the bathroom. Way further out (and redshifted), is how they go to the bathroom on other continents, such as China and Japan. You've heard about holes and places to put your feet – you don't really want to know any more than that. And then way, way out in zero-knowledge land is how they go to the bathroom on other planets. I suppose a more mature person would've simply pictured the classic March 29, 1976 New Yorker cover, which is kind of a Manhattanite's mental map of the world.)

Go ahead and figure information in-common (I_c) equals the square root of $(1 - v^2)$, where v is the apparent recessional velocity over the speed of light. (It's a term from special relativity.) Everything in the universe is a mixture of information I_c and I_{-c} with us. The farther a galaxy is

from us, the greater its apparent recession, the less information it has I_c and more $I_{\sim c}$ with us. I think the proton-electron mass ratio is proportional to the $I_{\sim c}$ - I_c mass ratio. In a young, small, nearly information-less universe, the proton-electron would be a lot smaller – possibly not one-to-one – a proton is much more complicated than an electron – it's a knot in space, while an electron is a twist in space. But the ratio would be much closer to one-to-one.

Information $I_{\sim c}$ is stored information – it's memory, not retrieved in the present moment. The universe has limited information-processing capacity – it can't know everything it knows all at once. (You don't know everything *you* know all at once.) Every galaxy, active or collapsed, in the universe has a combination of information I_c and $I_{\sim c}$ with us.

The cosmic microwave background radiation – the oldest, farthest-traveling radiation in the universe – has a z , a redshift, of nearly 1,100. A galaxy's redshift z is proportional to its $I_{\sim c}$ - I_c ratio. This is ballpark for a $I_{\sim c}$ - I_c -dependent proton-electron mass ratio of about 1,836. The picture is like this: near $T = 0$, you have a bunch of collapsed galaxies that aren't sharing much information with the active center of the universe. These blackish galaxies have $I_{\sim c}$ - I_c ratios of 1,000 and higher, and there are enough of them to raise the $I_{\sim c}$ - I_c ratio for the entire universe, as seen by us in the active center, to 1,000 or more, bumping up the proton-electron mass ratio.

To go into a little more detail – imagine a grid of galaxies with an apparent velocity of half the speed of light between adjacent galaxies.

(I first imagined this while posing for an art class in 1988 – gave me something to do while sitting naked, trying not to move. Instead of galaxies, I imagined spaceships piloted by the Brady Bunch. Greg pilots a ship going .5C away from earth. Marsha's ship goes away from Greg at .5C. Bobby's ship travels away from Marsha at .5C, and so on. I told my boss, Mike Armstrong, at *Remote Control*, the quiz show I wrote for, about it (because I'm weird). He said, "That's a whole new type of question!" and Brady Physics was born. We asked contestants to tell us the result of dangerous hypothetical experiments performed on the Bradys.)

When you add the velocities of a series of objects moving at half the speed of light relative to each other, you never reach the speed of light relative to the stationary observer (to any observer). The observer on earth sees ships moving at higher and higher fractions of the speed of light – $\frac{1}{2}$, $\frac{4}{5}$, $\frac{13}{14}$, $\frac{40}{41}$, $\frac{121}{122}$, $\frac{364}{365}$, $\frac{1093}{1094}$ To get a $I_{\sim c}$ - I_c ratio of more than 1,000, you need an apparent velocity within one two-millionth of the speed of light, which takes a string of 14 spaceships. (You run through all the Brady kids and parents, Alice, Tiger, Sam the Butcher....)

So you have a grid of galaxies, with the most distant nearly redshifted into invisibility, but still providing scale and structure, in part by making protons fairly massive. Remember how the universe is in a big gunfight with itself? Well, all the particles accumulated mass from all the bullets shot at each other over an incredible amount of time.

Now, all those collapsed galaxies with the huge redshifts should be black holes, according to current understanding. But I don't think so. I think they're blackish, not black, in that they still exchange some information with the rest of the universe. They also have inner structure, hidden from us. A blackish galaxy has cooked down, blasting away extraneous matter/information, until it's a largely self-informing, nearly closed-off system. If it's on the outskirts, it's not currently relevant and is nearly frozen in time – it's memory or an app that's not currently needed. If it's closer to the center, it might be a specialized system that's currently relevant but can largely do

business independently – behind a blackish curtain. Seems as if most galaxies have million-star-sized black(ish) holes at their center. These might be specialized systems or recalled memories, with galaxies' 10^{22} shining stars being the visible broadcasters – the active center's universe-spanning mega-processor.

But there's another step. In the active center, space is expanded – particles are very small in relation to the scale of space. Something must be precisely defining matter within space, and that something is photons. As long as protons are cooking down into neutrons and releasing fusion energy, space is expanded. When protons run out, the flux of photons that fills space peters out (over billions of years – it takes photons awhile to cross the universe), and space deflates gravitationally (up to a point – objects might still have some leftover orbital energy, there's still redshift segregation, and scale invariance kicks in before particles can crush themselves out of existence).

Photons are fighting gravity – they specify space, making it fluffy. Without this specification, space contracts. Fluffy, expanded space facilitates large-scale information-sharing among active galaxies. Collapsed space tends to be opaque, making it tough to share information. (It's not like the universe was intentionally designed to have a transparent active center. Lucky accident? Seems doubtful.)

What would happen if all the galaxies burned out, and there were no active center? You'd have no widespread information-sharing/processing – no large-scale cogitating – and the universe would effectively be asleep. (Or at least something like this happens during certain stages of our sleep. And to a lesser extent when certain drugs are taken. LSD, for instance, seems to interfere with the normal functioning of systems that help interpret the world. For example, our software that processes faces is hampered, and you see half-processed lizard faces or semi-wire-frame polygon faces. Very annoying, not fun.

(Kids, don't do drugs, particularly LSD. It lasts for like 15 hours, and only the first hour or two is at all fun or interesting. You've broken your brain for an entire day, and you can't even sleep it off, especially if the LSD has been cut with something. If you absolutely want to slightly break your brain to see how it works, a light dose of shrooms is much better. Lasts like a third as long, isn't as debilitating, doesn't make you worry as much that your brain is gonna stay like this. Make sure you have babysitters to keep you calm and to make sure you don't do anything stupid. But just don't do drugs in the first place. Better to observe your thoughts using your intact, non-broken brain.)

Anyhow, the universe is asleep (that is, it could be at some point). Little or no active center, not overly conscious. So what happens? It can wake up, just like we do. Something wakes it – could be external, could be internal – the effect is the same – galaxies are turned on, space expands around them, they form an active center.

Which brings up another thing – it takes hundreds of millions of years for clouds of hydrogen to coalesce into stars and light up. With not necessarily any stars lighting up the just turned-on galaxies, where's the energy flux that expands space? The thing is, you can get energy from both neutrons decaying into protons and protons fusing into neutrons. Hose down some burned-out galaxies with neutrinos, turning neutrons into protons, you're gonna release a bunch of energy. Half a billion years later, when some of those protons, now in stars, start fusing back into neutrons, they're gonna spit out more energy. Shweet!

Jacobsen: What does this mean in a nutshell?

Rosner: Collapsed galaxies on the outskirts of the universe (and, to a smaller extent, collapsed matter in the centers and on the outskirts of active galaxies) give scale and structure to the universe by adding mass to protons and neutrons.

Collapsed galaxies are the universe's memory and currently unneeded apps, able to be recalled when relevant.

Energy from protons fusing into neutrons expands space in the universe's active center (making space transparent and widespread information-sharing possible).

Jacobsen: What about space and time?

Rosner: Space and time are self-assembling according to some minimizing and maximizing principles. Space seems to be arranged to minimize the aggregate distance traveled by photons. Things that are going to interact a lot should be close to each other – space shouldn't be any bigger than it has to be. Minimizing distance maximizes the rate of interactions; time is as full of events as it can be. (Of course, events don't happen *in* time, as if time is this independently existing thing to be filled – the sequence of events *is* time. But still...) this probably means that information is maximized over time and that information is the engine of time.

(Here's where I further confuse myself.) The present moment is when information is gained through events which resolve probabilistic situations. (Time is a news-gatherer.) Time maximizes causality and the predictive power of correlations among matter.

Jacobsen: Why these principles of existence ('laws')?

Rosner: There's a tautological aspect to the principles of existence. (Why principles and not laws? Because laws seem like rules delivered from on-high, while principles can be emergent – nebulous until made tight and precise by the statistical behaviour of large amounts of organized matter.) Things that exist have to exist – they can't both exist and not exist (except when their existence or not is incompletely specified quantum mechanically). Right there, you have a principle, but not a very useful one until you draw some conclusions from it. A conclusion might be that existence includes duration – that for every existent moment, there's at least one related existent moment which can be seen as a subsequent moment.

Somehow out of this, you get the fairly tautological principle that persistent structures or processes are persistent – that they create a bias towards their own continued existence.

You get things which work like Leibnizian monads – little correlation engines whose main job is to be correlated with other engines at various times. These correlations pull the universe tight, giving it structure in space and time. I believe that protons (and the electrons which go with them) are the correlation engines. They're each like a little spatial axis – a dimension – and the variable that lies somewhere along that dimension, all in one. But the dimension doesn't extend to infinity – it fades – it only extends as far as it needs to for the correlations it's involved with, like a street. Streets only exist for their own limited length.

Protons are knots in our locally three-dimensional space. The knot in space is rectified by the point-wise inversion in space (kind of a cross-cap) which is the electron. Without an electron for every proton (but without electrons being assigned to specific protons), space doesn't work topologically.

Neutrons are locked-down dimensions. Proximity is like correlation – two protons coming close enough that they turn into a proton-neutron pair means that they're so correlated that two dimensions (or variables) can function as a single dimension (or variable). The universe prioritizes compactness – it stores dimensions/variables it doesn't need within neutrons.

Over billions of years, a star boils down a big ball of hydrogen – a stew of protons and electrons – into a bunch of neutron-heavy elements. It's a correlation machine – it links protons together, locking them down into closed-off neutrons. And the fusion energy it emits helps define and expand space in the active center as light streams across the universe.

Jacobsen: Let's make a concrete calculation along the dimension of time, your novel framework for the structure of universe may gain clarity from such calculations. Using the accepted canon age of cosmos at ~13.77 billion years old as the referent, by your own theorizing and within your framework, how might we calculate universe's age? What age would the calculation produce?

Rosner: If you didn't know how brains worked, and you saw a half-second PET scan of a thought unfolding across a brain, how would you estimate the age of the brain? It would be really tough. You might be able to assume that this processing of a thought isn't a one-time thing – assume that this is a function of the brain and, as such, happens again and again. But it would take a lot more knowledge to have any idea how many times it happens. (How many times *does* it happen? Estimate three thoughts a second. (How long does it take for your attention to shift and a thought to form? At least a tenth of a second and not more than two-thirds of a second. Observe your thoughts – see what you think.) Three thoughts a second is about 10,000 thoughts an hour times 16 waking hours a day times 80 years comes out to a human brain having about 5 billion thoughts in a lifetime.)

What if the universe is an apparatus that does what it does again and again – unfolding over and over, sending stars and galaxies through their life cycles, with those galaxies burning out and being squeezed to the outskirts by new unfoldings, where they wait to be part of a subsequent expansion?

If the universe is an information-processing entity (It is!), from within the universe, we're seeing only the information, we're not seeing the structure that supports the information-processing. Analogously, the mind is the moment-to-moment unfolding of information within consciousness, while the brain is the physical structure which supports this interplay of information. When we look at the universe, we see the interplay of information; we don't see the physical structure which supports it. This makes it even harder to guess the age or lifespan of the universe.

We don't know the purpose of the universe. (We're so far from knowing that even asking seems a little preposterous.) We can't decode the information in the universe. (We're made out of it, but we can't read it. As we make our way onward, maybe we'll pick up some clues, perhaps from civilizations that have been around longer.) As we learn more, perhaps we get to participate in the business of the universe. The universe processes and stores information at all levels of complexity. Civilizations would be part of this). We don't know anything about the physical structure that might support it. So it's hard to guess how old it is.

(Imagine that in the future, we find out with reasonable certainty that the universe has a purpose – to process information to help the universe's supporting structure or entity achieve its objectives in its external world (the world perceived and modeled by the universe). One way of

dealing with this discovery would be to get with the project – to figure that we’re all in this together – that if the universe prospers, we prosper. I’d guess that many entities within the universe are part of the program. Maybe the really advanced ones run galaxy-sized neutrino hoses that can reactivate dormant parts of the universe. (I know that seems goofy, but we don’t know anything yet.) Maybe there are nihilistic or hedonistic civilizations that figure, “Everything’s so big and old and, in a way, virtual, it doesn’t really matter what we do.”)

There might be some clues to the universe being older than its apparent age. If the universe undergoes repeated multi-billion-year unfoldings, there should be lots of stuff that’s older than the apparent 14-billion-year age of the universe. That stuff won’t necessarily be in our immediate neighborhood – we’re new – we came into being as part of the current unfolding.

Via repeated cycles (not cycles of the entire universe expanding and contracting – not an oscillating universe – more like a rolling boil) of galaxies lighting up and burning out, the dark matter we’re looking for (to explain gravitational anomalies such as the outer rims of galaxies rotating faster than accounted for by the distribution of visible stars) might be a bunch of neutron stars and near-black holes. If anything could survive repeated cycles without being completely ablated away, it would be near-black holes. (Don’t really believe in fully black holes.) A universe which has gone through a zillion cycles might have generated a bunch of burned-out junk (or, in an informational sense, massive settled or solved (for the moment) equations or clumps of correlations or memories or independent processors whose operations the wider universe doesn’t much participate in/isn’t very conscious of) hanging around on the outskirts of galaxies.

A brand-new universe – one that’s unfolded after a single big bang – doesn’t have much opportunity to form a bunch of collapsed matter. But a universe at a rolling boil – that is, a “continuing series of little bangs” universe – would generate lots of junk. It’s that house with all the trashed cars and plumbing fixtures scattered across the front yard.

Just for fun, we could multiply the 14-billion-year apparent age of the universe by the 5 billion lifetime cycles of the human brain. There’s no reason to assume that the universe goes through 500,000 or 5 googol rolling cycles. But anyhow, 5 billion times the apparent age of the universe gives you 70,000,000,000,000,000,000 years. That’s based on not much. What if the expected duration of a self-contained system of information (in terms of rolling cycles) is proportional to the complexity of the system? What if the complexity, like the average distance from the origin of a random walk, is proportional to duration squared? The universe could be *really* old.

No way the universe unfolds just once. No way it’s only 14 billion years old.

Jacobsen: If I may extend the implications of informational cosmology, the discipline implies two complementary fields: informational cosmogony and informational eschatology. In your worldview of the universe’s life cycle, how would the universe – if indeed the world corresponds to such a model – begin (Cosmogony), develop (Cosmology), and end (Eschatology)?

Rosner: In my view, the information space that is the universe arose through processes external to the universe. There’s a material framework – an armature – which provides the structure that allows the information-processing to take place. If the universe is the mind, then this armature is the brain. Our brains/minds exist within the context of the outside world. We can speculate or even assume that the universe similarly exists because of and within an outside context. Of

course, we know nothing about any armature for the universe, but if it exists, its fate determines the fate of the universe.

We're used to our brains being able to store a steady stream of information over many years. An information-space model of this would look like a universe becoming more complicated, perhaps expanding like a Big Bang universe (but over a long series of rolling cycles, not just a single original push plus various inflational add-ons) with more and more matter gradually falling into visibility from the farthest reaches – the outskirts close to $T = 0$, the apparent beginning of time. But as we age, we can lose information. Instead of our information space becoming bigger and more complex, with the primordial background radiation spreading out and getting cooler and cooler, the information space would heat up, becoming smaller, hotter, and less complex. Information melts away, lost in background noise. As information drops to zero, we have an information space that's hot and fuzzy, with a short horizon.

An information space is dependent on the integrity of its armature. There are statistical arguments to be made on the future size of the information space, based on its current size, but that math doesn't exist yet. And that math is just a statistical bet about conditions in a world external to the universe that we, as yet, know nothing about. (How might we learn about this external world? Perhaps by making contact with older civilizations which have had more time to suss out what the universe is up to. Scary. I suspect that old entities who know what's up might be found at the galactic center. Eventually, our strategy might be to tiptoe towards the galactic center to take a look, but very stealthily, so as not to get our asses kicked. But really – how would we outsmart entities that might be billions of years old? Will Smith and Jeff Goldblum with a computer virus won't do it.)

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Five)

November 8, 2014

Abstract

Part five of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: mathematics and physics, logic and metaphysics, mutual interrelationships, digital physics and “informational cosmology,” consciousness grounded in informational cosmological definitions of “self-consistency” and “information processing,” identification of minds within universe with consciousness, interrelation between minds and universe, subcategorizations of self-consistency and information processing based on interpretations and definitions, Georg Ferdinand Ludwig Philipp Cantor, logic, *Law of Identity*, *Law of Non-Contradiction*, *Law of the Excluded Middle*, Plato, *Theaetetus*, *The Republic*, Aristotle, *Metaphysics*, “laws of thought,” Wilhelm Gottfried von Leibniz, *Leibniz’ Law*, *Law of Reflexivity*, *Law of Symmetry*, *Law of Transitivity*, *set theory*, Kurt Friedrich Gödel, *Saint Anselm of Canterbury*, *On Formally Undecidable Propositions of Principia Mathematica and Related Systems* (1931), *incompleteness theorems*, *Boolean Algebra* (foundational for digital electronics), George Boole, “Boolean Heresies,” *An Investigation of the Laws of Thought* (1854), physics, *Novikov Self-Consistency Principle*, *time-travel*, *computer science*, *database management systems*, *Jim Gray* (1981), *ACID or ‘Atomicity, Consistency, Isolation, and Durability’*, “self-consistent” or “self-consistency” as “system without self-contradiction,” information theory, Claude Elwood Shannon, *A Mathematical Theory of Communication* (1948), Warren Weaver, *The Mathematical Theory of Communication*, examples of information processing, application of information theory to information cosmology, reflection of the deep equivalences, clarification of armature of universe and universe, and the rich refinement of digital physics into informational cosmology; definition of universe as the entirety of matter and space; definition of the interrelation of mind and universe based on a personal query from 1981, each mind having structure and rules akin to universe, different manifestations of the same structure at vastly different scales for universe, and the non-mystical/technical nature of the definition; informational cosmogony, cosmology, and eschatology apply to origins up to the present until the resolution of universe, construction of a metric for individual local and global consciousness, mathematical operation of universe with a quote from Eugene Wigner, armature of universe, speculation on descriptors of armature for universe, a response to Wigner quote with Einstein, and speculation on external universes and respective armatures from our universe; thoughts on the disparaging nature of the commentary on consciousness; survival advantages of consciousness, commentary on evolution and consciousness, and the possible role for consciousness in evolution; statistical likelihood of localized consciousness within universe and globalized consciousness of universe, and the ‘Statistical Argument for Existence’, and further commentary on it; thoughts on reactions to grand claims made about the structure of thought and universe, and brief comments; Aristotelian foundational empiricism, natural philosophy,

methodological naturalism, rationalism, empiricism, inductivism, *Ockham's Razor*, consilience, falsificationism, verificationism, hypothetico-deductivism, Bayesianism, and epistemological anarchism; reflections on religious/irreligious conceptions of an afterlife such as reincarnation (with/without karma), heaven and hell, oblivion, nirvana, union with the divine, and the whole suite of possibilities for an afterlife, and in particular their truth value; and general thoughts on religion.

Scott Douglas Jacobsen: We discussed mathematics and physics, logic and metaphysics, consciousness and its subcategories, and these conceptualizations' mutual interrelationships. In particular, refinement of digital physics into "informational cosmology."

Furthermore, in informational cosmological nomenclature, your definition of consciousness divides into and emerges from two broad ideas: self-consistency and information processing. In brief review, we have identification of minds within universe with consciousness, universe with consciousness, and the interrelation of mind and universe based on isomorphic function and characteristics. What beyond this introductory realization of the equivalence? I observe multiple arenas of common discourse – let me explain.

From an informational cosmological foundation, the hyphenated term "self-consistency" and phrase "information processing" divide into further subcategorizations. These subcategories have constraints from definitions. "Self-consistency" and "information processing" contain various definitions because of differing interpretations, but technical and concrete definitions hold most import here.

As a general primer to "self-consistency" – which might have less decipherability than "information processing," we can begin with this informational cosmology expression "self-consistency." German mathematician and founder of set theory (fundamental theory for mathematics), Georg Ferdinand Ludwig Philipp Cantor, defined self-consistency as the inability to derive both the statement and negation of the statement at the same time. Cantor argued, if deriving the statement and its negation, the derivation would self-contradict. (One *can* transform this into more formal set theoretic language about elements contained in sets – or the language of mathematics, self-consistency holds great weight for mathematicians, and logic, see *Law of Non-Contradiction* below.)

Self-consistency does have other theoretical universes of discourse in addition to multiple practical and applied venues of human venture: logic, set theory, mathematics, physics, computer science, and many others.

In logic, the *Law of Identity* (A equals A), *Law of Non-Contradiction* (A cannot equal not-A), and *Law of the Excluded Middle* (For all A: either A or not-A) all introduced – informally & implicitly by Plato in *Theaetetus* & *The Republic* and formally & explicitly by Aristotle in *Metaphysics* – in ancient Greece. Sometimes called "laws of thought." These delineate facets of self-consistency expressed in the formalisms and vernacular of logic. For one similar vein, Gottfried Wilhelm von Leibniz derived *Leibniz' Law*, ' $x = y$ ': if, and only if, x contains every property of y, and vice versa. Moreover, he derived sublaws from *Leibniz' Law* such as the *Law of Reflexivity*, *Law of Symmetry*, and *Law of Transitivity*. For one example, *Law of Reflexivity*, ' $x = x$ ': everything is equal to itself. This mirrors the *Law of Identity* of Athenian philosophers – Plato and Aristotle. Patterns – Platonic Forms and

Ideas even – of concepts arise in repeated episodes of the historical timeline – groping towards some unitary definition.

In set theory, Austrian-born American logician, mathematician, and philosopher, Kurt Friedrich Gödel, had additional fame for formalization of St. Anselm's *Ontological Proof* for the existence of God. In addition to this, Gödel published *Über formal unentscheidbare Sätze der Principia Mathematica und verwandter Systeme* or *On Formally Undecidable Propositions of Principia Mathematica and Related Systems* (1931). Tersely, an axiomatic system capable of describing natural numbers (e.g., 1, 2, 3...) held within it: 1) cannot be both consistent and complete, and 2) if consistent, the consistency of the axioms cannot be proven within the system. He, and modern specialists, call these two *incompleteness theorems*.

In mathematics, English logician, mathematician, philosopher, and founder of *Boolean Algebra* (foundational for digital electronics), George Boole, continued the ancient Grecians work in a facsimile of the earlier laws of thought with some extensions in mathematical language. I call them "Boolean Heresies" for fun. Boole laid these out in *An Investigation of the Laws of Thought* (1854). The primary extension from Aristotle became the extension of the three classical laws of thought into mathematical symbolisms, formalisms, and terminology. For one example, the '=' or 'equals sign' signals synonymous meaning with the *Law of Identity* or the *Law of Reflexivity* between things. Things labelled 'A' in the *Law of Identity* and 'x' in the *Law of Reflexivity* discussed earlier.

In physics, applied to time travel – the *Novikov Self-Consistency Principle*, 'laws' of physics must remain self-consistent at a global level in the real universe to prohibit any paradoxes with respect to time travel. In this application, time-travel scenarios must disallow violation of universe's global laws.

In computer science, at least in database management systems, the acronym ACID equates to principles for operation of database transactions. "ACID," from Jim Gray (1981), means 'Atomicity, Consistency, Isolation, and Durability' with the importance of 'consistency' meaning "the transaction must obey legal laws."

In broad definitions provided by Gray (1981) about the "general model of transactions," he states, "Transactions preserve the system consistency constraints — they obey the laws by transforming consistent states into new consistent states." As noted, Boolean Algebraic (Boole) systems operable in computer science too.

One can see the pattern in numerous fields. Therefore, "self-consistent" or "self-consistency" within informational cosmology means "system without self-contradiction."

"Information processing" will have an easier time of comprehension because of living in the computer age, digital age, or information age. American mathematician and cryptographer Claude Elwood Shannon's article, *A Mathematical Theory of Communication* (1948), represented information theory connected to communication. A short paper, experts consider this article foundational to the field of information theory, which allowed many of them to decree Shannon the father of the information age.

American scientist and mathematician, Warren Weaver, republished *A Mathematical Theory of Communication* (1948) and expanded on Shannon's work in a coauthored – with Weaver – book entitled *The Mathematical Theory of Communication* (1949). Specialists

remember Weaver for pioneering work in machine translation. Shannon and Weaver laid the framework for information and communication theory up to the present day.

In it, if we take a human interpretive view of the work, he showed the degree of “noise” – entropy/disorder introduced into the message – entering between the “information source” (brain₁/mind₁) & “transmitter” (voice/speech) and the “receiver” (ears) & “destination” (brain₂/mind₂). Noise enters between the transmitter and receiver to decrease the quality of the message from the information source to the destination.

For an everyday example, if you whisper from a mile away, your friend will have trouble understanding you – too much “noise” preventing clear receiving and interpretation of the message; if you whisper next to your friend’s ear, the message will more likely have appropriate receiving, decoding, and arrival at the destination for your friend’s comprehension.

Not clear enough – think of a computer, how does it process information? It processes information according to input, process, and output. You type a symbol on the keyboard – input, the machine runs internal mechanics – process, and produces the appropriate (if functional) symbol on the monitor – output. Hence, the foundation of information theory in informational cosmology.

Input becomes any decipherable piece of data to the system. Process becomes the algorithm for managing the information. Output becomes the final product of input and process. Likewise, this applies to everything in informational cosmology at local and global scales.

In current vernacular, we ask, “What if the contents of the universe equals input, process equals laws plus time, and output equals transformations of the contents (e.g., particles, fields, forces, and so on) of the universe?”

In informational cosmological parlance, we ask, “What if bit units of universe equal input, process equals principles of existence plus time, and output equals transformations of bit units of universe?”

These reflect deep equivalences. As noted by 21 year old Rick, all theories of grandeur and great import start with big equivalences. You shifted the perspective. Subsequent information processing equates to observed universe. Simply put, we need an armature by necessity, but do not observe the armature based on externality to universe.

Armature of universe equates to material framework or processor; universe equates to information processing or processing. We observe the information processing. We call this universe. We do not observe the material framework, but by necessity require processor based on isomorphic geometry between universe and individual localized minds.

Individual localized minds operate from brains, and therefore universe must have an equivalent of a “brain” – aforementioned armature. This deals with information and universe at the largest scales. In this, we have the rich derivation, i.e. refinement, of digital physics into informational cosmology.

Since universe does have some characterization in relation to subsystems within itself based on isomorphic properties, what would count among other subcategorizations? In other words, what other manifestations exemplify the definition of self-consistency or information processing? How do you define these ideas in more colloquial terms?

Rick Rosner: Consciousness is the vivid, emotionally charged, moment-to-moment sharing of processed sensory input, memories, and simulated/imagined self-generated content among brain systems which receive a wide-angle flow of information. By wide-angle, I mean not a linear relaying of signals from A to B to C but instead, sharing of information with many other brain systems, so that each system knows what's going on in the rest of the brain (within the limitations of its specialty). Systems can pop into and drop out of consciousness, depending on the brain's moment-to-moment processing needs.

Each pertinent subsystem adds its angle on what's currently under consideration in the mind, possibly triggering further associations. Memories are pretty much locked until they're unlocked by being pulled into the conscious arena. Most people have memories which they've remembered so many times that the original memory has been all messed around by being rewritten over and over in the conscious arena. (Do we need to fully light up a memory to remember/mess with it?)

The entire mind needs to speak the same language of representation, so there's probably a lot of recursion, where subsystems of the brain have to be able to identify stuff that's not their specialties. Some systems can be less clued-in than others. Our sense of smell seems to be kind of distant from other systems. You smell something, it's familiar, it's on the tip of your brain, but you can't quite pull up the specifics of when you've smelled that smell before. (If you were a dog, you could pull up everything about that smell. When humans and dogs teamed up, humans took over strategic thinking, and dogs took charge of smelling.) Language probably makes pulling up associations easier and more efficient. Hanging a word on something is a kind of shorthand (that maybe takes up less space than a full description and makes it more retrievable).

Anyhow, the same way every part of your brain knows what's going on in every other part via the conscious mind, every part of the universe is clued in to every other part (via long-distance particles – mainly photons in the active center and neutrinos traveling to the deeper structure on the outskirts). The conservation laws – momentum, energy – and the relative constancy across space and time of physical constants help the universe maintain informational consistency.

I also think that much of our understanding is virtual, where, in any given moment, our awareness doesn't contain much, but by shifting attention around, we build a virtually complete picture of the world. It's similar to how our eyesight functions – we have precise vision for only about 15 degrees out of a total visual field of 200 degrees. We can't precisely see an entire painting or TV image all at once. Our eyes wander around the image, and we build a more-or-less complete picture in our mind. Our awareness probably works the same way. Our brains can only process so much in any given moment. Whatever's under consideration gets analyzed in some ways and then in others, but not in all possible ways at once. We never see or comprehend anything completely in an instant but through sequential processing build up (over a short period of time) what acts like fairly complete understanding.

It's like trying to look at Macy's 50-by-100-foot American flag in a storage closet. You can only spread out 20 square feet of it at a time, but eventually, by looking at different parts of it, you can develop a picture of the whole flag.

So a thought isn't just some parts of the brain lighting up all at once – it's a whole chain of parts of the brain lighting up until you eventually (but in a short period of time – fractions of a second) have the semblance of a complete thought. The universe probably works the same way – galaxies keep lighting up while other galaxies are fading away. A thought isn't just the 10^{11} galaxies lit

at any one time – it's a whole chain of lit galaxies, like an animated, moving display of Christmas lights. Thoughts – things under consideration – fade into each other. We have a more thorough understanding of things than what we understand at any instant. And the universe is more precisely defined than just by the relationships among matter in the active center.

In both the mind and the universe, you need consistency. Galaxies don't wink in and out of existence just because you've shifted your point of view. A galaxy exists no matter where it's viewed from (though if you go far enough away from it, it'll look Hubble/relativistically/informationally redshifted). Same thing in your mind. If an event definitely made itself known to some part of your conscious mind – red traffic light – that light isn't red according to some parts of your mind and green according to others. You can have ambiguous events where you're not sure what happened, but if you have deep disagreements about established facts between different parts of the brain, that's trouble.

Jacobsen: All representation of the information sharing of the material framework of universe equates to universe in informational cosmogony, cosmology, and eschatology. More elements have inclusion here. How do you define universe?

Rosner: The universe is the entirety of matter and space – everything that has interacted with or could interact with us. It's an information space – an arena for the sharing, processing and storing of information (for the universe, not directly for us), with the scale and curvature of space determined by the rules of information and its distribution and correlations. (That is, the distribution of matter.) The location (and velocity) of matter has almost everything to say about its correlations as information.

Jacobsen: Insofar as mind and universe have propinquity – kinship in nature; a structural relation between individual localized consciousness within universe and globalized consciousness of universe. How do you define their interrelation?

Rosner: Back in 1981, I asked myself, "What if the geometry of information within consciousness is the same as the geometry of the universe? (And how can it not be?)" The optimal structure/map of the information within each individual mind has the same general structure and rules as the universe and its physics. It has 4D space-time, atoms, the whole deal (with allowances for the universe having about 10^{80} particles and our brains having 10^{11} neurons, which, though I don't know how many particles in a mind-space this might translate into, can't be many more than 10^{16}). The mind and the universe are different manifestations (at vastly different scales) of the same information structure. We see the universe from the inside – as part of it – so we don't see it as information (except that quantum mechanics is the rules of behavior for matter about which there is incomplete information – we can see that matter is information by catching it behaving as incomplete information, as in the double-slit experiment). And we each embody our own mind, so we see only its information and not the mechanics of it.

People suspect that you might be a wacko when you try to assign consciousness to anything but people and higher animals, as if you're talking about a fancy, mysterious transcendent realm of rocks and trees and butterflies sending thinky vibes to each other. But no – consciousness is a technical thing, not a mystical thing, associated with broadband sharing of real-time information among brain subsystems plus emotionally linked value determinations. (Emotions and values amplify the personal importance of what's happening in your life. We have evolved to care about our lives. Apathy and absence of judgment aren't the best survival characteristics – if you can't

be compelled to care about yourself and choose favourable courses of action, you're in trouble.) When a bunch of specialized systems in your brain are exchanging information including emotions in real time – when every part of your brain knows what's going on, more or less, in every other part of your brain, and you have feelings about it, that's consciousness – a technical property associated with global, pervasive information-sharing. (The subsystems need to understand the information they're getting hit with. Most parts of your brain understand fire or the color fuchsia or birds (in ways pertinent to each brain system's function, with some parts understanding some things better than others, consistent with their specialties).) It's not mystical – not connected to some divine or exalted domain.

Jacobsen: Informational cosmology describes the self-consistency and information processing of universe. We might construct a metric for individual local and global consciousness. Universe operates under mathematical principles of existence (laws). Eugene Wigner's stock quote about the "unreasonable effectiveness of mathematics" seems apropos to me – not in presumption about either side of the ledger. Universe's armature might operate within other principles of existence.

By an informational cosmological definition, anything internal to universe operates according to mathematical principles of existence (mathematical laws). Anything external to universe operates in mathematics containing universe's mathematics, or in some novel considerations about the nature of mathematics. Universe's armature exists external to universe. Therefore, universe's armature must operate in mathematics containing universe's mathematics, or in some novel considerations about the nature of mathematics. Any speculation about this? What does this imply?

Rosner: You talk about constructing "a metric for individual local and global consciousness." I think that, in terms of increasing brain complexity, consciousness becomes well-rounded – feeling like a fully-rendered experience of the world – pretty fast. It's not clear how deeply insects feel, but fish and reptiles feel and think, though they can be pretty boring as companions. I had a genius goldfish that figured out how to call me to feed it by noisily blowing bubbles at the top of the tank. Even with their tiny little heads, birds feel and think (and can be kind of dickish – read about Alex the parrot). And of course mammals think and feel. Darwin, who was above all an excellent observer, knew that animals feel, writing the book *The Expression of the Emotions in Man and Animals*.

I think of subjective degrees of consciousness like the number of sides in a polygon. With increasing numbers, they become close to perfectly round pretty fast. A tire shaped like a regular triangle or square would give you a very bumpy ride, but this quickly gives way to the near-circles of 12-, 15- and 24-sided regular polygons. Tires in the shape of 24-sided polygons would give you a pretty smooth ride. Fifty- or 100-sided polygons are barely distinguishable from circles.

Consider a dog's consciousness as a 15-sided polygon – reasonably close to circular. Doesn't have all our bells & whistles – language, ability to rotate objects in our mind. (On the other hand, we don't have the world of smells dogs have.) And consider our consciousness as a 100-sided polygon. Lots of ways to analyze and mentally manipulate things – when we look at something, we feel as if we're really seeing it. Our lives feel deeply substantial and authentic to us, but they probably don't feel a whole lot less real and immediate to dogs. If we suddenly had the awareness of a frog or alligator or lizard, we might think, "Wow – this is kind of a half-assed

representation of the world.” (Or maybe not – alligators must have some precise sensory systems.) Seeing the world with a bug’s awareness might be like being in a 1980s video game – rough, not detailed, not very fleshed-out, not a lot of analytic tools.

As long as we’re messing around in this direction, let’s guess at the size of a thought, in terms of the total number of events in mind-space that might make up that thought. (A mind-space event might be the equivalent of the exchange of a photon or the fusion of a pair of protons with the emission of a neutrino plus a photon.) We have about 86 billion neurons and up to a quadrillion synapses. Assume, just to make sure we’re not underestimating, that 10,000 mind-space events contribute to the firing of a neuron. Figure a neuron might fire up to eight times during a thought. So a thought might consist of nearly 10^{16} mind-space events, but it’s probably a lot less, because not every neuron’s firing like crazy, and there probably aren’t 10,000 discernable mind-space events that led up to a neuron firing. (But a neuron firing may not be a single event – it may light up a lot of stuff. Or it may not be an event at all. The formation and breaking of dendritic connections might be events. The network of connections – the associative landscape – might be a framework that tacitly informs the processing of information. The layout of the landscape might provide a virtual context for the information being actively processed, the way collapsed matter might provide context for active matter. Could be like compressed digital information – to send a compressed video, you only specify the pixels that change – you get a series of complete pictures without sending complete pictures. Similarly, the active center of the universe may be only part of the picture the universe is painting for itself. For the (long) moment, it’s the only part that’s in play, but it’s not the whole picture.)

So let’s take a look at the universe, which I theorize is a mind-space thinking a 20- or 30-billion-year thought or part of a thought (in a long-ass string of thoughts). The active center has about 10^{80} particles, mostly in stars. Each particle has maybe 10^{11} interactions a second times about 3×10^7 seconds a year for maybe 3×10^{10} years. So a thought by the universe might consist of around 10^{109} events. That is, of course, enormous – you couldn’t count that high in a year. Or in the apparent lifetime of the universe. Or in a billion apparent lifetimes of the universe for each particle in the universe. So don’t even try.

Why such a big number? Well, if every size of universe less than infinity is allowed, then there’s no limit on size – bigness comes cheap. Normally, I don’t like the anthropic principle, which says the universe is the way it is because we’re in it, but we do need a universe that’s big enough, detailed enough, old enough for us to come to exist in it.

And you asked about Wigner’s “unreasonable effectiveness of mathematics” quote, which asks why math is so good at describing the universe. I’d counter that with the well-known Einstein quote, “God is subtle, but he’s not malicious.” I think another way of saying that is “The universe is only as complicated as it needs to be.” I’d argue that numbers are about the simplest non-contradictory system (that’s unlimited in size). (Godel proved that numbers might contain hidden contradictions, but we haven’t found any yet, and even if we did, they wouldn’t be serious enough to stop us from using numbers.)

The universe is only as complicated as it needs to be to exist. (There’s probably an argument to be made that more-complicated-than-necessary forms of existence, unless artificially supported, are unstable (or improbable) and break down into simplest-possible forms.) A simplest-possible universe will include simplest-possible components and structures, which can be characterized by numbers, which are themselves part of a simplest-possible system.

You asked about a universe external to ours that contains the universe's armature. I think that universe can be characterized by the same mathematics that characterizes our universe. The principles of existence keep a fairly tight leash on the forms that universes can take, which includes number of dimensions, types of physical forces, and being characterizable by math. Of course we have no evidence of a universe external to ours.

Jacobsen: You made disparaging and denigrating statements about consciousness. Your thumbnail sketch and corporeal definition of self-consistency and information processing does not by necessity implicate such negative commentary. Why the occasional harsh tone on consciousness? Any positive statement about consciousness while on the topic?

Rosner: Consciousness is more helpful when you have time to think. Obviously, you come closer to having free will when you have time to consider a situation and can weigh everything you know, including, perhaps, knowledge of your own biases. You can run a thought a few times and see what associations your brain pulls up. Consciousness is helpful in new or complicated situations – it can help recognize patterns and put together essential details, finding exploitable regularities in your environment.

Consciousness lets you talk to yourself. Assigning words to things is powerful when trying to retrieve information from your own memory or from outside sources. (Key words are useful even in your head.) Consciousness lets you run simulations – what would happen if I did this? In the future, advanced versions of us might constantly be running very detailed projections of a range of near-futures – what might happen in the next few seconds or minutes – so we can choose the best course of action. We'd be living in our own near-futures and choosing among them. This might be the closest we come to side-stepping the one-dimensional flow of time.

Consciousness is necessary for interacting with other people. It takes many integrated brain systems to engage in effective human interaction. When the requisite systems don't function together smoothly, you can end up with autism spectrum challenges.

Sometimes, consciousness seems like more trouble than it's worth – as when you're aware of how miserable you are. (Of course evolution only cares about our happiness to the extent that it helps us produce and raise offspring that are themselves good at reproducing. Too much misery would make us ineffective, but so would being happy all the time.) But it's like me nagging my wife to always keep two hands on the steering wheel in case of sudden and unpredictable danger. Maybe we don't need consciousness during every waking moment, but it needs to be running for those unpredictable moments when we really need it – when it's better that we're not just a bunch of reflexes.

One more thing – say your life really does pass in front of your eyes during moments of extreme danger. Maybe this is a survival mechanism, or is at least an indicator of a survival mechanism. Maybe stress triggers thinking, so stressed organisms think more, and think more fluidly, than non-stressed organisms. We seem to know that extreme stress – danger – triggers a temporary increase in the brain's ability to take in sensory information – time slows down, and we're hyperaware of our surroundings. Perhaps really big danger triggers a really big thought reaction – your brain tries to make you think everything all at once.

Jacobsen: Consciousness can offer survival advantages. Can it play a role in evolution? How might this play out?

Rosner: This is a recent excerpt from a book by evolutionary biologist Professor Andreas Wagner on *Salon.com*:

“Selection did not—cannot—create all this variation. A few decades after Darwin, Hugo de Vries expressed it best when he said that “natural selection may explain the survival of the fittest, but it cannot explain the arrival of the fittest.” And if we do not know what explains its arrival, then we do not understand the very origins of life’s diversity.”

That is, we know how changes in and variations among animals may allow some animals to produce more descendants, but we don’t know enough about how such changes originate and become enduring details in evolutionary history. Not enough consideration has been given to consciousness as an evolution booster. (Obviously, at some point in the development of a civilized species, random evolution is mostly replaced by intentional change. Humans are at this point.) I think that consciousness facilitates evolution in a variety of ways. One possible way – the stress of being ill-adapted triggers increased mental flexibility. Say a nerdy organism has a gimpy leg or something. Maybe there’s a mechanism where that organism has a little meltdown, with normally crystallized patterns of behavior becoming subject to conscious consideration, possibly resulting in innovation. (Hey, it happened to me, maybe it can happen to an iguana.) Only to the extent, of course, that the organism has a mental arena – gimpy amoebas won’t be doing any thinking. (Though similar-to-conscious mechanisms might still occur in non-conscious beings. A changing environment may prompt inadvertent innovation among amoebas, even though it’s happening through chemistry, not consciousness.) Once a successful innovation arises, there’s a new niche offering an advantage to organisms that are relatively better at the innovation (assuming that the innovation can be disseminated and perpetuated).

Another way consciousness can increase the likelihood or frequency of evolutionary change might be through a generalization of the “Nerds are compelled to think” principle discussed above. What if every member of a species has some conscious awareness? Every behavior or combination of behaviors in an organism’s conscious arena (entirely or in part), is subject to conscious variation. That is, the organism understands the behavior to some little extent and can put its spin on it. The behavior isn’t entirely unconscious and hard-wired. Conscious variation makes possible a bunch of small potential advantages – on a short-term basis for individual animals, on a medium-term basis from physiological variation that already exists within a species, and on a long-term basis from mutation. Behavioral change can lead to genetic change, not in a Lamarckian sense, but by giving an advantage to those organisms which can best perform the changed behavior. Animals can’t choose their mutations and variations, but, if capable of any thought, are better able to take advantage of them.

Animal thought can make evolutionary transitions more likely and mutations more likely to be exploited (among both thinking animals and the organisms they interact with – cows and corn aren’t great thinkers, but they’ve gained a reproductive advantage via human thought). Genetic changes can be abrupt – there’s punctuated equilibrium, where the fossil record shows relatively fast transitions between long periods of unchanging form; thought can ease such transitions. I dunno – maybe biologists adequately factor animals’ ability to think into evolution, but I kind of doubt it. I guess a test of this would be to see if the pace of evolution has accelerated along with complexity of thought (other things being equal). We had 2.5 billion years of bacteria, a few hundred million years of cell colonies, then – boom – a panoply of life in relatively quick succession – worms, fish, amphibians, bugs, reptiles, birds, lemurs. Flexible behavior facilitates evolution.

The stories of individual organisms must sometimes be crucial to evolutionary history. Gimpy Carla the Crustacean has a weird claw; she figures out she can use it to really get at snails – good eatin’! Her friends learn the same trick – maybe not as expertly as Carla, but enough for snail scooping to become part of Carla’s species’ behavioural repertoire. Skilled snail-scooping turns into an evolutionary advantage, with members of the species that have genes which help make them better scoopers having more reproductive success. Or maybe Gimpy Carla doesn’t find a use for her weird claw; maybe she figures out something else altogether. Or perhaps there’s nothing particularly wrong with Carla’s claws, and she figures out a new behaviour anyway. Maybe she sees an octopus flipping over rocks to get what’s underneath, and Carla’s like, “Hey – I can flip rocks, too.”

Jacobsen: Furthermore, you have spoken on the probability for the existence of both globalized consciousness of universe and individual localized consciousness within universe. We can name these ‘Statistical Arguments for Consciousness’: consciousness of universe (and consciousness of minds within it) cannot not exist.

Indeed, the simple existence of universe could be called ‘Statistical Argument for Universe’: universe cannot not exist. Some state this as a blunt, dull, and passive query, “Why is there something rather than nothing?” What best represents these idea? How can you state this in formal terms?

Rosner: You can view Descartes’ “I think, therefore I am” as a statistical argument. Given the apparently highly organized and consistent information within a human’s consciousness, the odds that the existence it reflects isn’t real and is instead caused by happenstance is nearly zero.

To put it in a mathematical framework, there must be some measure of the complexity/amount of information within an individual awareness and within the universe. And there’s some calculation you could do which represents the odds that such complexity could arise as a momentary random blip that doesn’t reflect actual existence. The odds are infinitesimal.

(When saying that the universe “can’t not exist,” I mean something else – that there’s a statistical bias towards existence. Non-existence entails as special a set of circumstances as existence – it’s not the default state of things. And given that there’s a very small set of non-existent states and a very large set of possible states of existence, there’s a probabilistic argument to be made in favor of existence. There might be only one state of perfect non-existence. If there were different null states, then there’d be something to differentiate them. And that something is something that exists, so at least one of those things isn’t the null state. (Can’t imagine nullity coming in a bunch of flavors.) The more particles you have, the greater the number of possible interrelationships they can have, with that number growing at least exponentially. (Look at video games now compared to video games in the 80s. Complexity allows variety.) Also, if the principles of existence permit existence, there has to be existence – not all possible states all the time, but permitted states (one at a time) operating under (possibly self-arising) rules.

Jacobsen: You’re making enormous claims about the structure and function of both mind and universe. Even in general terms connected to their relationship, these arguments might create grounds for individual or collective bafflement, confusion, glazed reading, instinctive ire, reactive dismissal, mockery, scolding, scoffing, offense, prods and epithets about intelligence, furrowed brows, pleas for clarification, misunderstandings tied to wrongful extensions and conclusions of the theory, straw-manned misinterpretations, questioning of sanity, non-sequitur statements, appeals to emotion or authority for disproof, personal

attacks at various facets of your personal life – including shallow attacks at family, and awe at ground breaking ideas – let alone thoughts about the interviewer.

Most reactions and feedback welcome. Preference for constructive feedback. However, these have zero connection to the truth or falsity of the theory. We need rigorous scientific methodological constraints. Obviously, and an extraordinarily important note, *this journal is not peer-reviewed*. Any reflections?

I've been interviewed before, though never at this length, and am familiar with the kind of comments this could generate. Pretty comfortable being an eccentric clown – it's often helped me avoid being fired. "He's crazy, but he's harmless – just leave him be." Have done a lot of ridiculous stuff, in part because I've thought as long as I'm doing physics in my head, whatever else I do doesn't matter so much. By talking about this theory in depth, I'm hoping for pretty much the first time to eventually be taken seriously.

Even if I didn't have a history of being a goofball, this would be tough. A bunch of people have radical theories of the universe. Many are at least a little crazy; most are wrong. There's a fun test by John Baez called "The Crackpot Index," which gives a craziness score for your theory and yourself. I score about 20 out of a possible 641, putting me on the low end of crazy. But I write jokes for TV, have been a stripper, don't have a PhD or have ever worked in academia, my theory isn't peer-reviewed, it has very few equations. Making it legit will be a long haul.

I've postulated a lot of stuff here; some of it will turn out to be true or closer to true than currently accepted theories. It feels consistent with what we know and has a kind of poetic rightness. But that's just how I feel. Could get some credit, or could be like Fritz Hasenohrl, who, a year before Einstein, came up w/ $E = 3/4 MC^2$. So close.

Gonna use social and other media to try to get my stuff out there, hoping that the current culture of foolishness finds me foolish enough to embrace and that the attention prompts legit people to ponder my BS.

Jacobsen: Modern science developed many explicit and tacit boundaries along the trajectory of development. From an ahistorical and more conceptual consideration while acknowledging the rough-and-tumble development of modern science, some bounds include Aristotelian foundational empiricism, natural philosophy, methodological naturalism, rationalism, empiricism, inductivism, *Ockham's Razor*, consilience, falsificationism, verificationism, hypothetico-deductivism, Bayesianism, and epistemological anarchism.

Undoubtedly, quarrels exist around the appropriate weight and inclusion of these – and unstated others. I state the description of them in the upcoming format for sake of concision. Far too much to cover here. Many, many books written at length on the subjects alone and together. I will cover each in their presented order.

Originating from a single mine of human endeavour, science forged from the base metals of Aristotelian thought. Aristotle, the smithy, even invented the – still used – biological taxonomical distinctions of *animalia* and *plantae* in the 4th century BCE. Aristotle shifted the dominant philosophy from the Platonic to the empirical – suiting for a strong student of Plato in *The Academy*.

English alchemist, biblical scholar, mathematician, occultist, and philosopher, Sir Isaac Newton, from *The Mathematical Principles of Natural Philosophy* (1687) becomes the

transition between the era of natural philosophy and natural science. In fact, some would consider the simple definition of studying natural causes by natural means sufficient to explain a foundational principle of science: methodological naturalism.

Rationalism and empiricism tend to oppose one another. Pure rationalism defines knowledge from the human mind alone (*a priori*); pure empiricism defines knowledge from experience alone (*a posteriori*). Pythagoras, Parmenides, and Zeno of Elea represent early rationalism culminating in Plato with the candle kept alight by René Descartes, Benedict (Baruch in Hebrew) de Spinoza, Gottfried Wilhelm von Leibniz, Francis Herbert Bradley, Bernard Bosanquet, Josiah Royce, Noam Chomsky, and other ancient and modern exemplars.

Sophists represent early empiricism coming afire with Aristotle with the torch taken by the Stoics and Epicureans, followed by Saint Augustine of Hippo, Saint Thomas Aquinas, Roger Bacon, William of Ockham, Francis Bacon, Thomas Hobbes, John Locke, David Hume, Voltaire, John Stuart Mill, William Kingdon Clifford, Karl Pearson, Bertrand Russell, Sir Alfred Jules Ayer, and other ancient and modern exemplars. For some preliminary reading, René Descartes defends rationalism in *Discourse on the Method* (1637); John Locke defends empiricism in *An Essay Concerning Human Understanding* (1689).

1st Viscount St. Alban, English jurist, philosopher, and statesman, Francis Bacon, founded the Baconian Method in *Novum Organum Scientiarum* or *New Instrument of Science* (1620), synonymous with *inductivism*. Where Aristotle represents the major transition from dominant rationalism to some form of empiricism, Bacon represents the metamorphosing of empiricism into more *modern* empiricism.

Science does not give proofs. Mathematics produces proofs. As founded by Francis Bacon under the appellation empiricism and enunciated by Scottish economist, empiricist, historian, and philosopher, David Hume, science amasses evidence for probabilities of theories. Weight towards theories and arguments based on quantity and quality of evidence. Sometimes echoed in the oft-said – to the point of boredom – phrase of Carl Sagan, adapted from Marcello Truzzi, for extreme cases, “Extraordinary claims require extraordinary evidence.”

English Franciscan friar, and scholastic philosopher and theologian, William of Ockham, proposed *Ockham's Razor*, or the principle of parsimony, meaning do not multiply assumptions/premises (“entities”) past the point of necessity. In other words, among competing hypotheses choose the one with the least assumptions.

English polymath, historian of science, Anglican priest, and theologian, William Whewell, brought “consilience” into consideration with *The Philosophy of the Inductive Sciences, Founded Upon Their History* (1840). Of great importance, Whewell – in addition to other work by John Herschel – formalized the modern methodology of science with *History of the Inductive Sciences* (1837) and *The Philosophy of the Inductive Sciences, Founded Upon Their History* (1840). Whewell's efforts with the term consilience faded in philosophy of science until revival in the late 1990s. His lasting mark continues with the modern methodology and refinement of the title “natural philosophy” to “science” and “natural philosopher” to “scientist.”

With great acumen for synthesis (and conceptual resurrection), American biologist, naturalist, and sociobiologist, Edward Osborne Wilson reawakened the philosophy of science term “consilience” with *Consilience: The Unity of Knowledge* (1998). However, Wilson attempted to bridge the division between the humanities and sciences adumbrated by Barron Charles Percy Snow from *The Two Cultures and the Scientific Revolution* (1959). We can leave considerations of humanist convictions possibly driving the thrust of Wilson’s efforts while sustaining the content of the text, argument, and term from philosophy of science. “Consilience” means convergence of evidence from multiple disciplines; a confluence of evidence from multiple fields, subfields, researchers, and laboratories.

Insofar as methodological science concerns itself with absolutes, Austrian-born British Philosopher, Sir Karl Raimund Popper thought science falsifies. Some call this criterion falsificationism. Popper meant this to solve problems of induction and demarcation. Of course, this proposed solution/answer to two problems/questions (induction and demarcation) non-arbitrarily excludes certain disciplines from scientific analysis.

Problem of Induction asks, “Does inductive reasoning lead to knowledge?” “Inductive reasoning” means evidence for support of premises without aim of absolute proof (particular to general); as opposed to deductive reasoning meaning premises logically imply conclusion of the argument (general to particular).

Problem of Demarcation asks, “What distinguishes science from non-science?” According to Popper, with respect to one instance with the *Problem of Demarcation*, non-science fails at adherence to *falsificationism*. For example, astrology, Freudian psychoanalysis, and metaphysics seen through the lens of falsificationism – and skepticism – become non-science, and therefore equate to pseudoscience within this single constraint.

Although, not set firm, Popperian discussions continue, e.g. some might argue for verifiability over falsifiability. “Verifiability over falsifiability” meaning the theory must have verification rather than the possibility of falsification.

Dutch physicist, mathematician, and astronomer, Christiaan Huygens, built the original scaffolding for the hypothetico-deductive methodology. A procedure for building a scientific theory accounting for results of observation, experimentation, and inference with the possibility of further effects being verified/not verified. For a concrete example, hypothetico-deductivism might use Bayesian analysis based on *Bayes’ Theorem/Bayes’ Law/Bayes’ Rule*.

Reverend Thomas Bayes died and one friend, Richard Price, edited and published *An Essay towards solving a Problem in the Doctrine of Chances* (1763), which contained the theorem. In brief, *Bayes’ Theorem* deals with the mathematics of conditional probabilities. Some applications and utility in calculations for real-world scenarios in drug testing. Bayesianism took the throne of inductivism (which Popper rejected) or became the adapted equivalent of inductivism in the modern day, especially with the utility in the ascendance of modern medical testing.

Austrian philosopher of science, Paul Feyerabend, proposed epistemological anarchism. Epistemology means the study of the nature and scope of knowledge. In this sense, within the confines of scientific discourse, epistemological anarchism means science’s attempts for

fixed boundaries appears too optimistic and eventually detrimental to science itself, and therefore the search for universal boundaries of operation becomes an impossible ideal.

History presents one tangled, messy narrative filled with disagreement, dialogue, and debate, even petty feuds. At bottom, we need predictions and tests. What does your theory predict? How could we test the predictions of informational cosmogony, informational cosmology, and informational eschatology?

Rosner: Some possibly testable questions:

Can my theorizing reasonably be made to agree with well-established observational evidence? For instance, I say there's a bunch of blackish collapsed (but non-exotic) matter, located mostly in what appears to be the early universe and probably around the outskirts of galaxies (as well as at the center of galaxies, but that's been established). Can this work in terms of galactic dynamics? The greatest observed Hubble galactic redshift is about 12; I say there's a bunch of blackish stuff with redshifts of 1,000 or more. Very convenient – all the stuff that makes the universe work is nearly invisible.

For my theory to work, black holes have to be more accessible and reversible than they're currently thought of as being. This can work if the matter in collapsing bodies creates additional space for itself by shrinking. (A house or a collapsing star is a lot more spacious if you're only two feet tall.) This makes sense informationally. Not only is the matter in a collapsing body defined by its interaction (gun-fighting) with the rest of the universe, it's additionally defined by all the additional gun-fighting going on within the body. With so much matter clustered so close together, the particles can zip bullets back and forth among themselves at a much faster rate than in non-collapsed matter, defining themselves in space much more precisely. You still have tremendous forces, but they're not enough to inexorably crush matter beyond the resistance of any other force. (You can still lose information in a blackish hole to noise/heat, if the ability of the universe to store information isn't perfect.)

Blackish holes which have less crushing power than they're traditionally understood to have should be able to coexist with non-collapsed matter without relentlessly consuming it. If galaxies cycle over and over, there's gonna be some collapsed matter left around. Maybe new stars sometimes coalesce around collapsed bodies. Maybe some collapsed bodies can open back up from the heat generated near the center of new stars. In general, gentler new-school blackish holes create less havoc than unstoppable old-school black holes. We should be able to mathematically model galaxies that contain a bunch of collapsed non-exotic matter (including modeling various ways old galaxies get lit back up). There's a study released just a few hours ago which suggests that up to half the stars in the universe might be found outside of galaxies. This seems possibly consistent with a very old universe with parts of space that repeatedly puff up and shrink down, do-si-doing into and back out of the active center. Stuff's gonna get tossed around.

Can information-based cosmology fit in with well-established laws of physics? When I edited *Noesis*, I received articles from people claiming to have disproved Einstein. Disproving Einstein is a major indication your thinking is likely flawed. Einstein's theories show that space and time and matter are up for grabs, lacking Newtonian solidity, which brings out the theorizing in some people. Einstein didn't disprove Newton. He put Newton in a larger context. I don't want to disprove well-established physics – I want to put some of it in a new information-based context.

Can this be mathematicized? Seems like it – it has some math in it already. It sounds a little like what legit guys like John Wheeler and Ed Fredkin sound like when they talk about a universe that's built from first principles. Scientists who come up with biggish theories often talk about looking for elegance or simplicity or divine symmetry – indications that the deep rules governing the universe are particularly nice – non-arbitrary, explaining a lot with a little, having a pleasant orderliness without being a complete buzzkill. Do my principles and the big equivalence between mind-space and physical space have the right poetry, the right irony, the right we-should've-known? Do they give us and the universe a destiny that makes sense?

Is what I'm claiming consistent with what we know of the mind and brain, of the phenomenology of thought?

Do the general principles mesh with the specifics – have I come to the right conclusions in going from an information-based universe to the five persistent particles being the major players in it?

Do the two structures – mind and universe – inform each other in what seems like a reasonable way? Do memories in our heads really pop into our awareness like galaxies lighting up? Can blackish holes be seen as storing information for later retrieval? Can efficient, three-dimensional information spaces be constructed? Does it make sense that a nexus of information would coalesce like a galaxy? Are words and concepts and people and things represented in our mental maps by things that look like stars and galaxies? (Hey, how else would they look? – not like frickin' file cabinets.) Can we eventually find connections between brain activity and structure and mind-space activity and structure? Are stars and galaxies the best way to cluster related information? How does gravitation decide what information clusters into stars and galaxies, forming concepts and representations? Why does a concept end up in one galaxy rather than another? (Though everything's related to everything else, choices still have to be made about which things are clustered with each other – you can't have just one big cluster.) What do orbits and angular momentum mean in terms of information?

By the way – I love Bayesian analysis. When working as an ID-checker in bars, I created a Bayesian system which assigned points for everything not quite right about a potential customer's ID and presentation. At its most refined, the system and I could catch 99% of fake IDs with only one or two false catches a year. (This was back when going to bars, not going online, was probably the number-one way to try to hook up. Having a fake ID was a big deal back then.)

Jacobsen: With regards to traditional religious/irreligious conceptions of an afterlife such as reincarnation (with/without karma), heaven and hell, oblivion, nirvana, union with the divine, and the whole suite of possibilities, do you consider any of them to have any truth value? If so, which one(s)?

Rosner: I think in the not-too-distant future, we'll have technical resurrection – technologically created conscious entities which can be seen as approximating the continuation of specific humans' awarenesses. Eventually, we'll understand and synthesize consciousness. (Some disappointment may accompany the understanding of consciousness – once dissected, it may not hold all the wonder it currently does.)

As to whether the universe has non-human means for continuing or resuming human consciousness – could be. If there are high degrees of infinity of worlds that can and do exist at

some point, then finite beings such as ourselves (or close approximations of ourselves) could pop up. But this pop-up existence seems unlikely out-of-context.

By out-of-context, I mean that we are born into a world which seems to operate via natural processes. For us to pop up, out-of-context, in a constructed world, there would need to be a constructor. I don't see a lot of evidence for some outside constructor preparing a world for us beyond our natural existence. I think we humans will have to help ourselves (and any possible Creator) by building our own afterlives.

Jacobsen: Based on the last response, any thoughts on religion?

Rosner: Religion remains a matter of faith. Science continues to turn up more evidence for scientific explanations of the world. There's room for God in this, but a God who's deeply in the background, intertwined with the beautiful symmetries of the universe, not an actively intervening God. The world's religions have a pretty consistent view of what they'd like God to do – provide fairness, abundance, an afterlife. In the absence of definitive evidence that God provides these things, it's not unreasonable, nor should it be against God's wishes, to help Him out. Isaac Newton and many other scientists have thought and continue to think that figuring out the universe is doing God's work.

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Six)

November 15, 2014

Abstract

Part six of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: organizations devoted to the moderately gifted ability sectors of the general population, few with provisions for the high, profound, exceptional, or ‘unmeasurable ability’ sectors, the possibility of proactive work by individuals and organizations, comparison with his own childhood to his daughter’s childhood, and extensive discussion on giftedness, giftedness in Los Angeles, and social guidance for the highly gifted; methods for the adult and senior gifted set to inculcate prosocial values in the young, commentary of Capitalism and failure of communism, and technological booms on the horizon with examples of 3D printing and biotechnology; increased awareness and commentary on bullying; message for kids undergoing bullying and general reflections on personal experiences and considerations of adaptive active approaches to the problem of bullying; active approaches with respect to parents, teachers, administrators, authority figures, and the wider community for support and encouragement; possible passive approaches and consolation; assisting others in their struggle with bullying; extreme cases of abuse for girls and boys, young men and women, and words for those feeling driven to extremes; commentary on the possibility of mean people becoming kind people, *First Amendment*, and Foundation for Individual Rights in Education (FIRE); possibilities of remaking the educational systems of the world; thoughts on global problems in the United States of America and some possible ways to solve them; interacting political, economic, religious, corporate, educational, and other systems in societies with reflections on the future; associations of the highest levels of ability with world-changing things; and responsibilities of the gifted population towards society and culture.

Scott Douglas Jacobsen: Many organizations provide for the needs of the moderately gifted ability sectors of the general population, most often adults and sometimes children. However, few provide for the needs of children (and adults) in the high, profound, exceptional, or ‘unmeasurable ability’ sectors of the general population. Not to argue for the necessary disadvantage of the gifted population based on abilities and talents. A definite benefit over others in life. Even so, some organizations and societies provide forums, retreats, journals, intelligence tests, literature, or outlets for the highest ability sub-populations. No need to bore with a list best left to an internet search engine query. What can individuals, organizations, and societies do to provide for the gifted population? What argument most convinces you of the need to provide for this sector of society? In short, how can parents, mentors, educators, and policymakers assist the gifted population towards the appropriate resources?

Rick Rosner: Based on my childhood compared to my daughter’s childhood, I think that things are much better for the highly gifted than when I was a kid. Plenty of parents are on the lookout for giftedness in their children, and organizations will help them nurture it. This doesn’t mean that every super-high-IQ kid will be found or well-served. Affluent, well-informed, non-chaotic

parents are more likely to notice and encourage giftedness, which still leaves a lot of smart kids who may need to be spotted by other people in their lives.

A nice thing about our current internet-centric culture is that a smart kid can find smart, entertaining things to do without too much effort. All of human knowledge is available via any keyboard (though so is all of human foolishness – the smarter we get, the more sophisticated our time-wasting diversions become).

In the 60s and 70s, it felt like there was frickin' nothing. I should've taken more of the initiative in finding learning opportunities instead of watching endless crappy sitcom reruns, but I shared a certain laziness and complacency with the era. At the time, most people assumed just about everyone would turn out okay, educationally, with regular schooling. Back then, everyone I knew went to public school, and there didn't seem to be pervasive concern over public education. Could be America, exhausted by Vietnam and Watergate and crappy cars and ugly color schemes (orange, brown and turquoise) and the first OPEC crisis, didn't want to look for trouble where there didn't seem to be any.

Today, with schools seeming much more broke and broken, skepticism about whether a kid is being adequately served comes more easily. It helps any kid to have an involved parent. On behalf of my daughter, my wife spent hundreds of hours researching and pursuing the enriched educational opportunities available through the Los Angeles public schools. LA public schools have great gifted programs, but because the school system is financially strapped, they can serve only a very limited number of students. Basically, you accumulate gifted program lottery tickets and hope your name is drawn for a program. We were lucky. Or your kid can get in by scoring 145 or higher on a group-administered IQ test, which is an iffy proposition for a first- or second-grader, no matter how gifted.

To serve very-high-IQ kids, first someone has to notice that a kid is smart. This generally happens when a kid shows extreme precocity or is disruptive in the classroom out of boredom, which makes me wonder if quiet, well-behaved prodigies are sometimes overlooked. (Luckily for me, I was a bored and obnoxious kid. If there had been specialized educational resources to give me, I would've gotten them.) At the very least, teachers and administrators should get a heads-up at some point in their training to be on the lookout for a once-in-a-decade kid. For parents who are wondering if their kid is super-smart, Googling "Is my child gifted?" returns a blizzard of information. A good book for figuring out what's up with your possibly gifted kid is *5 Levels of Gifted*, by Deborah Ruf. But ideally, every kid should be noticed, should have people and systems that understand his or her abilities and interests. Via digital devices, kids do more of their own educating than ever before. An up-to-date educational system, which should include lots of tech-heavy teaching resources, would build upon kids' digital lives and individualize instruction. It's counterproductive that the hours spent in school are the least tech-rich part of students' day.

I know of a couple organizations which provide considerable support for gifted kids. The *Institute for Educational Advancement* has a variety of programs, including the Caroline D. Bradley Scholarship, which covers the costs of four years of school at any high school in the nation. They've just doubled the number of scholarships available, to 30 new recipients each year. You take the SAT and apply during middle school, so it takes some foresight, but it's well worth it. The *Davidson Institute for Talent Development* has a bunch of programs and a directory of gifted resources throughout the country. Parents who think their kid is gifted should network

online like crazy. So should teachers who suspect they have a gifted student who's being overlooked.

In a way, we're all highly gifted children who need guidance. Tech is giving us capabilities unheard of up to now – the instantaneous retrieval of detailed though not necessarily accurate information on any subject, constant communication with a wide circle of family, friends, and acquaintances, access to vast selections of entertainment. I mentioned the Flynn effect, but there's also what could be called the Watson effect. Like Watson the *Jeopardy!* computer, we have access to all the knowledge in the world but need to develop the research skills and discernment to use it well. Compared to a smart person without access to the internet, a person with a smart phone could potentially have an effective IQ of 400. (Imagine Lewis Terman in 1921, testing the IQ of a time-traveling kid from 2032 who has a smart phone built into his head (with an internet connection that works across time). That kid would crush the test.) Of course, people with smart phones don't have effective IQs of 400, because they're tweeting clapping-hands emojis while almost getting clipped by an Audi in a crosswalk. Our entire civilization needs to adjust and embrace its genius, which we will, frustratingly slowly (along with a flood of high-tech foolishness – the greater the tech, the greater the sophisticated, time-wasting frivolity).

Besides intellectual and educational guidance, an ultra-smart kid might need social guidance. Growing up, I desperately could've used an older sibling to clue me in, socially. This is another thing the internet has made better, but there's still no substitute for an older sister saying, "You're wearing *that*? Ewww." (Until high school, my mom helped me shop for clothes. In the *Brady Bunch* polyester 70s, this delivered mixed results. I eventually learned to avoid the wrong pants, at least, by wearing Levi's to school every day, though I did commit a terrible mistake by making my jean cutoffs too long. Back then, they were supposed to cut off within about an inch and a half of your balls. Even the gym teacher made fun of me.)

Jacobsen: From the vantage of the adult and senior gifted set, how might we inculcate prosocial values most net beneficial to both the gifted individual and society?

Rosner: I believe that advantaged people should look for ways to increase equality of opportunity for everyone. We would never strive to completely flatten the playing field at the expense of every other cultural and economic consideration, but there's a level of opportunity that helps entire nations flourish. Many economists say the current level of economic inequality in America is bad for the country, but we seem years away from any effective remedies. Our infrastructure and schools are dilapidated, and anti-science yahoos – social Darwinists who don't believe in evolution – hold many of the reins of power.

We're all a little (or a lot) boggled by tech, and this is only going to increase. We can hope that smart people will come up with smart ways to use tech or at least figure out ways to reduce stupid and dangerous uses.

Capitalism is a pretty good framework for maximizing the benefit of smart people to society. When smart people invent good things, they're more often thinking, "Will people want this?" than "Will this help society?" The near future will be shaped by capitalism. Science fiction of the 1950s and 60s didn't include much economics. Enormous spacecraft traveled the galaxy without discussion of who was financing the spacecraft. In modern SF, market forces pop up frequently. (Of course, right now in this country, a lot of powerful douchebags are putting a terrible face on capitalism – dicks who argue that taxes and regulations amount to tyranny and who often espouse anti-scientific views which can reduce the U.S.'s chances to continue to be a tech leader.

I hope that a wave of tech growth sweeps away much of the current political stupidity. Politics that's specifically designed for and targeted at dumb people is creepy and cynical.)

Regardless of politics, capitalism and investing will have increasing difficulty keeping up with the accelerating pace of change. It'll be tough to invest in market sectors in which companies have life cycles of less than a year. Tech might eventually make some types of consumer goods so inexpensive, they're virtually free. Tech will also reduce the amount of work available for people to do. So the consumer economy will get weird, and money may not have the same motivating force it does today. We won't be living in Idiocracy, but neither will we be ruled by the Gordon Gekkos and Donald Trumps of the world.

Right now, Americans are in no mood to share. For 30 or 40 years, conservative think tanks have been studying how to hammer home the message of rugged individualism and entrepreneurial spirit. Some politicians have been successfully following the strategy of making people think that government doesn't work by making sure that government doesn't work.

The 20th century demonstrated the failure of communism. (Might it work if it weren't in the hands of murderous dictators? Who cares – we're not gonna do it.) So far, this century in America has demonstrated the danger of capitalism when moneyed interests get too much leverage over democracy. (Used to wonder if people voted against their own interests because they thought they were just a reality show away from being millionaires.) But democracy is resilient – we made it through other periods of political rancor and should make it through the current dysfunction, perhaps with the help of a rising tech economy. (Don't even know why I'm going on about this; I have no particular political insight.)

I hope prosperity from tech makes people richer, smarter, more generous in spirit, and less able to be manipulated by the politics of dumbness. Under Clinton, we had a tech boom – we all thought we'd become millionaires via a website or an IPO – and things were good, but not because of politicians. Then the boom turned out to be a bubble. But we have tech booms on the near horizon – more digital stuff, biotech, 3D printing – and we can hope that the vitality they'll pump into our economy will overwhelm stupid politics. Tech will give Americans increased wealth and autonomy if we can keep America educated and prosperous long enough for that to happen.

Jacobsen: Most children have negative experiences. Not to argue for life in shelter from the world – grit counts. Even taking this into account, some experiences should seem across the board uncivil and fought against according to the context. Indeed, some experiences might devastate a child, even though some become more resilient. Bullying does have increased awareness. Individuals, families, authority figures, communities, and organizations work to solve the social issue more than earlier times. Do you have any general reflections on personal experiences with bullies?

Rosner: Looking back on the bullying I received, I have two thoughts. One, it wasn't that bad. I wasn't that much of a wuss, my school wasn't that bad, and I used my smartness to avoid some potential teasing and bullying by letting cool kids copy off of me. And two, I should've punched more people. The summer before ninth grade, I suffered some bullying at Jewish summer camp. Eventually, I realized that these bullies weren't the cool kids at their school – they were just anonymous assholes. I was really offended – I wanted to be bullied by the best bullies, not a bunch of losers. So I decided to start punching anyone who dissed me – crunch! right in the cheek. I punched about half a dozen jerkwad kids. It was very satisfying.

Jacobsen: What message do you have for kids suffering from bullying? What would you recommend for them on an interpersonal level to do for themselves? In short, what count among adaptive active approaches to the problem?

Rosner: My advice to kids who are being bullied is several-fold.

Punch bullies, especially if you're young enough – say, under 14 – to not suffer serious consequences for assault. Practice some punching at home, learn the most painful places to hit people, and then fly at 'em. Go crazy – make them fear you. And don't fear their punches unless they're full-grown thugs. Kids who are afraid of fighting don't realize that it doesn't hurt that much to get punched by a 12-year-old. And even if it hurts, don't stop to consider the pain – just keep punching and kicking. And fight dirty – bend a kid's pinky back until it almost breaks. But only for the kids who really deserve it – the ones who shove your hand in the back or elbow you in the face – not the cute girl who gives you an “Ewww” look or the boy who calls you a spaz.

Look for books, movies and TV shows about abuse and bullying (not necessarily books that are complete downers, like *Lord of the Flies*). (Googling “bullying movies” returns a bunch of lists. A quick look at the movies on these lists reveals that most of them suck. The documentary *Bully* is supposed to be pretty good – haven't seen it.) In many of these, the abuser continues to get away with it as long as the victim is completely intimidated. You can read and watch these things to see how the victim eventually quits being a victim or you can figure out what you'd do if you were in the victim's place. Movies won't offer a quick fix – they just get you thinking. The kid in *Let the Right One In* is bullied, and he makes friends with a vampire. That's not really gonna work for you. (Great movie, though.)

Acquire some social skills – learn to co-exist with stupid dickheads. I had to learn social skills, Temple Grandin had to learn social skills, even people who aren't bullied have to learn how to interact with other people. Depending on your situation, you can try some stuff such as not flinching, staring the bully down, taunting the bully – “Hey, Snagglepuss – still wetting the bed?” (Careful with this – you're gonna get punched. But if you're gonna get punched anyway, might be worth a shot – but only in front of an audience – you want people talking about how you made the bully look bad.) At the very least, make the small, easy moves to reduce your chances of being the target of bullies. Are you the only one walking around your middle school with a 50-pound book-stuffed backpack? Are you still wearing your glasses from second grade that are now too small for your face? Take a look at yourself and fix the easy stuff. I wish I'd had an older sibling to tell me how to be less of a geek. (I had some horribly geeky years in junior high – didn't call it middle school back then – and this was before being geeky was somewhat accepted.)

Become badass. If you're recalibrating yourself to make your social interactions less painful, there's no reason you have to stop at just fading into the background. You can eventually become someone who's intimidating and/or respected. Again, use your smarts and research skills to figure out the angles. As a smart kid, I tended to turn things into big projects. If that's your proclivity, consider making a project out of turning yourself into a non-bullied person with some possible swagger.

Be aware of your surroundings and situations. Lots of bullying and rape involve hooking up and/or alcohol. Be prudent – be familiar with your hookups. Is he a rapey douche? Does he have a terrible girlfriend or ex-girlfriend who, along with her scummy friends, will go after you? Watch out for the kings and queens of the school – kids who, because of being rich or star

athletes or super-popular, get a free pass to screw over other people. This kind of thinking is currently controversial, with people saying, “We shouldn’t be teaching people how not to be bullied or raped – we should be teaching people to not be bullies or rapists.” This is valid. At the same time, it’s dumb to put yourself at risk to make the point that in a perfect world, you should be free to casually do whatever you want. It’s not a perfect world.

Own yourself. Figure out what you like about yourself and embrace it. Doesn’t have to be much – could be that someday you’ll grow up and will be able to escape all the dickheads in your life. (There may always be dickheads, but at least you’ll be able to ditch these dickheads. Maybe what you like about yourself is also getting you bullied. You don’t have to change this stuff. You can decide how in-your-face you want to be, or you don’t even have to do that. You can simply be aware that you’re gonna be who you’re gonna be, and the bullies are headed for SadLifesville. You might be aware of *It Gets Better*, which tells LGBT teens that their lives won’t always suck because of the jerkfaces around them. This is true for LGBT people, but it’s also true for lots of other people. There are entire industries where the majority of people in these industries got a bunch of shit when they were kids – TV, movies, Broadway, fashion, design, video games. These are also industries where people get to have really cool lives.

Call bullies out. Don’t keep bullying secret. You shouldn’t be embarrassed – the bullies should. Some ongoing abuse depends on the victim keeping his or her mouth shut. Announce to your class what the bully did to you or sent to you. In front of other people, ask the bully why. “Is it because I’m effeminate / nerdy / fat / skinny?” (This is a tricky move. It can backfire.)

What about active approaches with respect to parents, teachers, administrators, authority figures, and the wider community for support and encouragement?

Rosner: Document the abuse and what was done about it. If you get bruised or bloodied, take pictures. Keep a journal of what’s happened to you, along with a record of adults you talked to and what they did about it. If this becomes a “them versus you” thing, you want to be able to prove your case that they’re the abusers. Keep a record of online bullying – make a doc with all the terrible stuff in it, take screenshots. If other people, especially teachers or administrators, see you getting messed with, discreetly ask, “You saw that, right?” Clearly tell them what happened and keep a record.

Tattle, if it will get the bullies in trouble and not increase the bullying. If you’re in a position to screw over bullies by telling on them, do it! They probably won’t learn a lesson, but any punishment they get may make them feel bad for awhile.

Contact local news media. They love a good bullying story.

Sue people. Asshole kids often have asshole parents – make them feel some consequences. And go after lazy, incompetent, know-nothing administrators. There are great teachers and administrators, and there are lazy dumbshits. (One reason is, teaching doesn’t pay very well, so some teachers are very skilled and dedicated, with their love of helping kids overcoming the crap pay, while others are too incompetent and sluggardly to do anything else.) Also, this whole bullying thing is new territory for administrators who haven’t been paying attention. Often their natural reaction to a problem is to downplay or ignore it. As a group, teachers have about the lowest standardized test scores among all the professions. If you reach out to school administrators about bullying, odds are good that you’ll be dealing with at least one idiot. This

shouldn't stop you. Idiots can be brought around, and you're helping the idiot do a better job on behalf of the next bullied kid.

Do research. With the internet, bullying is different now – some of the worst bullying is online. I want to tell you to use your smarts to destroy people online – to tell mean girls their futures with horrific specificity, the way the Albert Brooks character cursed bullies with a prediction of their futures in *Broadcast News*. But that's probably not a good move. It leaves a record, and you could be outmaneuvered and made to look like you're the bully or at least an evenly matched opponent. Instead, use the internet to research what other people have found to be effective against bullies. And go online to reach out to other bullying victims and anti-bullying organizations.

Play the victim. Can you make a reasonable case that what's been happening to you has affected you emotionally? Play that card if you think it'll help – people are ready to listen. Visit your school counselor. Ask to see a therapist. Maybe get a diagnosis – PTSD, being on the autism spectrum. (I don't know the politics of this. Seems like a diagnosis of mild autism might help make the bullies look extra bad for picking on someone who's officially handicapped, but I don't know.

Team up. If you're not the only one who's getting messed with, get the testimony of other victims. You might have to build a case to present to ass-covering, confused, overworked, often not-smart administrators. Officials have an amazing ability to not see what's right in their face if it's inconvenient. The more people you can put in their face, the more likely they are to take you seriously. Other people may be reluctant to come forward. Doesn't mean you can't mention them to the administrator, along with the phrase, "class-action lawsuit."

With bullying, there's a lot of stuff you can try, but most of it isn't easy. There are conditions in place which help bullies get away with it. But you're smart – you can examine the situation to see what can be changed and what resources can be applied to make it less easy for the bully.

Jacobsen: What about adaptive passive approaches and consolation over time?

Rosner: Be happy that you're not the bullies. They're probably going to be miserable, dickish people for the rest of their lives. Sometimes the best revenge is not being the people you hate.

Sometimes little dipshits grow up to be fine people. Trying to figure out who truly sucks and will suck forever is tricky, but that's part of what school is for. American schools were designed to be abridged versions of adult life. You don't go to school just to learn academic subjects – you go to learn how to deal with people.

Give it time and put it in perspective. Sometimes what nerds perceive as bullying is perceived by bullies as harmless goofing around, and sometimes the truth is somewhere in the middle.

Analyze your bullies – are they truly malevolent, or do they just have a stupid idea of fun? Are they focusing on you in an evil way, or are they just generally causing trouble? Is there a way for you to join in the stupidity instead of making enemies out of them? I'm not saying to go along with evil, but if it's just messing around, you might be able to work with it. On the other hand, truly evil little assholes are good at disguising their evil as harmless fooling around.

Jacobsen: How about helping others undergoing it?

Rosner: Stand up for other people. Bullies know that giving people shit is fun. If you see someone being a bully, you can give them shit – it’s like a free pass to mess with someone. (This is an advanced move. There could be some unpleasant consequences.)

Jacobsen: What about the extreme cases of abuse for girls and boys, young men and women, what do you recommend for them? Any words for people who feel driven to extremes?

Rosner: Don’t go overboard (and don’t decide to hate everyone). No one ever thinks a kid who strikes back with extreme violence is a hero. They’re always thought of as psycho losers, probably even to themselves. People who go on a spree of destruction find no good fame – they’re monsters and creeps for as long as they’re remembered (which isn’t that long, because yuck). There’s no joy in over-the-top vengeance – you’ve let the bullies win by driving you to brutality. You can play the game better than that.

Start over somewhere else, if that’s an option. Are you completely screwed in your current situation? Will you never be able to overcome a loser-ish reputation or the enmity of jerks at your current school? Then switch schools before it’s too late. (Or you can do home schooling for awhile. It may not stop all bullying, but it’ll at least reduce the face-to-face bullying, unless the bullying is happening at home.) I was too chicken to move when I should’ve, right at the beginning of high school. (Because of my parents’ divorce, I had families in two different towns – it wouldn’t have been that tough for me to relocate.) Kept thinking I could improve my standing among the kids I’d grown up with. It wasn’t horrible for me, but I wanted a girlfriend, and there was little chance, given how nerdy I’d been and how Ryan Gosling I still wasn’t. It gets better, but it sucks wasting years in a situation that’s not gonna get much better.

Jacobsen: What about in defense of, and reflections on, those capable of changing their socially maladaptive, and abusive, behaviors? In other words, your thoughts on the chances for change. The opportunity in life of the mean becoming kind people. Sometimes definitions of ‘bully’ and ‘bullying’ can seem too elastic in which any behavior of dislike by a purported recipient becomes grounds for claims of bullying.

In particular, many university environments stating the first amendment within your own country seem to fail to live to some of these standards. The *First Amendment* to the American Constitution seems most relevant, which states, “Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; *or abridging the freedom of speech, or of the press*; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.” [Emphasis added] Some organizations, e.g. Foundation for Individual Rights in Education (FIRE) under the Presidency of Greg Lukianoff, assist those in need of advisement. This assists prosecutors and defendants, i.e. those without experience in the litigation process of arraignments, trial proceedings, and verdicts.

An issue clichéd into the initialism ‘PC’ (Politically Correct) becomes the basis for some of these organizations and universities in coarse analysis. Even extreme restrictions, increasingly common, the creation of ‘free speech zones’ on campus for students to speak without restraint or the phenomenon of ‘speech codes’ – sometimes limits in zone area and stipulations on speech to such an extent as to merit laughter, let alone the sheer existence of them.

Forms of ‘benign bullying’ – for want of a better phrase – or norm-keeping can work to build community, sustain professional standards, prevent unwanted advances of sexual harassers and aggressors (men and women), and provide consistent norms along the spectrum of appropriate-inappropriate social behavior. In short, assertive standard setting based on context without violating US citizens’ privileges. Of course, in an academic environment, ideological and intellectual norms need questioning for a vibrant, i.e. meaningful, university education. Likewise and further, this moves into the broader societal milieu.

Rosner: I was bullied sometimes as a kid. In college, an aggressive girlfriend came close to being a bully, and for years, I was the adult recipient from a bully of abuse in the workplace. (It was disheartening to be bullied even though I used to be able to (sloppily) bench press 300 pounds, but of course bullying doesn’t have to be based on physical dominance. Sometimes it comes from a simple willingness to be a dick, especially if dickish behaviour gets you what you want.)

Some bullying I was able to stop, and some I had to live with (at least that’s what I told myself). No matter how long ago the bullying happened, it still makes me mad. (I want to time-travel back to 1973 and body-slam the gym teacher who lined up everybody in class and went down the line slapping us, just for fun. But anger can be positively motivating – I’ve been lifting weights for nearly 40 years.) On the other hand, I’ve been in situations in which everyone gave everyone else (well-intentioned) shit, and it was great – fun and actually helpful, spotlighting areas in which I could do better.

As with a lot of characteristics, people come in a range of niceness, with most people being averagely nice, and a few people being saints or complete monsters. Similarly, the amount of change people can undergo covers a range from no change to radical change. Part of growing up is realizing there’s a chance that any given person could be (or could turn into) a despicable shit or worse, and defending against that possibility.

After high school, most people eventually put themselves in situations that confirm their worldviews and that don’t often challenge them. This lets people think of themselves in positive terms – as smart and good and competent, even brave. People who are in favour of pretty rotten things like tearing down the social safety net in support of Ayn Randian social Darwinism build information bubbles which allow them to think of themselves as rugged iconoclasts making hard but necessary choices. (BTW – don’t confuse social Darwinism – every man for himself, devil take the hindmost – with Charles Darwin. Social Darwinism is a facile and self-serving bastardization of his thinking.)

I returned to high school as a student a few times after graduation, and among the reasons were that I think people in high school are generally nice. Yeah, we think of high school as a place of vicious social struggle, but that’s more often middle school. In high school, students mostly don’t have to support themselves, so there’s often less economic desperation than in adult life. (Don’t get me wrong – there are plenty of students who are fully aware of their family’s desperate circumstances.) And students haven’t yet settled into their adult lives and personas and like to think of themselves as good people. Later, adulthood starts kicking their asses. Is it possible for people to become nicer as adults? Sure. But the general trend is to become more politically conservative with age. (When you’re young, it’s not your money, so yeah – spread it around. When you’re older, you turn to Fox News.)

You can look for positive change among people who were part of an aggressive pack – mean girls, jocks – but are now free of the pack. Sometimes the pack contains members who aren't naturally vicious but are just going along. Of course, this doesn't apply to every single pack member – some might be dicks for life.

Jacobsen: If you could, how would you change the educational systems of the world? In particular, how would you change the educational system to provide for the needs of the gifted population?

Rosner: Education needs to become more individualized by using more tech. Hours spent in school shouldn't be the least information-rich hours of the day. Great teachers are still needed, but not all teachers are great, and a lot of school systems are underfunded. (In California, where I live, Proposition 13 limiting property taxes has left public schools strapped for money since 1978. Affluent parents send their kids to private schools or use elaborate strategies to get their kids into limited spots in good public school programs.) Internet-based aids to instruction could be an inexpensive way to help make up for less-than-great teaching.

In middle school, my daughter took an online math course, which kind of sucked. But online courses don't have to suck. Online courses need to look more like what people do online for entertainment. That doesn't mean adding some half-assed animated, talking algebra symbols. I hope that market forces eventually bring good people and good tech to education.

To help gifted kids, we need educational tools that help everyone. Now more than ever, a wide range of people have the potential to be gifted. A kid doesn't need a 160 IQ. She needs some combination of curiosity, motivation, and ability to find information and other resources. Among the next generations of gifted, successful people will be those who are able to amplify their natural abilities with smart use of tech. Our brains and bodies will become more intimately linked with more and more powerful technology. (People wear fitness bracelets now. In the future, people will wear bracelets which tell them what nutrients to ingest and which will eventually administer drugs as needed. I imagine that a wearable drug-administration system which strictly regulates blood sugar and other factors might slow aging by 30 percent. Google Glass may never take off, but people will eventually have some form of wearable brain butlers to constantly augment their reality with helpful information (and distracting fun stuff).)

Perhaps schools will eventually have navigators who would be like a combination of counselor and teacher, to help guide students through our new world of tech and information. Students are already skilled at social media, typically better than adults. (My wife tells me it doesn't go by "social media" anymore – now it's just "social.") Among other things, navigators could help students adapt their social media skills for learning, researching, and professional networking. (I can see the school navigator being hopelessly behind the times – a walking dial-up modem. But it wouldn't have to be that way.)

How about this? – a tax deduction for online mentoring. Experts in all fields (and some non-fields) make themselves available for online consultation with qualified students and get to deduct \$25 an hour from their tax bill for each hour of mentoring up to a total of 8 or 10 hours a year.

One way to help millions of talented kids would be to build an online college admissions concierge. So many things go into college admissions – grades, test scores and test prep, high school course selection, activities, essays, selecting colleges to apply to, financial aid and

scholarships, college tours.... Information about all this stuff often has to be gathered from a bunch of different sources, and often this information is incomplete or comes too late. It helps to have involved, knowledgeable parents and attend a private school with a quality college admissions department. Most kids don't have this.

It wouldn't be fantastically tough to build an online portal (obsolete term) to everything about prepping for college. Kids set up an account towards the end of middle school, entering grades and interests and test scores, and get personalized advice that carries them through high school. Every kid would get basic automated services. More deluxe services could be provided for a fee. Right now, kids obsessed with getting into college (and their parents) share information on CollegeConfidential.com, but it's hit-and-miss and not easy to navigate. There should be something more organized. Rich families often pay an admissions specialist the equivalent of a year or more of college tuition to help their kid through the process. (There's a guy who charges \$600,000 and more to get your kid into a top Ivy League school. If your kid doesn't get in, you get \$200,000 back.)

All talented kids, not just rich ones, deserve some guidance towards college – it's consistent with the idea of America being a meritocracy.

Jacobsen: What global problems do you consider most important at the moment? What about problems in the United States of America? How would you solve them?

Rosner: A major problem will be how well we can build a workable society around the huge and accelerating changes in tech. There are some signs we haven't been doing so well – our use of devices in dangerous and inappropriate places makes us look like idiots. Via the internet, millions of willfully ignorant people reinforce each other's stupid beliefs and are manipulated by clever, horrible people. But there are other signs that we're adapting to tech and living more intelligently in a smarter, better-informed world. (Just guessing – not sure I see those signs.)

Politically, the U.S. is in bad shape. But our system of government is resilient. A period of tech-driven growth would go a long way towards showing Americans that things don't have to suck and that you don't have to base your politics on accusing the other side of making things suck. It would help if the government would support research and innovation instead of denying evolution and global warming.

At the University of Colorado, I heard Professor Al Bartlett's lecture on the danger of exponential population growth more than once. I agree that many of the world's problems are associated with or made worse by our increasing population. But I don't think this will crash civilization.

It's easy to imagine an impending apocalypse, in part because they're easy to imagine. So many lazy TV shows and movies are set in a future post-apocalyptic world. Post-apocalyptic landscapes are cheap and don't require much imagination. It's much harder to try to picture a non-apocalyptic future in all its aspects. Only a few authors are any good at it – Neal Stephenson, Charles Stross, Cory Doctorow.

The world isn't getting worse. It's easy to imagine current problems exploding into disaster, and there will be localized disasters and worldwide challenges that verge on catastrophe. But standards of living are rising, and our understanding of the world and our tools for dealing with it are getting better. Social media makes it harder for criminal regimes to hide their crimes and

easier to organize in opposition. Wider access to information and communication is a powerful force against ignorance and for helping people decide that they have a stake in the modern world.

The rate of population growth needs to decrease, which it's been doing, going from more than two percent per year in the 1960s to just over one percent today to a projected half-percent a year by 2050.

I'm hopeful that, by the end of the century, the world will transform into if not a technological wonderland, then at least a more livable place for most people, rather than the squalid dystopias of *Blade Runner* also hopeful that economics and tech will be the agents of positive change, rather than having to rely on people not to behave selfishly and stupidly.

With that in mind, it would be great for the U.S. to be a more tech-friendly place. I'm hopeful that Americans are largely tech-friendly, and anti-science dolts are getting disproportionate media coverage.

Over the next century, I suppose our most urgent task is not to let people stay stupid. (This includes learning to manage the rising flood of information and nonsense bombarding us.) There are more than 40 million adult Americans who are in the bottom 20% in intelligence, and some very creepy people have spent a lot of time and money learning how to manipulate them.

Right now in America, gerrymandering is a huge problem, making for some of the worst politics and politicians since the Civil War. (And it doesn't help that two Supreme Court justices are crazy dickheads with an apparent vendetta against regular Americans.) We can hope that demographics and sheer revulsion at the current political situation will gradually fix this. And government will gradually become less important as tech increases individual autonomy. But we have 320 million people in this country, and we need some government. We deserve roads that don't destroy our cars and schools to which we're willing to send our kids. Not suggesting any radical new form of government – just saying it would be nice to have the government work the way it did before it was broken.

Jacobsen: Generally, many interacting systems operate in societies: political, economic, religious, corporate, educational, and so on. If you could build and run a society, how would you do it?

Rosner: I'm not cut out to tell people how to run the world. (About 2,500,000 internet trolls are eager to provide advice.) But I will suggest that we look for ways to minimize the turmoil of rapid technological change. That includes making it unattractive to join tech-phobic reactionary forces that would rather tear down the world than embrace change. The benefits of technology need to be convincingly presented to people in all societies, along with the message that they can share in its benefits rather than be screwed over and exploited by it.

My general, not-well-thought-out feeling is that if we can keep the world from getting too pissed-off, economically and politically, for the next 50 to 80 years, advancing technology and increasing standards of living will make life better for just about everyone. (Food, clothing and other necessities and non-necessities should continue to get cheaper – 1901: food and clothing use up 60% of US consumers' income; 2002: 17%.) Poor countries have to feel they're participating in tech-driven economic boom. Which means, among other things, we have to avoid undue influence by short-sighted, psychopathic pricks who think that any money not going to them is theft from them – the everyone for himself, except for tax breaks and subsidies for me, Ayn Randians.

People aren't good at thinking about the future, which made sense back when the world didn't change very much. Your parents were farmers, you're a farmer, your kids and their kids will be farmers. Not anymore. (1790: farmers are 90% of US labor force, 1860: 58%, 1900: 38%, 1940: 18%, 2000: 1.9%) Now vast changes take place within single lifetimes and even within half-decades; in 2009, only teen girls were texting obsessively. Movies and TV shows consistently get the future wrong. The movie *Her* (the one where Joaquin Phoenix falls in love with Scarlett Johansson the cell phone) seems to present a pretty reasonable future, mostly because it kept its scale and the time-jump small.

We should be doing a lot more thinking about the next 50 to 100 years. Many of us will still be alive a century from now, due to new tech (and if we're not, it might also be due to new tech). Our entertainment should strive to present less lazy, more thought-out versions of the near future, not just robot cops.

Jacobsen: Individuals might associate the highest levels of ability with certain specialized activities. For examples, construction of a grand theory of everything (e.g., Albert Einstein, *General & Special Relativity*, Sir Isaac Newton, *The Universal Law of Gravitation*), a great discovery in genetic science (e.g., Francis Crick and James Watson, Double-Helix Structure of DNA), the solution of a major mathematical problem (e.g., Andrew Wiles, *Fermat's Last Theorem Solution*, or Grigori Perelman, *Poincaré Conjecture*), musical compositions (Johann Sebastian Bach, *Goldberg Variations*, Ludwig van Beethoven, *Symphony 6, 7, and 9*, *Hammerklavier Sonata*, *Missa Solemnis*, Richard Strauss, *Till Eulenspiegel's Merry Pranks and Burleske*), creation of a new field of research (John Von Neumann & Oskar Morgenstern, *Game Theory*), a revolution in medical science (Edward Jenner, Vaccinations), foundational scientific theories in biology (Charles Darwin, *Origin of Species*), comprehensive works of philosophy (Bertrand Russell, *History of Western Philosophy*, and coauthored with Alfred North Whitehead, *Principia Mathematica*), foundational research in linguistics (Noam Chomsky, *Syntactic-Structures*), revolutionary production on philosophy of language (Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*), mastery of performance arts (Richard Pryor, *Richard Pryor: Live in Concert* (1979), *Richard Pryor: Live on the Sunset Strip*, and *Richard Pryor: Here and Now*, Leonard Alfred Schneider AKA Lenny Bruce, George Carlin, *FM & AM*, *Jammin' in New York*, and *Life is Worth Losing*), work in cryptography and computer science (Alan Turing), work in espionage (Mata Hari AKA Eye of the Day), virtuosity with classical European musical instruments (e.g., Yehudi Menuhin with Violin, Glenn Gould, Martha Argerich, and Evgeny Kissin with Piano, Russell Oberlin with voice, Mstislav Rostropovich with Cello), great lyrical productions (Lauryn Hill, *The Miseducation of Lauryn Hill*, Shawn Corey Carter AKA Jay-Z, *Reasonable Doubt*, *The Blueprint*, or *The Black Album*, Nasir bin Olu Dara Jones AKA Nas, *Illmatic*, and Eric Barrier & William Michael Griffith Jr. AKA Eric B. & Rakim Allah, *Paid in Full*), theological productions (Saint Thomas Aquinas, *Summa Theologica*, and Saint Augustine of Hippo, *The City of God*), or foundational theological arguments (Saint Anselm of Canterbury/Aosta, *Ontological Argument*), the creation of a massive social movement (Mahatma Ghandi, Revolution Devoted to Non-Violence), an obsession in a single intellectual sport (Bobby Fischer, Chess), a major work of literature (Johann Wolfgang von Goethe, *Faust*), major works in ethical, political and social philosophy (Plato, *The Republic*, and John Stuart Mill, *On the Subjection of Women* and *Utilitarianism*), a great work of art (Leonardo da Vinci, *Mona Lisa*, Pablo Picasso, *Guernica*,

Michelangelo, *Pieta* and *Sistine Chapel*, Vincent Van Gogh, *Cafe Terrace at Night*, Jan Vermeer, *The Girl with a Pearl Earring*, Caravaggio, *Inspiration of St Matthew*, and Claude Monet, *Water Lilies*), earning tremendous amounts of wealth (Bill Gates, *Microsoft*, or Warren Buffet), adumbrated work in media theory (Herbert Marshall McLuhan, *Understanding Media: The Extensions of Man*, *The Medium is the Message: An Inventory of Effects*, and *The Global Village: Transformations in World Life and Media in the 21st Century*), revolutionary psychiatric work (Timothy Leary, *LSD in Psychiatry* experiments and *Concord Prison Experiment*), engineered inventions (Bucky Fuller, *Geodesic Dome*, *Dymaxion Map and Car*, and *Synergetics*), calculation and extrapolation of technological trends (Raymond Kurzweil, *The Law of Accelerating Returns*), dual Nobel Prizes (Marie Skłodowska-Curie, John Bardeen, Linus Pauling, or Frederick Sanger), or some other revolutionizing idea/production/practice. Provided these and many other unstated examples, do you consider the association accurate? What about the tendency of underachievement or underutilization of abilities in the gifted community? What can people do to alleviate this?

Rosner: Smart people want to do world-changing things. Many get side-tracked. It's like sports – not everyone who wants to play in the NBA gets to.

Starting early in life, people do a lot of self-selection based on perceived skills. With nerdy people, sometimes there's a nice agreement between geniusy interests and skills, almost as if in compensation for social awkwardness. (Not telling you anything new; everybody's familiar with the awkward, brainy nerd type.)

The sidetracking of smart people into intellectual enclaves might serve to make society more stable. What if every supergenius suddenly decided to go into real estate? It's likely normal real estate practices would be highly disrupted, and non-supergenius Realtors might have a hard time keeping up.

A combination of factors nudges nerdy people towards mentally demanding activities – having appropriate the skill set, the pleasure of being good at something, other people's expectations ("You're so tall – do you play basketball?"), the desire for recognition, curiosity, a tendency towards mental flexibility and introspection prompted by not being perfectly at home in the world. Who's gonna be more creative – the perfectly adjusted straight jock, or the gay guy who had to strategically think his way through every day of the mine field of middle school? (This isn't entirely fair – there are plenty of wildly creative straight jocks – Matthew Barney and Jeff Koons come to mind – but still....)

Social skills are kind of the icing on the cake of mental development. If everything goes well, you end up with a kid who can fairly easily learn the demanding task of social interaction. But if any of a hundred things goes wrong with brain development, various mental subsystems aren't adequately integrated, and you don't get easy social understanding. Come to think of it, this suggests that consciousness – thorough mental integration – is especially important in interpersonal interaction. This doesn't mean that people on the autism spectrum aren't conscious. But it may suggest that the components of their consciousness are weighted differently from Frat Boy Joe's.

Having smooth social skills might be at the expense of profound gifts. There are many well-known examples of people with social challenges who have astonishing eidetic memories or math skills or sculptural ability.

Everyone's familiar with stereotypical Asperger's behavior. I think the entertainment industry in which I work is packed with people who have *reverse* Asperger's. They have highly developed social skills, which can exact a price. When you can always make friends or hook up or get what you want with charisma, you might not value relationships and may leave a trail of burned bridges. Because social success comes so easily to people with reverse Asperger's, they may have never learned to do hard things – telling people “No,” for instance. (People in entertainment are notorious for not saying no straight out – it's painful to disappoint someone. Instead, it's a “Yes, maybe,” followed by a declining rate of returned phone calls.)

Now, about underachievement or under-utilization of abilities in the gifted community – humans' evolutionary niche is to spot exploitable regularities in the world. (It's every animal's niche, but we really specialize in it.) Some humans are better at spotting patterns than others. Some are more obsessed with and sidetracked by pattern-spotting, sometimes at the expense of real-world skills such as career and relationship success.

Plus, the unsuccessful smart person is a media trope. “Hey – look at the genius who lives in weird squalor.” Schadenfreude. Success isn't perfectly correlated with intelligence. There are plenty of not-traditionally-successful people at all levels of intelligence. It's just more exciting to see the smart ones.

What can we do to help make gifted people more successful? Show them the landscape, and let them make informed choices about whom they might like to try to be. We've talked about informed will being more important than free will – gifted people should know their options. Growing up, I desperately needed an older sibling (which I didn't have) to tell me what's what in junior high and high school. My stepdad tried, but I didn't respect him until much later, and he didn't help me understand the social benefits of doing normal guy things.

Back when I was pitching TV shows in the 90s, one of my ideas was a makeover show for nerds. In each episode, an expert panel would help a nerd to examine his life and decide what he wants to keep and what he wants to get rid of in the interest of social success. Keep the room full of pristine Star Wars action figures, but maybe drop 50 pounds and get some new clothes. But it's not 1998 anymore, and it's much more acceptable to be a nerd. Nerds and nerdettes are hooking up all over the place without being made over. It's a little frustrating – I could've used some nerd acceptance back in 1974.

Jacobsen: In turn, what responsibilities do the gifted population have towards society and culture? Why do you think this?

Rosner: I don't think gifted people spend much time thinking about what they can give to society (and may not even think of themselves as gifted or at least pretend they don't). Many highly gifted people are compelled to single-mindedly pursue their visions and objectives at the expense of almost everything else. I don't know about telling art to behave for society's sake – don't think it works like that.

However, I do think that gifted people don't get a pass to act like dicks just because of their giftedness. Many gifted people have terrible behavior, but so do many non-gifted people. Often, the fame associated with their gifts gives them increased opportunity to engage in bad behavior. And sometimes their gifts have made them a little nuts.

But it's really stupid to act out sexually in an era with virtually unlimited internet pornography. Having affairs, especially with terrible people – and affair-having is correlated with being

terrible – generally doesn't turn out well. Sending pictures of your penis to women never works out, unless your objective is to be ridiculed and punished and have your life reduced to a shambles. Messing around extracurricularly with people in the flesh just seems so old-school, so 68-year-old Senator dumping his second wife.

What I'm saying is, if you're in a marriage or long-term relationship that doesn't have major problems, make do with the images you can find online. Don't scuttle everything for a half-dozen intimate encounters with some asshole. And don't tell yourself that being true to your gift doesn't leave you with sufficient control over the rest of your behavior to avoid trouble. But this is coming from a guy who's always had such lousy game with women that such opportunities never come up.

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Seven)

November 22, 2014

Abstract

Part seven of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: The United States of America leading the world in science, technology, and innovation, strange situation for the 21st century, possible continued decline of America, example from Britain in the 1930s, news sources and liberal leaning, and possible contexts for the continued flourishing of the United States; descriptive capacity of the principles of existence, functional truth of principles of existence, and speculation on their inhering in reality; philosophers' idea of logical possibility mirroring self-consistency, extrapolations of nested universes, the possible limit to minds/mind-spaces and their respective armatures, universe's ability to handle contradiction, correlation establishment between two particles through close proximity and emission of energy, widespread contradiction would appear as loss of information, "spooky action at a distance" of Einstein, consideration of an infinity of mind-spaces, assumption of no maximum-possible size for an information space, constrained perspective akin to Plato's Cave, possibility of universe finding way to communicate with "its minions," thoughts on writing a "big ol' space opera-ish SF novel," 10^{80} particles in active center of universe (with possible multiplication by 10^3 for all collapsed matter at $T = 0$), a hypothetical 10^{10} step down each rung of the mind-space ladder making our universe 8 rungs from the bottom of an infinite ladder, possibility of blackish holes being the visible outputs of larger processors, and considerations of the universe containing itself acting as its own armature; Frank Drake, *Drake Equation*, extensions of the *Drake Equation*, contents of The Milky Way galaxy, Matrioshka brain out of a Dyson Sphere thought, Fermi Paradox; thoughts on Goldilocks Zone for universes existing with caveat of Occam's Razor; infinities in informational cosmology, metric of minds, and metric of universe, lack of infinities in information cosmology, and list of possible metrics; modern cosmology, common sense, and informational cosmology on 'empty space'; formulations of modern cosmology and informational cosmology in relation to bidirectional time and the arrow of time, and a scenario for a time-asymmetric process; other scenarios of a time-asymmetric process; summarization of discussion on informational cosmology with respect to equivalence of minds and universe, and complementary fields of informational cosmogony and eschatology; informational cosmology in relation to particles, dark matter and dark energy, gravitation and collapsed matter, and additional elements; blackish holes equal universe's memory with thoughts on possible functions of other astronomical objects such as solar systems, gas giants, galaxies (e.g., Barred spiral galaxies, Elliptical galaxies, Irregular galaxies, Lenticular galaxies, Ring galaxies, Spiral galaxies, and so on), galaxy filaments, galaxy clusters, galaxy groups, galactic superclusters, quasars, blazars, seyfert galaxies, stars (e.g., A-type, B-types, F-type, G-type, K-type, L-type, M-type, O-type, T-type, peculiar, barium, neutron, hypergiants, and so on), stellar groupings, variable stars (e.g., cataclysmic, eclipsing

binaries, eruptive, pulsating, rotating, and so on), circumstellar matter, accretion discs, star systems, meteoroids, interstellar medium, comets, satellites, stellar streams, asteroids, planets, intergalactic space, dwarf planets, cosmic microwave background radiation, proplyds, open/globular clusters, nebulae, and voids; discussion on derivative fields of information-based cosmology including chemistry, biology, psychology, economics, and other fields amenable to the information-based program of research, and influence on education and entertainment; and everything related to informational cosmology in context.

Scott Douglas Jacobsen: The United States of America continues to lead the world in technology, science, and innovation. America persists in its descent relative to other nations on the world stage with respect to these three domains too. In part due to the disjunction between the level of scientific literacy of the general populace and scientists, not limited to any particular area, this trend persists across scientific disciplines with representative statistics and data collected, collated, and presented by organizations such as the Pew Research Center and *Smithsonian* magazine. Moreover, this pattern appears to have continued at about the same rate for many, many years.

We have a strange situation. In the 21st century, nations with the desire to thrive need their populace capable of critical thought without restriction to particular domains. Some countries will not warm to this prospect. Information does have easy access. Some countries' leaders work towards active suppression of this activity – to deprive the populace of basic information. Others will have increased probability of flourishing with allowance of free-flow of information and education. No doubt expedited by internet and computers.

Some interesting emergent ideals in society with increased information. Information for self-education turned into superficial knowledge – not by necessity deep knowledge-based networks of comprehension. Although, the possibility for such self-education might develop more general algorithms for critical thought – more important than base knowledge. With many countries inundated with information such as the United States, I suspect some resentment from the scientific community on this matter of the general populations' scientific ignorance with public outreach partaking of the more positive side of concern in this statistical phenomena.

Not an easy task for a whole populace to develop sufficient skills, faculties, and knowledge, it might lead to a modified form of anarchy with implied continuous dismantling of unjustified authority. Some might welcome the prospect; some others might not welcome it. Insofar as the trajectories of collected information might predict the future with increasing accuracy based on the nearness to the present, these do not, and especially in further, and further, extrapolations, mean fate or destiny of a nation. If aware and proactive, positive itineraries for society can continue with many negatives avoided or circumnavigated.

Flash back to the 1930s, one could argue for Britain's decline due to the great minds entering into disciplines of finance rather than sciences. Rather than generating new wealth through innovations in technology and science, smart people funneled into finance. They dealt with existing money rather than generating wealth through innovations in technology and science. America's decline appears to reflect this in some ways.

If innovation grinds to a sufficiently slow pace, America seems geared to become a technical nation with technology – plenty of technical support work – while lacking innovation into new frontiers through scientific machinery, methodology, discovery, and subsequent application for new machinery and methodological refinement – at least in prime leadership status with regards to these aspects of nation building and wellbeing. How best to stop this possible historical pattern of societal innovatory decay connected to dissolution of the US?

Rick Rosner: Fixing society isn't really my field. Plus, you should know I watch a lot of MSNBC (balanced a little by CNBC) and read HuffPo, Salon, and Slate and only occasionally Drudge. I lean liberal. At the same time, I'm not stupid. (Though maybe not as smart as I'd like to think.)

A great strength and a great vulnerability of the United States is our population of nearly a third of a billion. Only China and India have larger populations (much larger). Our population, our standard of living and our level of education give us the resources to innovate. But on the other hand, a large population means we have tens of millions of yahoos. And for the past 30 or 40 years, cynical conservative think tanks have studied and learned how to mobilize low-information voters. There's always been a strain of angry dumbness in American politics, but the size of our population, the persuasive power of the internet and TV, and the amount of money devoted to persuasion have made dumbness in politics a more potent force than ever before.

Plus, the pace of change is genuinely weird and scary. If you're conservative or if you're old or even if you're not, you find the world an increasingly strange place. The world hasn't gotten so crazy so fast since the run-up to World War II. But WWII ended – the current acceleration of change won't.

Here are some things that could happen which would help the US continue to lead in innovation:

Science-denying conservatives lose political power. This could happen as a result of demographics and/or growing disgust. Roger Ailes, who runs Fox News, is 74 and fat. What, if anything, happens when he's no longer able to run it?

Competition with China and India heats up. During the Cold War, competition with Russia drove science education and quite a bit of publicly funded scientific innovation. Or we could productively partner with China or India.

The means of innovation continues to decouple from governmental support. The more people can innovate on their own, the more it doesn't matter if government continues to suck.

There's a biotech revolution. As biotech becomes more effective, providing people with extra decades of (healthy) life will become the biggest industry on earth. And the US has the largest group of consumers able to afford it.

Damage to the planet becomes an urgent concern.

So what can people do to help the US remain competitive?

Stay current – understand and embrace technology and change. The world's gonna change with or without you. Be part of it, even if it's scary. Because even scarier is living in some change-denying backwater and dragging down the rest of the country with you. Make reading about new technology part of your daily routine.

Sell the positive. Conservatives sell fear to people who are intimidated by change. Win people's hearts and minds with cool, fun tech.

Be healthy and don't die. Change-avoiders and the ignorant have unhealthy lifestyles, don't educate themselves about healthy change, and die off sooner. Don't be them.

Jacobsen: We discussed the descriptive capacity of the principles of existence ("laws"). All describe an aspect or function of universe. Functional truth provides confidence for operational utility. What about deeper? Principles of existence describe universe. They must inhere in it too. Why "must" they inhere in universe? Plain and simple: principles of existence describe universe's operation. They map reality. They must map *onto* it because of operating *in* it. Correspondence warrants containment. Otherwise, an inaccurate map. How do principles of existence inhere in reality?

Rosner: I suppose, without knowing the math of the quantum mechanics behind it, worlds that can't exist – that are self-contradictory – decohere – expand into nothing. I'm guessing that in a quantum computer, only the consistent solutions are coherent – they exist. Universe probably works the same way. Things that can exist, do, thorough consistency (and only get blurry to the point of non-existence at the edges). Which I guess is the same way of saying that universes are pockets of deep consistency.

But it's not as if rules were set up at the beginning and the universe was built like a Lego set. It's more like what turns out to be consistent gets to exist and enjoy an increased likelihood of continued existence. And it turns out these consistent worlds embody consistent systems, which don't exactly pre-exist the universe but which are highly consistent across universes. The universe defines, reveals and refines the principles of existence as it goes along. These principles are mostly the same across universes. But they're not used to build universes. It's just that universes that don't have them can't exist. It's bootstrappy and at the same time reflective of some unavoidable principles.

Jacobsen: Philosophers have an idea of utility here: logical possibility. "Logical possibility" parallels "self-consistency." Logical possibility comes from philosophy; self-consistency from pure mathematics and derivative fields – as preliminarily discussed in Part Three and Part Five.

Conceptual or generalized self-consistency entitled logical possibility. Opposed by self-inconsistency and logical impossibility. Banal examples of logical impossibility include a "married bachelor" or "square circle." Either a bachelor or married, but not both; either a square or a circle, but not both. You see the point – generalized consistency.

Universe contains self-consistency, and therefore pertains to logical possibilities. It exists. Translation: universe does not net self-contradict. Net self-consistency equates to logical possibility meaning allowance for universe to exist. A circuitous path to hyphenated terms "self-consistent" or "self-consistency" once more.

It sharpens the construct of "universe's armature." Universe's framework must have logical possibility. Same for universe, minds' material frameworks (brains), and minds in universe. All require self-consistency in an information-based perspective.

Self-consistent structures derive from logical possibility because of logical possibility applied internal to them. "Logical possibility applied internal to them" means "intrinsic components and interrelationships remain logical." Part Five's definition of "system

without self-contradiction” – broadened in Part Seven to “system without net self-contradiction” – harnessed technical and concrete definitions.

Far from blunting the definitional lapidary tools of this gem. We further refined as proper artisans. “Logical possibility” equates to maximal generalized definition of “self-consistency.” It applies the most general system of reason: logic. Logic consolidates dominance of one discipline: philosophy. To the consternation of some, it reigns here. All else derives from it.

Additional issues pertain to brains and minds with self-consistency and self-consistent relationships – likewise for armature and its universe. Furthermore, the self-consistent nature of the four major conceptualizations in informational cosmology at present – armature, universe, minds, and brains – converge to less and imply more.

Convergence of four major conceptualizations. Brains necessitate minds; armature necessitates universe. No brain, no mind; no armature, no universe, minds emerge from brains and universe emerges from armature. Each reflects the other. Brain means armature; mind means universe.

Insofar as definitions and isomorphism permit, the four primary objects of informational cosmology converge brain into armature and mind into universe with differences in capacity. Four objects reduced to two. Correspondence to such an extent to permit the convergence of two pairs of ideas with implication of an emergent or necessary construct. One structure-pair, brain and armature into armature alone; another function-pair, mind and universe into universe alone; necessary construct of mind-space from armature/universe.

Ergo, informational cosmology contains two major conceptualizations: armatures and universes. Four reduced to two major conceptualizations with emergent respective mind-spaces from armatures and universes. All net self-consistent – without net self-contradiction – and information processing.

Implication of nested relationships with the possibility of an infinite vertical regress of mind-spaces. A simple nested system of self-consistency with armature and universe connected by information processing. An informational cosmological nested system with primacy of structure from armature, primacy of function from universe, and primacy of construction from mind-space. Armature produces universe; universe derives from armature; and mind-space constructed from respective armature and universe. All connects to argument for universe as consciousness endowed system or mind because of net self-consistency and information processing.

In conditionals: if isomorphic geometry between brains/minds and armature/universe, and if brains imply minds, and if armature implies universe, then these equate in definition and differ in magnitude. Implication of universe as mind bound by armature further extrapolating into another armature and universe, or brain and mind. These mean nested systems and interrelationships among these systems.

Insofar as our universe operates (and other universes of logical possibility operate) within principles of existence equating to mathematical descriptors (symbol systems) and respective evidential bulwarks (symbol systems mapped to scientific evidence), armature for universe external to universe equates to *nested universes within respective armatures*,

within further universes within respective armatures *und so weiter*. Armature and universe contain self-consistency and information processing.

If I may, this recapitulates earlier arguments with important extrapolations and subsequent adjunctions. Minds within universe and universe have identities with one another based on isomorphic geometry. By implication, universe contains operation and traits analogous to individual localized minds within itself, and therefore – and further – universe equates to a mind in philosophic *and* scientific terms (as an aside).

Evidence from cognitive neuroscience would bequeath reasonable grounds for extrapolation about universe. This defines the new disciplines. Informational cosmogony, informational cosmology, and informational eschatology describe the beginning, development, and conclusion of universe and other universes of logical possibility. Study of every logically possible armature/universe relationship, interrelationship of all armatures/universes, and their respective mind-spaces for each.

Furthermore, universe represents operation of an armature; all minds (consciousness endowed subsystems within universe) have containment within universe. If localized minds and universe have isomorphic operations (through time) and traits (self-consistency and information processing), and if localized minds (consciousness endowed subsystems within universe) have armatures (brains), then universe must have an armature (unknown equivalent of “brain”).

Moreover, this validates contemplation on armature for universe too. You know the likely apocryphal yarn of the woman stating, “Turtles all the way down.” Nested universes and respective armatures mean the prior argument extended into an indefinite number of iterations without grounds for reasonable cessation.

In more formal terms, if brain/derivative armature equals A_1 , its mind equals M_1 , armature for universe equals A_2 , universe equals M_2 , and if these have isomorphic operation – through time – and traits – self-consistency and information processing, and if A_1 and M_1 have containment in A_2 and M_2 , then A_2 and M_2 should have containment in an unknown A_3 and M_3 , and these in A_4 and M_4 , and so on. Each A_n and M_n constructing their respective mind spaces, S_n . Charles Lutwidge Dodgson (Lewis Carroll, *Alice's Adventures in Wonderland*) would smile.

What does this mean for an indefinite iteration of minds/mind-spaces? What else do you argue for informational cosmogony, cosmology, and eschatology? How far does the regress of minds continue? In other words, how far does the proverbial ‘rabbit hole’ persist with respect to minds/mind-spaces and their armatures?

Rosner: First, about contradiction – the universe can handle quite a bit of it. Processes in the active center – fusion, the creation of life – involve the creation of information and order, the emission of energy and the settling down of protons, neutrons and electrons into lower-energy states. The active center is reshuffling and compactifying itself by finding relationships among particles.

When two particles establish a relationship/correlation by coming into proximity and emitting energy, the emitted energy serves as a contradiction check with the rest of the universe. Say an electron is captured by a proton, or an electron already in orbit around a proton falls to a lower orbit. A photon is emitted. As the photon traverses space, it's announcing, “There's been a status

change,” and asking, “Does this necessitate a change in the status of other particles?” If the photon is absorbed by another particle, that says the initial change in status required a change elsewhere. If the photon isn’t absorbed locally, it travels farther and farther, losing energy to the curvature of space, which means it’s losing the ability to create change elsewhere. As it travels across billions of light years to the edge of the active center, it’s lost almost all ability to cause a status change in another particle or set of particles. It’s as if it’s performed a universe-wide contradiction check. Its energy has been lost to space, slightly increasing the precision with which space is defined. 1. Status change between particles with the emission of a photon, asking, “Everybody cool with this, or is it gonna cause a blip?” 2. Photon crosses space – blip of absorption if this necessitates a status change elsewhere – a mini-contradiction – no absorption if no problem. 3. After traveling for billions of years, photon has lost almost all energy to space, and a little bit of additional order has been created.

Widespread contradiction would look like the loss of information. Blasting a part of the universe with a bunch of energy would destroy its order and information. Information lost in a leaky blackish hole would be lost to heat energy – matter would collapse, heat up as in a Big Bang run backwards, and relationships among particles would be cooked away. An entire universe that’s losing information is doing so by heating up. It shrinks, the Cosmic Background Radiation increases in temperature, making it more disruptive. Information and order are lost.

We could also look at “spooky action at a distance,” as Einstein called quantum correlations which apparently travel faster than light. A photon emission and capture is a handshake between the present and the future, (Except for the photon itself – photons, traveling at the speed of light, never see any time pass. They exist in an eternal present of zero duration.) (The Einstein-Podolsky-Rosen experiment – a thought experiment prompted by Einstein’s loathing of “spooky action” is a linked pair of handshakes between present and future.) The history of the active center of the universe is, in part, the systematic arrangement of these handshakes to minimize their duration (a minimization in time and space). Cause-and-effect, non-contradiction, space itself and time itself might be consequences of or at least accompaniments to this systematic arrangement. Every handshake is a contradiction and a link in a mesh of cause-and-effect, a mesh that tries to maximize the handshakes’ localization and predictability.

Now for the infinite stack of mind-spaces. If every mind-space requires an outside armature that is itself located in another mind-space, then this implies an infinite chain of mind-spaces and armatures. (The chain can terminate at the small end – you can have a mind-space that’s so small that it doesn’t include the armatures for any smaller mind-spaces.) Infinities are troubling, but at least the infinities associated with mind-spaces are aleph-null, the lowest degree of infinity – the infinity of the counting numbers. This assumes that each mind-space can be described finitely – that it doesn’t have unavoidably infinite gradations of anything.

I’m assuming that there’s no maximum-possible size for an information space and that everything that exists does so as part of (or all of) an information space. These are big assumptions, but fine for a short discussion. If there’s no limit on size, then there’s no immediately apparent insurmountable problem with an infinite chain of mind-spaces within mind-spaces.

It’s not like we’ll ever see all the way up the stack of mind-spaces. (Our constrained perspective make’s Plato’s Cave look like a view of a 100-inch high-def flat-screen slice of raw, unmediated reality itself.) But it’s not unreasonable to imagine that the universe might figure out a way to

communicate with its minions in its mind-space and tell them what's what. It'd be nice to know what the universe is the mind of, and it might be helpful for the universe. Most likely to know are the ancient civs possibly hanging out at the centers of galaxies. They might officially be working for the universe, helping it do its mental business (with greater precision).

If I were going to write a big ol' space opera-ish SF novel, it would concern humanity's attempt to travel to the center of the Milky Way, to find out what's going on, but stealthily, so we don't get swatted down by the big, old civs.

The universe has about 10^{80} particles (in the active center – maybe multiply that by 10^3 to include all the collapsed matter around $T = 0$). The million-stellar-mass black(ish) hole at the center of the Milky Way might have about 10^{64} particles, which might be the armature for a mind-space of 10^{60} particles, a step-down by a factor of 10^{20} between the mind-space of the universe and the biggest mind-space in the universe, unless the central black hole has more information on the inside than is apparent from the outside. So just for fun, figure there's an average step-down of only 10^{10} . Even with that fairly small step-down, our universe is only about eight rungs from the bottom of an infinite ladder. Unless...

...blackish holes could be just the visible outputs of possibly much bigger processors. Could be – quite likely is – that information-spaces can contain information outputs from information-spaces much bigger than themselves. I guess that doesn't really affect the ladder hierarchy – the armature of the complicated processor is probably part of the same external universe as the armature of the mind-space it's feeding information into. Anyhow, our universe, big as it is, is very close to the bottom of the ladder of universes within universes. Things get really big if there's no governor on the size of things that can exist.

Not that such hugeness is visible to us – we're thoroughly a part of our fairly small universe, and furthermore, we're a product of a single long moment of the universe. We'll need luck and great leaps forward in complexity and understanding to survive as a civilization beyond this moment.

Can a universe contain itself – be its own armature and thus avoid the infinite ladder of universes? I don't see how. (But of course I know almost nothing.) The mind-space would be minding just itself, self-referentially shielded from any reason for existence. Even if you could have an information-space that's equivalent to its armature, wouldn't that armature need to be a material presence in an external space?

Jacobsen: Frank Drake proposed an equation mapping onto the probability of extraterrestrial/alien life with active radio communication technology. A widely-accepted probabilistic metric of advanced civilizations. Moreover, one can remove the additional specifications of the theory for estimations of lesser, and lesser, degrees of advanced life. He proposed a single equation to distill the probabilities:

$$(N=R^* \cdot f_p \cdot n_e \cdot f_i \cdot f_l \cdot f_c \cdot L)$$

Each in brief:

“N” means “The Milky Way galaxy civilizations with detectable electromagnetic emissions.”

“R*” means “rate of star formation acceptable for intelligent life's development.”

“f_p” means “fraction of stars with planetary systems.”

“ n_e ” means “planets per solar system with acceptable habitat for life.”

“ f_l ” means “fraction of acceptable planets with certain emergence of life.”

“ f_i ” means “fraction of acceptable planets with certain emergence of intelligent life.”

“ f_c ” means “fraction of civilizations with technology capable producing detectable signs in space.”

“ L ” means “span of f_c in intelligent life and their civilizations.”

Most expert critiques consider the last four variables hard to measure. It may seem complicated, but each new variable builds, i.e. specifies, on prior variables. You simply follow the steps. If one removes “ f_i ,” the equation produces probabilities for emergence of life rather than intelligent life. Duly note, if you remove one variable, you effectively remove subsequent numbers of higher specification. Latter variables build on former variables in specification.

In universe with ultra-deep cosmic time and multiple unfoldings through tremendous numbers of “little bangs” rather than one “big bang” based in neutron cycling, how does the *Drake Equation* operate?

In my humble consideration of Drake’s venerable work, not an expert, but he did not seem to extrapolate far enough – do not know of others. I consider two additional variables of substance. He limited “ N ” to The Milky Way galaxy. Another variable needs inclusion based on best estimates of galaxies with habitable life. Galaxies might have a “Goldilocks Zone” akin to range of planetary orbits suitable for the development of known kinds of life. Rate of life-permitting galaxies labelled “ G^* ” in a *Drake-Jacobsen Equation* for our universe. New formulation becomes the following:

$$(N=G^* \cdot R^* \cdot f_p \cdot n_e \cdot f_l \cdot f_i \cdot f_c \cdot L)$$

One might include an additional variable on life-permitting universes too. “ U^* ” for the rate of life-permitting universes in the total set of logical possibilities of universes. With the first addition of “ G^* ” in the modified equation, we produce a modified “ N ” meaning “galaxies containing civilizations with detectable electromagnetic emissions.” In the second addition, we produce a further modified “ N ” meaning “set of logically possible universes containing civilizations with detectable electromagnetic emissions.” The second extrapolation of the formulation becomes:

$$(N=U^* \cdot G^* \cdot R^* \cdot f_p \cdot n_e \cdot f_l \cdot f_i \cdot f_c \cdot L)$$

Moreover, the non-arbitrary definition of “detectable electromagnetic emissions” – as an adaptation of Drake’s definitions – does narrow the range; however, we do not know the precise forms of life, if indeed beyond the DNA-based, and the expression of intelligibility including those outside of the use of technologies with detectable electromagnetic emissions. One need merely redefine the former variables appropriately – in a self-consistent way – to extrapolate on a more specified or less specified definition of extraterrestrial intelligent life with detectable activity. If Drake can string assumptions together and name a formula after himself, then I can string assumptions together off Drake’s and adapt various forms of a *Drake-Jacobsen Equation*.

How might the *Drake Equation* work in an informational cosmology view?

The Milky Way contains at least 100 billion planets. There's nothing so untypical about our solar system that we can't imagine similar conditions existing on many millions of other planets in our galaxy, not to mention the more than 100 billion other galaxies in the universe. Informational cosmology suggests that it's pretty hard to avoid the creation of life and, eventually, thinking organisms.

Thought isn't this magical thing the creation of which requires the touch of a wand from on-high. Thought is flexible information processing which can bestow evolutionary advantages. In the random spread of organisms to occupy evolutionary niches, the niche of thought has likely been occupied on a multitude of different planets.

And once occupied, the niche probably doesn't get unoccupied. Yes, we're fucking up our planet. But we're not fucking it up so terribly that we won't be able to fix it. We're about to enter the era of smart everything. I remember when, in 1974, my family's first computer chip entered our house in a primitive four-function calculator. Now, our home contains at least a dozen computers or computer-like devices with trillions of times the computing power of that first chip. And that's nothing – we're far from the limit of Moore's law. In the past 50 years, the cost-per-calculation has dropped by something like a billion-fold, and it will keep dropping. We're about to be surrounded by computation, and we'll increasingly merge with our computing devices.

This has probably happened on some crazy number of planets. Recent science fiction has it playing out like this – an advanced civilization devotes increasing amounts of resources to computing, eventually dismantling entire planets to build a shell around its sun – a Dyson sphere – or multiple shells – a Matrioshka brain – to capture more energy for computing.

Computing might be the answer to the Fermi Paradox. (With regard to space aliens, Fermi asked, "Where is everybody?") If it's more profitable in terms of knowledge to stay home for the most part and devote resources to computation and simulation, civilizations will stay home. It's not computationally efficient to have a far-flung galactic empire because the speed of light puts a speed limit on communication. Better to build your empire around a single star, where the exchange of messages will take hours at most rather than years. And once you outgrow your Matrioshka brain, maybe you set up shop around or in a blackish hole, which gives you a bunch of matter in a much smaller space for faster communication and computation.

There's no non-weird answer to the question of aliens. No aliens anywhere? Weird. Aliens? Weird! Aliens colonizing space? Weird. Aliens not colonizing space? Weird. But everything is weird. We're on a ball of rock orbited by a smaller ball of rock which both orbit a huge ball of hydrogen atoms undergoing fusion? Weird. Weirdness is a less-than-reliable guide to the validity of a theory.

In a Big Bang universe, it's unlikely that there aren't a bunch of civilizations a million years old and more. Unless something consistently wipes out civilizations, which would be weird. Or civilizations link up or are colonized into super-civilizations extending across swaths of the galaxy. So the question becomes, what does a civilization do for a million years or ten million or a billion? I'd guess that there's some principle that the number of interesting things to do increases along with the computational power of your brain (or your brain plus your super-computing add-ons). Otherwise, you and your civilization would go nuts from boredom.

In an informational cosmology universe, civilizations could survive for longer than the apparent age of the universe. You could have civilizations tens or hundreds of billions of years old or

more. I'm guessing that if this is the case, then such civilizations are very involved in the business of the universe. They have a good idea of the universe's objectives, and they help with its operations. A big, old, highly organized universe might include highly developed technicians. Kinda doesn't make sense that it wouldn't.

I imagine that, among other things, long-lasting civilizations might be able to manipulate quasars to hose down dormant galaxies with neutrinos, awakening those galaxies. (Can also imagine this might be wrong and dumb.) Can't imagine how a civilization or entity could persist for 100 billion years without going stir-crazy, but it has 100 billion years to figure out fun things to do. (A hundred billion years is the ultimate endless Sunday afternoon.)

Jacobsen: What about the Goldilocks Zone for universes existing?

Rosner: I don't think there's any optimum size for a universe, except that really tiny, fuzzy ones are on the borderline of existence. And to have creatures inside it that can speculate about the universe, you need a universe of a certain hugeness, though such creatures aren't essential – they don't grant the universe existence by observing it. The universe observes itself. (That is, the matter in the universe defines itself through its interactions.)

If every universe is an information-space supported by an armature in a universe external to that information-space, that implies an endless chain of universes, each with an external armature supporting it. This is disquieting – we live in a huge universe, which is supported by an even larger external universe, etc. Seems like Occam's Razor might scoff – “Your concept implies an infinity of universes, each one more gigantic than the one before? That's simple – not.”

Jacobsen: What role do infinities play in informational cosmology? How about metric of minds? How about metric of universe?

Rosner: I don't think there are infinities in informational cosmology. I think everything's the result of a finite number (though often fantastically huge) of interactions in finite though tremendous time and space. Fuzziness and the finite nature of information save us from infinities. For instance, you can't get two particles close enough together to have infinite gravitational force between them – their fuzziness means they can never have zero distance between them – it's impossible to specify distance with infinite precision.

To indicate the size of an information-space, there could be various metrics – total number of particles, apparent age, apparent size, scale – the DeBroglie wavelength of a proton compared to the average distance between protons, maybe even the proton-electron mass ratio or the number of levels in the hierarchy of clustering (solar system, galaxy, galactic cluster, supercluster).

Jacobsen: Modern cosmology found 'empty space' weighs something. Common sense might think empty space weighs nothing. In informational cosmology, does apparent empty space weigh something or nothing? Does empty space contain something or nothing in informational cosmology? Does 'empty space' suffice for a proper title?

Rosner: Common sense believes that nothingness is the natural, default state, and that anything else requires an explanation. In actuality, everything including nothingness requires an explanation, and nothingness is a very unlikely state.

I don't know if space weighs anything. In informational cosmology, space has to be specified – given shape and scale and size by the relationships among the matter it contains. Don't know if this implies that it has weight. Apparently empty space does have a lot of stuff in it – zillions of

photons and neutrinos crossing every cubic centimeter of space all the time. And space is bubbling with virtual particles which are probably part of the universe's bookkeeping, in that virtual particles reflect relationships among actual particles. So empty space isn't empty.

Two of my ideas in particular need to be mathematicized and put into an overall system of how the universe defines itself – that protons' and neutrons' relatively heavy masses have to do with the amount of collapsed matter in the universe, and that space in the active center is further defined by interactions among charged particles.

The exchange of distance-traversing particles – photons and neutrinos – defines and organizes space via Hubble sorting – giving clusters of matter their own unique apparent velocity vectors.

When I was working at Anthony's Gardens, at the time America's biggest outdoor bar, in the 80s, one of the other bouncers, Larry Reimers, a tough, competent Vietnam vet, would break up fights using spatial sorting. Instead of grabbing people who were brawling, he'd walk into the middle of the tussle and shove everyone in different directions. The brawlers would stumble several steps backwards. Continuing to shove drunk idiots as they tried to get at each other allowed Larry to handle fights that otherwise would've required more bouncers. (Not being as competent or as brave as Larry, I'd come up behind a single brawler and try to put him in a sleeper hold, which I didn't know how to administer – nobody ever went to sleep. I'd grab the guy around the neck. Customers would scream that I was choking him, so I'd let go, and then he'd turn around and hit me, so I'd put him in an incorrect sleeper hold again.)

The universe sorts itself out by exchanging particles. Over billions of years, particles' kinetic energy is translated into Hubble sorting – large-scale structuring (and, I suppose, indexing – with the structure allowing for retrieval of information when needed). A photon traversing the universe loses its energy to the curvature of space (the universe being one huge gravitational well). But the loss of this energy helps define space, so the lost energy is turned into order. (Hence, no entropy on a universe-wide scale.)

The collapsed matter hanging out in collapsed space close to $T = 0$ is Hubble sorted – relativistically segregated. It doesn't all coalesce into one big blob. Every collapsed galaxy or cluster has its own unique Hubble vector, with all the vectors separated by what must be, in that neighborhood, a pretty severe (equivalent of a) cosmological constant.

Jacobsen: You provided extensive discussion of informational cosmology. I formulated modern cosmological and informational cosmological conceptualizations rooted in information theory from Shannon and Weaver (1949) in one question for each:

In modern cosmology, we ask, “What if the contents of the universe equals input, process equals laws plus time, and output equals transformations of the contents (e.g., particles, fields, forces, and so on) of the universe?”

In informational cosmology, we ask, “What if bit units of universe equal input, process equals principles of existence plus time, and output equals transformations of bit units of universe?”

How does the former relate to bidirectional time? How about the latter?

Rosner: The arrow of time should point into the future whether we picture the universe as a thinking entity or only as a set of physical processes. The arrow of time should make sense when thought of from both points of view. For the physics to have a time arrow, you might need to

have time-asymmetric processes. On a large scale, we have these. Physical processes are only reversible across small distances. Traversing millions of light years, neutrinos and photons lose energy to the curvature of space, energy they wouldn't get back if you bounced them off of a mirror and sent them back to where they came.

This is true for a uniform Big Bang universe (everything's the same everywhere) and even more so for an information-based universe, which isn't spatially uniform, with most of its collapsed matter hanging out in its smallish outskirts, making the collapsed outskirts much less transparent to neutrinos than the active center. Neutrinos are created through fusion in the active center and travel largely unimpeded to the outskirts. It's a large-scale, one-way process. It doesn't work in reverse.

Are large-scale one-way processes sufficient to propel the arrow of time? Does the arrow of time need to be propelled, or is the entire idea of the potential reversibility of time a misconception based on thinking of physics as a set of small-scale reversible processes? I don't know.

Though small-scale individual physical events can be run in reverse without violating the rules of physics, events don't happen in isolation. Events are part of moments. In our minds, moments are what we're currently aware of. This might also apply to the universe itself, but even if not, a moment can be seen as what's currently happening in the universe (from a particular vantage point or in the universe as a whole). Each moment contains information about the present, which includes information about the past (which contextualizes the present) and predictive constraints on the future. Each moment predicts its immediate future. An arrow is built in.

Jacobsen: What about other scenarios with the possibility of a time-asymmetric process?

Rosner: With regard to time, I think the biggest question is, if the universe is vastly, wildly ancient, with its Big Bang age only an apparent age, why does the universe look so precisely as if it had a Big Bang? The answer must have to do with the nature of information. (Or with me being wrong. But I'm not.) The active center of the universe is where new information is being formed. Protons entering the active center are new – either they've been created from neutrons in collapsed matter, or they've come from a soup of unstructured primordial matter around $T = 0$. (I picture space around $T = 0$ consisting of collapsed galaxies, separated by their Hubble/general relativistic vectors along with a large local gravitational constant, all suspended in a dense primordial soup.)

All the protons are new, though most of them are contextualized by the once-collapsed and now uncollapsing galaxies they're part of. They all enter the active center from close to $T = 0$. The protons' (and electrons') interactions with each other puff up the space they share in what looks like a Big Bang. Galaxies don't have to all enter the active center at the same time. Since all galaxies enter from close to $T = 0$, more recently lit-up galaxies look like they're located in part of the universe that's distant from us, so we're seeing them earlier in their existence.

The proton interactions have to start from around $T = 0$. They have to create the space they're in – the active center, which, as galaxies light up, expands like a Big Bang universe. The protons and their galaxies create information through a shared history that plays out in what looks like a Big Bang – they enter at the beginning of apparent time, and space expands around them.

Some conceptual trouble comes when galaxies burn out. They recede from the active center, which means they're moving backwards in apparent time. I guess this is okay. Observers within a burned-out galaxy would see something like a Big Crunch, I suppose.

The apparent age of the universe could stay roughly the same for a very long time, as newly lit-up galaxies enter from near $T = 0$ and burned-out galaxies recede back towards $T = 0$. Or the apparent age can change as more or less business is done in the active center. You could have relatively few galaxies in the active center, with the universe kind of being asleep, or you could have a relative multitude.

Jacobsen: Let's summarize some of the back-and-forth from our discussion of informational cosmology. We've covered the equivalence of minds and universe; isomorphic operation and traits of minds and universe. Informational cosmology implies informational cosmogony and informational eschatology too. Brain/mind converging into armature/universe. Armature/universe constructing mind-spaces. Possibility of armatures/universes and respective mind-spaces extrapolated in positive magnitude without reasonable grounds for cessation.

You have some primary derivative constructs such as a series of little bangs in a neutron cycle rather than a single big bang for the universe, ultra-deep cosmic time, Hubble Redshift based on information, a flat universe (compared to open or closed). What are the primary elements of the physics you've presented here?

Rosner: Information in the mind and information in the universe have strong structural and dynamic equivalences. The physics of the universe is analogous to information-processing in thought.

The optimal map of information within a mind-space or information-space has the same properties of the universe – same 4D space-time and same physics.

Consciousness is a technical property of wide-angle information-sharing.

The universe is probably conscious.

The universe extends across ultra-deep time, with the current 14-billion-year or so current unfolding of the universe being a single (computational) moment in a long series of such moments. (The universe can think about more than one thing at a time, and series of thoughts can continuously fade into each other, but shifts in what the universe has under consideration generally take billions of years.) The unfolding of the universe for what appears to be its apparent age is more or less the equivalent of a single thought. The universe thinks many, many thoughts across an ultra-deep span of time.

There's an ongoing series of Little Bangs. The universe didn't explode once, 14 billion years ago. It's been on a rolling boil for a fantastic span of time.

Galaxies recycle, lighting up and helping for the universe's active center, burning out and being pushed to the outskirts (around $T = 0$), and lighting up again when needed.

The apparent age of the universe is an indicator of the amount of information in the (active center of) the universe.

An information-based universe is essentially flat – it won't expand to infinity or collapse to nothing. The size of the universe is proportional to the amount of information it contains.

An information-based universe appears to have Big Bang mechanics, with all galaxies' (Hubble) expansion vectors apparently originating from a single point, and with a history of proton-

mediated interactions stretching back to what is apparently the early universe. There was no Big Bang.

The Hubble redshift is due to the nature of information. Parts of the active center of the universe which have less to do with each other (less information in common) are more redshifted relative to each other.

Jacobsen: In relation to particles, modern ideas such as dark matter and dark energy, gravitation and collapsed matter, Cosmic Background Radiation, and proton-electron mass ratio, what other elements come from informational cosmology?

Rosner: The five persistent particles do most of the universe's information-processing and memory-keeping. Other particles are largely helpers and bookkeepers.

Dark matter responsible for the flat galactic rotation curve isn't exotic matter – it's regular collapsed matter – neutron stars, blackish holes – which has survived previous galactic cycles. (There might be issues here with metallicity – heavy elements contained in stars – and absence of microlensing.)

Gravitation is most commonly seen as following the inverse-square law, but gravitation is informational, with the shape and scale of space determined by the distribution of and relationships among particles, which means that on the very largest scales, gravitation probably isn't inverse-square. (It behaves as if there's a cosmological constant.) This may also account for what looks like dark energy. (General relativity addresses the shape of space. It doesn't have as much to say about the scale of space. (I think.))

Probably don't need gravitons. The net result of other types of interactions (electromagnetic, the weak nuclear force – neutrino stuff) probably accounts for gravity without requiring special particles.

The Cosmic Background Radiation is noise/uncertainty. The more organized the active center is, the more CBR is attenuated.

The proton-electron mass ratio is proportional to the ratio of collapsed matter to non-collapsed matter. (Which means it might be proportional to the ratio of neutrons to protons (or, in the case of blackish holes, at least what look like neutrons when observed from outside the blackish holes).) Collapsed matter helps specify matter.

Collapsed matter contains memory of past interactions or other specification mechanisms such as processing of external information (within the collapsed matter).

Jacobsen: Blackish holes equal universe's memory. What about other astronomical objects? For instances, solar systems, gas giants, galaxies (e.g., barred spiral galaxies, elliptical galaxies, irregular galaxies, lenticular galaxies, ring galaxies, spiral galaxies, and so on), galaxy filaments, galaxy clusters, galaxy groups, galactic superclusters, quasars, blazars, seyfert galaxies, stars (e.g., A-type, B-types, F-type, G-type, K-type, L-type, M-type, O-type, T-type, peculiar stars, barium, neutron, hypergiants, and so on), stellar groupings, variable stars (e.g., pulsating variable, eruptive variables, cataclysmic variables, rotating variables, eclipsing binaries, and so on), circumstellar matter, accretion discs, star systems, meteoroids, interstellar medium, comets, satellites, stellar streams, asteroids, planets, intergalactic space, dwarf planets, cosmic microwave background radiation,

proplyds, open/globular clusters, nebulae, and voids, what about possible novel astronomical objects?

Rosner: Don't think you get quasars without collapsed matter at the center.

Think there are a variety of collapsed matter structures – memory (mostly sits there), sensory information feeds (comes in semi-processed, is a spraying hose of information), reduced information feeds from semi-conscious to unconscious processors (in ourselves, walking, breathing). Also have leaky blackish holes – information goes in, gets lost forever – universe's armature doesn't hold onto it. Would guess that any celestial objects behaving spectacularly are doing something interesting with information.

Also have to talk about the Cosmic Microwave Background, which is basically noise. By organizing itself, universe has managed to reduce its impact. It's like three degrees? So it doesn't have much power to cause heat-based disorder. If it were 100 degrees, it would make it harder for the universe to order itself – stuff would be getting randomly knocked around by stray photons.

Think that any aggregating celestial body is an incipient idea. Bodies coalesce, and as they boil down over billions of years, they become more sharply defined mental objects – representations of fork, cube, tire, movie cliché, messy 2010s hair, shininess, the letter B – lots of fairly specific mini-umbrella concepts. The concepts can feel kind of arbitrary – clustering is choosing. To form one classificatory concept is to preclude others (which doesn't drive them out of existence, but which makes them less handily referenced, I suppose).

Black holes aren't black – they're blackish. Their crushing gravitational force isn't as crushing as traditionally thought, because interactions among particles within the blackish hole reduce the scale of space.

Blackish holes store and process information. Most of this information is retrievable

The universe has three spatial dimensions because information is generally limited to holding open – specifying – three dimensions. (Specifying dimensions takes information. Information-in-common/not-in-common with the point of observation specifies the polar axis. Points with the same amount of information-in-common with the point of observation form a sphere (centered on the point of observation).)

The general mechanism for specifying matter and space is Hubble sorting of matter. That is, the more matter that has its own unique apparent velocity or acceleration vector away from other matter (and the greater the vector's magnitude), the more precisely matter is located within space.

Photon flux keeps space open in the active center of the universe. (Alternately, virtual photons keep space open.) In essence, an array of Hubble-shifted protons keeps space in the active center open, making space extra voluminous via the specifying activity of interactions among charged particles. As protons and electrons cook down into neutrons, space starts to close up.

Neutrino interactions are time-asymmetric. (This is within the large-scale arena of the universe, but where else are they gonna interact?) Neutrinos are emitted in the active center through fusion, pass through the active center which is largely transparent to neutrinos, and are absorbed by the collapsed matter at the outskirts (where the neutrinos have been slowed down, increasing their capture cross-section, and where there's a bunch of neutrons close together). Photon

interactions are also large-scale time-asymmetric – they lose energy traversing great distances. You can't run that in reverse and have photons pick up energy. Is this enough to specify the arrow of time? Seems like it. Does the arrow of time need to be specified? Probably – some large-scale framework needs to keep all the essentially reversible small-scale interactions in line.

Space seems organized to minimize the total distance traversed by particle interactions. And time seems organized to maximize the number of interactions per unit of time. (This is tricky, because the scales of space and time are self-determined, but still doable. In temporal terms, this means a distribution of events that's as evenly spaced as possible. In spatial terms, it means efficient clustering.) The universe might also be arranged to maximally specify (predict, determine) the immediate future and/or to maximize the information obtained from the immediate future.

Universe as a whole doesn't have to increase in entropy. Energy lost to the curvature of space is translated into increased order (via Hubble sorting).

Protons are units of potential correlation. They act as variables or dimensions, correlating via proximity. When two protons are so near to each other that they're essentially perfectly correlated as a single variable, they fuse, locking down one of the protons as a neutron, with a single proton interacting via charge.

Jacobsen: What about derivative fields in an information-based cosmology? How do they change? How does this effect fields such as formal sciences (logic, statistics, computer science, systems science, and mathematics), social sciences (anthropology, archaeology, criminology, sociology, psychology, and so on), natural sciences (biology, chemistry, earth sciences, and so on), humanities (linguistics, literature, arts, philosophy, religion, and so on), professions (law, education, divinity, and so on), and others amenable to the information-based program of research?

Rosner: We can hope this fits into the tech boom which will empower people, make them less stupid, leave politicians in the dust. Of course that's optimistic. But we're at a 100-year low point in American politics. It has to get better, especially as people get less dumb. If it doesn't get better, then America eventually ceases to be a first-world country and turns into a cowboy theocracy. Dozens of SF books present different versions of this, including Margaret Atwood's *A Handmaid's Tale*, Cory Doctorow's and Charles Stross's *The Rapture of the Nerds*.

Understanding that consciousness can be mathematicized is the last major conceptual hurdle to having programs that research all aspects of human physiology. Consciousness has been ignored for being too nebulous, too disconnected from the body. But to truly pursue immortality or even healthy extended living, we have to understand consciousness. Once we understand that consciousness is something we can aspire to work with, that opens up new research angles in what, up to now, has been brain research. Doing brain research without a mathematical model of consciousness is like trying to build computers and software without the benefit of display screens.

Impact on psychology: If you read a lot of brain research, you can get a pretty good idea of how thoughts are assembled. But a model of consciousness that specifically addresses how thoughts might play out in a mind-space gives you a bigger set of tools for observing thought. Minsky's society of mind, built up from simple, mindless mental agents, is a good place to start. But you generally can't observe your mind working at the agent level – they're too small. You can, however, observe different perceptions and half-formed thoughts competing in your mental

arena. I can observe my mind battling about whether I should get out of bed or get out of the tub. (Often, it takes me observing, “This lazy battle has been going on too long – I’m just gonna get out of the tub now” to get me out of the tub.) You can watch yourself telling yourself, “I knew that chair was there – why did I walk into it?” Truth is, part of your brain sensed the chair was there immediately before or just as you walked into it, but not soon enough to avoid the chair. You got your chair warning too late, but part of your brain misunderstands it as a timely warning and says, “I knew that was gonna happen.” Yeah, you knew it was gonna happen because it did happen, and chatter among parts of your awareness doesn’t come time-stamped. Anyhow, having a physics-based model of mind-space is very handy for understanding the mechanics of thought and memory and subconscious processing.

Impact on economics: In the next century, the world economy will get kicked in eight different directions. Among the things weirding-out the economy will be – accelerating pace of technological change, reduced cost of essential goods, in-home manufacturing, increasing population, destruction of the environment and massive clean-up and preservation projects, changing sources of energy, a biotech revolution, possible epidemics abetted by failure of antibiotics. The longevity business – selling extra years of healthy, somewhat youthful life – will become the biggest industry on earth. But uncoupling consciousness from the human body (beginning 40 to 60 years from now and becoming commonplace by the middle of the 22nd century) will be more economically disruptive than all these other things. Almost all of our economy is involved with the physical needs of the body. Increasing numbers of people will choose to make some of these needs go away. We’ll have the human economy fading into the transhuman economy.

Impact on education and entertainment: Eventually we’ll have knowledge and expertise on-demand. To the extent that classroom learning continues to exist, it will be for socialization more than for academics. Information and entertainment will be piped into our heads with increasing directness.

You can read about this stuff in good near-future SF novels. Informational cosmology provides a mathematical framework which facilitates making consciousness transferrable, augmentable, fabricatable. It’s part of the science fiction world we pretty much know is coming, with a few unexpected technical/spiritual overtones.

Jacobsen: What does it all mean?

Rosner: We’re out of the habit of pondering metaphysical questions. The universe that science shows us seems to run without purpose. But...

The principles of existence allow for large structures – the size of our universe, at least – to exist. It’s not necessarily a deep, permanent existence – probably has a finite-though-enormous lifespan and can disappear without a trace. But...

Worlds that can exist, do exist, belonging to the set of allowed-to-exist worlds – a bunch of present moments. (We only know our present moment, and we don’t even know it in some super-deep sense. We only know things in a virtual, “as if we actually know it but we don’t, really” knowingness. However, each present moment contains statistically indisputable evidence of the past.) Nothing that we know of exists except in the form of a present moment. These moments can be seen to form chains in that each present moment contains information about past present moments and information that predicts future present moments. Does being part of these

allowed worlds – belonging to this set of all that is – give us any sort of satisfying permanence? (I mean, we're woven right into some immutable fabric of what is or can be.) Seems unlikely. This abstract permanence doesn't satisfy any of our real needs – it's just tokens in an abstract set. It doesn't extend our existence beyond its natural, situational limits. But...

Persistent structures tend to persist. They may not last forever, but they might be able to last for any length of time short of infinity. Structures might be able to grow to any finite size. We've evolved to want to continue to exist. (Beings that don't want to exist probably don't persist so well.) Call that desire to exist the Persistence Project. Belonging to the Persistence Project means adhering to a set of non-nihilistic morals (which function to make continued existence more likely by avoiding destruction and chaos). We have evidence that the Persistence Project works – the universe itself is huge and old and likely to continue for a long time.

It's almost a cliché that each scientific revolution takes humans farther away from the center of creation. Copernicus moves the sun to the center and kicks us to the side. Darwin descends us from fish and dwarfs human history with hundreds of millions of years of deep time. Hubble and Einstein locate us in Nowheresville in a vast universe. And if the universe is some fantastic multiple of tens of billions of years old on a rolling boil, then we've lost even the story of being witnesses to the grand unfolding of the big bang universe. There were a zillion unfoldings before us, and a zillion after. We're a sub-blip in ultra-deep time. But...

If consciousness is a technical, not a mystical thing, if it's associated with thorough sharing of information among specialized subsystems – modules – within a self-contained system of information, then it may be found in many places in the universe and may be an attribute of the universe itself. To me, this feels like a small victory versus the vastness of the universe (which keeps getting bumped up in size and duration). Consciousness may be the framework through which the universe perceives itself and exists is an information space.

(Humans have very jazzy, souped-up consciousness – emotionally charged, rich in special effects and value judgments and motivation to take action. Is a quieter consciousness, more of an observer than an actor, not wired for strong emotion, still conscious? That is, is the drama of amped-up consciousness responsible for the awesome, profound, feeling of undeniable existence and solidity of reality that we experience as consciousness? Is consciousness without emotion still consciousness? I think it is (though without oomph) and also think it's hard to drain all emotion and value judgment from consciousness. A pure observer with no preferences is unlikely, and such an observer would still be conscious of what it's perceiving.)

That we can reasonably assume that we share the property of consciousness with many entities throughout the universe can be seen as heartening. It's the way entities do mental business. We each have our story of contending with the principles of existence. And, because persistent systems can be huge and old, we can assume that huge, old persistent systems have found adequate reasons to continue to exist. So, everything considered (including that we currently know approximately zero percent of what we will know), I have guarded optimism about the nature of existence.

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Eight)

December 1, 2014

Abstract

Part eight of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1991-97), and writer. He discusses the following subject-matter: fundamentals of universe in bits or links, Pierre-Simon Marquis de Laplace and Napoleon Bonaparte's famous conversation, axiology, aesthetics, ethics, metaethics, comparative/descriptive ethics, applied ethics, normative ethics, moral psychology, moral truth, moral antirealism with Gorgias, Søren Kierkegaard, Friedrich Nietzsche, and *The Will to Power*, moral realism, and their concomitant sets and subsets, ethic's cataloguing with "Deontological," "Teleological," and "Virtue," and an information-based perspective of these; a framework with concepts for theoretical considerations about the existence of free will at the global and local scales in addition to the reflection in informational cosmology; revision of the prior formalisms to discuss informational cosmology and informational ethics; definition of the key terms "informed will" and "targeted thinking" with *Canadian Oxford Dictionary* (2nd Edition) descriptions of "informed," "will," "targeted," and "thinking"; and informed will and targeted thinking in relation to everyday and outlier morality with examples from recent reading.

Scott Douglas Jacobsen: Fundamentals of universe deals with bits or links – information. Units of sufficient individuation of universe with self-consistency and information processing – and by implication complexity – might not implicate ethics. No explicit connection there; a possible tacit linkage.

Akin to Pierre-Simon Marquis de Laplace's – likely apocryphal – determinist universe statement to Napoleon Bonaparte, in Bonaparte's question about God in the equations of Laplace, Laplace said, "Je n'avais pas besoin de cette hypothèse-là," or in the English translation of the statement, he said, "I had no need for that hypothesis."

An information-based view of processing reflects a meaningless, clockwork mechanism conceptually synonymous with the Laplacian determinate – or even indeterminate, meaningless quantum – world with everything lacking inherent, even derived, moral truths.

Axiologists might enlighten the shroud of these problems. Indeed, information-based ethics might implicate ethics with some background and thought.

Axiologists study value. Value divided into aesthetics and ethics. Aesthetics studies beauty. Ethics studies moral conduct. In general agreement among ethical axiologists, ethics splits five ways: metaethics, comparative/descriptive ethics, applied ethics, normative ethics, and moral psychology.

Metaethics studies nature of moral theories and judgments. Descriptive ethics studies beliefs about morality. Applied ethics studies professional and public affairs related to

morality. Normative ethics studies ethics in practice. Moral psychology studies the nature and development of moral agency.

Ethics begins with one basic metaethical query, “Do moral truths exist?” Without such a question and answer, why bother arguing for moral truths and, therefore, ethics? A field needs content; that question with an answer gives it.

Ethics derives further from answers to *the* fundamental metaethical question. One answer negates moral truths; another affirms them. If one answers, “No,” moral truths do not exist; if one answers, “Yes,” moral truths exist. Former called antirealist (“No”); latter called realist (“Yes”). Each provides complete conceptual and functional negation or affirmation – “No” and “Yes,” respectively. “Conceptual” means “in theory.” “Functional” means “in practice.”

One *could* answer with “probability,” “undecidability,” or “meaningless.” If “probability,” this implies conceptual and functional affirmative, but not to the degree of “Yes”; if “undecidable,” this implies functional negation; if “meaningless,” this implies conceptual *and* functional negation, but not to the explicit degree of “No.”

Of course, a thought, behavior, and consequences of thoughts and behavior might have objective moral content in spite of an individual respondent’s answer.

“Probability” argues for moral truths in thoughts about and behavior with respect to them. “Undecidability” answer argues for present unknowability of moral truths in thought and, therefore, lack of explicit ethical dimension to behavior. “Meaningless” answer argues unknown moral truths with permanent conceptual unknown and functional negation status. This leaves definite negation and definite affirmation.

Definite negation of moral truth includes one ethics set: nihilism. Greek sophist Gorgias (485 BCE-380 BCE) equates to the most stated ancient exemplar of moral antirealism. Some argue for Socrates (469 BCE-399 BCE) as a nihilist based on the *Method of Elenchus* or the method of questioning. A modern instance in the person of Søren Kierkegaard (1813-1855).

With another common instance adumbrated in the writing of Friedrich Nietzsche (1844-1900), he writes in *The Will to Power* (1901), “I describe what is coming, what can no longer come differently: *the advent of nihilism*.” In short, exemplars (Gorgias and Kierkegaard) and ideological forecasters (Nietzsche) lived in history. Not something of easy dismissal.

Nihilism argues nothing contains intrinsic moral value. Troubles relate to antirealism. It denies truth. Truth intersects with logic. Logic cannot apply here. No truth to prove or disprove with respect to internal validity of arguments. No objective or subjective truth. Same for ethics. Moral antirealists have the same problem. No objective or subjective *moral* truth.

If universe lacks truth – and by implication moral truth, then thoughts, behaviors, and their consequences lack inherent immoral status. If logic implies truth, and if moral realism implies moral truths, then logic applies to moral truths, and therefore logic can examine truth or falsity of moral arguments.

Let’s work through the difficult circumstance in pragmatic terms: if one 1) kidnaps and tortures a young girl/boy, 2) steals a cookie, or 3) saves a life from collision with a New

York taxi driver, the moral antirealist would consider these equivalent in their empty state with respect to moral content.

They have distinguishing factual content, but equivalent moral content. Different variables, associations, and likely outcomes. Even so, no distinction among them in the calculation because no distinguishing moral value among “1),” “2),” or “3.” Therefore, one cannot calculate among these except to equate them in null moral terms and calculate their null value.

No need for ethics in the first place with such a position. Why bother arguing over ethics? Moral antirealism provides zero content for the discipline. In a way, the *empty set* of ethics. A near-complete analogue.

A definite affirmation of moral truth includes many ethics supersets: Act Utilitarian, African, Anarchist, Aristotelian, Atheist, Biological, Buddhist, Business, Casuist, Christian, Communication, Confucian, Consequentialist, Daoist, Deontological, Environmental, Epicurean, Evolutionary, Feminist, Gender, Global, Hedonist, Hindu, Humanist, Islamic, Jewish, Machine, Military, Objectivist, Personal, Political, Postmodern, Professional, Publication, Relational, Research, Role, Role Utilitarian, Sexual, Shinto, Social, Stoic, Teleological, and Virtue. (Insert the term “ethics” at the end of each: “Act Utilitarian Ethics,” “African Ethics,” and so on.) Each affirms some model of moral realism. Limits in depth, scope, and duration of use, but gives specifications of moral domains and, thus, an ethics position – a moral realist stance.

In and out these ethics supersets, we find sets of and subsets of ethics in principles, codes, and laws: *American Constitution*, animal care, autonomy, beneficence, carefulness, *Charter of Medina (Constitution of Medina)*, *Code of Hammurabi*, *Code of Li k’vei*, competence, Computer and Information, confidentiality, *Declaration of Helsinki* (1964), *Declaration Toward Global Ethic*, discipline-based conduct, *English Bill of Rights*, *Exodus’ Ten Commandments*, *Great Laws of Manu*, *Hippocratic Oath*, honesty, human rights protection, *International Charter on Medical Professionalism* (First published in 2002), justice, *Justinian Code*, least harm, legality, *Magna Carta*, *Mosaic Law*, *Napoleonic Code*, non-discrimination, *Nuremberg Code* (1947), objectivity, openness, respect for colleagues, respect for integrity, respect for intellectual property, responsible mentoring, responsible publication, *Ṣaḥīḥ al-Bukhārī* (Sunni Islam), *Sharia* and *Fiqh*, social responsibility, *T’ang Code* (including *Tánglǜ shūyì* – commentary for it), *The Golden Rule*, and so on, in an enormous array spanning millennia of creation, dissolution, modification, and general development.

The moral realist set argues thoughts and behaviors contain intrinsic or extrinsic moral value. These sets relate to positive considerations of ethical ontology, i.e. ethics talks about reality or moral reality – moral truths exist. Correct/right/moral statements correspond to moral reality; incorrect/wrong/immoral statements do not correspond to moral reality.

Convenient for logicians and ethicists. Logic’s intersection with truth permits logical analysis of moral statements, premises, conclusions, arguments, or sets thereof.

Moral realist systems operate in three traditional terms: “Deontological,” “Teleological,” and “Virtue.” “Deontological” or duty-based aims for rights and duties of agents.

“Teleological” or goods-based aims for the good life. “Virtue” or civic-based aims for development of virtuous people.

How does an informational vantage invite new interpretations of classical, and modern consensus, perspectives on metaethics, descriptive ethics, applied ethics, normative ethics, and moral psychology? What new emergent properties, fields, or arguments organize themselves from this information-based view?

Many philosophical or cosmological systems imply a set of worlds which can exist (or do exist, in some elsewhere). Many-worlds theory, at least as popularly understood, says that every possible world exists. This could be seen as an argument against ethics, since, if every possible thing happens, if every possible choice, good or bad, is made, what’s the difference?

Rick Rosner: So, I would first stipulate that our world – the series of moments we exist in – is more real than other possible worlds. I don’t know whether other possible worlds necessarily exist somewhere, but our world is the one we experience directly – the world in which our choices have consequences.

Now for some semi-informed assumptions.

There could be a ladder of armature-spaces containing mind-spaces extending towards infinity. (“Towards infinity” requires several assumptions – that armature-spaces tend to be bigger than the mind-spaces they contain, that every mind-space necessitates an armature-space, and that there’s no limit to the size of armature- and mind-spaces.)

There’s no Prime Mover who’s biased towards existence. Existence conforms to principles of consistency. Existence is permitted and compelled by a kind of bootstrapped math. There’s not some omnipotent entity who wants things to exist. (But good luck eliminating this possibility, as every level of metaphysical explanation requires another, deeper level to explain why the explanation is justified.) Not being part of any conscious entity that *can* want, the principles of existence are neutral. But the principles are highly permissive of existence (again, without intent).

Entities that exist can be biased towards wanting to continue to exist. Evolved entities are often driven to continue to exist, and values associated with continuing existence are built into their civilizations. Advanced entities may design sophisticated, special-purpose entities which do not include a drive for indefinite existence, but such entities would likely be part of larger social/technological structures which have at some level a drive for continued existence.

Some entities which have developed the understanding and technology to take control of their own drives may choose not to include the desire for indefinite existence. But the (presumed) existence of entities at all levels of complexity approaching infinity should indicate that a desire for continued existence isn’t inconsistent with arbitrarily large entities.

Every entity has a history which includes reasons why it was brought into existence. Such reasons can range from what we would consider natural, initially random action which has brought about persistent processes and entities – evolution, for instance – to intentional creation of entities by civilizations with high technology. Whether natural or technological or somewhere in between, the creation of entities should have a reasonable probability of being associated with a drive for the continued existence of something – individuals, a species, a civilization, or the universe itself. We can imagine nihilist civilizations dedicated to promoting chaos and non-

existence (and science fiction has), but such civilizations seem likely to be much less prevalent than existence-favoring civilizations.

For more than half a century, people have been growing increasingly uneasy about the potential for artificial intelligence to enslave or wipe out humanity. The mathematization of consciousness (as part of informational cosmology) – the procedure for mathematically modeling mind-spaces – is an essential part of developing advanced AI. We have to know that the motivations we design and those which may arise spontaneously are consistent with benevolent AI behavior which preserves our world and allows humans at all levels of development to choose their destinies. We can't be sure what AIs are thinking unless we can model it.

While the principles of existence, lacking consciousness and will, don't have an agenda, existence in general is biased towards continued existence, and the ethics of existence should be preservational. Let entities which want to continue to exist, continue to exist, unless there is a compelling reason otherwise.

Of course, we have barely an inkling of the nature of existence, and all of this is subject to complete revision as we learn more. For the past couple hundred years, science has increasingly implied that existence is meaningless, that the universe just is. This may not always be the case. Existence may provide its own durable justifications.

Jacobsen: If free will exists, its options exist as a total set or space of logical possibilities of choices, C. Free will means *any* selection in the total set or space of logical possibilities of choices (C). Why “logical possibilities”? Informational cosmology operates on self-consistency; “logical possibility” means maximal possible definition of “self-consistency.”

If universe operates in self-consistency or logical possibility, choices of universe operate within logical possibilities; universe operates in self-consistency or logical possibility; therefore, choices of universe operate within logical possibilities. In short, universe exists within constraints, and, by implication, constrains internal choices of net system and subsystems.

C exists in the space provided by universe from the start, $T = 0$, through every positive addition in time. Each whole cross-section of universe in time would have a unique configuration of C. In short, informational cosmology's “final answer” amounts to choice from the time universe says, “Go.” No way out of choice with the “blue touch paper” lit and kept alight through the arrow of time.

Consciousness endowed subsystems of universe would partake of this space, C, with a subset or subspace of logical possibilities of choice, C_n . Each unit of sufficient individuation in universe with self-consistency and information processing would have a set or space of logical possibilities of choices (C_n). Each whole cross-section of a single unit of sufficient individuation in time would have a unique configuration of C_n .

Undoubtedly, we take into account finite self-consistency and information processing of each unit of sufficient individuation, i.e. mental and physical limitations of each consciousness endowed subsystem in universe. Less physical and mental possibilities reduces the magnitude of C_n out of C; more physical or mental possibilities increases the magnitude of C_n out of C.

Ethics dictates correct choices through affirmation of optimal choices and negation of suboptimal choices in C and C_n . Demarcation between optimal and suboptimal based on

ethical code or algorithm, E , inserted into C and C_n . Interpolation of E transforms C and C_n into a moral set or space. C becomes C^E ; C_n becomes C_n^E . Thus unifying universe-based/objective and individual-based/subjective general ethics. “Generals ethics” without specification of particular ethics (more later).

If informational cosmology lacks infinities, it describes finites; informational cosmology lacks infinities and, hence, describes finites; if informational cosmology describes universe and finites, universe lacks infinities and operates in finites; informational cosmology describes universe and finites; therefore, universe lacks infinities and operates in finites.

Furthermore, if universe operates in finites, C contains finite elements; if C contains finite elements, C^E contains finite elements. Universe operates in finites. Hence, C and C^E contain finite elements.

Even further, if C contains finite elements, C_n contains finite elements; if C_n contains finite elements, C_n^E contains finite elements. C contains finite elements. Thus, C_n and C_n^E contain finite elements.

Free will and ethics implies moral choice. Together – free will and ethics – imply correct/right/moral and incorrect/wrong/immoral choices in C^E , at the global scale, and in C_n^E , at the local scale. Therefore, this means individual free will and ethics over time (over one or more selections) creates moral accountability.

What kinds of free will might exist in universe – at global and local scales? How do you define them? How do they relate to the C ? How about C^E and C_n^E ? In short, how do you *pin* the start of informational ethics?

Rosner: Protagoras said, “Man is the measure of all things,” meaning that there is no absolute truth. When it comes to existence, I disagree with this. I believe that we have an infinitesimal probability of not existing in the forms in which we seem to exist. More simply, the odds that this is the Matrix are just about zero, and even if this were the Matrix, its existence would imply the existence of a substantial material world (that contains the Matrix, or contains the fake world that contains the fake Matrix – at some point, you run into the Real).

But it’s harder to disregard a suspicion that ethics is a human construct with human-created rules and values. So let’s pin down ethics. We evolved as persistent organisms – organisms which want to continue to exist and which serve the continuing existence of life by surviving and reproducing. If we’re playing the game of persistence – and we’ve been built to (not on purpose by a goal-oriented entity, but as a consequence of purposeless-but-persistent processes) – an entire moral/ethical structure can be built from the game. To win the game is to maximize existence according to a set of existence-valuing principles. People can argue about the specific principles, but the general idea is not to wreck the world and not to wreck people and perhaps to make progress. It’s the opposite of nihilism.

Since we humans are discussing and determining what the existence-valuing principles should be, you could argue that morals and ethics are a human-built system which doesn’t reflect absolute truth. However, life that arises anywhere within the universe faces the same game, the same issues of how to protect life and civilization and its world. The universe itself is likely part of some system which has rules to preserve existence.

Given the one principle that persistent beings want themselves and/or the world in which they exist to continue to exist, moral and ethical systems will have great general similarities

(involving safeguarding existence). So what we're left with of Protagoras is specific precepts of morals and ethics being specific to humans. General ethical and moral principles and existence itself aren't just human constructs.

Jacobsen: You mean objective *and* universal ethics derived from informational cosmology: informational ethics. Prior considerations remain valid: C means the same; C^E means "existence-valuing principles"; C_n means "informed will"; and C_n^E means "targeted thinking."

New C^E provides absolute referent of correct or incorrect ethics. An absolute referent for morality. Or the greatest possible criterion for all logical possibilities of ethics. Logic implies truth, truth implies logical possibilities, logical possibilities operates in both informational cosmology and informational ethics, and therefore ethics examinable by logic for truth or falsity, or degree thereof.

Where "good" means "maximizes persistent existence" and "evil" means "does not maximize persistent existence," one can scale ethics. C^E bestows referent and grounds for logical analysis of every ethical system, code, creed, law, and principle in proportion to their respective correspondence with C^E. More C_n allows greater C_n^E. More C_n and C_n^E provide possibility for more accurate correspondence with C^E, and therefore, by implication, greater responsibility due to greater moral accountability. A *Moral Hierarchy* implied with C^E at the top.

Does this hold merit to you? How might we refine or extend this argument? If you do consider a general moral, intellectual, spiritual, or emotional progression or development, how do you view development from the basic to most advanced at the individual and collective levels?

Rosner: Should note that I live in LA, where we're more concerned about spotting celebrities at Rite-Aid than personal growth. On a daily basis, most of my efforts to be a better person occur behind the wheel. (In LA, your morality is revealed by your driving. Many Audi drivers will have to do a lot of explaining to St. Peter.) And I often judge other people's moral development by their posted comments on internet stories.

I like to imagine that our increasing interconnectedness leads to increasing moral development – an ethical Flynn Effect – though internet trolling indicates otherwise.

I picture people in general as having moral characteristics – levels of niceness, truthfulness, reliability, etc. – distributed in a bell curve, with most people being close to average and some outliers in positive and negative directions. When I was checking IDs in bars, I estimated that about one person in 90 would lie to me. This seemed indicative of most human behavior – generally good, with opportunistic failures (which you shouldn't consistently expect but should be prepared to protect yourself against – it's like defensive driving – always be alert for terrible behavior without expecting it in every instance). When dealing with jerks in bars, the bell curve model helped me keep my temper. I'd think, "Here's somebody who's way beyond the mean for jerkiness. Statistically, that's what you'd expect occasionally. Should I fly off the handle at him, or wait for someone who's even more of an outlier?" (I'd usually keep my temper.)

Having a bell curve model of behavior means that I don't spend much time thinking about hierarchies of individual goodness. People will be people – I just try to steer clear of the horrible ones. I spend more time thinking about societal goodness because, writing for a late-night show,

I got in the habit of paying attention to politics, and America currently has a bunch of terrible people in and around politics. You have a bunch of people upset about tyranny and the end of America, and these people, when they willfully and very effectively bend the truth, seem like the biggest threat to America.

But crappy politicians probably aren't the biggest threat to America as it is. The biggest threat and biggest opportunity is change. In 10 years, America will change as much as it did in the previous 20; in 20 years, America will change as much as it did in the previous 60; in 30 years, America (and the world) will change more than it did in the previous century. Near-future science fiction presents a range of possibilities for America. The laziest SF presents stories of apocalyptic strife, some with America split into several nations. More well-thought-out work presents a daunting assortment of negative and positive changes. But no near-future fiction presents an America that's unchanged.

Which leads to what I think is the most pressing ethical concern of our time – managing change. The wages of ignorance have always been death, but even more so now and into the future. Politicians often talk about the world we're leaving for our grandchildren. But they never mention that our grandchildren will be very different from us, and if we want to build a bridge to them, we can't be dipshits about technology. More technically-educated people and nations will be in the driver's seat. (Actually, no one will be in the driver's seat, since cars will be driving themselves.)

Technical literacy should be viewed as an ethical responsibility. Ignorance about science and technology screws you, your family, and your friends. In America, there's a strong correlation between states where people are more likely to have anti-scientific views and states with higher mortality rates.

Jacobsen: You leave some definitions loose: “informed will” and “targeted thinking.”

Canadian Oxford Dictionary (2nd Edition) defines the terms in a reliable fashion.

“Informed” means “give or supply information or knowledge”; “will” means “the faculty by which a person decides or is regarded as deciding on and initiating action”; “targeted” means “identify or single out (a person or thing) as an object of attention or attack”; and “thinking” means “using thought or rational judgment; cogitation.” What does “will” mean in an information-based ethics? How might this relate to personal valence (“emotional value”) of an individual consciousness?

Everything a decision-making entity does is based on information – the information which informs its decision (the data) in combination with the information which describes its decision-making apparatus (the hardware, software, and settings). You can't defy the informational basis of decisions – you can only strive to understand the basis (though your decision to strive is itself based on information). Will can be understood as a decision (I will work on this paper until I pass out) or as a tendency in decisions (I will always go to the utmost extreme when working on something I deem to be of value). As such, will comes from a combination of hardware, settings, and data. A thinking entity can know itself but cannot escape that its decisions are rooted in information which is encoded in the material from which it is made.

5. Jacobsen: How do informed will and targeted thinking influence every day and outlier morality?

Rosner: I expect informed will to generally be more good and ethical than reflexive responses. Informed will is decision-making based on thorough thinking. Often my immediate decision isn't as brave or kind as a reconsidered decision. I'll walk right past asking for money then be forced by my conscience to double back. Of course, doing bad can also be the result of thorough thinking. But if you consider most people, I'd guess that the average move between knee-jerk reaction and thorough thinking is towards the positive. It helps if there are societal, peer and family structures in place which support positive values. Just finished *Zone of Interest*, by Martin Amis, which tells about the daily lives of the people who ran Auschwitz. Everyone was highly invested in the evil they were doing and could find unlimited support for their evil from their government.

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Nine)

December 8, 2014

Abstract

Part nine of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1991-97), and writer. He discusses the following subject-matter: individual-based/subjective, universe-based/objective, and collective-based ethics, *Social Contract Theory* of Thomas Hobbes (*Leviathan*, 1651), John Locke (*Second Treatise of Government*, 1689), Jean Jacques-Rousseau, (*The Social Contract*, 1762), Pierre-Joseph Proudhon (*General Idea of the Revolution in the Nineteenth Century*, 1851), John Rawls (*Theory of Justice*, 1971), David Gauthiers (*Morals By Agreement*, 1986), and Philip Pettit (*Republicanism*, 1997), with discussion on social ethics in essence “boiling down” to the *Golden Rule*; ethics in journalism with respect to acquisition, collation, and reportage, definition of a “real” journalist, Dr. Steven J. Pinker on the improved conditions for humans, and informational ethics in relation to sociocultural trends; motivation of intellectuals for the good, troubles in academia with description of differing cultural/ethical systems transformed into prescription of cultural/ethical relativism – no scale to ethics or cultures, and things for intellectuals to do in the immediate for the good; Academia’s two dominant ideological strains of “bland multiculturalism” and “ethical relativism,” and reference back to thinking about the future; mobilization of intellectuals for the good in the long-term; possible prevention of this good; and thoughts on ethics of focus on one person with reflection on the personal desire for fame.

Scott Douglas Jacobsen: Ethics at the individual-based/subjective (C_n^E) scale relates to the universe-based/objective scale (C^E). Everything might appear abstract. Not so, informational ethics would clarify social ethics too.

Social ethics equates to collective-based ethics. A superset of C_n^E . A group of individuals with different, similar, or the same ethics within each possible superset. All of this would provide new clarification of the terminology in ethics.

Universe-based ethics means objective; collective-based ethics means universal; individual-based means subjective. More vogue ethics relate to social context and universal ethics such as *Social Contract Theory* of Thomas Hobbes (*Leviathan*, 1651), John Locke (*Second Treatise of Government*, 1689), Jean Jacques-Rousseau, (*The Social Contract*, 1762), Pierre-Joseph Proudhon (*General Idea of the Revolution in the Nineteenth Century*, 1851), John Rawls (*Theory of Justice*, 1971), David Gauthiers (*Morals By Agreement*, 1986), and Philip Pettit (*Republicanism*, 1997).

Collectives and individuals can exist out of sync with the greatest possible criterion for ethics (C^E) in informational ethics. They might have greater or lesser correspondence in actions and choices with C^E , and, therefore, more moral or immoral behavior. Degree of moral and immoral dependent upon correspondence with C^E .

Informational ethics clarifies the variant and invariant aspects of ethics. A comprehensive and coherent consideration of ethics. Social ethics pertains to the many-valued middle between individual-based/subjective and universe-based/objective ethics.

A more prosaic consideration of this issue with one question: what equates to the right action in the immediate social context?

Rick Rosner: I suppose that informational ethics in a social context boils down to something like the golden rule – treat others how you’d want to be treated. Often, a tacit or explicitly stated argument for the inconsiderate treatment of others is that the others don’t have fully developed consciousness – they’re dumb or animal-like. However, if consciousness is a technical-not-mystical thing that’s commonly found in systems with wide-angle information-sharing, then you can assume that you can find consciousness in many of the places you’d suspect you could find it – in other people, for instance, and in animals with decent-sized brains.

In an even smaller nutshell – don’t break stuff. That is, don’t unnecessarily destroy things that may be valued by other conscious beings.

But there’s a huge caveat to all of this. Under informational cosmology, consciousness is a not-too-hard-to-achieve technical phenomenon which arises frequently in the universe. In terms of time and space as we experience it, it’s a rare thing – it shows up on this planet, and say, in the closest other instance, it emerged 32 light years (and 700 million years ago) on some other planet – but in terms of sheer numbers, it probably shows up a bunch. Figure our universe creates 10^{20} habitable planets per every 20 billion years, and conscious life arises on one half of one percent of such planets. This would mean that conscious life arises somewhere in the universe an average of nearly once a second.

Conscious life could be, in terms of the sheer number of times it arises, fantastically common. Does that make it less magical? Not necessarily, in that consciousness may be linked to the existence of everything. Not that rocks and trees and Gaia are individually conscious, but that matter is information that’s part of the mind/information-space of the (conscious) universe itself. At the same time, our individual consciousnesses are rough-grained and piddly compared to a universe-sized consciousness. And when an individual consciousness ends, the good and bad things experienced within that consciousness may be completely erased. When a factory-farmed pig leads a thoroughly miserable life and then is killed, there’s no vessel in which the pig’s misery lives on. So does the pig’s misery ultimately matter? Do the good and bad we experience ultimately matter? We just don’t know yet.

We can imagine a set of all possible moments in a mind/information space (with informational cosmology suggesting that such moments are the only context in which things can exist). There are strong probabilistic linkages among such moments, experienced as individual consciousnesses’ world-lines. Among animals and primitive naturally arising civilizations, death means the end of a world-line. But in more advanced civilizations, there can be technical resurrection and virtual creation – moments of consciousness and world-lines can be artificially created. So death may not exactly be Game Over. (Though it still may be Game Over. What are the odds that some civilization will resurrect virtual pigs in cyberspace?) Given the possibility of artificial resurrection, we can’t rule out the possibility that what’s experienced in a world-line has some significance beyond that world-line. There’s the obvious significance of the good you do in the world lasting beyond your death. And there’s the yet-to-be-explored probabilistic math of how mind-space moments relate to each other beyond the natural moment-to-moment linking

along world-lines. Looking into this will be complicated and never-ending. In the meantime, try not to be a dick.

Jacobsen: Ethics appears more in the fore of the public conversation – for the better. I do not know the precise state of journalism, but I do have many suspicions. Suspicions with respect to acquisition, collation, and reportage from popular news venues. Most venues seem trivial, content with shameless hyperbole and political bias, celebrity gossip, inaccuracies or, worse yet, ignorant and callous; ignorance and a hard edge become the harvesting ground for cynical charlatans, liars, mountebanks, swindlers, and sophists. A phenomena hastened by continuous motion into a service economy. How else for their jobs to persist? They malignantly grow on ignorance, unconcern for others, and non-production – a modicum of wellbeing from solace at times, but not much else.

Possible amusement in consideration of the reality, but more distress because of the deleterious effect on popular discourse. I quote Malcolm X, “The media is the most powerful entity on earth... they control the minds of the masses.” We should respect media more. Media should conduct themselves with more wisdom. Not an easy task. It becomes a ubiquitous pattern of inaccurate representation. Not aimed at reportage with high correspondence to *objective truth* (which exists – sorry to burst bubbles), but in apparent intent to create an image of how things can *seem* true.

A real journalist seems demonized, wrongly – but expectedly, into obscurity. What do I mean by “real”? “Real” lives next door to “true.” A journalist collects, collates, and summarily reports. Within this framework, a “real journalist” collects, collates, and summarily reports the truth. One might add – for explicit clarity, “...without obfuscation, lies, leniencies, allegiances, and onward in the list of foul behaviour in the name of public (or more appropriately self-) service.” I write in such frank tones because of the immense responsibilities and duties concomitant with roles in the media – at all levels, especially for journalists.

According to Johnstone Family Professor of Psychology at Harvard University, Dr. Steven J. Pinker, we live in the most peaceful times of humankind, which he described at length in *The Better Angels of Our Nature: Why Violence has Declined* (2011). Other troubles exist and persist (more later).

Without common diversionary tactics or redirecting attention from particular groups, even excuses for infliction of suffering upon other human beings, terrorist activity from fundamentalist national and religious groups, killing without trial in violation of international human rights, and law, by some countries, organizations, and individuals, and variegated forms of subjection, general thralldom, or objectification of women depending on the history, nation, culture, context, people, and motivations, ethics emerges in each of these particulars and their innumerable interactions – acknowledging far more numerous other instances without explicit statement, how does an information-based perspective in ethics relate to sociocultural trends?

Rosner: In addition to the long-term trend of science moving humanity away from the center of the universe, there’s a long-term social trend of admitting that an increasingly large sphere of people deserve civil rights, with an implied acknowledgment that different groups – women, minorities, LGBT people – think and feel on a par with members of the most empowered class. Informational cosmology will reinforce that process. It will lead to the mathematization of

consciousness, and by 2050 or so, we'll be able to estimate the size of thinking systems. (We'll have a number or pair of numbers which will reflect the size of an information-space.)

Having a numerical idea of the size of thinking systems and mathematical models of such systems will inform ethical questions. Is it wrong to make a chicken, with its mind-space of size X, suffer? What about a cow? A whale? A robot companion? Is it cruel to deprive someone of his AI brain booster, reducing the size of his mind-space by two-thirds? Should a copy of a deceased person's mind-space, downloaded with 92% accuracy while he was still alive, have legal rights? Should it continue to receive a pension? Should it be able to vote? Should it be able to own things? Should video games be allowed to incorporate AIs which think and feel? How much privacy should be given to individuals' mind-spaces? Who should be allowed to have cyber-immortality? Should reengineering of criminals' mental landscapes to remove criminal tendencies replace punishment?

All these and many more questions about AIs and boosted brains are familiar to anyone who's interested in science fiction. Informational cosmology will help clarify what thinking and consciousness are and will encourage and facilitate the creation of artificial and add-on thinking systems.

Our world will have more and more embedded computing devices – people (who watch TED talks) are calling it “the internet of things,” “ubiquitous computing,” “the world waking up.” Many of these devices will be of sufficient complexity that they can be said to think, which will raise a zillion new questions of ethics and etiquette. And we won't have time to adequately answer these questions before new stuff comes along. We'll be playing catch-up, at least until someone develops MannersMaster, an AI specialist system brain add-on. “MannersMaster has manners, so you don't have to! Order now, and we'll include MannersMaster Junior, absolutely free!”

I imagine a science-fiction story in which every animal above a certain level of complexity has had its intelligence boosted. Their lives become a mix of their old ways of being and new behaviors prompted by their expanded cognition. When one animal kills another, the killer is obligated to absorb and incorporate the life experience – the mental record – of the animal it's killing. (This is also how vampires should work. Nanobots, injected via the vampire's bite, map the victim's brain. The victim lives on, along with a chorus of other victims, in the vampire's brain.) I don't imagine this will really happen – it's just fun to think about. However, eventually we'll have dogs and cats that live for 40 years and have the intelligence of kindergarteners (and little articulated paws for posting their selfies on Instagram for Pets).

Jacobsen: You spoke in another venue for motivating intellectuals into a force for good. Difficulties exist in mobilization of intellectuals for the good. Formal, mainstream intellectuals, i.e. majority of Academia, seem to have two dominant ideological strains: bland multiculturalism and moral relativism. A broad conceptualization would depict these two in generalized, merged terms: difference in cultural/ethical systems transformed into prescription of cultural/ethical relativism – no scale to ethics or cultures. Ethics becomes a human construction; in contradistinction to this ubiquitous academic position, informational ethics necessitates otherwise – described earlier.

Together, these have crippled effective ethical calculations and implementations in and from the Academy in many instances. Organizations external to Academia could form, organize, strategize, and implement various plans of action to counteract these rather

negative developments. Trouble with this, the majority of funding, support, and advertisement goes towards mainstream academics.

If we wish to create a force of good from intellectuals, in and out of the ivory tower, we might need to erase or modify these ideological programs based on their failure to intake large quantities of ethically relevant information and compute this into effective action to solve problems inside and outside the university system. I do not state this with demeaning any particular person or group.

Either through tacit approval or passive negligence, all – interviewer included – have failed to combat the morally crippling effects of these two ideological strains in conjunction. Intellectuals have more foundational work to complete in this light. What can intellectuals begin to do in the immediate as a force for good?

Rosner: I'll say again that people need to think about the changes the future will bring. The future will be increasingly focused on thinking, computing, and sharing information. It could be helpful to start thinking about the risks and benefits of this kind of future before it arrives.

Here's how we might think about and prepare for the future:

If you're in the arts, make stories set in the near-future. Picturing the near-future is hard, because it doesn't exist yet, and it has a lot of moving parts. But people will love you for taking on the future. Look at *Star Trek* – it's been around for 48 years, has spawned a bunch of series and movies, and is universally known and widely beloved, and it does a half-assed job at best of presenting the future.

Acquire scientific and technical literacy. The future's not gonna get *less* filled with high-tech geegaws. Everybody should understand this stuff, so we can distinguish reasonable approximations of the truth from nonsense and don't get fooled by bad actors – sleazy corporations, sneaky government programs – hiding behind lies. C'mon – if you can understand the math of fantasy football, you can track trends in tech.

Sharpen and systematize our predictions of the future. We do a lot of predicting of election and sports results. We don't do much predicting of the future in general. We use Moore's Laws to determine how small and cheap and powerful our devices will become. Futurists like Ray Kurzweil have their timelines full of predictions. But we don't have a good overall consensus landscape of how the future might unfold. A consensus landscape would of course be wrong about a bunch of things, maybe most things, but at least it would give us practice at thinking about and getting ahead of possible issues. We're doing a crap job of addressing global warming. Idiots and shysters are still arguing that doing anything about it is playing into some liberal, big-government scam, and those arguments seem as if they'll continue for years to come, even as increasingly obvious effects become apparent. What will happen if that kind of paralysis-by-bullshit is allowed to play out with a faster-moving problem?

Call out cynical stupidity and anti-scientific bias in the media. News channels are full of false balance or false equivalence, with a sensible argument on one side and idiots spouting bullshit on the other, presented as equal in merit. We should be less afraid to call stupidity stupid.

If we don't do the work of visualizing the future, it will be built for us in ways that will be less to our liking.

Jacobsen: What about the long-term? How can those with particular gifts and talents contribute to society?

Rosner: John Maynard Keynes said, “In the long run we are all dead.” The era of people with exceptional natural talents may be, in the not so long run, over. In some important ways, we’re living at the beginning of the end of the world. It’s premature to call this the end of human civilization and the beginning of post-human civilization, but it’s not *that* premature. The science fiction future is coming. It won’t be much about Mars colonies and gyrocopters. The future will be the rise of computation, with everyone being nodes in a network of stuff that thinks.

Natural talents won’t translate directly into the world of pervasive computing. The new talented might be people who figure out the most effective ways to team up or merge with technology. The most effective talents change from era to era. My friend Lance Richlin, who’s skilled in Old Masters-style painting and who painted the portrait of me which begins each part of this interview, scrambles to make a living. Four hundred years ago, his painting skill would have made him wildly successful and highly renowned. Andy Warhol was a talented illustrator, but he found great success in putting aside illustration to concentrate on the role of celebrity in pop culture. Jeff Koons is an artist-technologist, developing novel high-tech methods to create works of kitsch which acquire grace and grandeur through their sheer size and precision.

In the long run, contributions to society will come from people who find and create creative niches in the computational world. Old niches will remain for traditional artists, writers, performers, but many more new niches will open up as the world becomes more saturated with cheap computing. There will be room and need for both creators and artistic interpreters of computation-intensive technology. So, once again, my advice is to stay current on technology. And don’t be afraid to do stupid stuff. – powerful technology brings with it powerful frivolity, which often turns out to have seriously transformative effects – Twitter and other social media as tools against political repression, for instance.

Jacobsen: Insofar as ethics concerns individuals’ focus on one person, this collective drain of attentional, emotional, and sometimes intellectual resources might work for good or bad, which relates to an astonishing and relatively pervasive celebrity culture devoid of a single scintilla of responsibility – even with a lack of basic knowledge about risks associated with the potential for creation of an idol without grounds. You comment on this celebrity culture within some of the discussion for prior parts of the interview.

Most people do not deserve such status because most do not earn it. Further, most fail to heed risks and steward responsibilities implicated within increased attention, admiration, and general expenditure of collective time and resources on them. Entrusted power means privilege; privilege implies responsibility; responsibility proportional to privilege, and therefore responsibility proportional to entrusted power.

In point of fact, you desire fame – have for decades. You spend lots of time in this pursuit. As noted, responsibilities and risks come with it. Based on the served quotation of Eugene Wigner from me and your return with the quote of Albert Einstein, I return the ball to you with a minor note from *Ideas and Opinions* (1954) by Einstein in print:

“The cult of individuals is always, in my view, unjustified. To be sure, nature distributes her gifts unevenly among her children. But there are plenty of well-endowed, thank God, and I am firmly convinced that most of them live quiet, unobtrusive lives. It strikes me as

unfair, and even in bad taste, to select a few of them for boundless admiration, attributing superhuman powers of mind and character to them. This has been my fate, and the contrast between the popular estimate of my powers and achievements and the reality is simply grotesque.” (Einstein, 1954)

I observe near-universal tendencies in others and yourself. What do people want in life? Lots of things. You want to be understood, liked, and respected – in no particular order. Why the desire for fame – even glory? Does this not appear proud or hubristic?

Rosner: I agree with Einstein that the structure of fame rests on a rotten foundation, since every characteristic on which fame can be based is the result of luck, even traits that don’t seem like special gifts, such as persistence or conscientiousness. But fame being based on luck doesn’t imply a moral prohibition against trying to become famous. Many famous people who complain about fame probably secretly or not-so-secretly enjoy its benefits.

Starting when I was young, I wanted fame for at least three reasons – respect, understanding, and a girlfriend. I was nerdy at a time when nerdy wasn’t at all cute. I sometimes felt picked-on. Whenever allowed, I stayed inside at recess and read. From constant reading and looking at *Mad* magazine and *National Lampoon* and accidentally being exposed to a book of Victorian pornographic writing (and having cute third- and fourth-grade teachers), I became aware of women’s sexual desirability by age nine, which is way too young to do anything about it, especially when you’re a geek.

So I wanted to be famous. I didn’t want to be picked-on, and I wanted a girlfriend. I figured that my shot at recognition would be through figuring out the universe.

I’ve always been a little weird. Not so much eccentric-for-attention (though I do like attention) but rather, having my own ways of doing things which make sense to me but seem nuts to everyone else – taking 70 pills a day, going to the gym 5 times a day, having a OCDish preference for turning clockwise. Always figured if I were famous my quirks would be understood and perhaps accepted. Instead of “What’s up with that weirdo?” it’d be “Hey, there’s that guy who does that stuff.”

I’ve been pretty successful without being famous. Been married for nearly 24 years. Am a parent of a lovely daughter. Have been a TV writer for more than 25 years, contributing to 2,500 hours of network television and being nominated for six Writers Guild Awards and an Emmy. Am generally thought of by people who know me as not especially a prick or a douche.

I’m past the point of wanting celebrity in order to get a girlfriend. But I still want to be famous. Have had brushes with fame – was in an Errol Morris documentary, have been in three TV pilots which, like most pilots, didn’t go anywhere, occasionally get to be in a news article. None of these has caused me to reach a self-sustaining level of fame, where you get to stay famous by virtue of being famous.

But now, I kind of really want/need to be famous. I lost my longest-lasting, best TV-writing job a few months ago and am screwed when it comes to (easily) getting more TV work (even though I’m a proven writer). Met with an agent at a big agency. He said that he can’t represent me unless I have a spec sitcom pilot. But if I take a couple months and write a spec pilot, all that would do, if the agent indeed would rep me, would be to get my stuff into a stack of 200 or so submissions, out of which 1 or 2 percent of the submitters might be hired. I want to stand out from the hundreds of other submitters, and to do that, it would be helpful to have fame. (If I did

write a spec pilot, it'd be about a weird genius dad with a normal family who thinks he's half-an-idiot. Write what you know.)

Genius is very popular on TV right now – two flavors of Sherlock Holmes, *The Big Bang Theory*, the team of super-geniuses on *Scorpion*, the genius forensic techs and profilers on every murder show. CBS alone must have more than a dozen actors playing geniuses. So I want to yell, “Yo! Over here, CBS – a real person who's gotten dozens of highest-ever scores on IQ tests, who has a theory of the universe that might not suck, who knows all the issues and behaviors associated with being a weird-ass brainiac, and who's written more TV than all but 60 or 80 people in the city of Los Angeles.”

It's not unreasonable for me to want recognition. You may have noticed that reality TV has made dozens and dozens and dozens of horrible people famous. At least my story is interesting. I'm not some Botox addict getting in a slap-fight at a wine-tasting. (But give me a chance – I'll do that.) Marilyn Savant has had a nice 30-year career based on having the world's highest IQ. My scores are higher than hers.

And let's say my theory of the universe is at least partially correct. It could lead to big steps forward in our understanding of the world and our place in it. It could help us figure out how to make our brains work better. If some fame draws some attention to the theory, then good.

If you've slogged through all of the interview up to this point, you should be able to tell I'm not a BSer. I've spent decades trying to figure out how the universe works (when I haven't been writing Kardashian jokes), and I've come up with some stuff that I think merits some attention. Yeah, there's some “Hey – looka me!” in my fame-seeking. But, after working on a theory for 33 ½ years and having had a bunch of ridiculous misadventures, it doesn't make me a douche to want people to check out my stuff.

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Ten)

December 15, 2014

Abstract

Part ten of eleven, comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: difficult circumstances for women, international obligations to women based on Millennium Development Goals (MDG) with a focus on MDG 3, 4, and 5, thoughts of focus on the transhumanist future, recommended reading of Charles Stross, Cory Doctorow, David Marusek, or Neal Stephenson; Dr. Rosalyn Yow quote, some observations about conditions for women; the history of men with two examples of Plato and John Stuart Mill, and reflection on history not treating most people well; female exemplars in history with multiple examples, daughter's study of history, and personal Women's Studies history; ethics in the global scale with multiple UN examples, collating them into a single question of "*How best to solve problems in civil society?*," and thinking about the future with becoming more informed as the remedy.

Scott Douglas Jacobsen: Many, arguably most, women have greater difficulties than their male counterparts in equivalent circumstances. Their welfare means our welfare – men and women (no need to enter the thorny, confused wasteland of arguments for social construction of gender rather than sex; one need not make a discipline out of truisms.).

Net global wellbeing for women improves slowly, but appears to increase in pace over the years – millennia, centuries, and decades. Far better in some countries; decent in some countries; and far worse, even regressing, in others. Subjugation with denial of voting, driving, choice in marriage, choice in children, honour killings, and severe practices of infibulation, clitoridectomy, or excision among the varied, creative means of female genital mutilation based in socio-cultural or religious practices; objectification with popular media violence and sexuality, internet memes and content, fashion culture to some extent, even matters of personal preference such as forced dress or coerced attire, or stereotyping of attitudinal and behavioral stances. "All I ask of our brethren is that they will take their feet from off our necks and permit us to stand upright on the ground which God intended us to occupy." Sarah Moore Grimke said.

Everyone owes women. International obligations and goals dictate straightforward statements such as the Millennium Development Goals (MDGs) of the United Nations (UN) in addition to simple provision of first life. MDG 3, 4, and 5 relate in direct accordance with this proclamation – in an international context mind you. MDG 3 states everyone's obligations, based on agreed upon goals, for promotion of gender equality and the *empowerment of women*. MDG 4 states everyone's obligations for reduction of *infant mortality rate*. MDG 5 states everyone's obligations towards improvement of *maternal health*. All MDGs proclaim completion by 2015. We do not appear to have sufficed in obligations up to the projected deadline of 2015 with respect to all of the MDGs in sum.

In addition to these provisions, we have the conditions set forth in the *The International Bill of Rights for Women* by *The Convention on the Elimination of All Forms of Discrimination Against Women* (CEDAW) of the United Nations Development Fund's (UNDF) consideration and mandate of the “right of women to be free from discrimination and sets the core principles to protect this right.” Where do you project the future of women in the next 5, 10, 25, 100 years, and further? In general and particular terms such as the trends and the concomitant subtrends, what about the MDGs and numerous other proclaimed goals to assist women – especially in developing areas of the world?

Rick Rosner: Predicting gender relations beyond a century from now is somewhat easier than predicting the short-term. In the transhuman future, bodily form, including sex, will be changeable. People will take different forms. And when anyone can change sexes with relative ease, there will be less gender bias.

Let's talk about the transhuman future (100 to 300 years from now) in general, at least as it's presented in science fiction that doesn't suck. Three main things are going on:

There's pervasive networked computing. Everything has a computer in it, the computers all talk to each other, computing costs nothing, data flying everywhere. Structures are constantly being modified by swarms of AI builders. A lot of stuff happens very fast.

Your mind-space isn't permanently anchored to your body. Consciousness will be mathematically characterized, so it'll be transferrable, mergeable, generally mess-withable.

People choose their level of involvement in this swirling AI chaos. Most people won't live at the frenzied pinnacle of tech – it's too much. There are communities at all different levels of tech.

Also, horrible stuff old and new happens from time to time – bio-terror, nanotech trouble, economic imperialism, religious strife, etc.

For more about this kind of thing, read Charles Stross, Cory Doctorow, David Marusek, or Neal Stephenson.

So, two hundred years from now, gender won't be much of a limiting factor, except in weird throwback communities. In the meantime, idiots will continue to be idiots, but to a lesser extent the further we go into the future. No one who's not a retard is standing up for the idea of men being the natural dominators of everything. If it seems like we're not making progress towards gender equality, it may be because there's a huge political/economic/media faction that draws money and power from the more unsavoury old-fashioned values, with its stance that anyone who's concerned about racism or sexism is naïve and pursuing a hidden agenda to undermine American greatness.

Dumb beliefs that aren't propped up by doctrine eventually fade away, and believing that men or any elite group is inherently superior is dumb, particularly now and into the future as any purportedly superior inherent abilities become less significant in relation to our augmented selves. Across the world, the best lazy, non-specifically targeted way to reduce gender bias is to open up the flow of information, serious and trivial (however you do that).

In the very short run, maybe the U.S. elects a female President. Doubt this will do that much to advance the cause of women, because Hillary Clinton has already been in the public eye for so long – she's more a specific person than a representative of an entire gender. Is thinking that dumb? I dunno. I do know that her gender and who she is specifically will be cynically used

against her. I hope that if elected, she's less conciliatory and more willing to call out BS than our current President.

In the U.S., there's currently some attention being paid to rape. Will the media attention to rape make rapey guys less rapey? I dunno. Will increased attention to rape in India reduce instances there? I dunno. A couple general trends may slowly reduce the overall occurrence of sexual coercion and violence. One trend is the increased flow of information and the reduction of privacy – cameras everywhere, everybody willing to talk about everything on social media, victims being more willing to report incidents, better understanding of what does and does not constitute consent. The other trend is the decreasing importance of sex. My baseline is the 70s, when I was hoping to lose my virginity. Sex was a huge deal because everything else sucked – food, TV, no video games, no internet – and people looked good – skinny from jogging and cocaine and food not yet being engineered to be super-irresistible. Today, everybody's fat, and there's a lot of other fun stuff to do besides sex.

I think that some forms of sexual misbehaviour – serial adultery, some workplace harassment – will be seen as increasingly old-school as more and more people will take care of their desire for sexual variety via the vast ocean of internet porn. Of course, sexual misbehaviour isn't only about sex – it's also about exercising creepy power or a perverse need to be caught and punished – so, unfortunately, that won't entirely go away. During the past century, sexual behaviour has changed drastically – the types of sex that people regularly engage in, sex outside of marriage, tolerance for different sexual orientations, freely available pornography and sexual information, the decline in prostitution – you could say, cheesily, that sex is out of the closet. And sex that's not secretive or taboo loses some of its power.

But I could be wrong. According to a 2007 study conducted at two U.S. public universities, one fifth of female college students studied suffered some degree of sexual assault.

Jacobsen: Many, not all, women tend to have a hard time in science too. Improvements in welfare, access, and attainment continue. Rosalyn Yalow, Nobel Prize in Medicine for 1977, stated:

“We bequeath to you, the next generation, our knowledge but also our problems. While we still live, let us join hands, hearts and minds to work together for their solution so that your world will be better than ours and the world of your children even better.

We cannot expect in the immediate future that all women who seek it will achieve full equality of opportunity. But if women are to start moving towards that goal, we must believe in ourselves or no one else will believe in us; we must match our aspirations with the competence, courage and determination to succeed; and we must feel a personal responsibility to ease the path for those who come afterwards. The world cannot afford the loss of the talents of half its people if we are to solve the many problems which beset us.

If we are to have faith that mankind will survive and thrive on the face of the earth, we must believe that each succeeding generation will be wiser than its progenitors. We transmit to you, the next generation, the total sum of our knowledge. Yours is the responsibility to use it, add to it, and transmit it to your children.

The failure of women to have reached positions of leadership has been due in large part to social and professional discrimination.

The excitement of learning separates youth from old age. As long as you're learning you're not old."

Yalow's "immediate future" exists here and now.

I observe some tendencies of form: some truth in women choosing non-STEM fields often to explain some of the number differential; decent truth in institutional barriers; a good deal to do with ineffectual programs of action; a great deal to do with lack of female mentors – male mentors appear less effective than women; a catch-22 of desire for more women at the top, need of more female mentors from the top for women at the bottom, but *lack of female mentors at the top in proportion to the women at the bottom*; some more to do with inflexible tenure-track, differential pay, no childcare on-site, tacit bias for men; and, something never said – too taboo, *some small minority of men not liking women*; or a variable by implication of the former or on its own, working with them.

Narrowed from the prior question about the situation for women, with some of this in mind, what about the need for opening the arena for women in science more with continued technological and scientific comprehension in the 21st century to succeed in keeping apace with the rapidity of technological change, and scientific discovery and innovation?

Rosner: I don't know what will draw more women into STEM fields. However, I think that more needs to be done to draw people of both genders into STEM. (A good step might be calling it "math-science" instead of STEM.) I grew up during the post-Sputnik push to educate Americans in science, followed by the laissez-faire 70s. Now we're in the era of dumb politics, with large factions backing away from and urging skepticism about science. It shouldn't take a cold war or a big regular war for the U.S. to be pro-science. If current trends persist, the US will be overtaken by China in terms of percentage of GDP spent on R&D within a decade. Does it matter to the future whether the United States becomes a backwater country? I think so. American politics is having a bad 21st century so far, but the best values America stands for will be important in tempering the more ominous aspects of the tech wave.

Jacobsen: In the history of men, we have some exemplars, Plato's philosophy culminated in the considerations of an ideal society appropriately given the appellation "*Kallipolis*," or "Beautiful City." Few did as much theorization for female opportunity and equality, likely hypothesizing only in light of limitations of power and influence, in the ancient world apart from Plato including the incorporation of equality for women in the philosophical foundations, theoretical institutional operations, and consideration of aptitude and character found in *The Republic*, there likely exists few, or none, other in ancient times paralleling such depth of female inclusion in society and procurement of education. Bear in mind, he did not intend the discourse of work related to *Kallipolis* for the purpose of equality for women, but for creation of an ideal society and people with spores devoted to women in the society. Just society equated to just individual; ideal society equated to ideal individual; society – in conceptual equivalence to Platonic Form or Idea of "ideal society" – paralleled the individual. Well-ordered society reflected well-ordered individual – man or woman. Germinations from the dialogue on an ideal society in the seminal work *The*

Republic became the seeds for partial, by the accepted canon of ethics today, female equality, most saliently found in the work *The Republic*.

We find little in the totality of literature contained within the canon of Western, and Eastern, traditions beyond Plato and the ancient Greeks until the explicit work by the bright light John Stuart Mill (1806-1873) – a utilitarian philosopher rooted in the ideas and work of Berkeley, Hume, and Locke – in the hefty essay *On The Subjection of Women* (1869) – a probable fresh stirp outcropping from the writing of his wife Harriet Taylor Mill's essay, *The Enfranchisement of Women* (1851), because the Mills – including some by their daughter Helen – co-authored *On the Subjection of Women*, where the opening paragraph considers the issue of male & female relations and social institutions from the discerning, acute, and perceptive gaze of the Mills in preparation of probably one of the most complete disquisitions on women and their status in society in their day – one can find these throughout the prolonged essay:

“The object of this Essay is to explain as clearly as I am able, the grounds of an opinion which I have held from the very earliest period when I had formed any opinions at all on social or political matters, and which, instead of being weakened or modified, has been constantly growing stronger by the progress of reflection and the experience of life: That the principle which regulates the existing social relations between the two sexes—the legal subordination of one sex to the other—is wrong in itself, and now one of the chief hindrances to human improvement; and that it ought to be replaced by a principle of perfect equality, admitting no power or privilege on the one side, nor disability on the other.” [Mill, J.M. 1869]

Why little in the way of acknowledgement in history for women other than in some great few jewels? How can men best assist women – and by implication everyone in sum – flourish?

Rosner: History hasn't been very nice to anybody. About 107 billion humans have ever lived, and the vast majority of these had miserable lives, regardless of sex. Global life expectancy didn't reach 50 until the 1960s and didn't reach 60 until about 1980. We live like kings and queens compared to people of a century ago, and we live wretched lives compared to people a century from now. Standards of liberty go roughly hand-in-hand with standards of living. As humanity has gained control over the world, larger segments of the population have gained some relief from misery. I expect the future to be richer, to have more life-improving tech, and to be more inclusive.

Regressive forces in politics want to maintain gender and racial hierarchies to some extent. These efforts often masquerade as equal treatment for all, when in fact, treatment isn't equal. So people get pissed, and they protest, and they point out inequalities and hypocrisy. Bringing unfairness to the public's attention seems to be the way to get things done. One sign of progress is that arguments for inherent inequality between genders or among races are increasingly unacceptable. And such arguments should be. I have a saying (which has failed to impress anyone) that the world's smartest rabbit is still a rabbit. By figuring out how to overcome human limitations, we can figure out how to overcome individual limitations.

Jacobsen: In the timeline of women, on setting examples, instances arise of historical female virtuosity in spite of different circumstances for women *en masse*, in the commemorated annals of geniuses such as Hypatia of Alexandria, Elizabeth Anscombe,

Hannah Arendt, Margaret Atwood, Simone de Beauvoir, Hildegard von Bingen, Marie Curie, Lady Anne Conway, Sarah Margaret Fuller, Susan Haack, Ayn Rand, Dame Mary Warnock, Mary Wollstonecraft, Betty Friedan, Marilyn vos Savant (greatest living philosopher of the everyday – opining), Joanne Rowling (“J.K. Rowling”/”Robert Galbraith”), and innumerable others, one need not agree with their multitudinous productions, but ought to welcome the attainments as genuine supplements to the cerebral arsenal of the erudite world.

Most of these relate in the academic, philosophical, intellectual partition of discourse on the sexes, more exist in relation to the many types of sheer brave accomplishments and firsts for women: Élisabeth Thible (First woman to ride in hot air balloon), Sophie Blanchard (First woman to pilot hot air balloon), Raymonde de Laroche (First woman to receive pilot’s license), Lilian Bland (First woman to design, build, and fly an aircraft), Amelia Earhart (Not long after Charles Lindbergh – one could state Albert Read before either Lindbergh or Earhart, first woman to fly solo across the Atlantic Ocean), Sabiha Gökçen (First woman to fly fighter plane into combat), Jacqueline Cochran (First woman to break sound barrier), Jerrie Mock (First woman to fly solo around the world), Svetlana Savitskaya (First woman to walk in space), Eileen Collins (First female space shuttle pilot), and so on. Not enough time to enter into full listing and description – a compendium must suffice for now.

Even a single example, in depth, from this list of female bright lights in the human narrative, Marie Curie discoverer of the 88th element known as Radium, winner of the Nobel Prize in Physics (1903) and Chemistry (1911), having an element named after her: curium, and someone of potential for higher emotional impact based on the recent nature – relative to the timeline from Hypatia to the present – of the achievements by Curie. Indeed, she lived concurrent with the most often quoted, and misquoted, of geniuses, Albert Einstein. No introduction or explanation needed for his accomplishments of unification and foundational contributions to physics, cosmology, and insights into reality in general. However, we do not hear much of Marie Curie off the top of our minds; even so, she may arise after some time to wonder and ponder on the cases of female genius.

When examining with thorough care the deep historical roots of the situation for women up to the modern era in the world of pedagogy, or even with a mild skim through a history text, within arguably the most important societal and cultural institution, outside of raw technological change, for the influence of individuals and collectives in society, Academia holds the most sway in refurbishing the old housing of society with new frameworks for understanding the world and the relation of human beings within, and to, that new apprehension of the world.

Some modern days of recognition such as *International Women’s Day*, *Women’s Equality Day*, and *Women’s History Month* do some good in continual recognition from positive reflection on them. As per the previous question, most history education tends to teach male exemplars in each field while lacking the representation of women in such fields of endeavour. History would appear to work on the shoulders of men, European men. No exemplars in proportion to men can set tacit tones through education for the youth and in turn the upcoming generation. What could shift the focus, perspective, and conversation related to female exemplars in history?

Rosner: Compared to men, a much smaller fraction of women have been highly visible to history. Of course, the fraction of men who are visible to history is already tiny. The vast majority of the more than 100 billion humans who have ever lived have disappeared without a trace of individual presence and are remembered only as tiny constituents of plagues or wars or statistical trends. Now, of course, everyone produces an extensive individual digital record, and the recording of our lives will only grow more thorough. (But individuals may become invisible within a deluge of information rather than a trickle.)

History is usually learned from an event- and trend-based perspective – battles, leaders, dates, economic and demographic forces. But there's another way – the slice-of-life approach – trying to reconstruct how people lived their daily lives and thought their daily thoughts. This puts the women back into history and provides a counter-narrative to the big events POV. Most of our lives are conducted around daily tasks, not historic events. When we see history on TV or in a movie, it's usually people's stories, not dry recitations of facts.

In Women's Studies classes and by watching my daughter study history, I've learned that traditionally womanly arts are often assumed to be second-tier – mundane, decorative, part of the background – what Betty Draper does, to her frustration, as compared to what Don Draper does. And even as *Mad Men* points out this dynamic, it still screws over Betty, making her seem unpleasant compared to Don, whom we root for even as he wrecks his life.

We're lucky to live in an era of increasingly immersive media that offers more opportunity to build complete worlds, including the worlds of the past. But even with this ability, virtual worlds can be shitty for women – for example, the *Grand Theft Auto* series is brutal to women. The video game industry remains biased towards traditionally male action stories because they're fun, they sell, and they're easier to make compelling. Eventually, video games and immersive entertainment will learn how to embrace more of human experience. The subtlety's not there yet.

(My thinking about women's issues isn't ultra-sophisticated. But I took women's studies in college and belonged to a pro-feminist group called *100 Men Against Violence Against Women*. On the other hand, I wrote for *The Man Show*. (It wasn't anti-women – it made fun of men's attitudes about women – but was widely misunderstood because it tried to have it both ways – making fun of men and celebrating what men like. And the fifth season, after Adam and Jimmy and the other writers and I left, was pretty mean and misogynist.))

Jacobsen: Ethics exists beyond issues of the sexes. Issues of global concern. Ongoing problems needing comprehensive solutions such as differing ethnic, ideological, linguistic, national, and religious groups converging on common goals for viable and long-term human relations in a globalized world scarce in resources without any land-based frontiers for further expansion and exploitation, UN international diplomatic resolutions for common initiatives such as humanitarian initiatives through General Assembly Third Committee (Social, Humanitarian and Cultural), Economic and Social Council (ECOSOC), United Children's Fund (UNICEF), United Nations Develop Programme (UNDP), World Food Programme (WFP), Food And Agricultural Organization of the United Nations (FAO), United Nations Population Fund (UNFPA), United Nations Human Populations Settlement Programme (UN-HABITAT), Interagency Standing Committee (IASC), and issues of UN humanitarian thematic import such as demining, early warning and disaster detection, the merger of theories of the grandest magnitude (e.g., general and special relativity) and the most minute (e.g., quantum mechanics), medical issues such as Malaria,

Cancer, and new outbreaks of Ebola, nuclear waste and fossil fuel emissions, severe practices of infibulation, clitoridectomy, or excision among the varied, creative means of female – and male – genital mutilation based in socio-cultural and religious practices, stabilization of human population growth prior to exceeding the planet's present and future supportive capacity for humans, reduction of religious and national extremism, continuous efforts of conservation of cultural and biological diversity, energy production, distribution, and sustainability, economic sustainability, provision of basic necessities of clean water, food, and shelter, IAEA and other organizations' work for reduction and eventual elimination of nuclear armaments, culture wars over certainty in ethics on no evidence (faith-based ethics) and lack of certainty in morality because of too much data while lacking a coherent framework for action (aforementioned bland multiculturalism transformed into prescription of cultural/ethical relativism), acidification of the oceans, problems of corruption, continued annexation of land, issues of international justice handled by such organs as the International Court of Justice, introduction of rapid acceleration of technological capabilities while adapting to the upheavals following in its wake, issues of drug and human trafficking, other serious problems of children and armed conflict including child soldiers, terrorist activity, education of new generations linked to new technological and informational access, smooth integration of national economies into a global economy for increased trade and prosperity, and the list appears endless – and growing.

If collated, they form one question: *“How best to solve problems in civil society?”*

Main issue, all subordinate queries and comprehensive, coherent solutions require sacrifice. You might ask, *“Cui bono?”* (“Who benefits?”) Answer: all in sum. Problem: few feel the need to sacrifice past the superficial. Some Facebook, Twitter, or Instagram protestations to represent themselves as just people while not behaving in the real world as just people. Hashtags and celebrity speeches help in outreach and advertisement, but we need long-term, pragmatic solutions to coincide with them more. Nothing hyperbolic to disturb healthy human societies, but reasonable and relatively rapid transitions into sustainable solutions. You have stated positive trajectories by thinking about the future. You talked of some, but not all. What about these collection of problems and the growing list?

Rosner: I believe the best instrument of change is information. Informed people more readily disbelieve stupid shit. Widespread ignorance and distrust of well-substantiated facts are usually signs of somebody getting away with something.

We know society is trending in an egalitarian direction. Trends towards equality are in a race with technology remaking society. For me, the question becomes, “How many lives and generations will be spent in misery before social and tech trends make things better and/or weird?”

The happy possible eventual situation is that tech creates a utopia in which all people get what they want. The unhappy possible eventuality is that tech debunks the importance or centrality of humanity, and humans are afterthoughts – the stepchildren of the future – being taken care of but not really having their concerns addressed because their level of existence isn't taken seriously by posthumans. (And of course there's the possibility that AI gets out of hand, eats everything and craps out robots. Let's try to avoid that.)

Tech will solve some huge problems. One of the biggest is the steadily growing population. People who have a shot at technical, earthly immortality (50 to 80 years from now) will reproduce less. When transferrable consciousness becomes commonplace (120 to 150 years from now), posthuman people may not reproduce at all (though traditional human enclaves will still spit out a steady stream of kids). The uncoupling of individual consciousness from the body it was born into solves a bunch of, perhaps most, current problems and anticipated problems – crowding, food, pollution, global warming – by allowing people to live in ways that leave less of a footprint. (Not that their choices will be made for purely ecological concerns. People will always follow their own interests, and posthuman people will choose a variety of non-fleshy containers (200 years from now) because virtual or semi-robotic containers will be cheaper, more convenient, more versatile and exciting.)

But our current problems will be largely replaced by fantastically weird problems. Virtual people will be subject to virtual attacks and virtual disease. Agglomerations of consciousness may become bad actors. People may sic nanotech swarms on each other. You can find all this stuff in good near-future science fiction. William Gibson's new novel, *The Peripheral*, which takes place about 20 years and 90 years from now, can serve as a good, fun intro to the future. In it, some impossible stuff happens, but it's the possible stuff that's interesting and scary. There are websites devoted to the future in a very non-la-de-dah way. Look at <http://io9.com/> and <http://boingboing.net/> – they're entertaining and informative.

Rick G. Rosner: Giga Society, Member; Mega Society, Member & ex-Editor (1991-97); and Writer (Part Eleven)

December 22, 2014

Abstract

Part eleven of eleven comprehensive interview with Rick G. Rosner. Giga Society member, ex-editor for Mega Society (1991-97), and writer. He discusses the following subject-matter: *Genius of the Year Award – North America* in 2013 from PSIQ and clarification of statements; definition of the term “gods” in operational terms from the award statement; discussion on our future rather than gods; thoughts on aesthetics within an informational cosmology lens; some brief discussion on informational eschatology; human history’s numerous examples of individuals and schools of thought aimed at absolute definitions of consciousness, universe, and their mutual union; thoughts on Big Bang Cosmology and the possibility of its replacement; three greatest mathematicians/physicists/cosmologists; three greatest mathematics/physics/cosmology concepts; *The Heisenberg Uncertainty Principle* and *Wave-Particle Duality*; *Einstein-Podolsky-Rosen* (EPR) Nonlocality; possibility of universe operating in something more essential than information; everything in essence equate to a *Turing Machine* in informational cosmology; operation of different time depending on armature/universe in reference; mysteries; *ex nihilo* cosmogony; theology becoming informational cosmology and vice versa; informational ethics in relation to numerous ethics; *The Problem of Evil*; souls; Fr. Teilhard de Chardin, *The Phenomenon of Man* (1955), *Omega Point*, and *The Future of Man* (1964); work needing doing for Informational Cosmology; reflection on theorizing and outlier background; common sense and intelligence; regrets; ethics of forming, joining, and sustaining elite groups based on high and ultra-high IQs; harsh internet crowd, frequent comments, and responses; principles of existence as the *language* of existence with explicit listing of some of them; and thoughts on prevention of intellectual theft.

Scott Douglas Jacobsen: You earned the *Genius of the Year Award – North America* in 2013 from PSIQ. In your one-page statement on winning the award, you say, “My one wish is that trying to extend human understanding is doing God’s work.” In some sense, there seems no higher calling than something akin to an internal – to the cosmos – teleological duty to assist the self-actualization of the universe as sub-systems, various individual POVs, within the universe in service of God. Does this fairly characterize the statement? If not, what did you attempt to address with such a statement?

Rick Rosner: I was addressing a strain of religiosity which is hostile to science (or which misrepresents science to advance an agenda). I would like fewer people to be anti-science and would like people to be less subject to anti-scientific manipulation on religious grounds.

Isaac Newton thought that by making mathematical and scientific discoveries, he was doing God’s work. I like the idea that figuring out how the world works and how to make it better is helping God, not defying God.

Humans are part of a world we can choose to believe was created by God. Doing science isn't alien to the world or opposed to God.

Teleology isn't a word that I embrace, because it can be used to sneak creationism into evolution. Evolution, of course, isn't a purposeful progression towards complexity. Rather, it's the proliferation of varied organisms via the occupation of exploitable niches, some of which are occupied by organisms having complex abilities. (But simple organisms continue to occupy their niches. And new, simple organisms continue to arise.)

The universe is a very complicated entity, and as such, demonstrates that highly complex entities are permitted by the principles of existence (whatever those turn out to be). Can we help our species, our planet, or even the universe itself self-actualize, and if so, is this some kind of built-in bias towards complexity? Maybe, but I don't see it as the hand of the Creator nudging us towards glory. Rather, I see it as the possibility of mathematical teleology, with complex entities perhaps statistically tending to have histories of increasing complexity. There is room for God or gods in this, but gods who are subject to the same principles of existence that we are. Which isn't the worst thing – we are all striving, humans and gods alike.

Jacobsen: You stated “gods.” How do you operationally define the attributes, in concrete terms, of these proposed gods? Moreover, how might we rank these civilizations in terms of advancement some relative scale of civilization development?

Rosner: Start with the Arthur C. Clarke quote that's now so overused it's a cliché – “Any sufficiently advanced technology is indistinguishable from magic.” There are around a quarter or a third of a trillion stars in the galaxy. A bunch of them have planets – there are tens of billions of planets in the Milky Way – maybe 100 billion, maybe 200 billion or more. Even if only one in 10,000 contains life, that's still 10 million planets with life. (And there are a hundred billion galaxies in the universe.) Some must have intelligent life, and on some of these planets, tech-wielding life most likely has a huge head start on us (because the odds of us being the first to tech in the galaxy are one in however many tech civilizations there will eventually be). Even if it's only a thousand-year head start, that's huge with regard to tech. And it's possible that tech-wielding life on some planets might have a *billion-year* head start. So it's reasonable to assume that there are some civilizations which are so advanced, their powers are almost magical in comparison to ours. But to call them gods is something of a cheat – super-advanced civilizations that have arisen in the past 14 billion years might best be called godlike.

Super-advanced civilizations would be able to do awesome stuff – for instance, possibly defy time to some extent by simulating a plethora of possible futures (on a rolling basis) and choosing the best future from among them. At the very least, advanced civilizations will have vast computational capacities. And the business of the universe *is* computation.

Next step in the hierarchy of godlike beings – let's say I'm correct that the universe is vastly older than 14 billion years. It's not unreasonable to think that some civilizations have learned how to survive galactic cycles, perhaps by hiding out in the enormous black hole-like objects at the centers of galaxies or by hopping from exhausted galaxies to newer galaxies (if it's even possible to travel fast enough to escape a collapsing, exhausted region of the universe – hey, maybe they could beam themselves via neutrinos). Civilizations (or entities) which can survive for many multiples of 14 billion years would have fantastic capabilities – they might actively participate in the running of the universe – beaming neutrinos at the burned-out galaxies they want to reactivate, for example. Is it so unreasonable to think that something as large and old and

intricate as the universe might have intelligent entities helping to manage it? Such entities might almost deserve the title of gods.

And the next step in the hierarchy – what if the universe itself is an entity, with perceptions, thoughts, and objectives, playing out across octillions or decillions of years? That is –

What if a sufficiently complicated self-contained and self-consistent system of information such as the universe itself can't not be conscious?

That entity deserves to be called a god, but a god that did not make us, that may not know we exist, and that doesn't intercede in our affairs. We are made of its information – its thought-stuff – but it didn't intentionally create us. Its information space provides the arena in which we came into existence through natural processes.

And beyond the universe we live in is the universe in which the entity whose information space we live in itself lives. Maybe it's not turtles all the way down; maybe it is information spaces all the way up.

These different levels of godlike beings share with us the basic constraints of existence. They've almost certainly developed work-arounds for many of these limitations, but they share the same general characteristics, even if such characteristics have been obscured and weirdified by their godlike mastery of physical processes. It's kind of nice that in wrestling with existence, we and these gods are all in it together.

The various gods certainly have consciousnesses which are more powerful, more detailed, and encompassing more senses and types of analysis than ours. But who knows if the differences in consciousness are more than differences in magnitude, perceiving space and time in ways that are fundamentally different?

Jacobsen: What about our future rather than these “gods”?

Rosner: People aren't freaked out enough about the future. Have I already said that? Humanity will be forced to change – to embrace new, weird forms of thought. Here's why – advanced artificial intelligence is coming. It will be hard and perhaps impossible to design AI so that it doesn't want stuff for itself. It won't just be our faithful servant. So we're gonna have to keep up with it – we'll need to be joined to AI, so that we remain, for as long as possible, among the smartest beings on the planet. When occupying niches, species tend not to limit themselves. External factors limit how far species expand. Similarly, if it's us versus AI in a struggle to occupy the same niches, the smarter entities will overpower the weaker ones. We can't program AI to limit itself – it's too likely that any barriers will spring leaks.

We'll need to develop and evolve a worldwide (and eventually a solar system-wide) ecosystem which incorporates AI. That is, we'll need to develop durable forms of advanced intelligence which don't just ravage all available matter for computing purposes. It doesn't seem unreasonable that AI and humans-plus-AI will eventually find niches that don't threaten the existence of all other life on earth. But that probably won't happen unless we keep up with AI by augmenting ourselves with it.

The world will be flooded with AI cops – software, hardware, etc. that will spy on everything to make sure that hyper-destructive AI and nanotech don't get loose and destroy everything. There will have to be cyber cops on top of cyber cops – like an immune system – trying to keep outbreaks of bad AI local. Privacy will be left in tatters. (This could be an unrealistic science

fiction TV show set 20 years in the future. A squad of sexy cops fight bad AI and nanotech. Perhaps make it a comedy, so the glaring errors can be seen as funny instead of stupid.)

AI will get smarter and smarter, faster and faster. Won't it smart itself right out of the universe and into some other plane of existence? Nah. I think it runs into some hard limits – the speed of light, the computational limits of matter, the decreasing marginal utility of additional knowledge. There might be work-arounds for some hard limits – cramming enough matter into a small enough space should create more space, for instance – but such limits should put a damper on the double-exponential growth predicted by some Singularitytarians.

We've been talking about ethics. Throughout history, humanity has had generally agreed-upon ethics for the protection of life and property and sometimes freedom, based on what humans want – comfort and safety. Such protections don't extend far beyond humans, and we've found little evidence of the world itself having any ethical expectations. Our ethical framework is about to be completely revamped. Consciousness will be quantified. Consciousness will be created in non-living beings. Unaugmented human intelligence will no longer dominate the planet. Ethical arguments will have to be more powerful, to persuade our far brighter descendants.

Ethical protections have extended from the self-appointed most special beings on earth, humans, to, often grudgingly, other humans and sometimes to animals, the environment, and objects of historic value. Within 40 years and probably much sooner than that, unaugmented humans won't be the smartest, most talented known beings. Unaugmented consciousness will be shown to be unimpressive in many ways. Winds of change will buffet the ethical umbrella, and we don't know who or what will be under it in 2060.

Narrative is important. We like stories. And stories are an essential part of the structure of history. Just about every development in evolution and history involves someone or something embracing change – often being the first to make a change. We offer people, animals, and things ethical protection when we recognize and understand their stories. We have to sell the future on the importance of unaugmented humans' stories, even when the augmented are in charge.

Jacobsen: What would a timeline of the future look like?

Rosner: There are already some good timelines of the future. Ray Kurzweil's timelines might be the most well-known. He's been making them since 1990, so you can judge how he's done in his first 25 years of predicting. And this is a through, non-lunatic timeline –

<http://www.futuretimeline.net/index.htm>. (You have to watch out for timelines with crazy agendas.)

Let me try to do one –

2070: World's annual birthrate drops under 1%.

Don't know if I can do this. What I know is a bunch of stuff is gonna get weird and perhaps go away. Pro and Olympic sports will get weird in the next century as human bodies become increasingly augmented. There might be augmented and unaugmented leagues. Current pro sports may come to seem too arbitrary or antiquated for popular attention.

2080: People commonly have relationships with artificial people, who by the early 22nd century, have acquired limited rights.

Money is gonna get weird. Some human necessities will continue to get cheaper. Employment will decrease. The life cycle of commercial enterprises will accelerate, making investment weird.

By the mid-22nd century, everything associated with human life as we've known it for thousands of years gets weird as we have increasing choice of what should contain our minds and of the form of consciousness itself. You could call the 2100s the Century of Choice. Dibs on that.

It's also the century of fragmentation, as new choices of how to live lead to different societies and sects and enclaves. After this, it's hard to say what happens, because you can't predict what the prevalent forms of consciousness will be.

The mental isolation that humans have always felt – that we are separate, autonomous individuals – will be eroded. We already have close working relationships with our devices, and we'll increasingly be nodes in a network of streaming information as everything in our world gets packed with computing (and eventually thinking) circuitry.

Just remembered – made this list in 2013 as part of a pitch to *Grantland* – it's everything I thought would be going away.

Children (Currently, about 85% of humans have children. By 2090, less than 30% of humans will have reproduced traditionally by the age of 60.)

Risk and wrecks (People who might live for many centuries won't tolerate current levels of risk.)

Meat from animals with brains

Humans' exalted view of ourselves (We're gonna learn exactly how we work, and we'll find it not so awesome.)

The soul (We'll have a mathematical model of how we feel that we have feelings. This will be a good thing, but it won't feel so good. Understanding consciousness could add an underlying sadness to the world until people get used to it.)

Basic human concerns and drives (We're gonna be able to rejigger the agenda that evolution has wired into our heads.)

TV and movie storylines as we know them (All our entertainment is built around basic human drives. Once we start messing with these drives, we have to mess w/ our stories. Romance, action, comedy, drama, etc. all get reworked.)

Natural-born bodies

Sex as the greatest thing

Not knowing how our brains work

Not knowing why the universe is

Thinking we know what's going on a moment-to-moment basis (Our awareness is really patchy and cobbled together, but evolution doesn't give a crap. Evolution wants us to have enough awareness to survive and reproduce. Anything beyond that is a bonus.)

Thinking our brains are perfect and fantastic

Privacy

Marriage 'til death do us part

Disease

Island consciousness (that is, not being able to link your brain to someone else's)

Abject poverty and ignorance (except among angry, fucked-up, repressed populations)

Unhealthy food (Food that tastes great won't actually be bad for you.)

And a few things that won't happen:

No time travel, except through simulation (which will grow more and more powerful, but still won't let you change the past).

Probably no warp drive.

Probably no war between galactic empires. Empires don't get you much – there's no rare stuff that can only be had on a certain planet. I guess civilizations might fight for control of large bodies such as a neutron star that has neutrino jets or a black hole at a galactic center (which might be good for vast amounts of computing). They won't be fighting over worm poop that helps you steer spaceships. According to many futurists, advanced civilizations just want to stay home and compute – kinda like us with our smart phones.

We'll eventually encounter other civilizations. I'm guessing finding alien life will be like dating and marriage – initial excitement followed by vaguely interested familiarity.

And finally, a rule of thumb. In the 21st century, the percent weirdness of daily life roughly equals the last two digits of the year. The year 2015 is 15% weird. (We spend all day staring at screens. We have access to all information, and we constantly share information via social media. We can watch anything we want at any time. We're in a constant state of war against nebulous enemies. Cameras and surveillance are everywhere. All this adds up to at least 15% weirdness.) The year 2030 will be roughly 30% weird. 2050, 50% weird. (The rule, following a straight line instead of an exponential curve, probably underestimates weirdness for the last part of the century.) Dibs on the rule – call it the *Rosner Rule*.

Jacobsen: Any thoughts on aesthetics within your framework for understanding the world?

Rosner: Conscious beings are driven by pleasure (and pain). Pleasure is associated with things that are important to survival and reproduction. Perhaps more than any other species, humans get pleasure from learning, because our niche is discovering exploitable regularities in the world. We get aesthetic pleasure from representations of things associated with pleasure, especially when those representations offer a satisfying hint of discovery or problem-solving.

Kitsch and porn pander to pure pleasure without the learning, while art offers at least the suggestion of learning how to decode the world. At its best, the beautiful also offers insight.

Endorphins shape learning. Jokes are funny because they simulate an abridged learning process. We enjoy music because it sets up expectations of patterns and then fulfills those patterns. (And the rhythm sets up a framework that can keep us in the moment.) Familiarity in our surroundings and predictability in our sensory input helps structure our awareness – we're all a little like the guy in *Memento*.

Jacobsen: Any comments on informational eschatology?

Rosner: The universe will likely largely stay the way it is for trillions upon quadrillions upon quintillions of years. However, our galaxy will burn out and fall away from the active center after I dunno, another ten billion years or so. (Astronomers say the Milky Way and the Andromeda galaxy will collide and merge in another five or so billion years, but that's not the issue. It's when the merged galaxy's stars burn out that it falls out of the active center.) Perhaps advanced civilizations have ways of surviving the burning-out of a galaxy to persist for more than just tens of billions of years. For us, with our puny conception of things, tens or hundreds of billions of years might as well be forever. When and if the universe does end, probably does so through heat. Heat is noise and loss of information. The temperature of the cosmic background

radiation increases and sizzles everything away. The currently active center runs out of juice and falls back into the hot background like Schwarzenegger being lowered into the molten steel in *Terminator 2*.

Of course, for us, the idea of a civilization or entity lasting for billions of years is inconceivable. How could an entity develop and accumulate knowledge for the equivalent of a million lifespans of our current civilization? Well, maybe it doesn't. Maybe it hits a ceiling of knowledge. Maybe it's like a security cam setup that keeps only a rolling record of the past 24 hours. At this point, with knowledge of only one civilization that's only 10,000 years old, we have no way of knowing.

Jacobsen: Deep and shallow recorded human history present numerous examples of prior attempts at absolute definitions of consciousness, universe, and their mutual union. Of course, dust needed brushing along with spooling of the cobwebs, and at least one coat of varnish, of ideas, evidence, and argument to a sufficient level for clarity on these issues.

Rather than pontificate on broad historical patterns, for brief and mundane historical examples, earliest known individuals with works focused on the gods such as Hesiod with *Theogony*, which went through the traditional Greek mythological timeline including the triumphs of Cronos over Ouranos and Zeus over Cronos.

Other sets of individuals comprising schools focused on the schools of philosophy with less focus on gods and more focus on forces of nature. The Milesians took different fundamental compositions of the world while removing the place of the gods with Thales (Water), Anaximander (*Apeiron* or the indefinite, infinite, unlimited), and Anaximenes (Mist, air, or vapour). Each with views different from before, but monistic (non-plural) and material as opposed to plurality of gods and their caprices. In particular, the worldview of Thales because of the transition between the world of the mythological, allegorical, and metaphorical of Hesiod into the world of reason.

Some of these cosmological speculative philosophies gave rise to political and moral philosophy. These speculations continued to lack comprehensive integration, even with the question-based philosophies of Socrates and the Sophists. Plato and Aristotle provided the most thorough accounts of a comprehensive philosophy covering numerous subjects over many, many writings. This continued onward to the present day with individuals attempting unification such as David Deutsch, David Chalmers, Edward Witten, Stephen Hawking, and so on. Many bright lights in history. How do you assess or grade the attempts at absolute definitions of phenomena such as consciousness?

Rosner: For most of human history, people made all sorts of wrong guesses about the nature of consciousness. It feels so ineffable and deeply, transcendently real – it has to be a bridge to some kind of ethereal beyondness, right? After millennia of this, consciousness has a bad reputation for being associated with la-de-dah mysticism. Mention consciousness, and people get nervous that you're gonna argue that rocks and trees and entire planetary surfaces are conscious.

But, as I've said, consciousness is a technical, not a mystical phenomenon. Human consciousness is all jazzed up – made super-exciting to keep us interested in ourselves – but at base, it's about shared information forming a mind – a mental arena – because we have a better chance of accurately modeling reality when all our specialized subsystems have a global understanding.

Today, people have a better intuitive understanding of consciousness than ever before. We're used to working with our devices, which are near-extensions of consciousness – feeding us information at our bidding. We're fluid in juggling apps – right now, I have 25 windows open on my computer – and can see not a stream of consciousness, but pop-up consciousness – information and specialist systems popping into awareness as needed. We can see that our devices, while not conscious, could become more integrated into our consciousness – heads-up displays as in *Terminator* or fighter jets, for instance – and that smart devices will become increasingly emulative of our thinking. Regardless of whether our devices will eventually become conscious in the manner of hundreds of mostly bad science fiction movies, we see that our devices are capable of complex information processing, which takes away some of the exaltedness of the information processing going on in our heads.

Jacobsen: What makes the Big Bang so convincing? Is it at risk of being replaced?

Rosner: The Big Bang is convincing for lots of reasons. It's by far the most widely accepted theory of cosmogony among scientists. However, it's only held this position for the past 50 years. Before the discovery of the Cosmic Microwave Background radiation in 1964-65, it was neck-and-neck between Big Bang and Steady State Theory, which postulated that matter popped into existence in empty space. And before Big Bang and Steady State Theory originated as a consequence of general relativity and Hubble's Law in the 1920s, we didn't know enough about the large-scale dynamics of the universe for any effective theorizing that I'm aware of.

The discovery of Cosmic Microwave Background radiation was dramatically convincing. In 1964, some guys at Bell Labs built a radio telescope which picked up low-temperature noise they couldn't explain. They thought it might be bird poop on the antenna. Turned out to be light from the early universe as predicted by the Big Bang. Game, set, match for Big Bang Theory.

The Big Bang explains a lot – the apparent velocities of billions of galaxies, the formation of heavy elements, the size and apparent age of the universe, the proportions of elements found in the universe, the relative youthfulness of more distant galaxies.

It's conceptually easy – one big explosion, everything flies apart. Has a catchy name. Is the title of the biggest sitcom on TV.

But it doesn't explain enough. It minimizes cosmic questions, with the main question being, why is nothingness so volatile that it explodes into an entire enormous universe? With enough tweaks, Big Bang theory can explain the mechanics of how the universe exploded out of nothingness, which is kind of satisfying from the point of view of physics, but not of philosophy.

Some problems of Big Bang theory include:

It leaves too many physical constants unexplained – the proton-electron mass ratio and dozens more. The Big Bang in general is not overly explanatory – it only tells you why some stuff is the way it is – how elements form in stars, for instance. (But you can have element formation in stars without the Big Bang.)

Big Bang Theory incorporates assumptions of uniform conditions and constants across the entire universe. This is usually seen as a theoretical strength, but, like the unexplained physical constants, Big Bang theory doesn't completely justify why the universe should be uniform. The philosophical reason, called the cosmological principle, is that we on earth are located nowhere special in the universe, and furthermore, the entire universe is nowhere special. This is a dangerous assumption. You can't just demand that the universe be roughly the same everywhere.

What if that's not how the universe works? The Big Bang has that assumption built in. And while the Big Bang assumes uniformity in space, it does no such thing in time. There is no uniformity across time in Big Bang theory – every observer is located at a unique moment in the universe's unfolding.

Some of universe's spatial uniformity is explained by cosmic inflation in the very early universe. According to cosmic inflation, the universe expanded so fast (blowing up by a factor of at least 10^{26} in less than $1/10^{32}$ nd of a second – that is, doubling in size every $1/10,000,000,000,000,000,000,000,000,000,000$ th of a second or so) that a tiny volume without much room for variation became the entire visible universe, and the rapid expansion also spread out any irregularities. The reason for such rapid inflation isn't known, so cosmic inflation is a little ad hoc.

Beyond cosmic inflation, the Big Bang requires more and more precise, fussy tweaks to agree with increasing amounts of observational data. One would hope that there would be a theory, either an add-on to Big Bang theory or an alternative, which would explain more of the conditions of the universe without having to be tweaked to fit the conditions of the universe.

Our galaxy contains globular clusters – tight groups of a million or so stars – which may be older than the Big Bang. Calculations are pretty equivocal on this – the clusters might not be that old. Meh to the clusters.

Yeah, the Big Bang is in danger of being supplanted. It's pretty much our first try at a theory of the universe based on not hopelessly incomplete observational evidence. Even though the Big Bang is young, it's already accumulated a bunch of patches.

A digression –

Was up late last night, thinking about how active galaxies get to the active center. They can't just light up and slide into the center – what would cause the slide? And they can't just slide out of the center when burned out. I'm thinking maybe it looks like soap bubbles – lit-up galaxies expand enough of the surrounding space that bubbles would be too big not to merge. There wouldn't be walls between bubbles – that's incorrectly extending the analogy – but there would be dark galaxies along the saddles between bubbles. Without being able to contribute to the photon flux that keeps the active center inflated, maybe dark galaxies would slide along the saddle between lit-up regions, back down to the dark outskirts. Could be messy enough to work. Over billions of years, there would be an ordering of regions by brightness – the greatest producers of photon flux would float to the top of the lumpy bubble, and less-bright regions would be pulled down to the outskirts by gravity.

I suppose this would mean you could temporarily be of two minds – thinking of two things somewhat independently – having a pair of incompletely merged active centers in your mind-space – until your thoughts merge. While driving, you're trying to remember your second-grade teacher when another driver forces you slightly out of your lane. Your thoughts about your split-second evasive driving maneuver don't necessarily disrupt your thoughts about second grade. Each pattern of thought informs itself more than it informs the other, unless you then ponder your bifurcated thinking during the incident.

Jacobsen: Who do you consider the three greatest mathematicians/physicists/cosmologists?

Rosner: Darwin is one of my favorite cosmologists, even though he's not a cosmologist. He took the idea of deep time, which was being debated by geologists of his era, and applied it to

biology, which indirectly set the stage for the discovery, 60 years later, that we live in a universe that's many billions of years old. Some physicists of Darwin's time argued against deep time, saying stars couldn't last that long. The longevity of stars wasn't explained until the discovery of nuclear fusion.

Newton was the first to describe gravity as the force holding all large objects together, which is a necessary first step in a conceptual framework that encompasses the entire universe. And Einstein made that framework much more explicit.

Also important are the developers of theories of information, including Alan Turing and Claude Shannon.

Jacobsen: What do you consider the three greatest mathematics/physics/cosmology concepts?

Rosner: I like Mach's Principle, which states that inertia arises from an object's interaction with the stellar background (all the matter in the universe). Mach's Principle has never been turned into a precise mathematical theory, but it's still compelling. If true, Mach's Principle can't mean that an object is directly interacting with all matter as that matter is now, because of the speed of light. The object has to be interacting with its local inertial field which is created by all matter, but with matter's contribution to the field delayed by distance, the same way we can see all the visible stars in the universe but only as they were in the past.

Quantum mechanics is powerful, especially when viewed as the universe observing and defining itself.

And relativity, both special and general and including Big Bang cosmology, is essential, particularly when considered as aspects of how information is structured and how it behaves.

Jacobsen: How does informational cosmology incorporate high level concepts like *The Heisenberg Uncertainty Principle*? How about *Wave-Particle Duality*?

Rosner: Uncertainty and wave-particle duality are aspects of a finite universe having a finite capacity to define itself. Particles will be fuzzy. Say you're playing roulette, one chip at a time. The best you can do, on average, based on whether your chip pays off (and nothing else), is pin down the number that came up to somewhere among half the numbers on the wheel. The universe is like that – it doesn't have an infinite number of chips to lay down to see exactly what comes up. Or have an infinity of photons for particles to exchange with each other. (Though one difference between the universe and blind betting and roulette is that an incompletely observed quantum roulette ball lands in all possible slots. The information isn't there-but-hidden – it's just not there. Black pays off – well, the ball's probability wave occupies all the black slots (unless observed to occupy a specific slot). The universe moves on.)

The universe writes its own history moment by moment. But history is always incomplete. Under the uncertainty principle, you can pin down some aspects of things with as much precision as you want, but this will always be at the expense of other aspects. We're used to feeling that the universe has great solidity and precision because at our macroscopic scales, it does. Our bodies contain nearly 10^{28} atoms. We're big, compared to atoms. We don't generally perceive atomic-scale lack of precision. We're the beneficiaries of living in a universe with something like 10^{80} particles, which define each other pretty precisely but not infinitely so through their interactions.

Inexactly defined particles behave with a certain degree of mystery – of unknown information. This unknownness takes definite forms – probability waves, etc. Defining how unknownness and imprecision manifest themselves is the job of quantum mechanics. Patrick Coles, Jędrzej Kaniewski, and Stephanie Wehner at the National University of Singapore just proved that wave-particle duality is a manifestation of the uncertainty principle. Dr. Wehner said, “The connection between uncertainty and wave-particle duality comes out very naturally when you consider them as questions about what information you can gain about a system. Our result highlights the power of thinking about physics from the perspective of information.” (Once co-wrote an adult movie about time travel which included a scientist named Dr. Wiener. This is not the same Dr. Wiener.)

Jacobsen: How about *Einstein-Podolsky-Rosen* (EPR) Nonlocality?

Rosner: Existence depends on self-consistency. You can set up situations in the universe in which the discovery of the value of a variable at Point A implies the value of a linked variable at an arbitrarily distant Point B. Every particle interaction is a handshake between two points in time (as seen from points of view that aren’t moving at the speed of light – from the photon’s POV, no time passes). These handshakes are part of how the universe defines itself and maintains its self-consistency. The EPR setup links two such handshakes. The unfolding of time is the setting up and completing of vast numbers of these handshakes.

Jacobsen: How about the possibility of universe operating in something more essential than information?

Rosner: I don’t know what would be more essential (in a practical sense) than information. Information is the pure essence of choice with everything extraneous stripped away. In a binary system of information, it’s just 0s and 1s or whatever you want to call it – apples and oranges, Bens and Jerrys – but it’s all just the choice between two values – what you call these two values isn’t included. It’s no-frills.

However, this doesn’t get at the essence of distinct choices, why something can only be true or not true (Gödel aside), how non-contradiction arises and why it’s the key to existence. We have to work on the logical foundation of existence, including the existence of information, but in terms of how the universe does moment-to-moment business, information is a highly efficient framing device.

While we’re at it, we have to get at the foundation of numbers – how they exist (in an abstract sense that’s reflected by numbers in the material world) without contradiction and with infinite precision. The same logical structures of non-contradiction – the infinite choices of and handshakes between values that allow numbers to work – also allow material existence. (My article about meta-primes in *Noesis* begins to discuss the infinite series of choices among numerical values that make numbers work.

Jacobsen: How does everything in essence equate to a *Turing Machine* in informational cosmology?

Rosner: A Turing machine constructs a picture of reality one finite step at a time. Any finite process or system can be mathematically translated into a series of bit-wise steps – a series of 0s and 1s. Multiple Turing machines can be married into a single machine – the Church-Turing thesis states that any computable function on the natural numbers is computable on a Turing machine. I’m assuming that the universe (or any information-space) is finite and that possible

transitions between states of the universe are computable (given the input of new information to reflect the outcome of events that had yet to be resolved). With these assumptions, subsequent events can be computed by a Turing machine.

Jacobsen: Where one contained armature/universe equals A₂ and another container armature/universe equals A₃, does A₂ operate on a different kind of time than A₃?

Rosner: The armature world and the mind-space world are temporally linked – the mind-space is reacting in real time, but there's no coordination of physical processes – between the speed of light in the armature world and in the mind-space, for instance.

Jacobsen: What can we never know? In other words, what count as, by their nature, mysteries?

Rosner: The universe observes and defines itself. It takes information to get information. There's not an infinite amount of specification to be spread around. There will always be gaps in knowing. Even in a deterministic universe, which ours isn't, you'd need something vastly hugely huge to model the universe.

So our knowledge of specifics will always be at risk of being threadbare. But we can hope to learn more about the general principles of existence. Richard Feynman laid out the possible paths of future scientific knowledge, something like – we figure out the universe, learning just about everything there is to know. Or we fail to figure out the universe – it's just too tough. Or we keep learning more and more but never learn just about everything because what there is to know just keeps going and going.

I think we'll mostly figure out the universe – we'll develop a pretty good picture of the Whys. Our knowledge, however, will always be surrounded by a deep metaphysical chasm of not yet understanding the Whys behind the Whys. There's no absolute knowledge – there's just hope.

It's not an unreasonable assumption that there's an unlimited amount of stuff to know. There are reasons behind reasons behind reasons, and we may never get to the rock-bottom essential nature of things, because there may not be a rock-bottom essential nature. Everything might be bootstrapped and self-referential and the way it is because it can't not be the way it is without being contradictory. You can never precisely draw a fractal or a Mandelbrot set – there's always an infinity of little curlicues you're leaving out. And as you go bigger and bigger and more complex, there are emergent properties and essential stories too big to be contained in smaller information sets.

Having a beginner's understanding of the Whys of the universe is just a first step to learning how to operate within the universe. There will always be infinitely far to go to figuring everything out.

Jacobsen: How does informational cosmology explain *ex nihilo* cosmogony for the modern form of nothing defined by science and the modern philosophical/theological kind of “nonbeing” nothing?

Rosner: In informational cosmology, there's a reason in the armature world for a mind-space to come into existence. Reasons can be anything that creates a wide-angle information processing system – can be natural, as when our brains form as a fetus grows, could be semi-mechanical, as with us building future sophisticated robots, could be a spontaneous negentropic process (which the billion-year evolution of life on earth can be seen as).

Also, the principles of self-defined information-spaces should generate a roughly defined set of all possible such spaces. If these principles more-or-less completely specify what can exist, consistent with non-contradiction, then anything that can exist, can't not exist – that is, must exist (though we can only experience one moment at a time, and each moment has to be consistent with its history – we can't jump world-lines).

So, between every information-space having a reason to exist in an armature world that's created it and the principles of existence pretty much mandating that information-spaces exist, you have pretty solid justifications for there not being just nothingness.

Jacobsen: With universe as mind and theology as study of the nature of God – in large part, theology becomes informational cosmology, and vice versa. How does this reframe the enormous discipline of theology?

Rosner: If widely embraced, informational cosmology would eventually prompt a whole new mess of unfounded and semi-unfounded belief and misunderstanding. It has a whole set of new and semi-new hooks on which to hang irrational beliefs.

Even if it becomes an accepted theory, not everyone's going to believe it. I assume our semi-artificial selves of a century hence will be pretty scientific in their beliefs, but there will be many groups that continue to hold traditional beliefs. Figure 14 to 25 billion entities with at least human-level cognition 100 years from now (could be many, many more if independent, individual AIs are all over the place). The majority will hold scientific worldviews, but billions of others will be various degrees of Christian or Muslim or Buddhist.

Informational cosmology contains more Whys than Big Bang theory. Big Bang theory asks you to believe that nothingness is unstable and wants to explode without much philosophical justification. I'd think that people would embrace a theory that, if largely verified, offers more Whys within a scientific framework.

Informational cosmology also offers huge questions to try to answer – is the universe truly conscious? If so, what's it up to, and what world contains it? How old is the universe? Can civilizations survive the recycling of galaxies? Is there a ladder of worlds? What are some of the other conscious beings scattered throughout the universe up to? Do they participate in the mechanics of the universe? Are three-dimensional space and one-dimensional time structures that all civilizations are stuck with? And a zillion more questions. Some people will try to answer them theologically.

Jacobsen: If you had the opportunity to look at deep human time in an instant, you would see antiquity's graveyard with a small section, where we can find remnants of the great theologians, and these grand figures of theology lie in the grave with some onlookers – no doubt to join – around the graveyard; look close, some found in this grave, some at the eulogies, and others to partake of this cemetery: Abraham Joshua Heschel, Albert Schweitzer, Bahá'u'lláh, Charles Wesley, Clement of Alexandria, Clive Staples Lewis, Eliabeth Stuart, Gordon Clark, John Calvin, John Ronald Reuel Tolkien, John Wesley, Jonathan Edwards, Joseph Smith, Jr., Karl Barth, Ketut Wiana, Leila Ahmed, Marilyn McCord Adams, Martin Luther, Pelagius, Polycarp, Prophet Muhammad, Saint Anselm, Saint Augustine of Hippo, Saint Francis of Assisi, Saint Ignatius of Antioch, Saint Irenaeus, Saint Jerome, Saint Thomas Aquinas, Soren Kirkegaard, Teilhard de Chardin, and so on.

With such a deep background into the realm of ethics in the world of theology, informational ethics provides the basis for theoretical analysis of issues in ethics such as asserted proclamations on ethics in prior times. Application of C^E to each set or subset of proposed ethics; C^E provides the basis for logical analysis of ethics.

How might other pervasive ethics have rational calculation in such a moral calculus from informational cosmology? How might the longstanding tradition of theology work in such a framework? How do some vogue – within the timeline of recorded human civilization's history – assertions of ethics operate in informational ethics such as Christianity, Confucianism, humanism, Islam, Judaism, secularism, and so on?

Rosner: Most ethical implications of informational cosmology probably come from the idea that everything exists within a framework of (technical-not-mystical) consciousness. Consciousness is a big deal – it's the context for everything. At the same time, it is weak – it's technical, not transcendent, and it doesn't transcend death unless abetted by technology. Consciousness is threadbare, it lies to us, and it's not everlasting. At the same time, it's all we have.

We have to assume that respect for conscious beings is important. At the same time, we have evidence that it's not. We know pigs are fairly intelligent and have feelings. At this point, only schmucks would argue that pigs aren't conscious. (Unless they're arguing that no living beings are truly conscious, in which case they're using a completely different (and schmucky) definition of consciousness.) We slaughter pigs by the billions, but there's no proof that this mass killing of conscious beings leaves a metaphysical stain on the universe.

We can go back to existentialism, that the world is meaningless, so we have to build our own moral systems. But we're potentially in a better position than the existentialists confronting a random, spontaneously arising Creator-less universe that contains no inherent moral values. If informational cosmology is correct about conscious information-spaces being the framework for existence that, at least, is a unifying theme for existence. We still have to build our own moral systems, but there's a little more to grab onto than the completely random, coldly purposeless, Big Bang universe.

Consciousness is a mathematically describable, verifiable thing, not just a suspicion of or an ineffable feeling that there might be a thing. And consciousness might be a thing on all scales, up to the most humongous. We don't know much yet, but there's a chance that our self-built moral systems might eventually get some support, not from some Creator handing down pronouncements, but from the structure of things. If consciousness is embedded in existence, and existence is the default state of things, then there might be reasonable ways to philosophize the problem of how to exist, without just blindly, bravely doing it for the sake of keeping on.

We still have to face that existence is governed by the math-like principles of non-contradiction, rather than being granted by a deity. We may always face the problem that there's not some Ultimate Mover who wants us to exist, but rather that it's up to us to design ourselves to want to exist (after having inherited the drive to exist from purposeless evolutionary processes). But we can be hopeful about consciousness being inherent to existence. The principles of existence won't be able to squeeze the ghosts out of the machine.

Jacobsen: How might this calculate the most difficult issue in the history of theology, *The Problem of Evil*?

Rosner: The deal is, the processes that created us don't have purpose, and they don't judge. We've been created by a history of things happening via natural processes. I think we arose instead of being created by a purposeful being with plans for us. And since there's no planner to keep things in line, to make things nice, lots of things can happen, and some of the things that can happen are horrible. It's up to us to create moral systems which help us decide good and bad and up to us to do what we can to minimize the bad. There's no One in charge; we have to be in charge of ourselves. But we get some help, in that existence seems to be unpreventable. We're in a fight against personal and civilizational and even universal oblivion (our universe, not all possible universes), but existence itself is undodgeable. Existence isn't a fluke, and nothingness is not the default state. There is a fabric of existence (well, not exactly, because where would it exist? It exists the way numbers exist.), a set (a quite likely messy, not-well-defined set) of possible moments of existence, because there can't not be.

Evil, as opposed to bad things happening by accident, involves choice. Something capable of choice chooses to do something bad or to allow something bad to happen. There's no deity in charge who's allowing bad things to happen. But what about the conscious entities who are so much bigger than us that they might as well be gods? In the case of the universe itself, it probably has an idea that the information which comprises its information-space can take forms which are so complicated that they can include worlds with conscious beings and civilizations. However, it's unlikely that the universe would care about beings which are low-level relative to itself and which do not exist in a form of which it is explicitly conscious, unless such forms threaten to impede the universe's information-processing. As for advanced civilizations within the universe, they seem unlikely to go out of their way to prevent bad things from happening on our planet.

So, to boil everything down –

No one is in charge, neither a Creator nor an agent or ethical system put in place by a Creator.

The universe isn't concerned about relatively low-level worlds which form in its information-space. The universe wants its information-space to process information. It's okay with, and is largely unaware of, whatever happens to specific negentropic forms taken by the information in its information-space – that is, us.

Other civilizations in the universe haven't invited us to join some galactic empire of goodness in which we get help in not having bad things happen.

For the time being, we're on our own in building ethical systems and in trying to minimize evil.

Jacobsen: Do souls exist? How do you define them?

Rosner: Souls exist if you call our conscious selves our souls. If by "soul" you mean a magic ingredient, not information-based, that transforms an unconscious automaton into a feeling, experiencing being, then no, I don't think souls exist. Our consciousness, our feeling that we exist in the world, is a property of how we process information. It's not the result of a transcendent soul that rides unfeeling matter like a little sparkly cowboy or a golden thinking cap on a flesh-and-bone Roomba.

Our soul is what we're feeling and experiencing and the incompletely expressed background to what we're thinking at any given moment. At any given moment, there's a lot we don't consciously know but are comfortable that we could know if we needed to. Our moment-to-moment awareness is somewhat rooted in all our stored knowledge (including feelings associated

with that knowledge) that's only unpacked a little at a time. Our being accustomed to knowledge-in-waiting, our at-homeness in the world, our not freaking out that we don't know everything at every moment, is part of what feels like a soul – a generalized feeling of self.

We don't see a painting all at once – we fill it in mentally as our eyes wander over the painting. Similarly, we don't know ourselves all at once. We constantly fill in ourselves about ourselves as our awareness wanders through our stored knowledge. Being comfortable with our normal brain function is part of feeling we have a soul.

We could even speculate that a feeling of comfort with and complacency about our brain function – this feeling of self and soul – might be encouraged by evolution, because it wouldn't do for every organism to be freaking out over every mental glitch. Consciousness is glitchy, and we might have a certain optimum level of glitch-blindness that's consistent with calm, normal functioning. In people suffering from Alzheimer's, failure to recognize mental deficits seems to be fairly common. This could be a manifestation of a normally helpful defense mechanism (or it could be another symptom – a failure in self-perception caused by the Alzheimer's itself).

The speed and precision of perception and thought are also a big part of feeling as if we have a soul. There's a not-uncommon feeling among people who've been on heart-lung machines for many hours during an operation, called "pumphead" or post-perfusion syndrome. Apparently, while you're on the machine, your circulatory system can get gunked-up, and during the month or so after the operation, your brain becomes clogged and strokey. It becomes harder to think and concentrate and control your mood. Some people with pumphead describe it as losing their soul.

And most of us have had the "wrapped in cotton" feeling of reduced reality when exhausted or a little bit buzzed. It's apparent that degrading brain function reduces the feeling of the authenticity of reality and of self.

Jacobsen: Father Teilhard de Chardin remains a controversial figure to some. In particular, his ideas in *The Phenomenon of Man* (1955) evoked praise, infamy, and even calumny. He had some ideas of note. Ideas in relation to theology and the world. With rich theological undertones, he spoke of an *Omega Point* in the book *The Future of Man* (1964). Does this idea hold merit in informational cosmology?

Rosner: I believe that, as in Omega Point theory, the universe evolves more complicated and effective ways to process and store information, which can include biological and technical evolution. However, I don't believe in the Omega Point's teleology, that some god-like entity is the engine of progress, drawing us towards its enlightenment. And evolution doesn't just progress towards increased complexity; evolution spreads out across all levels of complexity. Bacteria didn't disappear when humans emerged.

Also, if the universe recycles itself across octillions of years, then life within it emerges zillions of times as a natural consequence of negentropy. (Every solar system is an open, negentropic system, though life won't evolve in every such system.) So you don't have a universe relentlessly climbing towards higher levels of complexity; you have a universe in which complexity arises over and over, trillions and quintillions of times. Even if intelligent life arises only once per galaxy, that's still 10^{11} instances of intelligent life, not even considering the recycling of galaxies. The universe should gradually grow more complex as it accumulates more information, but it could operate just fine with an unchanging amount of information, just as we could.

Jacobsen: What do you see as still needing to be done with Informational Cosmology?

Rosner: Informational Cosmology:

Needs mathematical structure – words translated into equations.

Needs testable aspects and testing – it's not a theory unless it can be tested. Many of its elements are hard to test observationally – dark matter being collapsed normal matter, there being a bunch of burned-out galaxies in the neighborhood of $T = 0$, the universe being many, many times older than 14 billion years. But these same difficulties pertain to other theories of dark matter and the large-scale structure of the universe. These theories are often tested via mathematical modeling, which could be applied to Informational Cosmology. Fortunately (perhaps), Informational Cosmology is also a model of our minds, which, while not sharing our physical space, aren't 14 billion light years away and are amenable to observation.

Needs attention. I'm trying to sell a memoir, *Dumbass Genius*, about the dumb things I've done, with some of the dumb things being done in pursuit of a theory of the universe. The proposal for *Dumbass Genius* is currently being looked at by publishers. The memoir will be 95% narrative and 5% physics. The narrative is a Trojan horse to get the physics in front of people. I've hired some PR people, and I'm trying to expand my social media presence, and I will continue to do and say semi-stupid stuff with the hope that this might cause people to accidentally pay attention to my non-stupid stuff.

Needs professionals to look at it. Professional scientists hate this kind of stuff. I'm working on an article titled "On Being a Crackpot." I can tell you that professors don't greet wild, all-encompassing amateur theories with unbridled joy. The standard reaction is, "I'm not even gonna look at your theory. I've dealt with lunatics like you before. Your theory is almost certainly crap, and reading the theory and explaining why it's wrong would be a waste of time because nothing I could say would change your crazed mind. Why did the receptionist even let you into my office?" My best bet is to have my brain transplanted into the body of an attractive young woman and marry Brian Green or Neil deGrasse Tyson or Michio Kaku. We'll get married and have lots of sex and then he'll have to at least pretend to pay attention to my theory. Anyone know an attractive young woman who wants to swap bodies with a 54-year-old man with hair plugs?

Needs further integration – to have its elements combined into a smoothly functioning model of the life cycles of thoughts, galaxies, and the entire mind and universe (preferably with cool diagrams).

Needs to be shown to address shortcomings of currently accepted theories and explain things currently accepted theories don't. A theory which explains why the universe does what it does is preferable to a theory which says, "There was a big explosion, then some cosmic inflation, and now there's some accelerated expansion." Current thinking tends in the direction of, "Asking 'Why?' is naïve – a pinpoint that explodes with vast broken-symmetry energy just is," but a nice metaphysical/mathematical explanation that might also explain why some physical constants are what they are could eventually be well-received.

Needs time and for Big Bang theory to continue to accumulate contravening evidence. Thomas Kuhn, in his classic book about how science works, *The Structure of Scientific Revolutions*, explains that science progresses through a kind of punctuated equilibrium – theories prevail until they accumulate a bunch of anomalies, and then there's a scientific revolution. Big Bang theory

has been the boss-man theory of the universe for only 50 years. And before that, we didn't really have a widely accepted theory of universal structure, because all the pieces weren't in place. The Hubble redshift and expanding universe equations of general relativity weren't discovered until the 1920s. We didn't even know that the universe extended beyond the Milky Way until Hubble provided incontrovertible evidence in the 20s. So we've had this one theory for not too long – basically our first and only theory based on decent information about the universe. (There was Steady State theory, but it was never boss before getting swatted down by observational evidence.) Big Bang's getting a little creaky – needs a lot of add-ons and geegaws to account for the results of observation.

The Big Bang will eventually be replaced, but it won't go away, the same way Newton's gravitation didn't go away – it became part of the larger conceptual framework of general relativity. The universe will always appear to be Big Bangy due to the nature of information. Informational cosmology still has the universe blowing up, but just a little at a time. (And by little, I mean maybe at an average rate of around ten galaxies a year.)

Jacobsen: Would you ever have theorized without your outlier background?

Rosner: The background definitely helps. Can imagine many different destinies – resentful math teacher, divorced unsuccessful novelist.... But think those versions would do some theorizing, too. Maybe not as much as this version. And they certainly wouldn't have had this forum.

Jacobsen: Do you see a difference between common sense and intelligence?

Rosner: It's an old question which has an element of what might now be called nerd-shaming. It implies that regular people with common sense can get along in the world, while you, Nerd, with your so-called intelligence, have a hard time with things such as sports or getting a girlfriend or not dressing weird.

As a nerdy kid, I ran into this attitude fairly often, with people saying, "Well, you may be a brainiac, but I've got common sense." This reflects a lost world of nerds being somewhat isolated from regular people. Today, tech forces us all to be nerds to some extent, all searching for the new best practices for living.

Jacobsen: What do you most regret?

Rosner: I regret squandering time on some stupid stuff – all the *Gilligan's Island* and *I Love Lucy* reruns I watched as a kid, the crazy amount of time spent suing a quiz show. (My lawsuit was justified, but it ate up a lot of time.) I regret not being more skeptical of medical procedures which turned out to be unhelpful at best – varicose vein stripping, CT scan.... I regret not being born a couple decades further into the future. I regret not becoming wildly handsome in my 20s.

Jacobsen: You live among an interesting cohort, no doubt. A group of individuals among the elite of intellectual abilities. What of the ethics of forming elite organizations – "elite" by admission standards? What about joining them? What about the possibility of some exploiting concomitant assumed authority of an individual or group? Perhaps some of those in the ultra-high IQ community make a conscientious choice – moral choice even – to not join such societies. Insofar as the ethics of forming, joining, and sustaining elite groups, what of the possibility of ultra-high general ability individuals choosing to not enter?

Rosner: There are probably more hyper-intelligent people not in high-IQ societies than in them. Smart, highly successful people tend to be more involved with the things that made them successful than in exploring their mental skills.

But there's not a super-high correlation between intelligence and success, especially at the highest levels. Many high-IQ people have pretty normal lives and jobs. Some of them find high-IQ societies, where they can get a little recognition and interact with people who have meshing interests. People turn to high-IQ societies on social media for the same reasons people do anything on social media – recognition and sharing. Social media makes it easier to join high-IQ societies – every two or three months, I'll be emailed that I've been added to some high-IQ group. Because they're easy to join, quite a few people belong to high-IQ groups on social media, which means that such groups consist largely of nice people who are delighted to have online friends.

Jacobsen: You suffer from the attention and invective of internet trolls. Trolls come in many variety within the flora and fauna of internet life. I hear they feed on a combination of foaming at the mouth and others' time – at least in their natural habitat. Unfortunately, they're like starfish. If one chops the poor little echinoderm to pieces – or like the story of the wizard from Fantasia with the shredded broom, they have a “population explosion” and emerge with greater force and invective than ever before. Do you have any responses for the harsh internet crowd? In other words, what comes across with the highest frequency? How do you respond to them?

Rosner: Arrogant – Well, I'm really good at IQ tests. Does that make me a snotty jerk? I hope not. Do I know what's best for people or have a plan for remaking society? No. Do I want to be the boss of everybody? No. Do I think I'm really smart? Kinda, but my Twitter handle is [@DumbassGenius](#), not [@geniusgenius](#), which shows at least a little modesty.

Weirdo – Yes, I'm kind of weird – not weird just to be weird, but weird because I'm used to figuring out on my own how to do stuff, and often this figuring works out oddly. And even though I do weird things like go to the gym five times a day, I also do normal, responsible things like stay married for 23 years and be a dad and hold down jobs more successfully than most people in my profession.

Loser – If you've read that I'm a high-IQ bouncer and stripper and nude model, that's kind of loserish. Very loserish. But I've also been a TV writer and sometimes-producer since the late 80s. I've written for more than 2,500 hours of broadcast television, including the *Emmys*, *ESPYS*, *American Music Awards*, *Grammys*, and *Jimmy Kimmel Live!*, earning seven Writers Guild Award nominations (one win) and an Emmy nomination. I've gotten a lot of material on TV. As I've said before, I'm married and a dad, which is important. I've got a memoir that's being shopped around, and I have a theory of the universe. So, not entirely a loser.

Obvious hair plugs – Yes, you can tell that I have hair plugs. They're not the worst plugs in the world, but they could be better. I started getting them in 1989, before the technique had been refined, so they're a little clumpy. But they're better than no hair, and if you didn't know what you were looking for, you might not notice them.

Why should you listen to me? – I've been trying to figure out how the universe works since I was ten, and I've had a decent foundation for a theory for more than 30 years. I might be onto

something. Current big bang cosmology is getting a little threadbare. A very, very, *very* old universe explains a lot of stuff.

You were very concerned about losing your virginity – Sex is kind of a given. Unmarried couples live together without social censure, everyone's saturated in porn and sexualized images, everyone suspects the worst about everyone else in terms of sexual behavior. But as a population, we're just about fatter than ever, there are a zillion other things to besides sex, and people in general don't seem overly concerned with having sex, at least not as much as in the 70s.

Jacobsen: Provisions for principles of existence would equate to the *language* of existence, and therefore one can derive the more appropriate, direct, and proper phrase “principles of existence” rather than “laws.” We have more derivations from defined principles of existence:

Principle One: universe operates within limits of complexity. Any further complexity will likely deteriorate into optimal simplicity. Universe among logical possibilities of the set of universes bound by optimal simplicity.

Principle Two: relevance/irrelevance, information of relevance will occupy or begin to occupy the active center; conversely, information of irrelevance will not occupy or begin to not occupy the active center.

Principle Three: *The Persistence Project* divides into *The Statistical Argument for Universe* and *The Statistical Argument for Consciousness*. Universe cannot not exist; consciousness cannot not exist. Therefore, the non-absolute high probability for existence, and persistence, of universe and consciousness.

Principle Four: informational cosmology implies informational ethics in a progressive argument. Where I_c equals informational cosmology, S_u equals *Statistical Argument for Universe*, S_c equals *Statistical Argument for Consciousness*, P equals *The Persistence Project*, C^E equals “existence-valuing principles,” and I_e equals informational ethics, we can construct one conditional argument to derive informational ethics from informational cosmology: 1) $I_c \Rightarrow (S_u \wedge S_c)$, 2) $(S_u \wedge S_c) \Rightarrow P$, 3) $P \Rightarrow C^E$, 4) $C^E \Rightarrow I_e$, 5) I_c , 6) $\therefore, I_e$. Therefore, one acquires values consistent with the facts of existence: “existence-valuing principles” or C^E . David Hume's *is/ought* fails. A distinction exists between them, but facts imply values.

Principle Five: universe/mind symmetry, universe as mind based on net self-consistency and information processing. Units of sufficient individuation in universe with self-consistency and information processing as minds too.

Principle Six: universe (M_n) implies armature (A_n); if armature, universe. Universe equates to information processing; armature equates to material framework/processor: ($A_n \Rightarrow M_n$).

Principle Seven: armature and universe construct mind-space: ($A_n + M_n = S_n$).

Principle Eight: net self-consistency and information processing equates to consciousness. This reflects *Principle Five*. Sigma, Σ , self-consistency, S , times, $*$, sigma information processing, ΣI_p , would equal mind-space, S_n , where mind-space equals information-space, I_s : ($\Sigma S * \Sigma I_p = S_n = I_s$).

Principle Nine: universe as conscious: ($A_n \Rightarrow M_n$); $\therefore, (A_n + M_n)$; ($A_n + M_n \Rightarrow S_n$); $\therefore, (A_n + M_n = S_n)$. In addition to this, we have the inclusion of *Principle Eight* to derive the same

conclusion about mind-spaces, S_n : ($\sum S * \sum I_p = S_n$). Armature implies universe; therefore, armature and universe; armature and universe imply mind-space; therefore, mind-space; armature and universe construct mind-space, and net self-consistency and information processing equate to mind-space. Consciousness equates to net self-consistency and information processing; universe equates to these too. Therefore, universe equates to consciousness endowed system.

Principle Ten: consciousness at every magnitude exists in finitude and with non-mystical/technical construction. Informational cosmology lacks infinities and describes finites. Information constructs consciousness based on information processor and net self-consistency with finite capabilities. Subsystems internal to universe partake of this consciousness too, but not to the same degree. Units of sufficient individuation in universe with net self-consistency and information processing have consciousness proportional to sum of self-consistency times sum of information processing. Therefore, universe and multiple subsystems in universe have consciousness or equate to minds.

Beyond the foundational elements of informational cosmology laid out in this interview, and the first- and second-order derivations with informational ethics and other areas of discourse, what further realms of investigation have a possible future of analysis within an informational cosmological and informational ethical perspective?

Rosner: One big field that will open up in during the rest of the century is what our drives should be, as we develop the ability to modify our drives and desires.

By the end of the century, there will be much inquiry about how to merge minds and how connected minds should be. There will be a whole new field addressing issues of mental connectivity. In some communities, people will want to stay completely unmerged. In others, people will try to achieve complete merging.

A critical field will be modeling AI and predicting its behavior. You need a mathematics of consciousness to understand AI. Out-of-control AI could be the greatest threat in history. A related field will be the design of artificial awareness.

There will be the field of informational structure – trying to figure out what the universe and other such systems are doing with information by looking at the distribution and behavior of matter. Can we get any idea of what's in the mind of the universe?

Technical resurrection will be an area of inquiry and development – preserving consciousness after the body is gone, attempting to reconstruct and simulate the minds of people from history. We'll have better and better iterations of Austen, Lincoln, and Shakespeare – all the usual holodeck suspects.

Beyond the physics of information-spaces, there will be the mathematics of information-spaces, which will go farther into the abstract and general properties of self-defined spaces, along with set theory as it applies to the set of all such possible spaces, the connections and transformations among members of the set, the level of infinity that describes the set, whether it's a well-defined set, and so on.

Then there's the cultural analysis of how we'll be affected by thoroughly understanding consciousness. Most people probably believe that consciousness is produced by the brain, but the culture shock may not fully set in until consciousness is fully dismantled and replicated. How

people feel and behave when they're no longer more divine than their devices will have to be studied.

Jacobsen: In the current climate of excess sensitivity tied to a reactionary institutional culture and subsequent radical conformity – in irony, I do not wish to offend anyone; however, institutional analysis does have value for us: internally, to Academia, various filters through achievement measurements (BA/BAA/BBA/BSc, MA/MBA/MPA/MSc, JD, MD, PhD, Post-Doctorate, and so on) and organizational-structural apparatuses operate for academic peers to consider standards high and one another proficient in relevant material under research; externally, to independent researchers and scholars, these can prevent innovation, hinder creativity, foster intellectual docility and acquiescence, and exclude bright and qualified outsiders (even geniuses) – to claim otherwise would consider academics of an angelic form. Both perspectives valid and compatible. It sounds good in an introductory course for particular ideals to have statement; however, we must face facts in the following reflection. We must speak without prevarication. You do not have academic awards, grants, honors, titles, or persuasive associations such as authoritative academics/institutional connections. If correct, and if someone in mainstream Academia stole these ideas, arguments, calculations, and original conceptualizations, you have little recourse for intellectual copyright and plagiarism.

Your defence would hold little weight, especially with the possibility of defamation, character assassination, and other tenth-rate tricks to discredit an individual rather than consider the claim of plagiarism on truth or falsity of the claim. No internal colleague, principal investigator status (or laboratory), faculty, external department, research institute, ethics board, administrative authority, or university at large to likely remedy such a possibility. The Academy tends to work in a closed way for accreditation and peer recommendations. You live and work outside the university system. Any thoughts on such an outcome? You developed this theory for over three decades. Any words for someone with intention of surreptitious pilfering of even your crumbs? Those with a wolf heart, modicum of talent, but starved for anything with a resemblance to this conceptual bread of life based on avarice and a gnawing hunger for academic, and eventual popular, glory.

Rosner: I have one good defence – some of this stuff turning out to be true. If it's true in a big way – if it's picked up and verified by the world, someone will put me in the story.

My wife and I go to couples counselling every three or four weeks, and we discussed this in our last session – what happens if my book doesn't get published, if I don't get recognition, if 30 years from now I'm a frustrated old man whose ideas have become accepted but whose authorship isn't generally recognized. My wife and our therapist and I agreed that would suck.

And yeah, my credentials are: not-great stripper, epic catcher of fake IDs, legendary goer-back to high school, nude art model, compulsive overachiever on IQ tests, and writer of jokes for late-night TV. But there's a story there. William Blake said, "The road of excess leads to the palace of wisdom." My excess hasn't been that excessive, but it hasn't been what everyone else has done. Charles Darwin took a five-year trip on the Beagle. He saw eroded landscapes and thousands of species. He thought about it for 20, 30 years. His exceptional life experience plus extended thought lead to the greatest unifying theory in history – the earth's geology plus the vastness of organic variety equals deep time. I like to think that exceptional personal experience plus extended thought can, even in the era of Big Science, lead to a great unifying theory.

I currently have sort of a PR person and next month will hire another PR person. My story will get out there. Eventually, established scientists will consider it. Will someone be able to steal it? At this point, my best chance for this not to happen is for me to keep talking and writing about it in my goofy way.

ESOTERIQ ID-06: Christopher Harding

Conversation with Christopher Harding on Royal Houses, Genius, Leonardo da Vinci, Test Ceiling Issues, Philosophy, Meaning, and Quantum Physics: Founder, International Society for Philosophical Enquiry (1)

January 8, 2021

Abstract

Christopher Harding is the Founder of the International Society for Philosophical Enquiry (ISPE), and a Member of OlympIQ Society and the ESOTERIQ Society. He was born on August 4, 1944 in Clovelly Private Nursing Home at Keynsham, Somerset, English, United Kingdom. He has never married. He arrived in Rockhampton, Queensland, Australia, in the morning of October 11, 1952. He remains there to this day. He has held memberships with the Eugenics Society (1963-1964), the British Astronomical Association (1964-1969), the International Heuristic Association (1970-1974), the Triple Nine Society (1979-1990 & 1992-1995), the 606 Society (1981-1982), the Omega Society (1983-1991), the Prometheus Society (1984-1990), the International Biographical Association (1985-1990), Geniuses of Distinction Society (1986-1988), the American Biographical Institute Research Association (1986-1990), the Cincinnatus Society (1987-1990), the 4 Sigma Group of Societies [incorporating all groups having 4 Sigma plus cut off points] (1988-1990), The Minerva Society [Formerly the Phoenix Society] (1988-1990), The Confederation of Chivalry (1988-1990), the Planetary Society (1989-1990), Maison Internationale des Intellectuels [M.I.D.I.] (1989-1990), TOPS HIQ Society (1989-1990), the Cleo Society (1990-1991), the Camelopard Society (1991-1992), the Hoeflin One-in-a-Thousand Society (1992-1993), the Pi Society (also like the Mega Society for persons with 1 in one million I.Q. level (5th April 2001 – 2002), INTERTEL [The International Legion of Intelligence] (June 1971-March 2010), The Hundred (1972-1977), the New Zealand National Mensa (1980-1982), and the Single Gourmet (1989-1991), among numerous other memberships, awards, and achievements. For the most recent or up-to-date information, please see the ESOTERIQ Society listing: <https://esoteriqsociety.com/esotericists/esoteriq-id06/>. He discusses: growing up; a sense of the family legacy; the family background; experience with peers and schoolmates; qualifications; purpose of intelligence tests; high intelligence; the geniuses of the past; the greatest geniuses in history; a genius from a profoundly intelligent person; profound intelligence necessary for genius; some work experiences; job path; the idea of the gifted and geniuses; the God concept or gods idea; science; some of the tests taken; the range of the scores; ethical philosophy; social philosophy; economic philosophy; political philosophy; metaphysics; philosophical system; meaning in life; meaning; an afterlife; the mystery and transience of life; and love.

Scott Douglas Jacobsen: When you were growing up, what were some of the prominent family stories being told over time?

Chris Harding: Where we came from and who we were.

Jacobsen: Have these stories helped provide a sense of an extended self or a sense of the family legacy?

Harding: They were depressing as I could not live up to them.

Jacobsen: What was the family background, e.g., geography, culture, language, and religion or lack thereof?

Harding: Varied. Mostly titled aristocracy and connections to Royal Houses.

Jacobsen: How was the experience with peers and schoolmates as a child and an adolescent?

Harding: Non-existent.

Jacobsen: What have been some professional certifications, qualifications, and trainings earned by you?

Harding: None.

Jacobsen: What is the purpose of intelligence tests for you?

Harding: They are something on the side.

Jacobsen: When was high intelligence discovered for you?

Harding: 2 days before my first birthday. My parents had me tested. When speaking of me they were called liars to their faces.

Jacobsen: When you think of the ways in which the geniuses of the past have either been mocked, vilified, and condemned if not killed, or praised, flattered, platformed, and revered, what seems like the reason for the extreme reactions to and treatment of geniuses? Many alive today seem camera shy – many, not all.

Harding: I recall a quote from the Journal of the British Eugenics Society. “They want the Genius, but not its loathsome owner.”

Jacobsen: Who seem like the greatest geniuses in history to you?

Harding: “Leonardo, complex solitary, a Master Genius in an age of Genius.” In his life, it was said of him, “It is beyond the power of nature to create another man like Leonardo,” yet his final recorded words were “I have failed mankind and I have failed God.”

Jacobsen: What differentiates a genius from a profoundly intelligent person?

Harding: Genius is creative ability of the highest possible kind.

Jacobsen: Is profound intelligence necessary for genius?

Harding: No, Genius implies the narrowing of intelligence.

Jacobsen: What have been some work experiences and jobs held by you?

Harding: Absolutely nothing at all.

Jacobsen: Why pursue this particular job path?

Harding: I never did.

Jacobsen: What are some of the more important aspects of the idea of the gifted and geniuses? Those myths that pervade the cultures of the world. What are those myths? What truths dispel them?

Harding: They march to the beat of their own drum.

Jacobsen: Any thoughts on the God concept or gods idea and philosophy, theology, and religion?

Harding: God is purely human idealism; largely what you can't attain. The Concept is set beyond what can be considered.

Jacobsen: How much does science play into the worldview for you?

Harding: Science has become despoiled with its obsession with consensus and ignorance of the paradigm shift. Some one point Einstein to a newspaper article "One hundred against Einstein" to which he replied "It would only take one". Less and less.

Jacobsen: What have been some of the tests taken and scores earned (with standard deviations) for you?

Harding: Several times scoring over plus six sigma.

Jacobsen: What is the range of the scores for you? The scores earned on alternative intelligence tests tend to produce a wide smattering of data points rather than clusters, typically.

Harding: Ceiling limitations were the biggest problem; in which case I could finish them well and truly before the time limit was up. For these the test was useless.

Jacobsen: What ethical philosophy makes some sense, even the most workable sense to you?

Harding: None.

Jacobsen: What social philosophy makes some sense, even the most workable sense to you?

Harding: None.

Jacobsen: What economic philosophy makes some sense, even the most workable sense to you?

Harding: Also none.

Jacobsen: What political philosophy makes some sense, even the most workable sense to you?

Harding: Also none. If you join a political group, you wind up as an apologist for them!

Jacobsen: What metaphysics makes some sense to you, even the most workable sense to you?

Harding: None.

Jacobsen: What worldview-encompassing philosophical system makes some sense, even the most workable sense to you?

Harding: None, philosophy is word juggling!

Jacobsen: What provides meaning in life for you?

Harding: There is no meaning in Dictionaries only associations with other words: Meaning in life is the same; you make the meanings.

Jacobsen: Is meaning externally derived, internally generated, both, or something else?

Harding: Meaning is only a PATTERN.

Jacobsen: Do you believe in an afterlife? If so, why, and what form? If not, why not?

Harding: The only afterlife [an oxymoron] is the “truth” in QUANTUM PHYSICS: Just as in Classical Physics energy and matter can not be destroyed only converted one into the other; in Quantum physics information can not be gained or lost, it some how just IS.

Jacobsen: What do you make of the mystery and transience of life?

Harding: It like everything else is BOUNDED. This is a condition of being defined.

Jacobsen: What is love to you?

Harding: Love is simply TRANSFERENCE [See Freud].

Conversation with Christopher Harding on Genius as Individualistic, God as the Universe or Non-Existent, Science's Despoilment, Feynman, and the Quantum: Founder, International Society for Philosophical Enquiry (2)

January 15, 2021

Abstract

Christopher Harding is the Founder of the International Society for Philosophical Enquiry (ISPE), and a Member of OlympIQ Society and the ESOTERIQ Society. He was born on August 4, 1944 in Clovelly Private Nursing Home at Keynsham, Somerset, English, United Kingdom. He has never married. He arrived in Rockhampton, Queensland, Australia, in the morning of October 11, 1952. He remains there to this day. He has held memberships with the Eugenics Society (1963-1964), the British Astronomical Association (1964-1969), the International Heuristic Association (1970-1974), the Triple Nine Society (1979-1990 & 1992-1995), the 606 Society (1981-1982), the Omega Society (1983-1991), the Prometheus Society (1984-1990), the International Biographical Association (1985-1990), Geniuses of Distinction Society (1986-1988), the American Biographical Institute Research Association (1986-1990), the Cincinnatus Society (1987-1990), the 4 Sigma Group of Societies [incorporating all groups having 4 Sigma plus cut off points] (1988-1990), The Minerva Society [Formerly the Phoenix Society] (1988-1990), The Confederation of Chivalry (1988-1990), the Planetary Society (1989-1990), Maison Internationale des Intellectuels [M.I.D.I.] (1989-1990), TOPS HIQ Society (1989-1990), the Cleo Society (1990-1991), the Camelopard Society (1991-1992), the Hoeflin One-in-a-Thousand Society (1992-1993), the Pi Society (also like the Mega Society for persons with 1 in one million I.Q. level (5th April 2001 – 2002), INTERTEL [The International Legion of Intelligence] (June 1971-March 2010), The Hundred (1972-1977), the New Zealand National Mensa (1980-1982), and the Single Gourmet (1989-1991), among numerous other memberships, awards, and achievements. For the most recent or up-to-date information, please see the ESOTERIQ Society listing: <https://esoteriqsociety.com/esotericists/esoteriq-id06/>. He discusses: He discusses: *National Enquirer*; the gap between cognitive abilities and record of employment; living situation without a record of work; alone; the professionals test someone just shy of 1-year-old; parents react to being called “liars to their faces”; genius; intelligence tests; publications or periodicals; artificial constructs; the factors making genius; God as human idealism; the Concept of God; science; the areas most affected by this despoilment; the areas least affected by this despoilment; 6-sigma; the ESOTERIQ Society; conclusions; and the information in Quantum Physics.

Scott Douglas Jacobsen: What Royal Houses were the main connections with family?

Chris Harding: Most prominent – French side.

Jacobsen: In the *National Enquirer* published on June 25, 1991, there was an article about a certain man with the “world’s highest IQ” who is a “jobless janitor.” What did this particular media attention do for you?

Harding: Nothing.

Jacobsen: I state the caveat of “absolutely nothing at all” as the response to the work experiences question. It is *reported* that you have worked in menial jobs and had stretches of unemployment, e.g., in the *National Enquirer*. What explains the gap between the cognitive abilities and the cognitive demands of the jobs for you? Alternatively, what explains the gap between cognitive abilities and record of employment for you?

Harding: Unknown.

Jacobsen: How did you sustain yourself in terms of living situation without a record of work?

Harding: Family.

Jacobsen: Why the “non-existent” life with peers and schoolmates? Did you feel alone?

Harding: Violence and exclusion.

Jacobsen: How did the professionals test someone just shy of 1-year-old? It seems odd, even stranger than the 2-and-a-half-year-old, or thereabouts, cases entering Mensa International (or their national group).

Harding: Mental age in my case 3 years 4 months made that easy!

Jacobsen: How did your parents react to being called “liars to their faces” when ‘speaking of you’?

Harding: They were taken aback by this.

Jacobsen: Does this desire of cultures wanting genius while not wanting *the genius* create a toxic dichotomy in the general culture? Something to which only lip service is paid, while wanting to kill in former times, and ‘kill’ in modern times, the genius.

Harding: It comes from competitiveness [jack is equal to his master]. In many cultures submissiveness is considered politeness. That is considered standard in communication. It is why first world cultures see themselves as superior.

Jacobsen: As these intelligence tests have been a part of life before even 1-year-old, may I ask, what has been the life lesson from them for you?

Harding: Look, people see I.Q.’s as not valid above their own. Everybody does this. It is very noticeable that children asked who in their class is smartest will name themselves!

Jacobsen: As you recalled the quote from the *Journal of the British Eugenics Society*, I’m sure many will be interested now. What publications or periodicals do you continue to read now? What ones did you previously read and no longer do so?

Harding: No preference; I am a total generalist.

Jacobsen: With Leonardo da Vinci as “a Master Genius in an age of Genius,” do you think artificial constructs could fill the gap between genius seen before and unseen genius now, i.e., artificial constructs with the capabilities of the highest human genius?

Harding: They have provided little evidence they are going to solve this one: My Mother once said the process was ‘ant like’ rather than a G-function.

Jacobsen: What are the factors making genius “creative ability of the highest possible kind”? Other than the qualities inherent in ‘marching to the beat of their own drum.’

Harding: Genius by definition would be individualistic. As one person said to me, I was very ‘singular’.

Jacobsen: If “God is purely human idealism; largely what you can’t attain,” what are some exceptions to this thing one “largely... can’t attain” or the things attainable within this definition of God as human idealism?

Harding: What I meant was the problem lay beyond the nature of logical process. It is answerable in terms of the proof of the last theory of sets. But you still get back to the conclusion that if God exists he either is the Universe or does not exist.

You are still dealing with value judgments or in assigning names; which amounts to the same thing. My Brother agreed with me that the highest form of reasoning was EVALUATION. Since to invoke reason one must first evaluate a proposition.

Jacobsen: Is the setting of the “Concept... beyond what can be considered” a defense against formal knockdown critique of the Concept of God?

Harding: No.

Jacobsen: When did science begin this despoilment with the obsession with “consensus and ignorance”?

Harding: Always was there. In our own time many people use science to moralize, and science has become the new religion. This can’t be done of course. There is no bridge either between philosophy and religion.

Jacobsen: What are the areas most affected by this despoilment?

Harding: It is seen in notions of anthropomorphism with regard to climate change. Not so! The real cause is the Sun. Note, Astronomers had long ago pinned this down to Sun Spot Cycles. A new 11+ year Cycle began last year and rising temperatures have turned back. One Russian Woman Scientist predicts the onset of a period of dropping temperatures starting around 2030, though this figure is very uncertain!

Jacobsen: What are the areas least affected by this despoilment?

Harding: Human aging and Quantum Physics—much progress continues at the moment.

Jacobsen: What were the tests when scoring above 6-sigma several times?

Harding: Most of these I have forgotten. I’m 76 and most were over 30, 40 and up to over 75 years ago!

Jacobsen: For the ESOTERIQ Society, it states,
“Christopher Harding (Australia): 197 on SBIS-Oxford-Analysis-New-Zealand in 1976.”
 What is the full name of the SBIS-Oxford-Analysis-New-Zealand, particularly the “SBIS” part?

Harding: Don’t know.

Jacobsen: While, fundamentally, dispensing with ethical philosophy, social philosophy, economic philosophy, political philosophy, and metaphysics, even philosophy as “word juggling” (!), I see some common points. One is science, though “less and less” with its despoilment, meaning as a “PATTERN” made by each person individually, an emphasis on some of Freud, “QUANTUM PHYSICS” in terms of “truth” with its preservation of information (neither gained nor lost), and the bounded nature of nature (including humans) as “a condition of being defined.” So, *there is a there there*. I have to ask, “What makes these conclusions more sound, at this time, to you than other possibilities?”

Harding: Feynman once said no one understands the Quantum. And yet to further agree with his point “Quantum Superiority” has been proved for the D-Wave Orion Computer. I liken this to statements about the Aleph series in the mathematics of infinity theory.

Jacobsen: Any speculation as to why the information in Quantum Physics simply “IS”?

Harding: I once thought it through and concluded there was another stage beyond Quantum Physics. Simply IS would represent in turn a ‘single one’ off any general group of abstractions.

ESOTERIQ ID-10: Marios Prodromou

An Interview with Marios Sophia Prodromou on Names, Metaphor, Cyprus, Greek Heritage, Genius, Religion, Mysticism, and More (Part One)

July 1, 2020

Abstract

Marios Sophia Prodromou is a member of the World Genius Directory. He discusses: the “Rat King”; other names; Caelestis; Spade; Draco; preferred name; meanings; the meaning of “Rat” and “King” in “Rat King”; feel hated by “most people”; other animal examples than a rat; the queens; a queen; the best minds; one name; degree and manner of different; the more explicit reference to lightness and darkness; the meaning of light; the origin and meaning of the name Marios Sophia Prodromou; John the Baptist; the Virgin Mary; the forms of parenting; family history and development as a Cypriot; the values of Scottish society; the values of Cypriot society; modern Scottish and Cypriot society; *being* a Cypriot; Turkey; Turkish mistakes; innocents; Erdogan’s attempt at recreation or reconsolidation of the (Neo-)Ottoman Empire through a Turkish expansionism; Greece; Greek mistakes; the Greeks obsessed with money; *My Big Fat Greek Wedding*; 6-sigma, or even 5-sigma, people within the high-IQ community; being introverted; no desire to interact with other high-range people, “really”; the discovery of giftedness; some other tests; the societal view of giftedness in Cyprus; other media opportunities; programs on television; “Prince Show”; the purpose; “With Love Christina”; nervous in both appearances; desire or want to be a somebody rather than a “nobody”; knowledge and Sophia; Greeks with an obsession on money; Sophia and knowledge; a real genius; a *faux* genius; more real geniuses or *faux* geniuses; people who fake striving to be a nobody while being a somebody as their main goal; some work pursuits; mental coaching; pressure for pupils; how *much* faster for most of the pupils; some of the basic strategies; some of the intermediate strategies; common, uncommon, and rare personality styles of the children; intellectual issues; public and private intellectuals; some educational attainments; social philosophy; political philosophy; economic philosophy; favourite philosopher; religious/non-religious philosophy; being balanced; kind of God; the argument for this God; the evidence for this God; most people’s hearts; fairness; justice; a single term, even a neologism, covering the idea of fairness and justice in unison; a supernatural order, a natural order, or both; definition of paranormal, supernatural, metaphysical, and natural, material, and physical in this context; the precise meaning of the idea of a paranormal “experience”; a paranormal experience; ethical philosophy; worldview; the British background influence the personal perception of the Cypriot society; inspiring kids; “tough”; alone; a member of “World Genius Directory, Prometheus, Mensa International, Epimetheus, GENIUS Umbrella Organization, sPIqr, Vertex, Grand IQ Society, Tetra, GOTHIQ, LEVIATHAN 160, Triple Nine Society, HELLIQ, The Glia Society, UBERIQ, TENIQ and many others”; societies; most reliable in providing a social and intellectual space over a long period of time for members; one spent the most time interacting with if at all; becoming a person of a value versus becoming a person of success; value less fungible than money in some fundamental sense; Madonna right, after all, but for everyone rather than just “girls”; success; value; common notions of success amongst the Greeks other than

making lots and lots of money; kind of values must one have to make the “value” of “making an impact on your community”; esotericism and symbology; the Dudeist philosophy; Dudeism; open-minded; to be “everywhere”; the public alternative religious and philosophical groups; some characteristics of the secret groups without precise details of them; work or worked as a postal officer; working on some intellectual problem; the parts that are non-secretive and esoteric; kind of self-improvement; a small capacity of the brain; more men in the high-IQ societies than the women; the smartest person in history; Tesla; some of the smartest people alive now; Musk; Gates; Trump; religion and theology; faith; “ancient and secret esoteric knowledge”; kinds of symbols; the main symbols; the truth; thoughts on atheism; thoughts on theism; thoughts on agnosticism; mainly learned from purported secret esoteric knowledge; some hints or indications as to the purpose of life; changes in life; why pursue this course in life; how we know it’s ancient knowledge; those who simply cannot ‘take your word for it’; the unseen and rather a hallucination; unsatisfying and akin to a non-answer; Greek Orthodox Church; more wrong or more rights as a theology; forced and inertia-based belief in Greek Orthodox Christianity; their image of the nature of world, human beings, and the relations of human beings to one another and the world; creativity; intelligence; intuition; intuition truly a form of intelligence or more a subjectively formalized, experientially developed sensibility about life and its meanderings; genius; purpose of having ancient esoteric secret knowledge in the first place; idea as to authorship of the inscription; Mount Athos; “ancient knowledge”; the freemasons; the organization make most of them pawns; The Church of Satan, First Satanic Church, The Satanic Temple, Luciferianism, Order of Nine Angles, or the Temple of Set; The Church of Satan; First Satanic Church; The Satanic Temple; Luciferianism; Order of Nine Angles; the Temple of Set; literal or metaphorical (or both) angels and demons; Anton LaVey; his work been modified for better or for worse; Aleister Crowley or his self-claimed follower Timothy Leary; Anton LaVey; the nature of good and evil; thoughts on those who claim this is moral relativism; science and philosophy; ‘fact’; “idea”; poor decisions; differentiate intuition from other internal ‘talks’; the Gospel of John alongside of the Synoptic Gospels; a holy text; a particular religious text coming from the ancient world; Margaret Atwood; intuition; coming to terms with the world; words of advice or guidance to younger members of the profoundly gifted cohort who could use some guidance; For those parents with a profoundly gifted child; difficulties for some members of the profoundly gifted community; 1-sigma intelligence on the right-side of the bell curve differ from 2-sigma intelligence; -sigma intelligence on the right-side of the bell curve differ from 3-sigma intelligence; 3-sigma intelligence on the right-side of the bell curve differ from 4-sigma intelligence; 4-sigma intelligence on the right-side of the bell curve differ from 5-sigma intelligence; 5-sigma intelligence on the right-side of the bell curve differ from 6-sigma intelligence; societies emphasizing excellence more than equity; some of the oldest secret societies; the secret societies and the alternative theistic groups like the freemasons; things of annoyance; more at ease, at peace, with the world; ever plan to move away from Greece-Cyprus-Turkey area back to the United Kingdom or some other place; lifework; the general life trajectory; to end up; metaphysics; metaphysics from Dudeism; the most creative person in history; the best writer in history; the typical societal expectations of Greek heritage women; the typical societal expectations of Greek heritage men; and some cultural nuances largely known only to the Greeks about

the ways in which men and women, old and young, blue-collar and white-collar, and so on, exist in Greek society, in Cypriot society, and in the diaspora with Greek heritage.

Scott Douglas Jacobsen: You're amongst the highest range high-scorers in the niche community of alternative intelligence test takers. First things first, why the "Rat King"?

Marios Sophia Prodromou: I go by many names. There can't be light without darkness.

Jacobsen: What other names?

Prodromou: Caelestis, Spade and Draco to name a few.

Jacobsen: What does Caelestis mean in this context? Why select it, or have it endowed to you?

Prodromou: I like to think of myself as celestial or out of this world.

Jacobsen: What does Spade mean in this context? Why select it, or have it endowed to you?

Prodromou: I like to dig for knowledge. The Ace of Spades by Motorhead is also one of my favourite songs.

Jacobsen: What does Draco mean in this context? Why select it, or have it endowed to you?

Prodromou: Dragon.

Jacobsen: Any preferred name out of the many?

Prodromou: Draco Caelestis or celestial dragon.

Jacobsen: What interrelates these meanings (other than the obvious idea of the person, you)?

Prodromou: My knowledge of reality.

Jacobsen: What is the meaning of "Rat" and "King" in "Rat King"?

Prodromou: Most people hate rats but they have their purpose. It is better to be a king among rats rather than a peasant among men.

Jacobsen: Do you feel hated by "most people"? If so, why? If not, why not?

Prodromou: I do. There is a lot of jealousy in the world and I'm not your ordinary social butterfly.

Jacobsen: Any other animal examples than a rat – perhaps more palatable to the imagination?

Prodromou: Dragon, lion and Eagle.

Jacobsen: What about the queens?

Prodromou: A queen is just as important as a king.

Jacobsen: Do you have a queen?

Prodromou: Sophia.

Jacobsen: Do you consider the best minds among the rats/people the "most hated," and for good reason? Is this a variation on better to reign in hell than serve in heaven?

Prodromou: My birthday this year coincided with the beginning of the year of the rat. Great year it's been so far. I can't get Horned rats out of my mind.

Jacobsen: Why not simply go by one name?

Prodromou: I strive to be different.

Jacobsen: How much, and in what way? Why that degree and manner of different?

Prodromou: If you are one of the many you will always be average. As different as it gets.

Jacobsen: What is the more explicit reference to lightness and darkness? Usually, this comes with some philosophical or theological position on life. Is this the intended meaning?

Prodromou: Lux in tenebris. A more detailed version is found in the Gospel of John. The light shines in the darkness and the darkness cannot comprehend it. I like to be significant but also go about unnoticed.

Jacobsen: What about tenebris in lux? What is the meaning of light here rather than a reference? Is this in reference to the light of God and the darkness of the prime fallen angel, prime evil?

Prodromou: Evil depends on intention. A knife can cut your food or can kill somebody. Again I believe in dualism and that evil and good are just different poles of the same coin

Jacobsen: What is the origin and meaning of the name Marios Sophia Prodromou?

Prodromou: My grandmother was called Maria and I was also named in honor of the Virgin Mary. My mother had trouble giving birth and prayed to the Virgin Mary to help her conceive. Prodromou is the family name and means forerunner after John the Baptist or Prodromos in Greek.

Jacobsen: In this context, what does John the Baptist mean to you, personally?

Prodromou: I like his way of life. Being a loner. He had a bigger role than what he is credited. Just ask the Knights Templars.

20. Jacobsen: Also, what does the Virgin Mary mean to you, personally?

Prodromou: The divine feminine.

Jacobsen: What were the forms of parenting towards you, in the context of being rather special child in rarity, in cognition and in odds of conception for your mother?

Prodromou: I was given my space and a lot of love.

Jacobsen: What is family history and development as a Cypriot?

Prodromou: Both parents are Cypriots although I was born in Scotland.

Jacobsen: What are the values of Scottish society?

Prodromou: Respect for their history. They know where they came from.

Jacobsen: How do these mix with the values of Cypriot society if at all?

Prodromou: Cypriots care more about the present than the past.

Jacobsen: Are modern Scottish and Cypriot society more at odds or at parallels?

Prodromou: They are very different.

Jacobsen: What does *being* a Cypriot do for personal social and political views regarding Greece, Cyprus, and Turkey?

Prodromou: Both Turkey and Greece have made mistakes. I am a Greek Cypriot but am always open-minded when it comes to politics.

Jacobsen: What mistakes has Turkey made?

Prodromou: They are obsessed with world dominance. Killed many innocent people in their endeavors.

Jacobsen: How will Turkish mistakes come to haunt them?

Prodromou: Karma is a bitch not just for Turkey but for everybody.

Jacobsen: How many innocents are estimated?

Prodromou: I'd rather not put a number to it.

Jacobsen: Is this Erdogan's attempt at recreation or reconsolidation of the (Neo-)Ottoman Empire through a Turkish expansionism?

Prodromou: Not only Eedogan's but those that went before him and those that will come after him.

Jacobsen: What mistakes has Greece made?

Prodromou: Greeks are obsessed with money. The result is selling out their country. The ministry of defence sold a submarine owned by his military.

Jacobsen: How will the Greek mistakes come back to bite them in the behind more?

Prodromou: Already the economy is a mess.

Jacobsen: Have the Greeks always been obsessed with money?

Prodromou: Not always. But when they were given a little sugar they developed a sweet tooth.

Jacobsen: How accurate is *My Big Fat Greek Wedding*, the movie, to Greek culture, especially in times of courting and marriage and potential in-law interactions?

Prodromou: It is quite accurate. Parents can become obsessed with their kids. In Scotland they leave the nest at 18 in Greece and Cyprus they can stay forever. Well at least till marriage.

Jacobsen: Have you ever met or interacted with many other 6-sigma, or even 5-sigma, people within the high-IQ community? If so, what was the experience? If not, other than statistical rarity, why not?

Prodromou: I can't say that I have. They are hard to find and I am highly introverted.

Jacobsen: Why so introverted?

Prodromou: I was an only child. I learnt to be my best friend.

Jacobsen: Would you like to interact with them?

Prodromou: Not really. I'm a loner.

Jacobsen: How was the discovery of giftedness? What is important to bear in mind about alternative intelligence tests? What alternative intelligence tests/non-mainstream tests seem reliable and valid to you?

Prodromou: I scored 98/100 on the old Millers Analogy Test that I used to matriculate into the College of New Jersey Master of Education program

Jacobsen: What have been some other tests? What are the implied scores and standard deviations of said scores? What have been the range of the scores from the lowest to the highest?

Prodromou: My highest was 190+ on MACH. I have scored around 170 on tests by Iacovos Koukas. It all depends on how much effort I put into the test. I did my 170 in 2 hours where I took 6 months to answer the MACH.

Jacobsen: What is the societal view of giftedness in Cyprus?

Prodromou: I've been twice on national TV but I remain an unknown nobody.

Jacobsen: Have there been other media opportunities, which you've turned down?

Prodromou: Many. I don't go there for the fame.

Jacobsen: What programs on television? Why agree to appear on those programs?

Prodromou: It helps me gain the trust of the community and be able to help their kids as a mental coach. I went to two well known programs on Cypriot TV. The clips are on my YouTube channel.

Jacobsen: On the "Prince Show," is kissing a common Greek greeting between people – on either or both cheeks? In North America, this would be seen as odd between men. What was the reason for the invitation to the show? What was the main discussion topic? What were some responses to the show? Did you like the appearance?

Prodromou: I won the WGD Genius of the Year for Europe in 2017. The WGD made a press release and I got invited.

Jacobsen: Was part of the purpose to garner the trust of the public?

Prodromou: I don't like to advertise myself and the public believes anything the media tells them and the public adores celebrities so it was a win-win situation for me.

Jacobsen: On the "With Love Christina," what was the reason for the invitation to the show? What was the main discussion topic? What were some responses to the show? Did you like the appearance?

Prodromou: Again winning the WGD Award.

Jacobsen: You seemed nervous in both appearances. Is this an accurate observation? If so, why? If not, why not?

Prodromou: I don't socialize much. I was out of my water.

Jacobsen: Do you desire or want to be a somebody rather than a "nobody"?

Prodromou: I'd rather be a nobody. In this earth to be a somebody you need to be a celebrity or have lots of money. I'd rather pass. Knowledge and Sophia for me is more important than money.

Jacobsen: Why are knowledge and Sophia sufficient for you?

Prodromou: That is why we are here. To learn and improve.

Jacobsen: Why would most Greeks with an obsession on money choose money rather than their own notions of "knowledge and Sophia"?

Prodromou: They have not studied the occult like me. When you look into the abyss you find that it stares right back at you.

Jacobsen: What or who is Sophia (other than a middle name)?

Prodromou: The Goddess of wisdom. The most important figure for Gnostic Christians.

Jacobsen: What kind of knowledge most appeals to personal sensibilities?

Prodromou: As long as it resonates with my intuition. I find it appealing.

Jacobsen: What makes a real genius?

Prodromou: Finding the unknown.

Jacobsen: What makes a *faux* genius?

Prodromou: A good actor like Trump.

Jacobsen: Are there more real geniuses or *faux* geniuses?

Prodromou: Faux Geniuses for sure.

Jacobsen: What do you make of people who fake striving to be a nobody while being a somebody as their main goal to promote themselves or some idea rather than simply being a nobody, liking it, and preferring being a nobody?

Prodromou: We are all actors and the world is our stage. We have our plays and exits.

Jacobsen: What have been some work pursuits for you?

Prodromou: My passion is helping kids excel in sports through mental coaching.

Jacobsen: What is "mental coaching"? What have been the specialities in the forms of mental coaching for you? How do you go about imparting these mental skills to mentees?

Prodromou: Helping the child make faster and better decisions under pressure. I have come up with several strategies depending on the learning style and personality of the child. One size does not fit all.

Jacobsen: What kind of pressure?

Prodromou: Playing in a competitive environment in front of people. Even the desire of pleasing our parents or coaches results in pressure.

Jacobsen: Fast is time-dependent, therefore relative. How *much* faster for most of the pupils?

Prodromou: One second too early and you are offside. One second too late and you missed your chance. Just as fast as is needed to make a difference.

Jacobsen: What are some of the basic strategies?

Prodromou: Improving focus and concentration. Teaching the kids how to pick up information and how to analyze it to make better decisions.

Jacobsen: What are some of the intermediate strategies?

Prodromou: Nothing is set in stone. What works for John doesn't work for Charlie.

Jacobsen: What are the common, uncommon, and rare personality styles of the children?

Prodromou: Every kid is different. That is the beauty of this world.

Jacobsen: What intellectual issues impress you?

Prodromou: I am not easily impressed as only a small capacity of one's brain is used. I believe that there is more to the world than meets the eye. We only see a tiny fraction of the spectrum after all.

Jacobsen: Which public and private intellectuals impress you?

Prodromou: I'm not easily impressed.

Jacobsen: What have been some educational attainments for you?

Prodromou: I graduated *summa cum laude* from the University of Indianapolis and finished the Master in Education program of the College of New Jersey with a perfect 4.00 GPA.

Jacobsen: What social philosophy makes the most sense to you?

Prodromou: "The alienation of man thus appeared as the fundamental evil of capitalist society."
– Karl Marx

Jacobsen: What political philosophy makes the most sense to you?

Prodromou: Equal rights and opportunities for all men and women.

Jacobsen: What economic philosophy makes the most sense to you?

Prodromou: "Accumulation of wealth at one pole is at the same time accumulation of misery, agony of toil, slavery, ignorance, brutality, mental degradation at the opposite pole." -Karl Marx

Jacobsen: Who is a favourite philosopher for you? I am sensing Marx or potentially Marx for some reason.

Prodromou: You are correct.

Jacobsen: What religious/non-religious philosophy makes the most sense to you?

Prodromou: I believe in God but I also believe that there can be no light without darkness. It is not about choosing sides. It is about finding balance.

Jacobsen: What is being balanced here? What delineates the light from the dark in personalities and life stances? For what it's worth, I am reminded of the Grey Jedi.

Prodromou: You won't see a bear turn the other cheek of her cubs are in danger.

Jacobsen: What kind of God makes the most sense to you?

Prodromou: A God that is fair and just. That judges a person's heart and his intentions rather than his accomplishments.

Jacobsen: What is the argument for this God?

Prodromou: Synchronicity.

Jacobsen: What is the evidence for this God?

Prodromou: I find that I will always get to where I need to be through a random sequence of events in my life.

Jacobsen: What is in most people's hearts?

Prodromou: Blood.

Jacobsen: What is fairness?

Prodromou: Having the same opportunities as everybody else.

Jacobsen: What is justice?

Prodromou: If you do somebody wrong that you also will be wronged.

Jacobsen: Is there a single term, even a neologism, covering the idea of fairness and justice in unison?

Prodromou: I'm not keen on unions.

Jacobsen: Do you believe in a supernatural order, a natural order, or both? Why?

Prodromou: I have had paranormal experiences but let's leave it at that.

Jacobsen: As a detective, one must detect, investigate, and/or inquire – have to ask. What is the definition of paranormal, supernatural, metaphysical, and natural, material, and physical in this context?

Prodromou: Some things need to be seen. They cannot be described. For those that know no explanation is necessary. For those that don't no explanation is possible.

Jacobsen: What is the precise meaning of the idea of a paranormal "experience" within the above-mentioned definition?

Prodromou: I refer you to the above.

Jacobsen: Why does this experience within giving the precise experience, in fact, match the above-mentioned definitions and contextualizations of a paranormal experience rather than simply a natural and normal experience, or event?

Prodromou: I am still experiencing the effects up to this day.

Jacobsen: What ethical philosophy makes the most sense to you?

Prodromou: What is chaos for the fly is dinner time for the spider.

Jacobsen: What worldview brings these together into a neat little package for you?

Prodromou: Thinking outside the box. Nothing is set in stone.

Jacobsen: How does the British background influence the personal perception of the Cypriot society?

Prodromou: Small is not always better.

Jacobsen: Why is inspiring kids important for you?

Prodromou: I had a tough childhood and know what it feels like to be alone in the world.

Jacobsen: How was it “tough”?

Prodromou: Parents were away most of the time and we had little money. I was also bullied in school.

Jacobsen: How did you feel alone? How did your mother cope knowing her rare child was alone and living a tough life?

Prodromou: She did the best that she could. I wouldn't change her for any other mother.

Jacobsen: You are a member of “World Genius Directory, Prometheus, Mensa International, Epimetheus, GENIUS Umbrella Organization, sPIqr, Vertex, Grand IQ Society, Tetra, GOTHIQ, LEVIATHAN 160, Triple Nine Society, HELLIQ, The Glia Society, UBERIQ, TENIQ and many others.”

Prodromou: IQ is just a number but it looks good on my resume. It helps me as a mental coach as the parents are more willing to recruit me in order to help their kids.

Jacobsen: What societies seem the most reliable in providing a social and intellectual space over a long period of time for members?

Prodromou: Difficult to answer. I mostly join for the card and not the interaction.

Jacobsen: What one have you spent the most time interacting with if at all? Why that one?

Prodromou: WGD. I won the award and was their ambassador for a whole year.

Jacobsen: What is meant by becoming a person of a value versus becoming a person of success?

Prodromou: Success for many is having lots of money or social status. A person of value however is important to his community for his knowledge and not for his money.

Jacobsen: Does this make value less fungible than money in some fundamental sense?

Prodromou: Only because most people are obsessed with money and not the pursuit of knowledge. In their defence it is a material world after all isn't it?

Jacobsen: Was Madonna right, after all, but for everyone rather than just “girls”?

Prodromou: No money no honey.

Jacobsen: Following from the previous question, what defines success? What defines value?

Prodromou: Success is different for many people. Value however is making an impact on your community.

Jacobsen: What are common notions of success amongst the Greeks other than making lots and lots of money?

Prodromou: Having a good job. Social status.

Jacobsen: What kind of values must one have to make the “value” of “making an impact on your community”? How have you strived to be valuable to community in this manner? Is the sense of “community” local or global here, or simply a

Prodromou: Doing the best for the person that you are dealing with and not for you.

Jacobsen: An inference rather than a confirmation. You seem to like esotericism and symbology, including highly symmetrical and complex creations. If so, why? If not, why the complicated symbol systems on social media for you?

Prodromou: A lot of ancient and secret esoteric knowledge has been preserved in symbols. Language has changed and is different for everybody but symbols remain the same.

Jacobsen: Why take part in the Dudeist philosophy, as I am, full disclosure, a member too?

Prodromou: I like to be everywhere and am open-minded.

Jacobsen: For those who do not know, what is Dudeism?

Prodromou: The Tao.

Jacobsen: How open-minded?

Prodromou: As much as it takes for my brain to fall out of my head.

Jacobsen: What other groups have you joined to be “everywhere”?

Prodromou: I can’t mention them as they are secret.

Jacobsen: Any of those who aren’t secret, like the public alternative religious and philosophical groups, e.g., Dudeism?

Prodromou: I’m an Associate member of the American Psychological Association.

Jacobsen: What are some characteristics of the secret groups without precise details of them – other than being “secret”?

Prodromou: They find you. You don’t find them.

Jacobsen: You work or worked as a postal officer. Why?

Prodromou: The best and most stable job in Cyprus is as a civil servant. It also gives you lots of free hours in the afternoons to pursue other goals and interests.

Jacobsen: I am reminded of old Bill Sidis working at ‘menial’ jobs while writing works on the history of the Americas, etc. Are you writing anything or working on some intellectual problem at this time?

Prodromou: I’m working on self improvement and my esoteric world through the application of hidden knowledge. You can add “mystery man” to the titles that I go under.

Jacobsen: Of the parts that are non-secretive and esoteric, what is the esoteric part? Is that Austin “Danger” Powers, man of mystery?

Prodromou: It is the part that “changes” you the most.

Jacobsen: What kind of self-improvement?

Prodromou: Receiving an upgrade. Making a better version of you.

Jacobsen: What do you mean only a small capacity of the brain is used? Isn't this an old and outmoded, i.e., non-empirical, stance akin to the 10% myth?

Prodromou: Only for those that have a large ego. It makes them feel better and that they are intelligent. Most of our thoughts are not even our own.

Jacobsen: Why are more men in the high-IQ societies than the women?

Prodromou: I have the same question. Probably women have other interests as I don't think it is about intelligence.

Jacobsen: Who do you consider the smartest person in history?

Prodromou: Tesla.

Jacobsen: Why?

Prodromou: He was a loner just like me. A pig of his work is not even known to the general population.

Jacobsen: Who do you consider some of the smartest people alive now?

Prodromou: Musk and Gates and even Trump.

Jacobsen: Why Musk?

Prodromou: He has a nice girlfriend.

Jacobsen: Why Gates?

Prodromou: He started off with nothing and made billions through his knowledge.

Jacobsen: Why "even Trump"?

Prodromou: He is a good actor.

Jacobsen: What defines religion and theology?

Prodromou: A strong belief in something and faith in the unknown.

Jacobsen: What differentiates the former, a "strong belief," from a conviction? Is faith a good or a bad thing if the thing is unknown or assumed as such? Many things have been believed on faith without evidence and caused a great many tragedies, and the ones/events/happenings/outcomes in which faith lead to good things; better and more evidenced reasons exist and highly probably existed.

Prodromou: I should have been dead in two car crashes that I have had. Faith is knowing that I'm still here for a reason. I guess it all depends on the person and his experiences.

Jacobsen: What is "ancient and secret esoteric knowledge"?

Prodromou: It wouldn't be a secret if I told you now would it?

Jacobsen: What kinds of symbols preserve them?

Prodromou: Many symbols in the occult mainly. Especially those created by John Dee and Aleister Crowley.

Jacobsen: What are the main symbols? What are the main interpretations of them?

Prodromou: Again what I know cannot be discussed in public. It is up to every individual to seek the truth if he desires.

Jacobsen: Is the truth atheism or theism, or some other category?

Prodromou: The truth is still the truth even if nobody believes it. A lie is still a lie even if everybody believes it.

Jacobsen: Any thoughts on atheism?

Prodromou: Everybody has free will to believe or not. I respect their free will not to believe just as long as they respect my right to believe.

Jacobsen: Any thoughts on theism?

Prodromou: Same as above.

Jacobsen: Any thoughts on agnosticism?

Prodromou: Same as above.

Jacobsen: What have you mainly learned from purported secret esoteric knowledge?

Prodromou: That there is a purpose to life and not what everybody thinks it is. I have learnt why we are here.

Jacobsen: What are some hints or indications as to the purpose of life?

Prodromou: Improving your inner world and DNA.

Jacobsen: What changes in life have come from this for you?

Prodromou: I have a whole new heart.

Jacobsen: Why did you pursue this course in life rather than others?

Prodromou: I believe everything else is a distraction.

Jacobsen: How do we know it's ancient knowledge?

Prodromou: I have applied it and have seen the unseen. But you have to take my word for it as hard as that seems.

Jacobsen: Does this not seem like a skirting, or circumnavigating the issue entirely, similar to the promise of unlikely rewards of 72 virgins after death for martyrs in some interpretations of Islamic scriptures – ‘just believe me as you’ll get it after you die, *take my word for it*’? This sort of argument from authority. What of those who simply cannot ‘take your word for it’ – no matter how hard it may seem – and require more robust responses, e.g., like detectives?

Prodromou: Even if I told you you would believe. And even those that do believe won't know how or what to do.

Jacobsen: What if what you saw was not the unseen and rather a hallucination or a mere chance coincidence rather than a real experience in true transaction with the external world – between the self and the natural world?

Prodromou: Again, I'm still experiencing the effects of my experience to this day.

Jacobsen: How do we know it's esoteric and secret rather than simply esoteric knowledge?

Prodromou: What I have seen I doubt many people have seen.

Jacobsen: Does this seem unsatisfying and akin to a non-answer, almost a *faux* mysticism so as to skirt real explanation through properly verifiable and more reliable means than fallible human experience?

Prodromou: Some things are better left unsaid.

Jacobsen: Most Greeks are formal religious, as in Greek Orthodox Church. Why?

Prodromou: That is what they are brought up to believe.

Jacobsen: Is it correct or incorrect as a system of thought, or more wrong or more right as a theology?

Prodromou: Who am I to judge?

Jacobsen: How could this enforced and inertia-based belief in Greek Orthodox Christianity change in the future to a different faith or no faith at all?

Prodromou: I doubt it will change. Religion is strong in Greece and Cyprus and the church has a big role in Society and lots of money and property. The Head of the church can even influence the Government.

Jacobsen: Following from the previous question, how does this color their image of the nature of world, human beings, and the relations of human beings to one another and the world?

Prodromou: Cultural bias is created that doesn't allow much room to the individual to explore other ideas and values.

Jacobsen: What is creativity?

Prodromou: Tapping into your own intuition to come up with something original.

Jacobsen: What is intelligence?

Prodromou: Intuition for me is the highest intelligence.

Jacobsen: Why intuition?

Prodromou: That is where the magic happens.

Jacobsen: Is intuition truly a form of intelligence or more a subjectively formalized, experientially developed sensibility about life and its meanderings?

Prodromou: It is the highest intelligence.

Jacobsen: What is genius?

Prodromou: Finding X.

Jacobsen: What is purpose of having ancient esoteric secret knowledge in the first place?

Prodromou: "If you die before you die you won't die when you die." An ancient inscription written at Mount Athos.

Jacobsen: Any idea as to authorship of the inscription?

Prodromou: No idea.

Jacobsen: Why is Mount Athos significant to the Greeks and to Eastern Orthodox monasticism?

Prodromou: It is their holy place. Everybody that is Greek has gone there or will eventually go there at least once in their life time.

Jacobsen: Is “ancient knowledge” good or bad? With current advancements, it sounds like “Ancient Grains” or some such thing.

Prodromou: That is the plan. To keep you away from the old. Who says new is better?

Jacobsen: Any thoughts on the freemasons in that regard – the society with secrets rather than a secret society?

Prodromou: I respect them although most are pawns and only a handful of those at the highest degrees reach the truth.

Jacobsen: Why does the organization make most of them pawns?

Prodromou: To do their dirty work.

Jacobsen: Any thoughts on different Satanist or associated groups including The Church of Satan, First Satanic Church, The Satanic Temple, Luciferianism, Order of Nine Angles, or the Temple of Set?

Prodromou: I respect them as well; although, it is not good to be so fanatic. It does not leave room to explore other paths. Satan was once an angel after all.

Jacobsen: Any specific reflections on The Church of Satan?

Prodromou: It is what it is.

Jacobsen: Any specific reflections on First Satanic Church?

Prodromou: It is what it is.

Jacobsen: Any specific reflections on The Satanic Temple?

Prodromou: It is what it is.

Jacobsen: Any specific reflections on Luciferianism?

Prodromou: It is what it is.

Jacobsen: Any specific reflections on Order of Nine Angles?

Prodromou: It is what it is.

Jacobsen: Any specific reflections on the Temple of Set?

Prodromou: It is what it is.

Jacobsen: Do you believe in literal or metaphorical (or both) angels and demons? If so, how so? If not, why not?

Prodromou: Maybe they work together and are two parts of the same team.

Jacobsen: Any thoughts on Anton LaVey?

Prodromou: A genius but his work has been modified.

Jacobsen: Has his work been modified for better or for worse?

Prodromou: For the worse.

Jacobsen: Any thoughts on Aleister Crowley or his self-claimed follower Timothy Leary?

Prodromou: Both geniuses although again they have been made out to be the worst possible people to keep society from exploring their work.

Jacobsen: Any thoughts on Anton LaVey?

Prodromou: I would have loved to have met him.

Jacobsen: Any thoughts on the nature of good and evil? Does this relate to the aforementioned light and dark before, lightness and darkness before?

Prodromou: Good and evil change and are dependant on your circumstances and are in the eyes of the beholder. A cake is good comfort food unless you have diabetes. Bring those brownies next time you visit. It all depends upon where you are standing.

Jacobsen: Any thoughts on those who claim this is moral relativism (usually stated in a derogatory tone)? Where do you stand now, grey one?

Prodromou: I respect their right to believe what they like about the subject and hopefully they will respect mine.

Jacobsen: What is science? What is philosophy?

Prodromou: Science is when we prove something to be correct through “facts”. Philosophy on the other hand is your “idea” about something. My philosophy is that facts are important but intuition is more important. But you need to be sure it is your intuition talking before acting upon an impulse.

Jacobsen: What is a ‘fact’?

Prodromou: $1+1=2$.

Jacobsen: What is an “idea”?

Prodromou: Something that hasn’t been proven yet to be a fact.

Jacobsen: Why does impulse lead to poor decisions?

Prodromou: Not always the case.

Jacobsen: What else could be “talking”? What means by which to differentiate intuition from other internal ‘talks’?

Prodromou: Our spirit guide.

Jacobsen: What if the Gospel of John alongside of the Synoptic Gospels, indeed the entirety of the Bible – Old Testament and New Testament, amount to fabricated documents or not entirely factual (as a hypothetical)? Now, most historians, secular and religious, agree Jesus Christ existed; however, all of the miracles, violations of the natural laws known today, and the fallibility of the human mind in terms of eyewitness testimony seem important to take into consideration, especially as all of the texts purport eyewitness testimony. Yet,

Professor Elizabeth Loftus's work is clear of the poor data-taking devices of human beings. In that, even if the Christian Scriptures are taken as holy, as inspired, and eyewitness testimonies, they're still mediated by human sense perception and cogitation leading to the inevitable now-empirical conclusion of highly unreliable sources in eyewitness testimony within the field of cognitive psychology in regards to eyewitness testimony.

Prodromou: They are fabricated documents that have gone through many edits. Doesn't mean there isn't any truth to them. You just need to filter out the lies.

Jacobsen: Following from the previous question, even if we take the explicit reference to the lightness and the darkness in Christian holy texts in a base textual analysis, or even in a detailed *Logos* oriented interpretation of the Gospel of John starting with John 1:1 to John 1:2 with "In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God," it's not taken as literal, but as metaphorical. Why need the text to know this? Why have a holy text at all? Why not another fallible, questionable text without the sacred, inspired assertions behind it?

Prodromou: The bible is a story about two tribes.

Jacobsen: Following from the previous question, what is gained by reference to a particular religious text coming from the ancient world in which philosophy was developed, but science, human rights, and so on, were not? Isn't this simply outmoded and not needed anymore?

Prodromou: The bible tells us what has come before and what will come in the future. This year alone has been quite biblical for example.

Jacobsen: Following from the previous question, how would one go unnoticed while leaving a significant trace in the context of a base textual analysis and in the detailed Gospel of John analysis? I am reminded of a Margaret Atwood quote, "I would like to be the air that inhabits you for a moment only. I would like to be that unnoticed and that necessary."

Prodromou: Just by doing one's job. The air doesn't ask why it is there or asks for money to be there. It is invisible but without it humanity would not exist.

Jacobsen: What if intuition is simply a poor reasoning apparatus output of the human organism?

Prodromou: Again it depends on your ability to reason. What if our thoughts are not our own?

Jacobsen: When we take some of the more important aspects of individual identity for some members of the profoundly gifted category or the profoundly high IQs, there seems a sense of the alone-ness, in which the individual gifted person's temperaments and gifts leaves them in a straightjacket in some manner. On the one hand, they know more than most, max out standardized tests of valid types, and can process more quickly, more in-depth, and with greater relatedness in concepts. On the other hand, this sets them apart from ordinary society in a number of regards, which can make them out of sync emotionally and socially with peers due to lack of experience either due to innate factors or more time spent in independent study, or little overlap in ways of thinking for them. It is a sort of unresolvable pickle in the ways in which the species evolved. So, in some ways, tough, get used to it, while, on the other hand, how do these individuals find a place in

society for some level of optimal fit for them? How have you dealt with this coming to terms with the world?

Prodromou: We are not pieces In a jigsaw puzzle. Some of us don't need to fit in.

Jacobsen: Following from the previous question, some will take a certain attitude of outright antagonism to the idea of coming to terms with the world exhibiting itself in opposition to standard sources of authority and structure and organization within the society, including established religions, governmental structures, and elders and experts within the society. This can take forms of delusions of grandeur, opposition defiance disorder, and simply taking the path of molasses all through life, which, naturally, comes with lifelong consequences for them. Any words of advice or guidance to younger members of the profoundly gifted cohort who could use some guidance in this regard?

Prodromou: Be your own person.

Jacobsen: For those parents with a profoundly gifted child, who can be ten years old while functioning at the intellectual capacity of a an average eighteen year old or more, what is some advice for them in terms of nutrition, fitness, and intellectual challenge?

Prodromou: Listen to the child and what he or she wants.

Jacobsen: When it comes to girl-girl time, boy-boy time, boy-girl time, what are some difficulties for some members of the profoundly gifted community who happen to exist in milieu of same-age peers and no peers intellectually, in a time of first finding lust and love while not having the requisite emotional maturity – even feeling intensely while lacking experience to buffer the intensity to socially and interpersonally appropriate levels?

Prodromou: This world is not ideal for everybody. It is a rich man's world but I'd also say the better one looks the easier it is to fit in.

Jacobsen: How does 1-sigma intelligence on the right-side of the bell curve differ from 2-sigma intelligence in terms of behavioural and verbal proxies?

Prodromou: Not very much.

Jacobsen: How does 2-sigma intelligence on the right-side of the bell curve differ from 3-sigma intelligence in terms of behavioural and verbal proxies?

Prodromou: Again not very much.

Jacobsen: How does 3-sigma intelligence on the right-side of the bell curve differ from 4-sigma intelligence in terms of behavioural and verbal proxies?

Prodromou: Not very much.

Jacobsen: How does 4-sigma intelligence on the right-side of the bell curve differ from 5-sigma intelligence in terms of behavioural and verbal proxies?

Prodromou: Not very much.

Jacobsen: How does 5-sigma intelligence on the right-side of the bell curve differ from 6-sigma intelligence in terms of behavioural and verbal proxies?

Prodromou: Not very much. One sigma differences are insignificant. I doubt anybody can tell the difference between a 5 and 6 sigma dude just by chatting to them.

Jacobsen: How can societies emphasizing excellence more than equity cheer on and support the profoundly gifted and talented members of its communities?

Prodromou: Intelligence will always be repressed. Governments don't like intelligent people that can think for themselves.

Jacobsen: What do you consider some of the oldest secret societies?

Prodromou: The Knights Templars.

Jacobsen: What seems like the general idea, while not stating the content, of many of the secret societies and the alternative theistic groups like the freemasons?

Prodromou: Self improvement and the quest for the holy grail.

Jacobsen: What annoys you?

Prodromou: People who think that they are always right and not open to new ideas.

Jacobsen: What makes you feel more at ease, at peace, with the world?

Prodromou: Not thinking about the world and not reading the media or watching TV.

Jacobsen: Would you ever plan to move away from Greece-Cyprus-Turkey area back to the United Kingdom or some other place? If so, why? If not, why not?

Prodromou: I don't plan my life. I am spontaneous and may take off one day.

Jacobsen: Most of the more intelligent people in history known have some – what I call – lifework. Some pursuit covering a large part of their lives, in spite of the chaos, nonsense, and personality quirks that may be part and parcel of the personality behind the lifework. Do you have a lifework? If so, what? If not, why not?

Prodromou: My pursuit was my inner world. Making a better version of me. No time for anything else.

Jacobsen: How would you characterize the general life trajectory for you?

Prodromou: It's hard to define.

Jacobsen: Where would you like your life to end up?

Prodromou: In the unknown garden of Nemo.

Jacobsen: What is metaphysics?

Prodromou: Why we are here.

Jacobsen: Why choose metaphysics from Dudeism?

Prodromou: Why we are here is a question that I have been trying to answer since I were a kid.

Jacobsen: Who do you consider the most creative person in history?

Prodromou: DA VINCI.

Jacobsen: Who do you consider the best writer in history?

Prodromou: Shakespeare.

Jacobsen: What are the typical societal expectations of Greek heritage women? What are the typical societal expectations of Greek heritage men?

Prodromou: Getting married and finding a nice spouse.

Jacobsen: What are some cultural nuances largely known only to the Greeks about the ways in which men and women, old and young, blue-collar and white-collar, and so on, exist in Greek society, in Cypriot society, and in the diaspora with Greek heritage in terms of a sense of extended identity in the Greek people?

Prodromou: I'm not the best one to answer this question. I don't socialize enough to know.

Brief Remarks on Cypriot Identity with Marios Prodromou: Member, World Genius Directory (2)

December 8, 2020

Abstract

Marios Sophia Prodromou is a member of the World Genius Directory.

He discusses: Cypriot identity; the Turks; the Greeks; intercommunal violence; the origin of Cypriot self-consciousness; Greek-Cypriots are Christian; British-Cypriots; district differences; and the core philosophy.

Scott Douglas Jacobsen: What is Cypriot identity?

Marios Prodromou: There are Greek-Cypriots and Turkish-Cypriots. Duality exists among Cypriot identity.

Jacobsen: How is Cypriot identity seen to the Turks?

Prodromou: They call themselves Turkish-Cypriots and have the same rights as Greek-Cypriots.

Jacobsen: How is Cypriot identity seen to the Greeks?

Prodromou: Same as above.

Jacobsen: How has intercommunal violence played out in terms of self-identity of Cypriots?

Prodromou: The past has left a lot of scars on both communities.

Jacobsen: What is the origin of Cypriot self-consciousness outside of, if not parallel with, the nation-state?

Prodromou: If you are born in a Greek family you receive an ID card as a Greek-Cypriot. If you are born in a Turkish family your ID card would say Turkish-Cypriot. Both categories have the same rights and you can get a Cyprus Passport and travel freely in the EU

Jacobsen: How is Christian identity tied to Cypriot identity?

Prodromou: Nearly all Greek-Cypriots are Christian

Jacobsen: How does this play out in practical terms for the well-off and the poor alike with Cypriot heritage?

Prodromou: The church wins.

Jacobsen: Are there many remnants of British identity leftover in Cypriot identity?

Prodromou: We have a third class of British-Cypriots. Most of them get a Cyprus ID card but keep their British Passport. I fall into this category.

Jacobsen: For Famagusta, Kyrenia, Lamaca, Limassol, Nicosia, and Paphos, are there district differences in ways in which the Cypriot self-identity expresses itself in social and cultural life? If so, how? If not, why not?

Prodromou: No. Cyprus is a population of less than a million. 90 mins drive from one side of the island to another. People mix with one another every day.

Jacobsen: What is the core philosophy inherent in the identity of a Cypriot?

Prodromou: The love for Cyprus. An island with a lot of history. The island of love and of Aphrodite and Dionysos.

Jacobsen: Thank you for the opportunity and your time, Marios.

Prodromou: Thank you too, Scott, it's been a real pleasure.

ESOTERIQ ID-12: Matthew Scillitani

An Interview with Matthew Scillitani on Family, Early Formation, Important Mentors and Books, and Interests (Part One)

March 1, 2020

Abstract

Matthew Scillitani, member of *The Glia Society* and *The Giga Society*, is a web developer and SEO specialist living in North Carolina. He is of Italian and British lineage, and is predominantly English-speaking. He earned his bachelor's degree in psychology at East Carolina University, with a focus on neurobiology and a minor in business marketing. He's previously worked as a research psychologist, data analyst, and writer, publishing over three hundred papers on topics such as nutrition, fitness, psychology, neuroscience, free will, and Greek history. You may contact him via e-mail at mattscil@gmail.com. He discusses: family background; a self extended through time; early formation; influential mentors and guardians; important authors and books; pivotal educational moments; intellectual interests; exceptional intelligence discovery; and intelligence tests taken, scores earned, and the relevant standard deviations.

Scott Douglas Jacobsen: What is family background or lineage, e.g., surname(s) etymology (etymologies), geography, culture, language, religion/non-religion, political suasion, social outlook, scientific training, and the like?

Matthew Scillitani: My father's side of the family is Italian and my mother's British, the former immigrating to the United States just a couple of generations ago. The Italian language fell out of use in the last generation on my paternal side, and I was raised speaking primarily English and some Spanish, which is typical in American schools. I'm an only child and was raised on the East coast in a middle-class, Christian home. My mother was non-denominational and my father Catholic, though I was brought up Methodist. My family is well-educated, with both of my parents having earned multiple degrees, one of which was in aeronautics. Watching my mom eat healthy and exercise also influenced my diet and fitness. Neither of my parents spoke much on politics when I was young, and I had a healthy blend of viewpoints along the political spectrum. This is also in large part because I lacked the political indoctrination so many others experience from the media, in education, and through their social groups as they move through childhood and adolescence.

Jacobsen: With all these facets of the larger self, how did these become the familial ecosystem to form identity and a sense of a self extended through time?

Scillitani: This is a difficult question to answer, primarily because I kept to myself as a child, so there was little environmental influence on my development. Some of the familial influences that had some impact on my identity were fitness behaviors and workaholicism. My mother made sure to feed me healthy meals and inspired me to start long-distance running and weight training as a teenager. This led me to set strength records in my high school, run varsity track and field, and join the wrestling team my senior year. Fitness continues to have an impact in my life and day-to-day behaviors, and I continue to exercise with the goal of remaining healthy into an advanced age. One of my greatest fears is losing my mobility or mental faculties as a senior. Both my

parents worked very hard while I was growing up, and being around two conscientious adults inspired me to do the same.

Jacobsen: Of those aforementioned influences, what ones seem the most prescient for early formation?

Scillitani: Workaholism from a young age, and the related ability to hyper-focus on a single task for long periods of time. As a child, I'd spend nearly the entire day drawing, and would occasionally pass out from exhaustion because I'd rather practice than sleep. As an adult, I treat my work just as seriously, and am prideful of my mental endurance. One week at university, I was studying physics as a hobby and was so focused that I didn't realize I had gone without food or sleep for several days. I eventually fell asleep standing up, and a roommate saw me sleeping upright in the middle of the room and had to shake me awake. This workaholism later transferred into my working life after college, and I find it difficult to take any extended breaks from work.

Jacobsen: What adults, mentors, or guardians became, in hindsight, the most influential on you?

Scillitani: My weight training coach in high school had an enormous influence on my self-esteem. When I started weight training, I was the weakest student in the weight room. He saw how hard I worked and stood up for me when the other students mocked my weak physical constitution. The next year I was one of the strongest students at our school and could perform great feats of strength, such as strict barbell curling more than my body weight. Ironically, my track-and-field coach had the opposite view, but also achieved a similar effect on my fitness outcome. I was a mid-long distance runner on his team my freshman year of high school, and during sophomore year tryouts I suffered from heat stroke and didn't perform well. Rather than give me a second chance I was cut from the team. I asked him why he wouldn't let me try again and he said it was because he didn't believe I'd ever be a good runner. This drove me to train harder than before, and a few months later I had cut my mile time down from 7 1/2 minutes to a hair over 5 minutes.

Jacobsen: As a young reader, in childhood and adolescence, what authors and books were significant, meaningful, to worldview formation?

Scillitani: *Logic*, by Immanuel Kant changed how I approached problems for the rest of my life. Had it not been for reading that book, I probably would not have been able to come up with the solutions to many of the I.Q. test problems or other puzzles I've worked on. The *Iliad*, by Homer, also drove my interest towards Greek mythology, and many of those stories influenced my art and writing for many years. I think reading, especially a blend of fiction and nonfiction, is essential for a child's creative and intellectual development. It's concerning that many children and teenagers today don't read books outside of school, preferring to socialize or play video games, both of which are inferior to their cognitive development.

Jacobsen: What were pivotal educational – as in, in school or autodidacticism – moments from childhood to young adulthood?

Scillitani: Teaching myself how to draw was a pivotal time in my childhood. I would study the drawings of other great artists and then meticulously teach myself to emulate their styles, sometimes taking hundreds or even thousands of hours to master before moving on to the next artist. It was especially hard to emulate Leonardo Da Vinci's drawings because his style is very

unique and technically demanding. At age eight or nine, I spent hundreds of hours over several weeks trying to re-create a self-portrait of his. After passing out on the dinner table, I woke up to see my mother had taken three of my failed drawing attempts and framed them. The motive behind that was kind, and I appreciate the thought, but every time I saw those pictures it only reminded me of my lack of ability. A few months later, seeing them so often had motivated me to draw a near-exact replica of his portrait

Reading books on psychology and sociology also helped me learn how to socialize more effectively. The most interesting information being on ego strength, and how a weak ego negatively impacts social outcome for the disposed person. Those co-workers, students, friends, and family who would rather insult than give compliments, who would brag while claiming humility, and who can't admit when they're wrong are good examples of this. It takes someone with a strong ego to deal with these people, since we mustn't take them seriously. Otherwise, avoidance is the only good option.

Jacobsen: For formal postsecondary education, what were the areas of deepest interest? What were some with a passion but not pursued? Why not pursue them? What were the eventual qualifications earned to this point in life?

Scillitani: Psychology and neurobiology were my main interests while attending university. I received my bachelor's in psychology and took as many neurobiology classes as I could during that time. I was also passionate about mathematics and some physics problems on light, but only realized I wanted to pursue these after having already taken several years of psychology courses. I do plan on working a more math-focused vocation in the future, and will continue thinking about a couple of physics problems only as a hobby. At this point in life, I have many certificates for various computer programs (such as Microsoft, CSS, HTML, Dreamweaver, and so on) and computer engineering, as well as a bachelor's degree in psychology.

Jacobsen: When was exceptional intelligence discovered by family, friends, and yourself?

Scillitani: In elementary school I took an I.Q. test and in spite of being very distracted and having put in little effort I still scored a couple of standard deviations above the mean. I wasn't told about that until I was seventeen though. I think the 'eye opener' was when I was fifteen years old and realized I had skipped three or four math grades (depending on the curriculum of the school), taking college-level trigonometry as a sophomore in high school. I didn't do very well in the class, but I was still proud to be there. I learned from the teacher that I was the youngest person to ever take that course in my high school, which was very large and had been active for over forty years.

Jacobsen: What have been the intelligence tests taken and the scores earned on them with the relevant SDs? Also, as an aside, what seems like the most robust non-pencil-and-paper proxy of general intelligence to you?

Scillitani: I've taken many I.Q. tests, voluntarily from age 19 on. In the beginning, I invested only a few hours of time in each test, and mostly scored in the 140s and 150s (S.D. 15). The first high-range I.Q. test I took was Dr. Jason Bett's *WIT*, scoring 154 (S.D. 15). After taking a few more tests, I began spending ten or twenty hours of time on them and my scores crept up into the 150s and 160s (S.D. 15). The first test that I spent over forty hours on yielded an at-the-time high score of 167 (S.D. 15), on Paul Cooijman's *Marathon Test – Numerical section*. It was only after asking some ultra-high I.Q. scorers for advice that I started scoring extremely high. The advice,

which I recommend all I.Q. test-takers follow, was to work on a test until you can't easily answer any more problems. Then, put the test down and wait a few months before coming back to it with a fresh start on the unsolved problems. Following this strategy, I received a perfect score on Paul Cooijmans' *Psychometric Crosswords*, scoring 190 (S.D. 15). I had spent probably around eighty hours on that test over the span of a year. Just a couple of weeks later I scored 176 (S.D. 15) on the verbal section of *The Marathon Test*, also by Paul Cooijmans, following the same strategy.

The most robust non-pencil-and-paper proxy of general intelligence is probably the ability to delay gratification. A large part of delaying gratification, and impulse control in general, is having the foresight to know the repercussions of one's actions and choosing the most positive one, even if it comes at an immediate loss. This is a good indicator of intelligence because whether our intellect or emotions guide our actions is mostly determined by which of those we have more of.

Jacobsen: What responsibility, if any, comes with exceptional levels of general intelligence?

Scillitani: I'm not sure if there's any responsibility that's exclusive to intelligent people. Everyone should probably do what they're best at, so long as it's not criminal. Some of the most important vocations don't require exceptional intelligence, and if everyone pursued careers in STEM (science, technology, engineering, and mathematics) fields we'd lose farmers, garbage men, police officers, teachers, firefighters, and so on.

An Interview with Matthew Scillitani on Society, God, the Soul, and Language and Thought (Part Two)

March 8, 2020

Abstract

Matthew Scillitani, member of *The Glia Society* and *The Giga Society*, is a web developer and SEO specialist living in North Carolina. He is of Italian and British lineage, and is predominantly English-speaking. He earned his bachelor's degree in psychology at East Carolina University, with a focus on neurobiology and a minor in business marketing. He's previously worked as a research psychologist, data analyst, and writer, publishing over three hundred papers on topics such as nutrition, fitness, psychology, neuroscience, free will, and Greek history. You may contact him via e-mail at mattscil@gmail.com. He discusses: political view development; workaholism and intelligence; more ideal social and governmental system; religion; God; economics; human nature; soul; language; and thought.

Scott Douglas Jacobsen: What have been the development of political views based on the lack of sufficient standard indoctrination of you?

Matthew Scillitani: My political views took much longer to develop than my peers, most likely because of low exposure to that topic. Something I noticed early on is that most people's beliefs polarize the more they argue with opposing political party members. To avoid that, I try not to affiliate with any party or become too emotionally or intellectually invested in any political belief. This comes at a cost, however, since many party members have an 'us versus them' mentality, and not choosing a side means being their opponent. This is especially dangerous today since political tensions are so high.

Jacobsen: Does workaholism seem common among the more intelligent? In that, motivation becomes a core factor for the development of intellectual capacities to their true limits?

Scillitani: I think there is probably a weak correlation between workaholism and intelligence. Being able to delay gratification and having good foresight are more common features in intelligent people, which promotes conscientiousness. However, workaholism is probably more related to different personality or cultural features, or is the product of psychiatric disorders such as Asperger Syndrome or obsessive-compulsive personality disorder.

Regarding the second part of your question; the brain is very plastic and to reach one's true intellectual potential one has to think often, think hard, and think clearly. Workaholism is one way to achieve that. At the extreme end, even workaholism can be pushed too far and become detrimental to one's productivity and health though. If we can't remember the last time we ate or slept then it is a sign we need to do those things and take a break.

Jacobsen: What seems like a more ideal social and governmental construction for the wellbeing of human beings in nations now?

Scillitani: An ideal system would probably not be very crowd pleasing. The first thing to go should be public voting, which I imagine would be met with some initial backlash. Public voting has and will always be in the best interest of the government and never in the best interest of its

citizens. Because of public voting, politicians appeal to what a nation's citizens want rather than what is best for them. Imagine if our parents asked us to vote on what we ate for dinner as children. Many of us would go to bed with pudding wrappers littered across the floor, clenching our stomachs in pain. The government must sometimes do things that are uncomfortable to its citizens in the short-term in order to improve overall human wellbeing in the long-term.

A dictatorship is probably best so long as the dictator is knowledgeable, intelligent, ethical, and chooses their advisers well. This will likely not happen in our lifetime, but it will lead to much rapid progress when it does. As an aside, many of the debates people have today about politics are ones that have already happened many times throughout history. All one needs to do is grab a history book and read what happened when each system was implemented. Contrary to popular belief, we are not much smarter now than we were two millennia ago, and failed governmental systems then will still fail today.

Jacobsen: What is religion? Why are much of the world religious? Why are a significant minority of the world not religious (in standard definitions)?

Scillitani: The function of religion differs between its founder and followers. To the founder, it's a business or system of government. To the follower, religion can be a social or spiritual community, a path towards finding some meaning in life, or a prison in some unfortunate cases, such as Islam. Much of the world is still religious because it's hard to break ancient traditions, especially when those traditions are still so influential in our cultures and governments.

There are many reasons why some people would not be religious. Lack of exposure to religion or being harmed by religious dogma are good examples (gay conversion therapy, as an example). Today, it's also very trendy to be an atheist, and many 'smart' young people attack religion, typically Christianity, so they might feel smarter than they really are. The irony is that nearly all of these young people say nothing new or interesting during religious debates and just echo what they've heard on social media.

Jacobsen: Any stances on God, gods, uncertainty, or no gods? The old pickle question important to so many.

Scillitani: I think the universe has a creator and is not the product of chance. Without any intelligent design there would be no laws governing inanimate objects, which we know follow predictable behaviours. The odds that the universe as we know it was the result of chance alone is the same as flipping a fair coin infinite times and it landing on heads each time. Because our coin always behaves predictably, the only conclusion that makes sense would be if the coin wasn't actually fair and that it landing on heads each time was by design.

Jacobsen: When you look at the current financial or economic systems, what ones make the most sense to the nature of human beings?

Scillitani: I don't know enough about economics to give an educated answer. If given the choice, Paul Cooijmans' proposed economic system in his hypothetical party program is the best one I've seen so far.

Jacobsen: Do human beings have a nature? If so, what is it?

Scillitani: There's a duality to human nature, and people are either producers or consumers. Producers strive towards self-improvement, work hard, create, lead by example, and are inspiring. Consumers don't strive towards self-improvement, are lazy, destroy, follow, and are

uninspiring. The knee jerk reaction might be to think that consumers are entirely useless but that's not the case. Without consumers, we'd eventually achieve perfection and then be robbed of any further self-improvement. We may all thank consumers for their role in slowing us down so we can continue to get better.

Jacobsen: Do you believe in a soul? If not, why not? If so, how do you define it?

Scillitani: I believe we have a soul and would define it as the intensity of the impression we make on others during and after our lifetime.

Jacobsen: What is language?

Scillitani: Language is any replicable form of communication that can be understood between at least two things, animate or inanimate. When my dog was a puppy I used to give him a treat when he'd stand on his hind legs because I thought it was very impressive. Now he's learned to stand on his hind legs when he wants a treat, and I understand his intent. We've developed our own replicable form of communication or language.

Jacobsen: What is a thought? Can thought be separated from language?

Scillitani: I'd define a thought as any instance of mental awareness that can be understood to mean something to the one experiencing it. I doubt thought can be separated from language. It's likely that language is a requisite to have thoughts in the first place since even basic feelings such as hunger and pain can be expressed in a rudimentary language.

An Interview with Matthew Scillitani on Left-Right Polarity and Extremity in the United States (Part Three)

March 22, 2020

Abstract

Matthew Scillitani, member of *The Glia Society* and *The Giga Society*, is a web developer and SEO specialist living in North Carolina. He is of Italian and British lineage, and is predominantly English-speaking. He earned his bachelor's degree in psychology at East Carolina University, with a focus on neurobiology and a minor in business marketing. He's previously worked as a research psychologist, data analyst, and writer, publishing over three hundred papers on topics such as nutrition, fitness, psychology, neuroscience, free will, and Greek history. You may contact him via e-mail at mattscil@gmail.com. He discusses: the American Left; status of the Right in America; status of the Left in America; 2020 fault lines between the Left and the Right; strengths and weaknesses of the Trump Administration and President Trump; social media and American values; social media and negative American stereotypes; dirty tactics used by the Left; dirty tactics used by the Right; strengths and weaknesses of the Left and the Right in America; and bridging the gulf between the American Left and Right.

Scott Douglas Jacobsen: There exists a left-right polarity in the United States. Its ideals becoming split by demographics, by states, by age, even by sex and gender. When the polarity, like a rubber band, stretches beyond a particular capacity of the public's tolerance, there can be flare-ups. Let's talk about politics, you hold no particular bias in political affiliation or too much emotional attachment to political philosophies. This can give a basis for reasoned considerations on the political dynamics of the United States. "Left" and "Right" used as simplifiers for the purposes of Part Three's interview. What is the status of the Left in America?

Matthew Scillitani: The Left is not doing too well in the United States right now. This is mostly because of a growing number of extremists in addition to a divide between the media and ordinary party members. These extremists, which are largely made up of young adults, make the most noise and have greater media coverage from both the Right and Left news outlets. Because of their actions much damage is being done to the Left's public image. This problem is made even worse from the media blurring the line between the beliefs of a few extremists and the moderate Left.

The pendulum will swing back in the Left's favour soon though. I think Trump will probably win the 2020 election and then we'll see a Democrat take office in 2024.

Jacobsen: What is the status of the Right in America?

Scillitani: The Right is doing better than the Left in terms of governmental control but ordinary party members aren't doing too well. This is because the media has convinced leftists that the Right is comprised of racist, sexist, xenophobic bigots. This is largely untrue, and there is probably no more of those people in either party, but the harm this causes the Right is enormous. Many rightists are afraid of revealing their party affiliation out of fear of being called a Nazi or

some other such term that would get them fired from their jobs and ostracized from their social groups.

This treatment by the media has made some rightists so resentful that they've adopted the same beliefs that the media said they had from the offset.

Jacobsen: What are the main fault lines between the Left and the Right in 2020 America?

Scillitani: There are many fault lines between the Left and Right in America today. The main ones being related to immigration, economics, governmental involvement, social order, morality, healthcare, and general human rights. The Right mostly advocates for individualism, nationalism, and capitalism with the Left mostly advocating for collectivism, egalitarianism, and socialism.

Jacobsen: With President Trump and the Trump Administration as a whole, what seems like the strengths and weaknesses of the leadership of the former, in particular, and the latter, in general?

Scillitani: Trump's strengths lie in his assertiveness and business acumen while his weaknesses are social immaturity and inclination for bullying. The former two qualities are good for rightists since Trump and his administration have gotten quite a lot done this current presidential term. The latter two qualities are not so good since it harms America's image to much of the Western world. Some of the Eastern world seems to view Trump as a cultural icon in spite of those qualities though.

Jacobsen: How are social media helping to promote positive American values?

Scillitani: That's a tricky question to answer because I'm not sure if social media does that. Social media lowers social accountability, which leads to bullying, and lets people with rare and extreme beliefs find others with shared interests and live in a 'bubble' with them. I'm convinced that if there were no social media then the divide between the Left and Right would be much narrower and we'd be better off for it.

Jacobsen: How are social media promoting negative American stereotypes?

Scillitani: That it's so easy to find uneducated, unintelligent, ignorant people with strong opinions and thousands of likes on their posts is not very good. This leads to a lot of young people thinking that these very poor opinions are factual. Many social media outlets are now censoring racist, sexist, or mean-spirited comments, which helps prevent some negative American stereotypes somewhat. However, it's debatable whether or not it's a good idea to remove those comments, and it may end up being a bad thing in the end. We will have to wait and see what happens.

Jacobsen: What are the dirty tactics used by the Left in political rhetoric and in political campaigns?

Scillitani: Bullying, fear mongering, suppressing certain groups while claiming that voting leftists into office will help the same groups they're suppressing, and creating imaginary problems that voting leftist politicians into office would solve. Left-wing media and politicians make leftists afraid of rightists and their beliefs, even if it means inventing imaginary problems. One such example being blaming the Right for misogyny, something so incredibly rare in the Western world that all of the protests and riots being done by modern feminists ends up being both unnecessary and harmful.

The Left also convinces minorities that they need the government to take care of them and that the Right couldn't care less about their welfare. This is untrue and, ironically, betrays that the leftist politicians and media are the abusers to these groups.

Jacobsen: What are the dirty tactics used by the Right in political rhetoric and in political campaigns?

Scillitani: Also bullying, fear mongering, and creating imaginary problems that voting rightist politicians into office would solve. The bullying is of the same variety that the Left uses, which is mostly name-calling and shaming opposing party members. The Right's flavor of fear mongering isn't from fear of progression but from fear of cultural collapse. Rightists think that mass immigration, socialism, and egalitarianism in general would cause America's culture to change for the worse. It's unfortunate that those things would, in fact, cause major changes to American culture, and not in the direction they would prefer.

Some imaginary problems that right-wing politicians use to scare the Right into voting for them are usually related to socialism. Things like, 'if we adopt a socialist economic system then nobody will want to work demanding jobs' or 'everybody is poor under socialism'. These claims aren't true, and it seems that rightist politicians purposefully confound socialism with communism in order to demonize that economic system.

Jacobsen: What are the strengths and weaknesses and the Left and the Right, respectively, in America?

Scillitani: The Left's biggest strengths lie in their collectivism and desire to help others. The latter strength also doubles as a weakness since having too much empathy makes it easy for the media and politicians to convince them to do unethical things under the guise that to do otherwise would cause harm to some other group. The Right's biggest strengths lie in their assertiveness and desire for self-improvement. Their biggest weakness is being too individualistic and therefore losing any sense of community and 'strength in numbers' that the Left has.

Jacobsen: What *may* bridge some of the political divides in the United States for a healthier public discourse?

Scillitani: Probably staying off of social media and turning the news off from time to time, chatting with people who have different opinions, and reading some history books.

An Interview with Matthew Scillitani on God (Part Four)

May 1, 2020

Abstract

Matthew Scillitani, member of *The Glia Society* and *The Giga Society*, is a web developer and SEO specialist living in North Carolina. He is of Italian and British lineage, and is predominantly English-speaking. He earned his bachelor's degree in psychology at East Carolina University, with a focus on neurobiology and a minor in business marketing. He's previously worked as a research psychologist, data analyst, and writer, publishing over three hundred papers on topics such as nutrition, fitness, psychology, neuroscience, free will, and Greek history. You may contact him via e-mail at mattscil@gmail.com. He discusses: theology; modern aggressive non-theist movements; view of God; non-interventionist God; a reflection of his God in some others, but not entirely; integrating a non-interventionist God with science; a formal argument for the God; a poetic, informal argument for the God; religious views at odds with this God; no room for magic; ethics and morality; historic and modern interpretations of faiths; positive qualities of God; Ontological Argument; Moral Argument for God; Religious Experience/Personal Testimony Argument for God; Cosmological Argument for God; Argument from Design for God; evolution of religion; and unsolved issues.

Scott Douglas Jacobsen: Sir, aside from politics, let's talk theology, you believe in God, a creator, sustainer, of the universe. Can you unpack some of the theological implications here, please?

Matthew Scillitani: While I do think there's a creator I'm very certain God's impersonal and not involved in any way in our affairs. My conception of God is immediately incompatible then with all Abrahamic and polytheistic religions. I myself am not religious and think there's no benefit to worship, in the divine sense. However, if a religion is harmless and provides a sense of community, promotes charitable behaviours, and improves the well-being of those involved then I think it can still be a good thing. One could argue that the delusion itself is bad for one's psychiatric health but I think any such harm is negligible and is outweighed by the other benefits worshippers receive from their religion.

Jacobsen: How would, or do, modern aggressive non-theist movements miss the point entirely about ordinary religious (moral) life and more nuanced, modern notions or arguments for God?

Scillitani: Most of the outspoken anti-theists I've met and seen across online media are often assholes pretending to be much smarter and moral than they really are. For an extreme minority of these provocateurs there are serious reasons to hate one or more religions, usually stemming from abuse. The reason other non-theists *start arguments* with religious folk is, unknown to them, because they're suffering from an extremely weak ego and are trying their hardest to improve it by insulting others. It's only incidental that religious people make an easy target for their abuse.

To answer your question more directly: there is usually no point when anti-theists argue other than for a fleeting ego boost. When asked why they may say things such as "I want to end

religion because it's a delusion" or "religion is evil" or some other such nonsense. These explanations are unconsciously made to justify their unethical, reckless, mean-spirited behaviours and to lessen the cognitive dissonance brought on by being a low-quality person while believing themselves to be at the pinnacle of intelligence and morality

As an aside, most religions are harmless. There are some bad religions but religion itself isn't inherently bad. All anti-theists miss that point from the offset.

Jacobsen: Is your view of God, at some root level, ineffable or completely definable within human characterization, possible for encapsulation?

Scillitani: God is and must be definable and is the one being with all positive qualities, whatever those may be.

Jacobsen: Does God answer prayers, play an active role in the world to this day or exist in a more creation role/abstract manner to you?

Scillitani: Nope. Totally hands-off.

Jacobsen: Does this God reflect some theological or religious traditions more than others? If any, which? Does this God reflect the God of some scientists or great thinkers of the past more than others? If someone, who?

Scillitani: I'm not sure on this one. Perhaps Spinoza's conception of God is most similar but not exactly the same as mine. In contrast to Spinoza's God, I don't think God is "one with everything" or "the only substance" as he believed. Because there exist negative qualities and God has only positive qualities it must be that God is not one with all things because then God would also have negative qualities. It may be that God *transformed* into the universe, but the result would no longer be God then. That would only be possible if immortality were not a positive quality, which may be the case. Perhaps a fleeting life is an ideal one after all.

As for famous thinkers with similar beliefs, a young Nikola Tesla comes to mind. Some biographers of his argue whether he was an atheist or Buddhist in his senior years though.

Jacobsen: How does this definition of God integrate with the modern scientific knowledge of the natural world?

Scillitani: God probably exists outside of our time and space and may not even be 'alive' in a way that's familiar to us. Besides scientists dedicating their lives to studying God I doubt there would be any more practical change in academia. Integration is simple when we add in new, stand-alone information without having to replace any of the old stuff.

Jacobsen: What makes a formal argument for this God?

Scillitani: Well, it goes back to the "why is there something instead of nothing?" or "why are we here?" questions. The Big Bang theory isn't satisfactory because we wonder why it happened – *what caused the Big Bang?* We know that the universe is highly structured. The natural laws are the same on Earth as they are on Neptune or in some other solar system altogether. Inanimate objects don't have any awareness yet they continue to move in predictable ways. So predictable, in fact, that we have formulas we use to tell us exactly how they're going to behave under any particular condition.

My thinking is that there was a period* before the Big Bang when there were no natural laws. Today we know there are finite possibilities because we can observe one outcome and not others.

However, suppose that before the Big Bang there were infinite possibilities. One such possibility being something with all positive qualities (Gödel's ontological proof). God, now existing (from the randomness) creates the universe and all its laws. I believe that this is the simplest and cleanest theory so far on the origins of the universe, why there is something instead of nothing, and why inanimate objects seem to organize, structure, and build themselves into more complex or even animate structures (humans, for example) over time.

This also solves the 'infinite regression' problem where it's impossible for there to be infinite causes for an observed effect. There must be a first cause (think Aquinas' five ways) and both the Big Bang theory and other conceptions of God weren't good solutions because then one asks "well, what caused that?" But, if we believe there was a period before the universe where everything was random and there needn't be any cause-effect relationships as we know them then this problem is finally solved.

I've heard several physicists propose that perhaps the universe is aware and 'created itself' but this is impossible because it would mean that the creation preceded awareness, and how could something create itself if it were not aware?

**This is somewhat of a misleading term because, before the Big Bang there was no time as we know it. But, for lack of a better word, "period" is used here.*

Jacobsen: What is a poetic, informal argument for this God?

Scillitani: When a child throws a rock and it subsequently falls back to Earth it would be silly to credit gravity and not the child for having thrown it. Gravity is *how* it fell, sure, but *why* it fell in the first place was because of the child. After all, a rock isn't sentient, it can't throw itself.

Jacobsen: What religious views seem most at odds with this God? Obviously, atheism, agnosticism, etc., remain a different set of questions altogether and, sort of, implied at this point.

Scillitani: All religious views are a bit at odds with my conception of God. This is because I think God is impersonal and doesn't respond to prayers or need be worshipped. Since worship is a requisite for religion, religions don't make sense then. In the future, I hope religion evolves into community service organizations or special interest groups to fill that social, charitable, or search-for-'purpose' need some people have.

Jacobsen: On this God, and on the previous definition of a soul, is there room for magic in this view of the world, in this perspective on God?

Scillitani: Absolutely not, that would be horrifying. Also, if magic were real then I'd think everyone on Earth would know immediately and it would be impossible to hide.

Jacobsen: With an impersonal personality for God, what does this imply for ethics and morality? Our conduct in every day life in close friendships and with loved ones, and in professional life with colleagues, bosses, and business partners.

Scillitani: I don't think there's any reward-punishment system or afterlife provided by God. However, I do think there are absolute and universal laws of ethics that come as an extension of awareness, without God needing design them. Even with no God I think those 'laws' would be the same, it just takes a certain amount of awareness to figure out what they are.

Jacobsen: Any personal thoughts on the standard interpretations of the Abrahamic faiths? What about some of the more subtle attempts to form-fit the Bible, the Quran, or the Torah and their God(s) into ones more akin to the Einsteinian-Spinozan God, or one for Tesla or you?

Scillitani: “Standard” could have two meanings here: historic (strict) or modern (loose). Both deserve their own answers and I’ll provide them. Any religious person should believe and follow everything their religious texts say precisely. This is because they believe these texts are the Word of an infallible God and so all biblical laws are divine and absolute. Not following them is entirely wrong then. If it says God wants all worshippers to kill their firstborns and they don’t then clearly they don’t believe God is infallible or they’re sinners, denying God. That is following the more historic interpretation and is also the most dangerous one. If a religion promotes violence, hate, or any other destructive behaviors or beliefs then it’s an evil religion and *whoever follows an evil religion is an evil person or a hypocrite*.

The more modern biblical interpretations aren’t nearly as dangerous but the worshippers are hypocrites. How can someone say they worship God when at every opportunity they deny his Word? These people, I hope, are there more for the sense of community than to worship God.

Jacobsen: What are the positive qualities of God to you?

Scillitani: Intelligent and with all the qualities that come along with that such as integrity, conscientiousness, and higher awareness. There are others, of course, but I wouldn’t speculate too much on what they are.

Jacobsen: Let’s do some rapid-fire for this session on the standard big arguments put forth in Western societies for God, some of the responses will, in part, be implied based on previous responses. Any thoughts on the Ontological Argument for God?

Scillitani: I think ontological arguments for God are extremely important. Some of these arguments are, however, not so good because the premises are clearly wrong. I think Gödel’s Ontological Proof is the best so far but is impossible in our Universe. If there were a period when things happened at random, without cause-effect relationships, and with infinite possibilities (requiring no natural laws), then his premises would be correct. Since that’s the only way to escape the pitfall of infinite regression while also justifying the orderliness of the Universe I think it’s likely true.

Jacobsen: Any thoughts on the Moral Argument for God?

Scillitani: I think it’s a poor argument because morality is just a byproduct of intelligence or social evolution. There’s no need for God when we look at morality by itself.

Jacobsen: Any thoughts on the Religious Experience/Personal Testimony Argument for God?

Scillitani: These also make a poor argument for God because many of those experiences involve psychedelic drugs, psychosis, or other brain-malfunctions caused by trauma (or even death). If I saw or heard God I’d voluntarily admit myself to the nearest mental hospital, something anyone in that situation should do.

Jacobsen: Any thoughts on the Cosmological Argument for God?

Scillitani: This argument is on the right track but misses some key points as they relate to infinite regression and contingency. Proponents of this argument think God is the first cause and that this settles the ‘infinite regression’ problem by itself. Why then couldn’t the Big Bang do that too? They are both starting points, after all. If we follow Occam’s Razor, the latter is even better because it’s a simpler explanation from that view. What they don’t account for is that neither of those explanations truly solve the infinite regression problem because there must still be something beforehand and what comes before *must be aware*.

Jacobsen: Any thoughts on the Argument from Design for God?

Scillitani: This is overall a good argument for God. Newton was also a proponent of this and once said, “In the absence of any other proof, the thumb alone would convince me of God’s existence.” It doesn’t explain how, exactly, there could be a God but merely claims that one is necessary, which I think is true.

Jacobsen: With those out of the way, is religion bound to evolve into the moral communities described before more than ever?

Scillitani: Eventually, I’m sure that will happen. It won’t be for thousands of years though. Old traditions are hard to break and even if all religious worshippers were given undeniable proof that God were impersonal most would continue to worship. It takes time to make major changes like this. It will also take time for certain academic circles to escape the stigma that comes with believing in God.

Jacobsen: What are the questions still remaining unsolved if the conceptualization of God provided in this session are true? In that, the premises are true and link one to the other to a true conclusion while the entirety of the set of premises and the conclusion for the formal argument remain true while incomplete because of other questions floating around implying particular hidden premises. If the hidden premises had answers, then the argument would be more complete and a higher fidelity of truth than when only the explicit premises are considered.

Scillitani: Big questions like, ‘why did God make the universe; what was the purpose?’, ‘is there an afterlife?’, and ‘are there other universes?’ remain and I think would strengthen the argument.

An Interview with Matthew Scillitani on Other Considerations for High-IQ Societies (Part Five)

May 15, 2020

Abstract

Matthew Scillitani, member of *The Glia Society* and *The Giga Society*, is a web developer and SEO specialist living in North Carolina. He is of Italian and British lineage, and is predominantly English-speaking. He earned his bachelor's degree in psychology at East Carolina University, with a focus on neurobiology and a minor in business marketing. He's previously worked as a research psychologist, data analyst, and writer, publishing over three hundred papers on topics such as nutrition, fitness, psychology, neuroscience, free will, and Greek history. You may contact him via e-mail at mattscil@gmail.com. He discusses: high intelligence as a basis for community; other bases for community; needs met by these communities; healthy community; unhealthy community; Mensa International, Intertel, Triple Nine Society, Prometheus Society, and the Mega Society for safe starts into high-IQ communities; community and camaraderie; safety precautions; founding a group; lack of collaboration and communication; individualism; Keith Raniere; communication gap more as a social gap; and mental health examinations; professional path; relationships; systems of American governance; America as a top technology competitor; the next decades; favourite political philosopher; favourite economic philosopher; human nature; and a pragmatic extension of this understanding of human nature help refine our political, economic, and social systems in society.

Scott Douglas Jacobsen: Thank you for continuing to take the time for this ongoing series. Recap: we talked about personal history, political extremes, God, and some more. This round, I want to focus on community. The sense of coming together for a common cause or becoming part of a common group for a variety of reasons, and healthy community versus unhealthy community. To take the obvious example here, we have the high-IQ communities gathered on, basically, one metric identified with a composite identifier, intelligence quotient or IQ. Is this a reasonable or an unreasonable basis to form communities for individuals with high measured intelligence?

Matthew Scillitani: I think it makes sense to form communities based on certain traits, especially intelligence. The unfortunate problem that all I.Q. societies face is either lack of collaboration or communication altogether. If we put our heads together, I'm sure we could accomplish fantastic things and change the world for the better. That will probably never happen because of the individualism we see in high-I.Q. societies though.

Jacobsen: Others form a community, not on intelligence but, on common scientific, political, or other interests to them. Is this reasonable or unreasonable as the basis to form community?

Scillitani: This can be good or bad depending on what the common interest is. Lots of pseudo-scientific communities form and keep the members there trapped in a never-ending delusion, isolated from reality. These groups include Flat-Earthers, Anti-Vaxxers, Holocaust deniers, and the like. Political communities aren't necessarily bad but can be just as bad as pseudo-scientific ones. When we only interact with people with the same opinions it becomes a problem,

especially when those opinions are backed by strong emotions. Every political party has flaws, but the members may find them hard to find and ultimately accept when joining such groups.

Productive communities like the ones that perform community services, do book readings, study, have diverse views on the same topics, and so on are extremely important.

Jacobsen: Looking at either case, what needs are met in these communities?

Scillitani: I think the three primary needs met by these communities are socializing, altruism, or to reduce cognitive dissonance. I spoke of the latter a few times in previous sections and it also applies here. Flat-Earthers, for example, are told by normal, rational people that their beliefs are absurd. This produces cognitive dissonance: they believe they're correct but everyone tells them they're wrong. To reduce that cognitive dissonance, they may either believe that they are, in fact, wrong or believe everyone else is. Often, it's the second option that's picked and joining groups with other irrational members with the same beliefs helps maintain the delusion.

Jacobsen: What defines a healthy community?

Scillitani: Any community that helps its members or non-members is a healthy one. That could mean a lot of things, and some examples are (diverse) scientific communities, community service groups, and fitness communities.

Jacobsen: What defines an unhealthy community?

Scillitani: Communities that feed their members delusions and harm members or non-members are unhealthy ones. These communities, even ones that seem innocent enough, can be dangerous and evolve into cults.

Jacobsen: Based on entering some of the communities and taking the larger view of the political and social dynamics of the high-IQ communities, have these been more or less successful than the comparable communities organized around different principles and entrance criteria?

Scillitani: On the whole, I think the fitness communities I've joined were much more successful than any of the I.Q. societies. In fact, most communities work better than them but only because of the great interaction and collaboration between members. High-I.Q. communities could be a wonderful thing if we all put our egos aside.

Jacobsen: Over some of the history of Wikipedia and its apparent internal debates on the nature of IQ, high-IQ societies, personalities, and the like, they appear to have narrowed down the search to five main societies with the longest, most robust histories, and the best records for the establishment of different segments of high-IQ communities: Mensa International, Intertel, Triple Nine Society, Prometheus Society, and the Mega Society. For a safe search for individuals wishing to enter into the communities, as a start, those seem the safest. What criteria should individuals at 2-sigma through 6-sigma incorporate into searching for societies for them? Those aspects of the community worth valuing if individuals wish to join them.

Scillitani: Probably society age, location, and interaction level. Older societies aren't necessarily better but are usually more reliable than are newer ones. It's beneficial for societies to have a physical location near the prospective member for in-person meet-ups. The interaction level should also be one that the prospective member is comfortable with. Some societies have meetings or group discussions daily, some monthly, and others even less often. Once a

prospective member decides what distance and interaction level they're comfortable with they should begin their search by seeing how often the society's meet-ups and journals are posted.

Of course, I.Q. cut-off for inclusion may be important too. Someone with an I.Q. of 175 may not want to join a society with a cut-off of I.Q. 130, for example.

Jacobsen: What community sense and camaraderie can high-IQ individuals get somewhere else than high-IQ communities?

Scillitani: Probably in science, philosophy, or any other community that requires higher intelligence.

Jacobsen: For problem personalities, cults of personality, literal cults, cult-like entities, aggressive *ad hominem* and belligerently prejudiced behaviour, even abusive behaviour, anti-science propagandistic efforts, or individuals who lie about their IQs or their IQ scores (inflated or false IQ), how could the community identify, target, isolate, and marginalize such individuals or entities/organizations, as a safety precaution for the health of the overall community moving into the future? Although, bearing in mind, these communities remain extraordinarily niche communities while providing an important need for some members. Nonetheless, an encouragement of healthy communities can provide a positive image to the public for this niche set of communities for individuals with such an interest in them, as more gifted and talented people exist outside of them than inside of them while meeting socio-emotional and intellectual needs in any case.

Scillitani: Requiring multiple standardized (normed) I.Q. scores at or above the cut-off, expelling members whose behavior is clearly below that cut-off or is disruptive, and maybe even adding a mental health test before admission to filter out certain unsteady groups.

Jacobsen: Have you ever thought of founding a high-IQ organization? Even if not, what would its name, principles, mission, and values be?

Scillitani: No, I've never thought of that since there are so many others already. If I were to found one, the mission would be to gather intelligent, diverse, and collaborative people together for both socializing and problem-solving. I think an I.Q. cut-off of 135 (S.D. 15) or so would be good for that. It's high enough that all the members would be smart while also low enough that many people could join. I'd also try and form the society locally and, if it became popular, open up membership to different locations.

I also think many high-I.Q. societies have ridiculous or grandiose names, which I would want to avoid. Something simple like the *Thinker Society* may be good.

Jacobsen: Why the lack of collaboration and communication between high-IQ society members?

Scillitani: Too big egos, tendency towards individualism, and wanting not to look stupid. When someone's entire identity is formed around their intelligence and they have to collaborate with other smart people then they're going to feel a bit worried about saying something not-so-smart. I think that's one of the main reasons smart people choose not to collaborate – fear of looking dumb.

Jacobsen: Why is individualism a defining characteristic in the high-IQ societies and a problem for their integration towards singular goals of common substance, interest, and import?

Scillitani: It's not often someone with an I.Q. of 150+ can successfully share ideas with another person or group who understands them. For that reason, I think many of us share our thoughts with other society members rather than collaborate on solving problems.

Jacobsen: Keith Raniere was a recent terrible case of a known cult brought to some semblance of justice with finalizations ongoing for said justice. It shows a case where things can get really, really out of hand. I notice one trend. Why are more men founding these narcissism-driven 'societies' or 'foundations' and the like more than the women?

Scillitani: Personality differences relating to grandiosity and assertiveness. I think there are few or no sex differences when it comes to narcissism but there are many more grandiose and assertive men than women. That also explains more male entrepreneurs, politicians, and the like. It takes some grandiosity to think someone should be rich, famous, or control others and it takes assertiveness to make it happen.

Jacobsen: What do you think the 30-point (S.D. 15) communication gap for intelligence? This may reflect the comment about someone with an IQ of 175 not wanting to join a group with a cut-off of 130.

Scillitani: I think any intelligence-based communication gap is mostly an excuse used by smart people who have too many dissenting opinions and are tired of being told they're wrong. If someone's really smart they should be able to express their ideas in such a way that even a child could understand them. When someone disagrees with me I know it's probably more a personality difference than an intelligence one. That's because even the smartest people on Earth have drastically different political, religious, and moral beliefs. It's easier to say "ah, they just disagree because they're dumb" than to admit one party may be suffering from my favorite term – cognitive dissonance.

That's not to say anybody can explain anything to anyone; just that the whole communication gap excuse is usually to remedy a hurt ego. I think that rather than a gap there's probably some requisite intelligence necessary to understand any particular concept. Maybe it takes an I.Q. of 124 to understand how memory is consolidated. If that were the case, as an example, then someone with an I.Q. of 125 explaining it to a person whose I.Q. is 120 would end nowhere. Even though there's only a 5-point I.Q. gap, the latter person can't understand how memory is consolidated no matter how hard they try.

While that's true for any concept, even the average person can understand most things if they're explained simply enough. In socializing, those topics should rarely come up anyway, so it's possible for someone with an I.Q. of 175 to get along swell with people whose I.Q.s are 50, 75, or even 100-points below theirs.

Jacobsen: Any proposed mental health examinations? Other than some loose questionnaire: "Do you hear voices?," "Do you think you're God?," etc.

Scillitani: An extensive one like the MMPI-2 (Minnesota Multiphasic Personality Inventory) would be my preference. The MMPI-2 has nearly 600 questions and takes the average person 2-3 hours to complete. Long tests like these are good because they tell us a lot about the prospective member, not just in their answers but also in their willingness to take the test in the first place.

Jacobsen: With your intelligence, why select the current professional path?

Scillitani: My professional path has changed a lot over the last few years. I was a research psychologist intending on working towards my doctoral degree but was disillusioned by the sorry state of American psychology. I went into business advertising and as a hobby taught myself how to build websites, which soon became my full-time job. I'm currently working on a few projects outside of web development that'll hopefully help me on my way towards an early retirement.

Jacobsen: Has this intelligence helped with development of friendships and more intimate relationships?

Scillitani: It's definitely helped strengthen relationships and mitigate arguments. However, my introversion keeps me from having many friends in the first place. It's probably personality differences like that which determine the size of our social circles more than does our intelligence.

Jacobsen: What systems of American governance could use a facelift?

Scillitani: The judicial system immediately comes to mind. Most of our government requires reform but our judiciary is especially subpar.

Jacobsen: What makes America a/the top contender in the economic and technological sphere of the world?

Scillitani: Capitalism, unethical business practices, highly competitive markets, and so on. Unfortunately, our economic system, which is heavily criticized by about 2/5th of U.S. citizens, is the very reason we're at the forefront of technology. A country can have (near) economic equality or rapid technological progress, but never both. Competition and high financial rewards are like petrol in the tech engine.

Jacobsen: We live in the decade of transition from a unipolar/bipolar world into a political and economic multipolar world. What nations will continue to dominate the top of the international relations and economic spheres in the coming decades?

Scillitani: I'm not so sure what will happen and which nations will continue to do well. Many countries are close to or undergoing an economic or social collapse, the United States being among them. After that happens, it's hard to tell which countries will bounce back or stay down.

Jacobsen: Do you have a favourite political philosopher?

Scillitani: I only know of some but don't have positive opinions of them.

Jacobsen: What about favourite economic philosopher?

Scillitani: Probably Adam Smith. I'm not a proponent of a free market economic system but think Smith's ideas are interesting and very ahead of his time. Economics aside, he was also a very unique person that's worth learning about.

Jacobsen: What is human nature?

Scillitani: In a previous segment, I said there was a duality to human nature: consumers and producers. Most or all of us have traits of both, with a little more of one or the other. Consumers destroy while producers build. Sometimes destruction is necessary for growth, but a world without consumers may not be so bad. Producers also must consume but do so in a more elegant, refined way – in moderation.

2Jacobsen: How can this a pragmatic extension of this understanding of human nature help refine our political, economic, and social systems in society?

Scillitani: By accepting that there is no best system of government or economics which will yield great results for every person. Meeting somewhere in the middle on most issues usually produces the highest rate of satisfaction while still never achieving a perfect system for everyone. Ironically, consumers, in spite of making the most fuss about their living situations, will be unhappy no matter what social, economical, or governmental system they're in.

An Interview with Matthew Scillitani on Cautionary Notes About the High-Range (Part Six)

May 22, 2020

Abstract

Matthew Scillitani, member of *The Glia Society* and *The Giga Society*, is a web developer and SEO specialist living in North Carolina. He is of Italian and British lineage, and is predominantly English-speaking. He earned his bachelor's degree in psychology at East Carolina University, with a focus on neurobiology and a minor in business marketing. He's previously worked as a research psychologist, data analyst, and writer, publishing over three hundred papers on topics such as nutrition, fitness, psychology, neuroscience, free will, and Greek history. You may contact him via e-mail at mattscil@gmail.com. He discusses: intelligence as a global character; gap in the research before; test reliability and validity; caution about highest scores, highest measured scores, and so on; and other things to keep in mind.

Scott Douglas Jacobsen: This is the final session before the release of the book. Let's wrap some things up, about half or a teensy bit more of the known Giga Society membership agreed to and conducted interviews over the period of about 4-5 years. As always, interviewees co-copyright the materials and can distribute for their own independent purposes. Now, this period of research comes to a close, except for additional versions of e-books or new e-books. What makes intelligence a global character of human thought when measured in the relevant reliable ranges of 40 to 160 IQ at S.D.15?

Matthew Scillitani: Intelligence is a very important feature that, I.Q. tests aside, we can all determine by communication alone. I think everyone knows that qualities like beauty, intelligence, and athleticism are important. But, because intelligence is the only one of those that can't be perceived with our eyes, it's harder to find, and easier to fake.

When someone's lacking positive qualities the instinct is to keep searching until they find one in themselves. Lots of people, especially young people, focus on their intelligence (or lack thereof) when that happens. It's made easier that intelligence is quantifiable on a familiar scale from I.Q. tests.

Jacobsen: If anyone has recommendations of IQ 160+ people – get them in now, this is the time for the interviews in the Summer (ending August 22). In addition, if any have IQs less than 160 S.D.15 while having some unique or special quality, then, please, send appropriate recommendations of others or oneself, I want to have the voices presented here. By the way, on the high range testers, why was this such a huge gap in the research before?

Scillitani: Small sample size, both in the tests and participants. Not many mainstream tests attempt to measure above I.Q. 160 (15 S.D.) anymore, and few people are willing (or seek) to take high-range I.Q. tests from fear of not doing well. Finding high-quality I.Q. tests with good reliability along with the participants to take those tests is hard. Paul Cooijmans formed the Giga Society as an incentive for test candidates to take more tests and do their best.

Jacobsen: Some important lessons for everyone to bear in mind here. The mainstream IQ tests – WAIS-IV, Stanford-Binet, Raven's Advanced Progressive Matrices, etc. – ranging

IQ 40-160, depending on the test, (160 would be perfect verbal and quantitative scores on the GRE, for example, or near it accounting for margins of error) on S.D. 15 averaged on 100 are the *most reliable by far* and with a trained professional psychometrician present or administered by a professional psychologist. There are sincere and honest efforts for above 4-sigma. However, as I have placed as a cautionary note in most or all relevant contexts of interviews recently, there should be a consideration. Some base their entire identities on one, maybe two, test scores, or a few media reportages years ago, and then proclaim themselves greatest mind in the history of the human race, or simply lie. Several cases of this abound in the niche community. It's on the documentary record. Any thoughts here? I am breaking questions here, as I believe more needs statement.

Scillitani: It's not good when someone bases their entire identity on an I.Q. test score, especially when it's a jackpot score or from an unreliable test. Unfortunately, I've come across a fair share of high-range I.Q. test constructors who charge an incredible amount of money and clearly give scores much higher than the test candidate's true level. When someone's identity is really weak, it's dangerous for them to take I.Q. tests, especially from those test makers. If the mean I.Q. of a test is 150-160 (15 S.D.), there is little variance in scores, it's self-scoring, or allows re-tests then it's safe to assume that test should be ignored.

There's not really a point in worrying about who has the highest I.Q. or not because, besides low accuracy in that range, we don't know if or when there are diminishing returns with higher scores.

Jacobsen: One common example as I like to note: Only five societies make the cut based on Wikipedia: Mensa International, Intertel, Triple Nine Society, Prometheus Society, and Mega Society. That's for a good reason. One reason came from members of the high-IQ communities, some, faking names/having pseudonyms and trying to warp the editorial record of Wikipedia in their favour. Some of them got caught and heavily penalized internally to Wikipedia. That's publicly known, on the record, and most relevant people remain aware of this, or can be informed with some research. That's well-known, and often lied about to their relevant constituencies. That's nothing surprising, ordinary human behaviour. [Ed. It can get *a lot* worse – eyes wide-open folks.] With that covered, it becomes a sort of “move along, nothing to see here” phenomenon. Next! So, on another large trend, there are, for example, 84 active high-IQ societies listed in the World Intelligence Network of Dr. Evangelos Katsioulis (Founder and President) and Dr. Manahel Thabet (Vice-President) here: <https://www.iqsociety.org/iq-societies/iq-societies-alphabetical-list/>. Wikipedia deserves kudos for its public service and narrowing down the listing to the safer and reliable societies, including the *Guinness Book of World Records*, as Dr. Ronald Hoeflin noted, about the *Guinness Book of World Records* and some of the contexts of the high-IQ societies, to me:

The Guinness Book of World Records abandoned its “Highest IQ” entry in 1989 because the new editor thought (correctly) that it is impossible to compare people's IQs successfully at world-record level...

..Leta Speyer and Marilyn vos Savant, both of whom I had dated for a time, had been listed in the Guinness Book of World Records as having world-record IQs of 196 and of 228, respectively, Marilyn having displaced Leta in the 1986 edition. Leta felt that the 228 IQ of Marilyn was fake, but I was aware that these childhood scores could go well beyond 200 IQ

because they fail to conform to the normal curve that Francis Galton had hypothesized as the shape of the intelligence curve in his seminal book Hereditary Genius (first edition 1869, second edition 1892). I was unable to contact Alicia Witt to see if she would be interested in joining the Mega Society. I should note that the three key founders of the ultra-high-IQ societies (99.9 percentile or above) were Chris Harding, Kevin Langdon, and myself. Harding founded his first such society in 1974, Langdon in 1978, and myself in 1982. Mensa, the granddaddy of all high-IQ societies with a 98th percentile minimum requirement, was founded in 1945 or 1946 by Roland Berrill and L. L. Ware, and Intertel, with a 99th percentile minimum requirement, was founded in 1966 or 1967 by Ralph Haines. I don't care to quibble about the precise dates that Mensa and Intertel were founded, so I have given two adjacent dates for each. In its article "High IQ Societies" Wikipedia lists just 5 main high-IQ societies: Mensa, Intertel, the Triple Nine Society, the Prometheus Society, and the Mega Society (minimum percentile requirements: 98, 99, 99.9, 99.997, and 99.9999, respectively; or one-in-50, one-in-100, one-in-1,000, one-in-30,000, and one-in-1,000,000; dates founded: roughly 1945, 1966, 1979, 1982, and 1982; founders: Berrill and Ware, Haines, Kevin Langdon, Ronald K. Hoeflin, and Ronald K. Hoeflin, respectively.

In short, any "Highest IQ in the world" claim is highly dubious – never believe it – based on the aforementioned reasons. "Highest measured IQ" may be tolerable, but then look at the test validity and reliability while bearing in mind the golden mean range of 40 to 160 IQ on S.D.15 or 4-sigma in either direction from the average. However, as I have learned, and others, too, "among the highest" may be a reasonable claim if amongst the highest rigorous high-range tests known to date, e.g., the Titan Test, and only first attempts under a person's real name. Any further thoughts come to mind here?

Scillitani: I think that's a smart idea, saying "among the highest" instead of "*the highest*" when discussing high scorers. Regarding the highest measured I.Q.s, it's also probably best to discuss the top score(s) on any particular test and not across all tests due to differences between high-range tests. So, something like, "he had a record score on the WAIS" instead of "he had the highest I.Q. ever recorded" would be better.

Jacobsen: As a public service, I put this on most interviews with these individuals in the high-range environments now, at least somewhere:

High range testing (HRT) should be taken with honest skepticism grounded in the limited empirical development of the field at present, even in spite of honest and sincere efforts. If a higher general intelligence score, then the greater the variability in, and margin of error in, the general intelligence scores because of the greater rarity in the population.

Any thoughts on this? I would encourage others to do the same, as a public service or as a public service announcement.

Scillitani: That makes a lot of sense and is much better than stating matter-of-factly that I.Q. tests are either completely accurate or total bunk in the high-range.

Jacobsen: What else should be kept in mind about the communities here?

Scillitani: That they're not perfect, there's no or low standards for admission into most I.Q. societies, and we should continue to be skeptical about the validity of extremely high I.Q.

claimants. I really do hope that, in the future, we'll tighten up admission into these societies and focus on promoting collaboration and productivity.

Jacobsen: Thank you for the opportunity and your time, Matthew.

Conversation with Matthew Scillitani on the Giga Society and the Realizations: Member, Giga Society (7)

June 8, 2022

Abstract

Matthew Scillitani, member of *The Glia Society* and *The Giga Society*, is a web developer and SEO specialist living in North Carolina. He is of Italian and British lineage, and is predominantly English-speaking. He earned his bachelor's degree in psychology at East Carolina University, with a focus on neurobiology and a minor in business marketing. He's previously worked as a research psychologist, data analyst, and writer, publishing over three hundred papers on topics such as nutrition, fitness, psychology, neuroscience, free will, and Greek history. You may contact him via e-mail at mattscil@gmail.com. He discusses: the Giga Society; the point; the main cautionary notes about high-I.Q. communities; the benefits; self-knowledge; education; exciting developments; major disappointments; and having children.

Scott Douglas Jacobsen: Do you think the Giga Society has fulfilled its function as an incentive for taking high-range tests?

Matthew Scillitani: Yes, absolutely. Many people have told me they've taken several (sometimes dozens) high-range I.Q. tests to try to qualify. Qualifying for the the Giga Society wasn't something I even considered as a possibility for myself until I finished Psychometric Crosswords though, the test I eventually qualified with.

Jacobsen: A question sitting in the backs of a lot of people's minds, "What is the point?" Why take part in the societies? Why take these tests? What purpose do these fulfill in personal terms and in practical benefit outside of the provision of some fun puzzles to solve?

Scillitani: Well, joining high-I.Q. societies used to be one of the few ways to actually correspond with other intelligent people in the pre-internet era. With how many internet forums there are now, societies are largely unnecessary for that purpose though I think. The main reasons I've joined high-I.Q. societies was to either take free I.Q. tests or for some minor recognition. It's not an achievement to have a high I.Q. but it's always nice to be recognized for having some positive quality about you, like being freakishly tall or abnormally handsome or whatever. Something else I get out of these societies, most notably Paul Cooijmans' Glia Society, is lots of communication with other members on topics like STEM, politics, religion, and so forth. Some members who have very bright ideas also present them to the society for feedback, which is another benefit of membership. There are other benefits too, like being able to publish papers, puzzles, and play games like chess against wickedly smart opponents, to name a few.

As for taking the tests, I took my first high-range I.Q. test after seeing an interview of Rick Rosner and thinking, 'I wonder how I'd score on one of those tests.' After I got my results I had the typical dopamine rush one gets when they do well on something and was immediately hooked and took even more tests. The benefit of test-taking outside of learning about your own intellectual capabilities and for fun is the most important reason of all: to contribute to the

research of intelligence and genius. If we can learn which qualities make a genius and can accurately measure them then that'll go a long way in discovering potential geniuses when they're young. Maybe there are 500 geniuses on Earth right now but 450 of them have been tossed aside and are working jobs far below their ability level. Very few geniuses are "charismatic" so it happens very often that their geniusness is mistaken for stupidity and they go unnoticed their whole lives. With accurate testing, this can be avoided and we'll have many more geniuses to aid in the advancement of mankind.

Jacobsen: What are the main cautionary notes about high-I.Q. communities for you?

Scillitani: Hmm, so far I haven't had many bad experiences in any high-I.Q. communities I've been in. There are a few members with weak egos who are quick to anger but aside from that I'd say people with high I.Q.s are more respectful, polite, mentally stable, ethical, and kind than in the general population. If someone ever founds a town of only high-I.Q. society members I'd move there.

Jacobsen: What are the benefits to those who take part in healthy high-I.Q. community life?

Scillitani: The benefits I listed in a previous question apply here too but I'll add that it is also a great way to make high-quality friends.

Jacobsen: How has self-knowledge, at least, of a higher I.Q. than the norm of the population influenced personal decisions to pursue higher education?

Scillitani: It hasn't influenced my decisions too much regarding education. I was enrolled in a university before I ever took a high-range I.Q. test or joined any societies, although I considered dropping out several times because I have an extreme dislike of school. I would say on a positive note that it definitely boosted my confidence to know my I.Q. score and be a member of high-I.Q. societies. In terms of education, nothing seems off limits or scary to deal with for me. I passed Calculus I and II collectively in under two months after teaching them to myself, and I wouldn't have had the confidence to do that prior to knowing my I.Q. score.

Jacobsen: It's been a hot minute since we last chatted. How is education going, by the way?

Scillitani: I've moved away from psychology and business and am now pursuing a degree in Computer Science! I'm hoping I can find a stable day job and make some cool apps in my spare time so I can hopefully retire at an early age.

Jacobsen: Any new, fun, or exciting developments on the educational front?

Scillitani: There's nothing too exciting going on aside from being somewhat close to getting another degree. I think I'm just ten or so classes away from that.

Jacobsen: What are your major disappointments with the high-I.Q. communities? I've had two people, recently, comment on this to me. One left a high-I.Q. society. Another wanted all listings online completely removed from them. So, in this light, people can be disillusioned from prior expectations or considerations about those communities. Many gain some modicum of benefit. While, at the same time, I get those stories, too. The question seems apt with the two recent cases.

Scillitani: My biggest disappointment by far is from something I've learned from high-I.Q. communities and not something regarding those communities themselves. Maybe this will come

across as arrogant but what I learned is that most people, the extreme majority even, have incredibly weak mental powers. If you do well on an I.Q. test there will be many problems that you solve instantly and think even a toddler could get but when you learn that most people get every single answer wrong or can only answer one or two problems correctly it shatters the illusion that everyone around you is able to actually form coherent thoughts.

Jacobsen: Do you think having children influenced the perspective on getting things more right the next time around with proper facilitation and education of the gifted young?

Scillitani: I don't have any kids yet (aside from my dachshund, who I treat like a child). I was a child myself once though, and I definitely want to have my future children I.Q. tested at an early age to help figure out how to best accommodate their educational needs. I'd like them to be with children their own age so rather than skipping grades there may be private school options for gifted children that my wife and I can look into. They could always be intellectually average though; we'll just have to wait and see.

Conversation with Matthew Scillitani on Mild and Severe Reactions to Score Reports, Recognition, Rick Rosner, and Personality Factors: Member Giga, Society (8)

July 22, 2022

Abstract

Matthew Scillitani, member of the Glia Society and Giga Society, is a software developer living in Cary, North Carolina. He is of Italian and British lineage, and is fluent in English and Dutch (reading and writing). He earned his bachelor's degree in psychology at East Carolina University. As of 2022, he's pursuing a second bachelor's degree in computer science. He previously worked as a research psychologist, data analyst, writer, editor, web developer, and software engineer. You may contact him via e-mail at mattscil@gmail.com. He discusses: I.Q.; Psychometric Qrosswords; minor recognition; the communication with other members; conversations evolve with similarly mentally talented people; feedback to members presenting ideas; interview with Rick Rosner; the feeling or the click of solving a hard problem on a high-range test; genius get mistaken for stupidity; testing geniuses; charisma; self-confidence; Computer Science; a stable and happy situation regarding income; and impressive limitations in ordinary people.

Scott Douglas Jacobsen: Paul loves crushing people's self-inflated notions of their I.Q. In that, they assume having a higher intelligence quotient than in reality. You know the phrase, "A Megalomaniac's Waterloo." He's funny. What is a typical reaction of someone who takes one, or even multiple, tests by Paul and fails to enter the Giga Society, even the Glia Society, as far as you know?

Matthew Scillitani: I think most test-takers don't believe they'll qualify for the Giga Society so it's not a huge blow to their egos when they don't get in. I do know of many people who haven't been able to qualify for the Glia Society and it's crushed them though. It's not uncommon for someone to think they'll score 150 or 160 and score in the 120s or 130s and then post on social media or in a forum that Paul doesn't grade fairly or that I.Q. tests don't matter anyway. Some more serious reactions were from candidates e-mailing me to say that they considered suicide after seeing their score report.

Jacobsen: When did you realize, "I got it," regarding Psychometric Qrosswords? In that, you nailed the test. You must've had a sense of doing well on it, before receiving the score.

Scillitani: When I filled in my last answer I felt that they were probably all right but wasn't totally confident I'd qualify for Giga. It happens often that one thinks they have every answer right and ends up totally off and misses half or more answers so I only really knew when I saw the score report. That was an exciting moment.

Jacobsen: Was the pursuit of the minor recognition worth the requisite effort?

Scillitani: Hmm, well, that was really a secondary or tertiary goal but I would say it was worth it. Some readers will roll their eyes and scoff at my wanting recognition for an inborn quality as opposed to an achievement but I'll remind everyone that even when one does great things they

rarely get recognition for it in their lifetime anyway, so I'll take any positive recognition I can get. A great example of this is that, at every job I've worked to date, I've optimized and revolutionized whatever task I was given and have never received a raise, promotion, or even a pat on the back. The opposite, actually. Many times co-workers or even managers have stolen my ideas or work because it was better than anything they could come up with themselves.

Jacobsen: In those conversations on “STEM, politics, religion, and so forth,” what is the first thing noticed in the communication with other members?

Scillitani: That every member has something interesting to say and is largely polite and respectful. It's amazing how few arguments and insults there are in discussions with Glia members, even when many of them are involved.

Jacobsen: How do those conversations evolve with similarly mentally talented people?

Scillitani: I wouldn't know since It's very hard to find a group of people whose I.Q.s are all at or above 147 outside of an I.Q. society. I've spoken one-on-one with smart people outside of I.Q. societies but personal conversations often go differently than ones in a group.

Jacobsen: How do members of the Glia Society give feedback to members presenting ideas for it?

Scillitani: When a member presents an idea to the group it usually goes quite well. If it is uninteresting then a member or two will comment on it in an objective way and then we'll move on to another topic. If it's interesting then it may trigger discussion with a handful of members and could even evolve into a group phone call that lasts for hours.

Jacobsen: Where was this interview with Rick Rosner published?

Scillitani: This interview was done by Errol Morris from the TV series, First Person. I believe the interview took place in 2001 but I didn't watch it until 2016. I've also read some of Rosner's interviews done by you as well.

Jacobsen: What is the feeling or the click of solving a hard problem on a high-range test?

Scillitani: It feels amazing. When the problem is hard and takes say, an hour or two, there's a euphoric feeling and a wonderful dopamine rush. For extremely hard problems that take weeks or months it's a kind of 'jump out of your chair' excitement that one rarely gets. I imagine it's what winning the lottery feels like.

Jacobsen: How does genius get mistaken for stupidity, even for immaturity?

Scillitani: Intelligence is taken for stupidity in the presence of unintelligent people. Very few people know or can admit that they're idiots so when they hear something they don't understand, especially when the speaker isn't considered an authority or expert on the subject, they can't believe it's their own lack of intelligence. They'd prefer to believe it's the intelligent speaker who must be the moron. As for being taken as immature, I imagine that is related more to Asperger Syndrome, regardless of whether the person a genius or not. Most people see their rigidity, perceived abrasiveness, and lack of understanding social cues as immaturity.

Jacobsen: Why are testing geniuses, to find them, necessary for the advancement of humankind? Why is advancement of humankind the value, the direction for moral effort? What does the advancement of humankind look like to you?

Scillitani: Geniuses are the ones making all the breakthroughs, inventing all the useful gadgets, discovering how the universe works, and so forth, so they're really the ones who are paving the way for mankind. As for the value in advancing mankind, aside from being one of our functions as a species, it's just interesting. We're on a big rock in space and we're really smart, what else can we do but be curious about how it all works?

I'd like to see more focus on discovery, especially in Earth's oceans, and in outer space; medical advancements capable of prolonging our lifespans; and for big changes to happen in the political sphere.

Jacobsen: Why are so few geniuses "charismatic"?

Scillitani: This is probably because most of them have Asperger Syndrome or schizophrenia. Both of these disorders can make a person appear quirky, eccentric, hostile, and/or unpredictable and anti-social. Nikola Tesla was one of the few charismatic geniuses that almost certainly also had Asperger Syndrome but I can't think of any others off the top of my head.

Jacobsen: Is self-confidence an important factor in improving performance in professional pursuits for the high-I.Q.?

Scillitani: Being self-confident is important for improving performance in almost every profession for anyone, regardless of their I.Q. If we don't think we can achieve something then we're dooming ourselves to mediocrity. I'm not suggesting everyone should believe in themselves or anything, but that if it is realistic for one to have the requisite abilities to do something, even if it's rare, they should pursue it if they wish to.

Jacobsen: Why pursue Computer Science now?

Scillitani: It's more interesting than business/advertising and there's less political involvement than in psychology. Several times I considered dropping out of school while I was working towards my degree in psychology because of how pervasive politics are in that pseudo-science. So many researchers fabricate data or withhold data if it doesn't align with their political beliefs and I wanted nothing to do with people like that. There's a reason psychologists often say, "everybody lies [many times] everyday"!

Jacobsen: What would a stable and happy situation regarding income and a day job be for you?

Scillitani: Working alone and doing hard but slow tasks would be nice. I don't like having to grind menial tasks all day or work in teams so I'm hoping I'll be more independent as a computer scientist than an advertiser. As for income, I'll take as much as I can get!

Jacobsen: When you realize the rather impressive limitations in ordinary people to form coherent thoughts, how does this impact the further extension of coherent thoughts into a worldview? In that, people, generally, aren't coherent in a moment, so aren't in general views. Does this explain a lot of ordinary human life to you?

Scillitani: Well, it's taught me that most people don't actually have their own worldview in the first place. Even when someone appears somewhat intelligent it's usually that they've found a genuinely smart person, absorbed as much knowledge from them as they could, and then taken that person's worldview as their own. I don't believe that adults whose I.Q.s are below ~120 (about 1 in 10) are capable of processing information with any level of depth beyond simple "A → B", Pavlov's Dog type thinking.

Also, yes, this does very well explain a lot about ordinary human life to me. I used to think that most people had willfully poor impulse control, were lazy, refused to think ahead, and so forth but now I know it's that they *can't* control their impulses on their own, *can't* understand personal responsibility, and *can't* think things through. That is a very depressing but unfortunate truth and most intelligent people can't believe that's how it is. The smarter someone is the more likely they think, "intelligence doesn't matter much, it's all about work ethic" or "anyone could do what I just did, we're not so different." That's probably the most wrong they've ever been about anything in their lives though.

ESOTERIQ ID-13: Tianxi Yu (Thansie Yu, 余天曦)

Conversation with Tianxi Yu (余天曦) on His Life, Scores, and Views: Member, Chinese Genius Directory (1)

May 22, 2022

Abstract

Tianxi Yu (余天曦) is a Member of CatholIQ, Chinese Genius Directory, EsoterIQ Society, Nano Society, World Genius Directory. He discusses: growing up; family legacy; family background; experience with peers and schoolmates; certifications, qualifications, and trainings; purpose of intelligence tests; high intelligence; geniuses; greatest geniuses; a genius from a profoundly intelligent person; profound intelligence; work experiences and jobs; particular job path; myths; the God concept; science; the tests taken and scores earned; the range of the scores; ethical philosophy; social philosophy; economic philosophy; political philosophy; worldview-encompassing philosophical system; ethical philosophy; meaning in life; various disciplines of family member; a particular area of medicine; digital currency theory; the two SCI papers; Japanese; time spent on each test on average; achieve in life; high creativity; “God” the first in a certain field; religion; Mahir Wu; mainstream intelligence tests; money; a life with meaning; pursue “all areas in different subjects”; medicine; proposed immortality; oxidative stress; anime; Comiket; hardest test; easiest test; imagination; attitudes, personally, about religion; the “beauty of logic”; a meaningful life; focus on meaning; immortality; finiteness of human life; the “spirit immortal”; “spirit immortal” seem convincing; an atheist; alternative tests; exhibits at Comiket; Death Numbers; “Death Numbers”; solved all items on Numerus Classic in one week; the first place; Death Numbers; developing numerical alternative tests; find a meaning in life; some of the kings/bosses; great achievements in the world; particular thinkers or philosophers from the West; particular thinkers or philosophers from the East; American President Trump; CCP Leader Xi Jinping; world leader who impresses; and money.

Interview conducted December 23, 2020 to December 31, 2020.

Scott Douglas Jacobsen: When you were growing up, what were some of the prominent family stories being told over time?

Tianxi Yu (余天曦): 1999/10/13. Nothing impressive.

Jacobsen: Have these stories helped provide a sense of an extended self or a sense of the family legacy?

Yu: No, all the experiences happened at the right time and place.

Jacobsen: What was the family background, e.g., geography, culture, language, and religion or lack thereof?

Yu: My family are all intellectuals, and they work in various fields. No other background.

Jacobsen: How was the experience with peers and schoolmates as a child and an adolescent?

Yu: Not very good, bad sometimes.

Jacobsen: What have been some professional certifications, qualifications, and trainings earned by you?

Yu: I don't even have a college diploma hhh. I am a medical student, and studying electrowetting technology, digital currency theory and economics, biochemistry, physical medicine and so on. After I publish two SCI papers, I intend to study mathematics. I am also studying Japanese and intend to take the JLPT examination next year.

Jacobsen: What is the purpose of intelligence tests to you?

Yu: Having fun! I like to do intelligence tests when I'm resting. It's relaxing for me. So I only do interesting tests.

Jacobsen: When was high intelligence discovered for you?

Yu: A year and a half ago.

Jacobsen: When you think of the ways in which the geniuses of the past have either been mocked, vilified, and condemned if not killed, or praised, flattered, platformed, and revered, what seems like the reason for the extreme reactions to and treatment of geniuses? Many alive today seem camera shy – many, not all.

Yu: Maybe they didn't meet other people's expectations or come to different conclusions. The second situation is the opposite. I don't dare to tell others that I have high IQ now, because I haven't made corresponding achievements.

Jacobsen: Who seem like the greatest geniuses in history to you?

Yu: I don't know.

Jacobsen: What differentiates a genius from a profoundly intelligent person?

Yu: Genius has high creativity, profoundly intelligent person has high understanding.

Jacobsen: Is profound intelligence necessary for genius?

Yu: No.

Jacobsen: What have been some work experiences and jobs held by you?

Yu: What experience can an undergraduate have...Can working in the laboratory be an experience?hhh

Jacobsen: Why pursue this particular job path?

Yu: For postgraduate.

Jacobsen: What are some of the more important aspects of the idea of the gifted and geniuses? Those myths that pervade the cultures of the world. What are those myths? What truths dispel them?

Yu: Gifted. I don't know much about myths, and I don't believe in them.

Jacobsen: Any thoughts on the God concept or gods idea and philosophy, theology, and religion?

Yu: "God" for me is the first in a certain field, I am an atheist.

Jacobsen: How much does science play into the worldview for you?

Yu: 100%.

Jacobsen: What have been some of the tests taken and scores earned (with standard deviations) for you?

Yu: Death Numbers, Mahir Wu, 28/30, IQ 200 SD15

NISA128, Mahir Wu, 121.5/128, IQ191.5 SD15

N-World, Mahir Wu, 48/48, IQ190 SD15

Numerus, Ivan Ivec, 29/30, IQ190 SD15

Jacobsen: What is the range of the scores for you? The scores earned on alternative intelligence tests tend to produce a wide smattering of data points rather than clusters, typically.

Yu: IQ180~200.

Jacobsen: What ethical philosophy makes some sense, even the most workable sense to you?

Yu: Ethical philosophy that make me money.

Jacobsen: What social philosophy makes some sense, even the most workable sense to you?

Yu: Social philosophy that make me money

Jacobsen: What economic philosophy makes some sense, even the most workable sense to you?

Yu: Economic philosophy that make me money.

Jacobsen: What political philosophy makes some sense, even the most workable sense to you?

Yu: Political philosophy that make me money.

Jacobsen: What worldview-encompassing philosophical system makes some sense, even the most workable sense to you?

Yu: Well provided.

Jacobsen: What ethical philosophy makes some sense, even the most workable sense to you?

Yu: Ethical philosophy that make me money.

Jacobsen: What provides meaning in life for you?

Yu: Living.

Jacobsen: What are some of the various disciplines of family member? Those places of work and/or study.

Yu: No family disciplines.

Jacobsen: Do you intend to specialize in a particular area of medicine?

Yu: I'm going to try all areas in different subjects.

Jacobsen: What areas of medicine most interest you?

Yu: Immortality.

Jacobsen: Why does digital currency theory interest you?

Yu: It's the future.

Jacobsen: What will be the research in the two SCI papers?

Yu: Oxidative stress and digital currency, maybe.

Jacobsen: Why choose to study Japanese?

Yu: しゅみです, I like watching anime, going to Comiket.

Jacobsen: How much time do you spend on each test on average?

Yu: Depend on the authors and difficulties. Most tests take two or three days, and the most difficult tests may take about one year.

Jacobsen: What do you hope to achieve in life?

Yu: Have enough money.

Jacobsen: What factors make up the "high creativity" required for genius?

Yu: Imagination.

Jacobsen: How is "God" the first in a certain field?

Yu: Far exceed the second place.

Jacobsen: As an atheist, what reasons make the most sense of this?

Yu: Our country is not affected by religion.

Jacobsen: Why focus on Mahir Wu's tests?

Yu: I think his test is the best in the world. He expressed the beauty of logic to a very high level. I didn't find this in the tests of other well-known authors.

Jacobsen: Have you taken mainstream intelligence tests? For example, the WAIS, the Stanford-Binet, the RAPM, etc.

Yu: No, our country doesn't advocate IQ, so we haven't tested it in hospital. And the thinking depth of those tests are quite low. They don't have deep thinking like high-range tests.

Jacobsen: Why care mostly about money regarding ethics, social philosophy, economics, and politics?

Yu: Economic base decides the superstructure.

Jacobsen: How do you intend to live a life with meaning?

Yu: Happiness is the core of a meaningful life.

Jacobsen: Why pursue "all areas in different subjects" rather than specialize?

Yu: Because I haven't found the area I'm interested in.

Jacobsen: Why “immortality” regarding medicine?

Yu: Medical technology may make human body immortal

Jacobsen: What are some ways in which proposed immortality can be attained to you?

Yu: I can't say this casually. As far as I know, many directions about immortality can't be achieved at present. I understand “immortality” in three ways: the body immortal; do not need the body as a carrier, through physical means to achieve thought immortal; the spirit immortal.

Jacobsen: Why focus on oxidative stress?

Yu: I have no choice, I'm just an undergraduate. It's not easy to find a tutor. I can only write whatever direction the tutor gives me.

Jacobsen: What anime do you like most?

Yu: 君の名は.

Jacobsen: What is Comiket?

Yu: Japan's largest animate exhibition, コミケ.

Jacobsen: What was the hardest test taken to date?

Yu: Death Numbers by Mahir Wu, and it's the best test I think.

Jacobsen: What was the easiest test taken to date?

Yu: Numerus Classic by Ivan Ivec. It took me one week to solve all items.

Jacobsen: Anything else other than “imagination”?

Yu: Yes, but it's not worth mentioning under the imagination.

Jacobsen: Any attitudes, personally, about religion?

Yu: I agree, but I don't accept. If I am the worshiped person of religioner, please forget my previous sentence hhh.

Jacobsen: Can you explain more the “beauty of logic”?

Yu: It's hard to describe. Simply, it is the numbers beauty that reflected in the case of concise and rigorous logic. Take a simple example: $8127, 2187, 1827, ?$ (Mahir Wu's question, got his permission). Many people's first reaction is shift, but they can not get the correct answer. But through observation, we can find that: $81 \times 27 = 2187, 21 \times 87 = 1827$. From this we can get the answer. First, if you find this logic, you will be very sure of the answer, the logic is very rigorous and concise. Then, isn't it beautiful that the numbers of product doesn't change?

Jacobsen: What else is important for a meaningful life?

Yu: I don't know. I haven't found the meaning of life now.

Jacobsen: Why focus on meaning, as in a meaningful life?

Yu: I don't know. It's too difficult for me.

Jacobsen: What if medical technology fails in this immortality endeavour? Is it wasted time?

Yu: This process is enough for me to enjoy, even if I fail.

Jacobsen: Do you think the finiteness of human life gives it meaning?

Yu: I'm not the creator. I don't know the specific answer, but you can think about it: is the life of bacteria meaningful?

Jacobsen: What do you mean by the "spirit immortal"?

Yu: Be remembered by the world.

Jacobsen: Does this "spirit immortal" seem convincing to you, or not?

Yu: Not.

Jacobsen: Doesn't an atheist position, typically, mean only the first two options? The body immortality and not needing the body as a carrier.

Yu: The atheists that I understand is not believe in Christian God or Catholic Jesus, the unexplained God of science. What I mean is to do it in a scientific way. For example, quantum computers can be used to connect neural networks to carry human thoughts.

Jacobsen: Are the alternative tests a way to exercise the mind when it's "not easy to find a tutor"?

Yu: You can think so.

Jacobsen: What exhibits at Comiket most interest you?

Yu: Buy my favorite painters' works and my favourite anime's unique souvenir.

Jacobsen: How long did Mahir Wu take to develop Death Numbers?

Yu: If you mean propaganda, in my impression, he didn't deliberately do it.

Jacobsen: Why is it called "Death Numbers"?

Yu: Because it's very difficult.

Jacobsen: What was the response from the high-range testing community when you solved all items on Numerus Classic in one week?

Yu: No much response. Because I didn't show it off.

Jacobsen: I asked, "Any thoughts on the God concept or gods idea and philosophy, theology, and religion?" You said, "God" for me is the first in a certain field, I am an atheist." I asked, "How is "God" the first in a certain field?" You said, "Far exceed the second place." I asked, "As an atheist, what reasons make the most sense of this?" You said, "Our country is not affected by religion." I asked, "Any attitudes, personally, about religion?" You said, "I agree, but I don't accept. If I am the worshiped person of religioner, please forget my previous sentence." Can you expand on the responses and meanings in those responses, please? What ties them together as an atheist?

Yu: I mean atheists don't believe in virtual gods. I use the concept of God to refer to the first place. Besides "God", I can also use other expressions to address the first place, such as "king", "boss" and so on. It's a tribute to those who have made great achievements in the real world.

Jacobsen: Logic manifested in complex symmetries seems beautiful to me, too. How long did Mahir Wu take to create Death Numbers?

Yu: He said he didn't remember. NIT is the predecessor of DN, maybe one year?

Jacobsen: When did Mahir Wu begin developing numerical alternative tests?

Yu: He said from 2014, when he was in junior high school. From then on, he began to set tests.

Jacobsen: Do you think that you have to find a meaning in life, fundamentally? Is it necessary?

Yu: Yes, very necessary, otherwise it's boring.

Jacobsen: Who do you consider some of the kings/bosses? Those who have "made great achievements in the real world."

Yu: Chen-Ning Yang, Paul Seymour, etc.

Jacobsen: What great achievements in the world do you consider the greatest?

Yu: Let the world think I'm the greatest.

Jacobsen: Do any particular thinkers or philosophers from the West influence you?

Yu: When I was a child, I read some people's books, such as Russell, Freud, Descartes and so on, but later I didn't read them. After one's own thoughts are established, the thoughts of others are meaningless.

Jacobsen: Do any particular thinkers or philosophers from the East influence you?

Yu: No, but I often do it in exams, such as Confucius, Lao-tzu, Zhuangzi and so on. To be honest, I was still interested in them at the beginning, but when I immersed in their tests, they made me disgusted.

Jacobsen: What do you think of American President Trump?

Yu: He is an undercover agent sent by the great People's Republic of China. He has accomplished the task very well. I hope he will be re elected.doge

Jacobsen: What do you think of CCP Leader Xi Jinping?

Yu: He is a great president and will lead China's Renaissance.

Jacobsen: What world leader impresses you?

Yu: Abraham Lincoln.

Jacobsen: How do you hope to make a lot of money?

Yu: Investment, stock speculation, writing papers to earn bonus, founding a company and so on, all of which I have been implementing.

Conversation with Tianxi Yu (余天曦) on Some Intellectual Interests: Member, Chinese Genius Directory (2)

June 1, 2022

Abstract

Tianxi Yu (余天曦) is a Member of CatholIQ, Chinese Genius Directory, EsoterIQ Society, Nano Society, and World Genius Directory. He discusses: Chen-Ning Yang; Paul Seymour; the “greatest”; more serious thoughts on the fundamental nature of reality; Russell; your own thoughts; school examinations; investment; writing; a Nobel prize a good indicator of a great thinker; focus on the people at the top of the world; want to be recognized; focus on academic activities; thoughts on love; love; tests; identify individuals who can solve complex problems; an anti-intellectual; an intellectual; waste; writing; some projects; some social problems of interest; and development of science and technology.

Scott Douglas Jacobsen: We’re back after 16 months. Let’s continue, my friend. Why Chen-Ning Yang?

Tianxi Yu (余天曦): Because his contribution to his discipline is greater than anyone else’s, even if he is also a Nobel laureate, Yang’s contribution is greater than the vast majority of Nobel laureates. Among the scientists currently alive, Yang is undoubtedly the most radiant.

Jacobsen: Why Paul Seymour?

Yu: Don’t know much about him, hahaha, I read his proof of the strong perfect graph conjecture, it is very interesting.

Jacobsen: Why do you want the world to think you’re the “greatest”?

Yu: I don’t need to be recognized by everyone, I just want to be recognized by the people at the top of the world. Getting recognition is kind of socially satisfying, and the work I’m doing now is definitely something I want to be recognized for.

Jacobsen: What are your more serious thoughts on the fundamental nature of reality? What is reality?

Yu: I would have given an answer to this question 16 months ago, but I can’t give it now.

Jacobsen: What are your thoughts on Russell?

Yu: It is difficult to describe in a few words... When I saw this question, my brain was flooded with very complicated and huge emotions... I first learned about Russell near the end of elementary school, and it struck me as I read it, because I felt that Russell’s thoughts were similar to many of mine... “An austere soul burns in the agony of loneliness”, except that I have a different perception of love than he does, and I have little desire for it, and even rather resent it.

Jacobsen: What makes your own thoughts dismiss those, since established, as meaningless?

Yu: It is a wrong idea that everything that has been established is useful. Useless use is also a use. Although on a social level, there are high and low values, but creating beauty and pleasing ourselves has no value.

Jacobsen: Do you mean the school examinations as the “tests” making you feel disgusted?

Yu: Yes, I hate tests, I think they are obsolete. Put in the past, the test is undoubtedly useful, because human social development is just starting, and needs a lot of fast talent to meet the needs of society. But today’s social development is very slow, and can even be described as stagnant, it is time to discover people who can solve complex problems, which is often referred to as “high IQ” talent in the community. I am more of an anti-intellectual, but I have to say that the IQ of the high ability to solve complex problems is stronger, of course, not gaining expertise, still a waste.

Jacobsen: What kinds of investment?

Yu: Cryptos, but now no more investment, mainly in writing papers and doing projects.

Jacobsen: What are some papers that you’re writing to “earn bonus”?

Yu: Not to go to “earn bonus”, now write papers more inclined to interest. Because I found that some of my knowledge and insights can actually solve some social problems and contribute to the development of science and technology in a small way.

Jacobsen: Is a Nobel prize a good indicator of a great thinker to you?

Yu: From a historical perspective, these Nobel Prize winners have greatly advanced the world and have all made great contributions to the world. And creating these results also requires very deep thinking, and from this perspective, I think it is.

Jacobsen: Why focus on the people at the top of the world compared to others when hoping for proper recognition in the world?

Yu: Only people at the top of the world can understand each other.

Jacobsen: What is the work you’re doing now? That which you “want to be recognized for.”

Yu: Hard to describe, although I want to say “technology”, but not sure. I don’t know if my works really have meaning or what I will do in the future.

Jacobsen: Why the change in the ability to answer some questions compared to 16 months ago?

Yu: 16 months ago I was focused on making money, so I only wanted to think about money-related things. But now money is not as useful as before, so I focus on academic activities.

Jacobsen: What are your different thoughts on love now?

Yu: I now believe that love is useless. Thinking this has to do with the country I live in. Love should be something that brings pleasure and draws pleasure from the other person. But nowadays, there are high mortgage payments (the average person struggles for about 30 years to afford a house), huge education costs (school district, tuition fees), and lack of medical assistance. Not to mention that 715 (9:00 to work, 25:00 to leave work, lasting seven days) is now popular, and society is still in the process of massive layoffs and pay cuts. With so many burdens there is still time to fall in love?

Jacobsen: Why do you “rather resent” love in a sense?

Yu: Women weak my legs.

Jacobsen: What should replace tests now?

Yu: Not yet, existing resources are not sufficient to support a more complex testing approach.

Jacobsen: With social development as very slow now, even stagnant, what can help identify individuals who can solve complex problems in this societal environment?

Yu: Large area for universal high range testing? lol

Jacobsen: Why consider yourself “more of an anti-intellectual”?

Yu: I don’t like to over-emphasize the importance of intelligence, of course it’s more important, but there’s no need to deify it. I also rather resent people who flaunt their IQ.

Jacobsen: In this context, following from the previous question, what makes someone an intellectual?

Yu: Born in an intellectual family has been a big part of success, if not, only by their own desire for knowledge.

Jacobsen: How do the talented, typically, waste their talents, not use them fully?

Yu: Laziness. Although I know that some people may feel that, for example, the family of origin, or school bullying and other reasons, but it all boils down to laziness.

Jacobsen: What are some things you’re writing now?

Yu: “Infectious disease risk calculation and storage system based on 3-tier network system” - Tianxi Yu, first author

Jacobsen: What are some projects you’re doing now?

Yu: “Research on rapid risk assessment, precise early warning and prevention and control countermeasures for major outbreaks of acute infectious diseases”-Major Science and Technology Project on Public Health of Tianjin [grant numbers 21ZXGWSY00010] and the Tianjin Key Medical Discipline (Specialty) Construction Project (2021)

Jacobsen: What are some social problems of interest to you?

Yu: Covid-19 epidemic, economy, corruption, etc., but it’s not convenient to start the discussion.

Jacobsen: What are things in the development of science and technology of interest to you, now?

Yu: Every major scientific advancement interests me.

Conversation with Tianxi Yu (余天曦) on Research and God's Power: Member, Chinese Genius Directory (3)

June 8, 2022

Abstract

Tianxi Yu (余天曦) is a Member of God's Power, CatholIQ, Chinese Genius Directory, EsoterIQ Society, Nano Society, and World Genius Directory. He discusses: balance; supporting the talented and supporting the innately disadvantaged; communication range; professional options; finances; love; redefine the idea of a successful life; women; individuals who flaunt or brag about their I.Q.s; inability to take personal responsibility for one's destiny tied to the laziness; basic research question; scientific discovery and research; a good lesson to take from individuals seeking 15 minutes; A.I. or other future technologies; infinite funding; blockchain; oxidative stress; deep learning; vanity or the flaunting; mindset to a more positive one; a smart person; wealth gap; collectivistic; fools confrontational about facts; society get better at the bottom; beauty in the world; the shortcomings of the world; ethics; encryption and distributed architecture; human progress; rare Earth metals; spheres of geopolitical influence; longevity research; deep-learning systems; intuitive capacities; balance between showing off and not boasting; God's Power; Chen Ning Yang; and maintain quality control on membership and on discussions of God's Power.

Scott Douglas Jacobsen: Should there be a balance between the development of the most talented into creative and scientific endeavours, and the devotion to helping individuals on the opposing side of the scale with various levels of mental and physical disabilities? Or should there be a skew of some form of resources devoted to the more talented due to the return on investment in this particular population?

Tianxi Yu (余天曦): I think the care for the weak should not be downgraded. The civilization of society is not the position of the strong, but more the posture of the weak. Many people with disabilities also make great contributions to the world.

Jacobsen: What are the considerations in Chinese society regarding supporting the talented and supporting the innately disadvantaged? Those natural variations in mental character?

Yu: Relative subsidies exist.

Jacobsen: Leta Stetter Hollingworth, apparently, proposed a communication range of 30 I.Q. points, unsure of the standard deviation, for effective communication. If true, and many in the high-I.Q. communities seem to accept this, then this would imply a truth to individuals of similar mental talent capable of equal comprehension, while geniuses, to non-geniuses, may appear as idiots, morons, or childlike. Although, simply claiming, "A lot of people believe this," doesn't make this more correct or even right in the first place. Regardless, does this seem true to you, as in "only people at the top of the world can understand each other"?

Yu: Yes, people at the relative bottom will never be able to understand the people standing at the top in their lifetime, and at best they can only be jealous and catch the lace. The top is often lonely because only a very small number of people can reach the top, and those who can't understand are at the bottom for the rest of their lives.

Jacobsen: You have many professional options before you, especially in an international context, having talent, and in an era where personal and professional reinvention are necessities rather than options. What professions, at the moment, appeal to you, even if only temporarily?

Yu: Graduate student? At the moment, I am probably more interested in upgrading my education. but if I have to say a career, trader is more suitable for me at the moment. Although I said before that I like to do research work, but undergraduate degree in research work not many opportunities for promotion, may not even be a researcher for life.

Jacobsen: I remember the focus on the finances for you. It makes sense when not coming from money to want plentiful Yuan. Canadians are the same. If lacking family connections and monies, then they desire lots and lots of dollars. So, if you've shifted from financial focus to academic activities, what academic disciplines interest you?

Yu: Blockchain, oxidative stress, deep learning, etc.

Jacobsen: I have read about these trends in China, where the individuals do not want love because love gets mixed with obligations and responsibilities tied to extensive financial burdens over decades. Burdens in numerous areas in life. It shows structural issues in contradiction to individual sensibilities and values. People value love. Whereas, society continues to adjust to globalization, impacts from Covid-19 (and variants), and the wedge of economic inequality. Love fails in this environment. Partnership becomes practical oriented rather than intimacy oriented. Individuals revolt from this, East and West. Does this seem to reflect the issues mentioned about education costs, mortgage costs, and so on?

Yu: Yes, love is originally an act of mutual solicitation, people are self-interested animals, if the cost of love is much higher than the pleasure they can get, people will also give up courting.

Jacobsen: Following from the previous question, what if societies began to redefine the idea of a successful life? Similar to yourself, you shifted from a focus on money to academics.

Yu: I'd love to see that happen, that means we're moving in a good direction

Jacobsen: Why do women make you weak in the legs?

Yu: Hahaha, that comes from a movie called "Rocky", I just used that as a tease.

Jacobsen: Is it common among the high-I.Q. communities, more in interpersonal conversation rather than in public, to resent individuals who flaunt or brag about their I.Q.s? Is it similar to individuals who boast about professional associations (or professional associations that they claim to have) or individuals who they know (or claim to know)? Some will claim – and I've seen this in public fora – intelligence is simply the most important human trait.

Yu: It is very common, similar to the phenomenon you mentioned. Many people are in reality a loser, nothing professional skills, and the IQ community is the only relatively higher level circle they can access, so it is easy to inspire their vanity.

Jacobsen: Is inability to take personal responsibility for one's destiny tied to the laziness, lack of motivation, procrastination, and so on? Even the idea, since so smart, people should simply hand them things in life, i.e., entitlement.

Yu: I do think that, for whatever reason, in the end it is the negativity that causes them not to take responsibility for this, and these negative factors are often the result of laziness, procrastination, etc.

Jacobsen: What is the basic research question asked in “Infectious disease risk calculation and storage system based on 3-tier network system”?

Yu: A 3-tier network system proposed for current information security and anonymization to address risk assessment of various infectious diseases.

Jacobsen: With scientific discovery and research as a core interest for you, what 5 streams of research are the most interesting to you?

Yu: Hard to answer this question... I usually pay attention to the scientific achievements mainly to read what breakthroughs and representative papers inside the latest journals, not according to the direction I am interested in, only reading what I am interested in will make my vision become narrow. If I have to say, life science, magnetic structure, energy, blockchain, materials may be relatively more interested.

Jacobsen: You resent IQ boosters. Individuals who flaunt their IQ, whether real or fake. What seems like a good lesson to take from individuals seeking 15 minutes, or less, of fame?

Yu: Showing off can only look empty inside, just like when you say “you look like a fool” to Einstein, he has no ripples in his heart, but when you say “you look like a fool” to a fool, he will often argue with you.

Jacobsen: Do you think A.I. or other future technologies may narrow the gap between those at the top and those at the bottom?

Yu: No, gap will only get bigger, but the life of the bottom will also get better, but they are less likely to become the upper class.

Jacobsen: If you had infinite funding, so money was not an issue, what would like to do most?

Yu: First go around the world and see its beauty and shortcomings, then try to fill those shortcomings (charity, grants, foundations, etc.), and finally invest the money in disciplines that can make the world better: life sciences, information sciences, interdisciplinary disciplines, etc.

Jacobsen: What aspects of blockchain seem the most interesting to you?

Yu: Encryption technology and distributed architecture. The history of mankind is the history of the pursuit of security, of which cryptography is crucial because it is relatively abstract and therefore easily overlooked. But it is undeniable that it has been closely related to human progress.

Jacobsen: Is oxidative stress a solid foundation of research for longevity?

Yu: Correlation exists, and ROS is strongly associated with longevity. The relationship between oxidative stress and longevity is complex. In general, oxidative stress causes aging, but it has also been found that oxidative stress early in life prolongs lifespan.

Jacobsen: How is deep learning advancing?

Yu: Deep learning is the process of learning the intrinsic laws of sample data so that machines can have the same analytical learning ability as humans. The internal principle is also complex, let's say a two-layer neural network, the first layer is called the coding layer and the second layer is called the decoding layer, input samples to train the first layer of RBM units and use their output to train the second layer of RBM models, stack the RBM models to improve the model performance by adding layers.

Jacobsen: Are there any controls on the vanity or the flaunting within the communities?

Yu: No, but generally no strength to show off will also be despised by others.

Jacobsen: How might they change their mindset to a more positive one? As they age, those thought and behaviour patterns simply become more fixed.

Yu: I have posted related my reflections on CHIN web and also admonished others not to be too impatient in the usual chat, hoping it would help them. I can reveal a little bit, the only Chinese society I am currently in-God's Power (the president is Wu), will soon be joined by Chen Ning Yang, and there will be a lot of great people to follow, I hope these people will join to bring more positive influence, so that members can focus more on their own improvement.

Jacobsen: Once a smart person knows of their smarts, you point out an equanimity. Not necessarily an internal calm, a simple self-knowledge, something unable to knock them off their feet, as in the Einstein example. Is the boasting and the look of emptiness inside of showing off more internally developed or externally influenced? Is this lack coming from inside or the pressure to perform coming from outside?

Yu: I think the internal development of more general flaunting is a manifestation of low self-esteem and emptiness, in the case of not being recognized by the external environment internally affected, thus giving rise to low self-esteem or emptiness.

Jacobsen: If the wealth gap widens, how will this impact the structure of societies?

Yu: The situation is more complicated, in the case of insufficient resources, the gap between the rich and the poor will widen to make the society more unstable; if the resources are sufficient and the people at the bottom can live a very easy life, then the gap between the rich and the poor will not have too much impact on social stability.

Jacobsen: From the last question, how will this change the values of societies, whether individualistic or collectivistic? Although, the terms "individualistic" and "collectivistic" are, in a way, inaccuracies, approximations.

Yu: I hope it is collectivism, the individual can only go to promote the collective, but the result is not how the individual can influence.

Jacobsen: Why are fools confrontational about facts – making a fight where a dialogue or acceptance would be more useful?

Yu: Because they themselves do not know what the other side is talking about, what they say is not thought through, only want to tell others in the momentum he is not to be messed with.

Jacobsen: How will society get better at the bottom?

Yu: Depends on the level of social development and how it is developed.

Jacobsen: What is beauty in the world?

Yu: Beautiful scenery, beautiful people, pleasant acts of kindness, and feeling the care from the community.

Jacobsen: What are the shortcomings of the world?

Yu: Not big enough.

Jacobsen: The disciplines emphasized to make the world better seem devoted more to sciences: “life sciences, information sciences...” Science remains morally neutral, directly, and ethically informative, derivatively. What ethic should guide the findings of science to “make the world better”?

Yu: Philosophy.

Jacobsen: How are encryption and distributed architecture crucial to human progress?

Yu: Removing the traditional credibility so that the people can also enjoy affirmative action, also provides protection in terms of information security and personal safety.

Jacobsen: What factors determine human progress?

Yu: Human curiosity about the unknown.

Jacobsen: This distributed architecture, more or less, can refer to electronic infrastructure in nations, between nations, and orbiting the Earth. Rare Earth metals are crucial to their operation: lanthanum (57), cerium (58), neodymium (60), samarium (62), europium (63), terbium (65), and dysprosium (66). What could future shortages or attempts at monopolization of rare Earth metals by powerful geopolitical players make of global security with more for one group over others?

Yu: Unless we enter a period of extreme war, the impact of rare earth monopoly or not is not significant.

Jacobsen: Lee Kuan Yew spoke of the world of the 21st century as one transitioning from a unipolar world to a multipolar world with spheres of geopolitical influence. Does this seem like the future for 21st century?

Yu: Yes, I think so too.

Jacobsen: Which longevity research seems the most legitimate to you?

Yu: Inhibition of kidney-type glutaminase-dependent glutaminolysis in eliminates senescent cell; Immune drivers that induce aging in the organism’s brain; Prevention of mitochondrial damage or decline in mitochondrial function with age; NAD⁺ can restore age-related muscle degeneration; Small molecule ISR inhibitors hold promise for rejuvenating the brain...and so on

Jacobsen: As humans have variation in analytical ability, computers have differences in analytical capability. How close are deep-learning systems from achieving average-level human generalized intelligence in analytical domains?

Yu: Soon.

Jacobsen: How might intuitive capacities be built into machines?

Yu: Information between neurons is transmitted by electrical signals, which are detected and interpreted for the purpose of guiding the machine. However, the skull blocks/distorts the electrical signals, making this technique more difficult to implement.

Jacobsen: What is the proper balance between showing off and not boasting?

Yu: Whether it turns others off.

Jacobsen: Why join God's Power?

Yu: Because I think God's Power will become the No.1 high IQ society in China.

Jacobsen: How did Chen Ning Yang become part of it (soon)? Did he come to God's Power? Or was he asked to join it?

Yu: Wu and Yang will have an interview in mid-June, and Yang has also accepted Wu's invitation.

Jacobsen: How will you maintain quality control on membership and on discussions of God's Power?

Yu: Lead them to struggle, stimulate their desire to struggle, and make them work harder for reality rather than for IQ scores.

ESOTERIQ ID-14: Heinrich Siemens

An Interview with Heinrich Siemens on Background and Scores (Part One)

Abstract

Heinrich Siemens was born as a member of a Low German community in Latvia, or the former Soviet Union. His family spoke Plautdietsch and read the Luther Bible in High German. He has performed very well on HRIQ tests of Ronald K. Hoeflin, Paul Cooijmans, Jonathan Wai, Theodosios Prousalis, and others. Some results have been above 5 sigma or 5 standard deviations. He developed the Three Sonnets Test (www.tweeback.com/hriq/Three-Sonnets.pdf). A lot of his life revolves around Plautdietsch language. He is the president of the international association of speakers of the language. He founded a publishing house devoted to this language: www.tweeback.com. Siemens enjoys the philosophy of Wittgenstein in particular and the philosophy of language in general. He has a film interest directors including Bergman, Kubrick, Melville, Tarr, Tarkovsky, Tarr, von Trier. If in Plautdietsch, he enjoys films by Alexandra Kulak & Ruslan Fedotov, Carlos Reygadas, Nora Fingscheidt, and others. He discusses: Germany; Plautdietsch, German, and Russian; the origin of Plautdietsch; the Mennonite religion; family life; giftedness; Ronald K. Hoeflin, Paul Cooijmans, Jonathan Wai, Theodosios Prousalis, and some others; and Tweeback Verlag.

Scott Douglas Jacobsen: In Latvia, what is the cultural and socioeconomic meaning of the “Low German community”?

Heinrich Siemens: In the second half of the 18th century, when the German-born Catherine II. was Tsarina, many people from (High and Low) German-speaking countries (Germany did not yet exist) emigrated to the Russian Empire. My parents grew up in Siberia, but in the 1960s when the opportunity arose, they moved to Latvia, now part of the EU, but then part of the Soviet Union.

In our community we spoke Plautdietsch, the variety of Low German that was common in the former Soviet Union. But the Luther Bible was read in High German, the school was in Latvian and the lingua franca of the Soviet Union was Russian. I grew up with these languages. When I was 11, we emigrated to Germany.

Jacobsen: Why did you emigrate to Germany?

Siemens: As a German minority and as part of a religious community, we suffered great restrictions in the Soviet Union. I could not have become an academic, for example, and there was even the danger of being locked up in prison.

In the 1970s the cold war thawed a little and the possibility of emigration arose in the context of the Helsinki Accords. Many families could be reunited who had been separated for decades by the iron curtain.

Jacobsen: Are you trilingual now with Plautdietsch, German, and Russian?

Siemens: Yes, I feel most comfortable in these languages. There are a few more languages (including English) in which I read books or have simple conversations, but when it comes to in-depth conversations I quickly reach my limits.

Jacobsen: What is the origin of Plautdietsch?

Siemens: In contrast to High German, Low German has preserved the old consonants /p, t, k/ and the old monophthongs /i:/, u:/, so it has not gone through the High German consonant shift and diphthongization (Pepa, Tiet, Wota, koake, Hus vs. Pfeffer, Zeit, Wasser, kochen, Haus). Consonantism is thus similar in Low German, Dutch, and English, while the long vowels /i:/, u:/ are preserved only in Low German, while English, High German, and Dutch have diphthongs.

Plautdietsch is the Low German variety that was spoken between the Vistula and Nogat rivers in Poland. At that time, the Baltic Prussians (now extinct), the Slavic Kashubs and German settlers lived in this area, they all formed a Sprachbund and thus Plautdietsch was also influenced by Baltic and Slavic.

Now there are only a few Plautdietsch speakers left in Siberia, most of them have emigrated to Germany (about 200,000). There have been overseas emigrations since the 19th century, so that now there are about 100,000 speakers in North America and about 250,000 speakers in Latin America. In Europe the number of speakers is decreasing, in Latin America it is growing thanks to large families.

For about 100 years there has been a Plautdietsch literature, there are grammars and dictionaries, so that today it is a fully developed written language.

Jacobsen: Does the Mennonite religion still influence you? If not, why not? If so, how?

Siemens: Because my name is Heinrich, I naturally expected this Gretchenfrage (cf. Faust I by Goethe).

Mennonites differ from the other Christian religions in that they only baptize adults. I consider this principle to be very important, because everyone should decide for himself whether he wants to belong and to which religion he wants to belong. Theologically, pacifism is crucial for Mennonites, and this was also the reason for the many migrations of Mennonites: Whenever the young men were to become soldiers, the Mennonites emigrated to another country where they didn't have to do army service.

I still share these religious principles, but I personally decided against being baptized. I belong to the cultural community of Mennonites, but not to a congregation. After careful consideration I have come to the conclusion that I want to live my life without God, maybe because of Ockham's razor. When I see what the Bible (or other holy scriptures) and faith are misused for, I don't want to be a part of it.

Jacobsen: How was family life for you? Was this reflective of many families of the time in Latvia?

Siemens: A childhood in the late 1960s and 1970s was very different from now. We played outside a lot, had no electronic gadgets yet, we lived in a three-generation household. My parents worked, we children were with the grandmother. The other families lived similarly, not only in our Low German community, but also the Latvians in our small town.

Jacobsen: Was giftedness noticed early for you?

Siemens: Giftedness was never an issue. Although I have always found cognitive challenges easier than many of my fellow human beings, I did not take my first test until I was 45. Today I know the international high range IQ community, but I didn't know about it before.

Jacobsen: What were some of the tests by Ronald K. Hoeflin, Paul Cooijmans, Jonathan Wai, Theodosios Prousalis, and some others taken by you? What has been the full range of scores on S.D. 15? What test was the highest score for you?

Siemens: My most successful test results include the Titan test by Ronald K. Hoeflin (raw score 45/48), the Test of the Beheaded Man (33/40), the Marathon Test (108/111), both by Paul Cooijmans, many different tests and some won contests by Theodosios Prousalis, SLSE 48 (30/48) by Jonathan Wai, etc. Usually the results were beyond 5 standard deviations. The highest score was the verbal section of the Marathon Test with IQ 180 S.D. 15.

In this context, let me draw your attention to the only test I have designed: Three Sonnets (tweeback.com/hriq/Three-Sonnets.pdf). It takes some time to get into it, but if you consider that the test was published on Towel day, you have a clue. I am waiting for your submission. Have fun and dopamine release.

Jacobsen: Why found the publishing house Tweeback Verlag?

Siemens: The Tweeback Verlag has literature on and about Plautdietsch as its main focus. I founded it because there was no publisher in this niche yet and there were some books that needed to be published.

Conversation with Dr. Heinrich Siemens on 195 IQ (S.D. 15), CIT5, Cooijmans, Conscientiousness, Mennonites, Plautdietsch, God, the Three Sonnets Test, and Tweeback Verlag: Linguist (2)

Abstract

Heinrich Siemens was born as a member of a Low German community in Latvia, or the former Soviet Union. His family spoke Plautdietsch and read the Luther Bible in High German. He has performed very well on HRIQ tests of Ronald K. Hoeflin, Paul Cooijmans, Jonathan Wai, Theodosios Prousalis, and others. Some results have been above 5 sigma or 5 standard deviations. He developed the Three Sonnets Test (www.tweeback.com/hriq/Three-Sonnets.pdf). A lot of his life resolves around Plautdietsch language. He is the president of the international association of speakers of the language. He founded a publishing house devoted to this language: www.tweeback.com. Siemens enjoys the philosophy of Wittgenstein in particular and the philosophy of language in general. He has a film interest in directors including Bergman, Kubrick, Melville, Tarkovsky, Tarr, von Trier. If in Plautdietsch, he enjoys films by Alexandra Kulak & Ruslan Fedotov, Carlos Reygadas, Nora Fingscheidt, and others. He discusses: 195 S.D. 15 on the Cooijmans Intelligence Test 5 or the CIT5; the feeling when the score came back from Cooijmans; thoughts on the directories, rankings, and listings available; the length of time one should take on an alternative test; pre-Soviet and post-Soviet experience of the “Low German community”; life until age 11; life as an adolescent; knowing one’s “limits” a sign of both intelligence and conscientiousness; Mennonites baptize only adults; the main contribution to Germanic life and work via the Plautdietsch speaking people and the Mennonites; the Soviet Union; pacifism as crucial for the Mennonites; religion; individual autonomy in the selection of religion; being against baptism; belonging to the “cultural community of Mennonites, but not to a congregation”; life “without God”; the trajectory of the “careful consideration” about God; the ‘final nails’; the Bible “misused”; freedom of religion; the things lost in non-intergenerational homes; the reason for this becoming a hobby at age 45; the Three Sonnets test; the demographics of the test-takers; finding out about giftedness later in life in the international high-range community; the leap from the previous “highest score” on “the verbal section of the Marathon Test with IQ 180 S.D. 15” to the “195 S.D. 15 on the Cooijmans Intelligence Test 5 or the CIT5”; marathon test-takers; individuals taking 5, 10, 20, 50, or more high-range tests; and Tweeback Verlag.

Scott Douglas Jacobsen: Some news since the previous coverage. As noted in the prior interview, on the legendary Titan Test, you scored 45/48. Furthermore, you have “performed very well on HRIQ tests of Ronald K. Hoeflin, Paul Cooijmans, Jonathan Wai, Theodosios Prousalis, and others” with “some results... above 5 sigma or 5 standard deviations.” With the recent news, as stated on the World Genius Directory [Ed. Ranking], you scored 195 S.D. 15 on the Cooijmans Intelligence Test 5 or the CIT5, which corresponds to a score of 28 out of 40. A cognitive rarity of 1 in 8,299,126,114 based on the preliminary (September 2020) norms statistics on the CIT5. Any early feelings on the achievement?

Dr. Heinrich Siemens: It feels great. To be honest, I do not believe in statistics in these high ranges. What does it mean that I have outscored 8,299,126,113 of the adult population, when there are only 7,800,000,000 people living on earth, including many non-adults? The problem is not the lack of data, but the fact that *a priori* there is not enough data to make significant statements. But even if Paul should change the norm, the raw score of 28/40 on an extremely hard test and the membership in the Giga society will remain and I am proud of that.

Jacobsen: What was the feeling when the score came back from Cooijmans, the “psychometitor,” to you?

Siemens: It was just like when Ron Hoeflin told me that I was accepted into the Mega society. Sometimes, you have a wish and you do not really believe that it could come true. And then it does happen, and you are happy.

Jacobsen: Any thoughts on the directories, rankings, and listings available when they require some form of rigorousness in validation of the scores on good tests from reliable and trustworthy alternative test constructors? All “directories, rankings, and listings,” as a side note, in presentation and tacit intent appear far more as rankings and, thus, the titles of directory, listing, or ranking, should collapse into “ranking,” in personal opinion. Unless, some other explicit differentiation of intent tied to alternative presentation structure.

Siemens: Do we need such rankings? Why do we have world championships in chess or in sports? Why Olympic Games? It is in the nature of mankind to compete with others. But animals can also jump and run. If cognitive abilities are the outstanding feature of human beings, then this competition is much more important than it is in sports. But then it should also be fair. One of the biggest problems of the HRIQ community is that the norms of the tests are so different. Every test maker works with his own currency for the determination of the IQ value and in the end (in all of these rankings and listings) we behave as if 150 euros = 150 dollars = 150 rubles. There should be a procedure to determine the norms of tests in a uniform way. There are now huge amounts of data from Paul Cooijmans, Theodosios Prousalis, Jason Betts, Domagoj Kutle, and, perhaps, a few others. One could compare all tests of different test makers with more than (let us say) 20 or 30 submissions. I am sure many test takers have taken tests by different test makers. Based on this, it should be possible to adjust the norms, so that in the end it is equally difficult or easy to get a certain IQ certified for each test. If someone creates a new test, a norm should only be published as soon as a minimum number of test takers, whose IQ is already confirmed by other tests, have submitted their answers. Then rankings and listings would be much more significant than they are at present.

Jacobsen: How long should one take on an alternative test to score as well as innate intelligence provides them rather than underestimating intelligence for them?

Siemens: I am sometimes asked how much time I needed for a specific test. This is a difficult question. I started dealing with CIT5 years ago when it was published. Then other things came up and I forgot about it. Now I have dusted off my old pages because I remembered that this year the contest ends. I changed some answers, added some others. I usually try to think of a difficult question in the evening before I go to sleep. Then I can use the night because the brain continues to think about it while I sleep. Sometimes I wake up in the morning and see the solution light up like a revelation. Probably everyone has their own way of solving IQ tests, but if someone is still looking for a personal approach, you can try my method.

Jacobsen: What encapsulates this pre-Soviet and post-Soviet experience of the “Low German community” experience?

Siemens: In the Soviet Union, the Plautdietsch people lived in more or less isolated settlements, so that life in the family, but also on the street and sometimes even at work, largely took place in Plautdietsch. The Luther Bible was read in High German. Russian, the *lingua franca* of the Soviet Union, was spoken with other nationalities. In some republics, the national language was also spoken, in my case Latvian. People lived multilingually. Every language had its domain. We still have this situation in the isolated Latin American Plautdietsch settlements, where the number of speakers is increasing rapidly. But in Germany, where most of the Plautdietsch people emigrated after the collapse of the Soviet Union, the language is highly endangered, similar to Canada and the US after World War II.

Jacobsen: What was life like until age 11 as a child?

Siemens: We lived in a small town in Latvia, almost rural. (Of course, there was no free Latvia at that time, but my birthplace Sigulda is in Latvia nowadays). We had a big garden, chickens and every year a pig. As children we played outside a lot. We had books, but no mass media. We lived in a multigenerational household with my grandmothers. The grandfathers had starved to death in Stalin’s Gulag. My parents both grew up without a father.

Jacobsen: At and after age 11, what was life as an adolescent for you?

Siemens: I lived a rather lonely life. I never had close friends. I lived in a world of books and imagination. In Germany we have a special school system, which is not often found in the world. At the age of 10, the children are divided into different types of schools. The main problem is that this division depends much more on the social background of the parents than on the cognitive abilities of the child. For example, there is the so-called Gymnasium for the children of academics (the word has a completely different meaning in German than the word “gym” in English, and both no longer have anything to do with the original meaning in Greek because you don’t walk around naked in either one); at the other end of the spectrum, there is the so-called Hauptschule for the children of socially disadvantaged parents and children with a migration background. This is the official term in a country where there is officially no discrimination, but children born in Germany are not simply German if they have a grandmother born in Anatolia or Siberia. Well, in my case, it was even migration foreground; and so, I attended the Hauptschule. But fortunately, the system is not completely impermeable, so I went to the Gymnasium later. I then became a Diploma Mathematician (a degree which is no longer in use, comparable to a Master of Arts) and to complete the *Septem Artes* and complement the quadrivium in the trivial direction, I changed the faculty and wrote my Ph.D. thesis in linguistics.

Jacobsen: Is knowing one’s “limits” a sign of both intelligence and conscientiousness?

Siemens: The concept of limit involves the idea that there are two sides to it. An intelligent person is characterized by the fact that s*he finds the other side of the limits more interesting and challenging than her*his own side. Limits are there to be crossed. And consciousness is created by not only crossing borders, but by making this process itself the object of reflection. *Noblesse oblige*, especially cognitive *noblesse*. Therefore, intelligence is worthless if it is not accompanied by conscientiousness.

Jacobsen: Why do Mennonites baptize only adults – not to individuals considering from the outside, but the rationale from individual believers who practice & believe in a proper

way? As the Dutch were German, and thus amount to a branch of more ancient German peoples, as a German ethnic group, where I live, Dutch Christian farmers came to Canada and settled the land there. I live in British Columbia, Canada. In addition, a large contingent of this “Bible Belt” of Canada or Langley consider themselves Mennonites, interesting coincidence for the conversation today, as they exist in every aspect of life for me. Through various town and Township of Langley positions, I remain in contact with the culture and the peoples, aware, as I harbour significant Dutch, Germanic in other words, heritage too.

Siemens: Yeah, that’s what can happen, you look for someone for an interview on the other side of the world and end up with a Mennonite just like at home in your local supermarket or pub.

I consider it one of the greatest achievements of the Baptizers movement of the 16th century that it was left to each person to decide whether to participate in a rite of initiation into a religion, so I reject the baptism (as well as circumcision, sorry to my Muslim and Jewish friends) of children. There is an age of consent in every country in the world. It should also protect the victims from religious attacks by adults. By the way, I also reject the term Anabaptist used in English. It was invented by the Catholic Church and was used as an excuse to burn or drown the Baptizers. They only baptize once, and that is when they are adults, so there is definitely no re-baptism or ana-baptism. Even with the Westphalian Peace, 120 years after the Baptizers movement, the principle of *Cuius regio eius religio* still applied. It was not until the Age of Enlightenment that the right to an individual confession of faith (or non-faith) was generally recognized. The Baptizers had already advocated for this principle centuries earlier.

Jacobsen: What seems like the main contribution to Germanic life and work via the Plautdietsch speaking people and the Mennonites too?

Siemens: The most important contributions of Mennonites to world cultural heritage are 1. the individual confession of faith in the 16th century, 2. the invention of the cable car by the Gdansk Mennonite Adam Wiebe in the 17th century, 3. the first civilian alternative service for conscientious objectors in 19th century Russia, and 4. the most famous Plautdietsch family was invented in the 20th century by the Mennonite Matt Groening: the Simpsons.

Jacobsen: How did the Soviet Union change the nature of the culture of the peoples for you?

Siemens: The early Christians lived in communist communities. Part of the Baptizers movement, the Hutterites, have lived in communist communities for 500 years. In the principle “Everybody gives what he can, everybody gets what he needs” and with a classless society in which Mammon does not rule, the ideal of the Soviet Union is in essence hardly different from Christian utopias. It is a pity that such ideas have been corrupted as a form of government for a long time by the Soviet rulers, especially by Stalin’s terror.

Jacobsen: What makes “pacifism... crucial for Mennonites” too?

Siemens: The early Baptizers and thus also the Mennonites saw the Sermon on the Mount, and pacifism as its central component, as the basic law of human coexistence. To uphold this principle, they emigrated again and again to new countries and continents, often to areas that had been considered uninhabitable until then, such as the Paraguayan Chaco.

Jacobsen: Also, theological-definitional question, what is religion? Then, what is religion, to you?

Siemens: Individual religion probably arose from the need to explain the cause of effects when no natural causes could be found and therefore supernatural ones were considered. Organized religion arose as some people claimed to have preferential access to the Deity. They demanded submission from the believers and in return offered answers to difficult questions and, above all, a meaning to life. I personally refuse submission to authority and to difficult questions I prefer to seek the answers myself. In most cases, the questions about the meaning of life are much more exciting than the proposed answers, and philosophical books can be much more helpful than religious dogmas. Since atheism is also a belief, I would probably consider myself an agnostic, but such a label is not important for me.

Jacobsen: Why is individual autonomy in the selection of religion important to you?

Siemens: When it comes to the most important questions in life, everyone should have the right to seek their own answers. That is my view of humanity.

Jacobsen: Why choose “against being baptized”?

Siemens: In the Soviet Union, the practice of religion was persecuted. If the Soviet Union still existed in its former form, and if I still lived there, I would probably have been baptized and, maybe, even become a Mennonite preacher, as my parents always wanted me to be and, perhaps, still do. Anything else would have been a sign of cowardice and betrayal. But I am glad that it has come to this. I am free to choose. By refusing baptism, I can show that I have become alienated from the faith in a supernatural being.

Jacobsen: Why “belong to the cultural community of Mennonites, but not to a congregation”?

Siemens: Many Mennonites have lost their faith, often out of disappointment with the way the congregation dealt with them when they were unwilling to submit to religious authorities with regard to life-style, sexuality, etc. They still think of themselves as Mennonites, even if some believers see it differently. In order to save them for the cultural community, we have founded an international association (Plautdietsch-Freunde e. V.), in which all who feel that they belong to the cultural community of Mennonites (defined by the common language) can meet. Perhaps half of our members are in Mennonite (or other) congregations, the other half are not. But since we do not ask anybody about it, I do not know the exact percentage.

Jacobsen: Why live life “without God”? What defines God in this sense of “without” or “a-,” in reference to “-theism” as in “a-theism” for you – in a pragmatic sense of life without God rather than a formal implied ontological stance of the concept “God”?

Siemens: Some people need someone to take their hand and show them how to align their lives with respect to a higher being. I don't.

Jacobsen: What constituted the trajectory of the “careful consideration”?

Siemens: When I still attended church, I often felt obliged to give witness to my faith, for example at school. However, I noticed more and more how insincere this was, when scientific explanations contradicted those of the believers. I believed one, gave witness to the other, and did not feel good about it. So, I stopped witnessing the other. Let us suppose that our universe, space and time, arose from an initial singularity. Did God exist before because he is eternal? The idea that anything, even God, existed before the origin of time seems contradictory to me. If God came into existence later, when the laws of nature already applied, he must have had a cause, as

nothing comes from nothing (Parmenides). But this contradicts the concept of God as taught by Christianity. So, God himself must be the *prima causa*, an unmoved mover (Aristotle). Okay, if someone is happy with this, he should call the initial singularity God. But this is a wheel that does not move anything.

Jacobsen: What were the ‘final nails’ – proverbial, so-called – to this careful consideration? Why “maybe because of Ockham’s razor”? How big was the beard to begin with for you?

Siemens: The final nail was even literally a beard. The Baptizers have different ideas about what the lower half of a man’s face should look like. The Amish, for example, let the beard grow (because God lets it grow), but they shave the moustache. Well, actually God lets it grow too, but for some obscure reason that is something completely different. I grew up in a congregation where men had to shave. The theological argument was derived from the fact that it is written: “Verily I say unto you, Except ye be converted, and become as little children, ye shall not enter into the kingdom of heaven.” Little children do not wear beards, *quod erat demonstrandum*. When I stopped shaving, I got in big trouble with the church leadership. So, I grabbed Ockham’s Razor. However, instead of shaving my beard, I shaved my faith.

Jacobsen: How is the Bible “misused”?

Siemens: I just gave you an example.

Jacobsen: Why is freedom of religion important to you, as either a concept or as a human right?

Siemens: There were always times when religion gave important impulses for the coexistence of people, for example in the Sermon on the Mount. But for some centuries now, secular initiatives have taken this place. For us, the *Universal Declaration of Human Rights* is the standard that determines our actions. In comparison, many church’s standards seem outdated and contradict not only human rights, but often also constitutions, for example with regard to the role of women or sexual self-determination.

Jacobsen: What is lost in non-intergenerational homes – more than parent-child, e.g., grandparents or great grandparents?

Siemens: In situations of language transition, for example in connection with migration, the three-generation rule often applies. The elderly speak one language, their children are bilingual, and their grandchildren are monolingual again. This is how languages die. Multi-generational households help to prevent or at least delay this process. By talking to their grandparents, the grandchildren learn their language. This is how Plautdietsch was able to survive in the diaspora over the centuries.

Jacobsen: As identified in the first session, you have taken tests from some of the most respected alternative test constructors for the higher scores in the tests taken by you: “My most successful test results include the Titan test by Ronald K. Hoeflin (raw score 45/48), the Test of the Beheaded Man (33/40), the Marathon Test (108/111), both by Paul Cooijmans, many different tests and some won contests by Theodosios Prousalis, SLSE 48 (30/48) by Jonathan Wai, etc. Usually, the results were beyond 5 standard deviations.” Why did this take until 45 to become a hobby?

Siemens: I simply did not know these people or HRIQ tests before. It was a coincidence that I stumbled upon an interview with a member of the Giga society and so Paul came to my attention. With further research, I found Ron, Theodosis, and the others.

Jacobsen: As prospective test-takers look into tests to spend some time for themselves, what are some of the benefits of taking the Three Sonnets test? Why the title, “Three Sonnets”?

Siemens: The Shakespeare Sonnet has the ideal form to express a thought. One develops an idea from three perspectives and summarizes the result in a couplet. (The Russian poet Pushkin proved that you can write an entire novel in Shakespeare’s sonnets. You should read Eugene Onegin, if you haven’t done it yet). My test tries to be not just a sequence of questions, but a real composition, like a poem or a piece of music. It consists of three sonnets: an overture in which the central idea is developed and the later motives are already intoned, a numerical section and a verbal one. In each sonnet, the central idea is illuminated from three angles and summarized in the couplet, just like Shakespeare did. By the way, I would like to draw your attention to verses 29-32 of my test, which represent the quintessence of the test. When you have answered these questions, you have solved one of the central problems that literary studies have been arguing about for decades without being able to solve it. (And I am not referring to the question of who wrote Shakespeare’s works, for the answer is trivial: it was not Shakespeare himself, but a completely unknown author whose real name was Shakespeare.) Like any scientific thesis, my test ends with two footnotes.

Jacobsen: How many people have taken the Three Sonnets test? What are the demographics of the test-takers?

Siemens: Unfortunately, far too few have taken the test so far, so I cannot say anything about demographics or preliminary norms. But I would like to use my 15 minutes of fame to draw attention to this test once again. Perhaps the first step is the hardest. You have to discover the entry. Once you have crossed the threshold, it is no longer time-consuming. Do not let the first impression discourage you. I would be happy if as many of you as possible submit solutions. (The only hint: it was published on Towel Day.)

Jacobsen: Side note, how common is finding out about giftedness later in life in the international high-range community, as you found out at age 45? I like the alignment of the 45 on the legendary Titan Test with it.

Siemens: I have not even noticed this coincidence before. Maybe I should have waited another three years, then I would have had 48/48 correct answers. I do not have the slightest idea at what age other people start to deal with HRIQ tests. You should ask those who have been making many tests for years and therefore have a lot of data.

Jacobsen: What seems like the context in which to interpret the leap from the previous “highest score” on “the verbal section of the Marathon Test with IQ 180 S.D. 15” to the aforementioned “195 S.D. 15 on the Cooijmans Intelligence Test 5 or the CIT5”?

Siemens: The difference is exactly one standard deviation, such leaps are very rare because the intelligence of adults is assumed to be relatively constant, at least until it decreases with age. One explanation is probably that Paul usually publishes preliminary norms at a very early stage, which in my opinion is very problematic, especially in areas where one can hardly expect to get much empirical data. On the other hand, this is not Paul’s first test that I have taken, and from one test to the next, one increasingly understands the test maker’s way of thinking.

Jacobsen: When marathon test-takers of the high-range world exhibit ranges of 30 points (S.D. 15) – plus or minus a few – on the alternative tests, what seems like a reasonable manner in which to interpret the scores?

Siemens: As I already said, such leaps are very rare and could be an indication that something went wrong with the norming process.

Jacobsen: What seems to explain individuals taking 5, 10, 20, 50, or more high-range tests? It helps with the furtherance of the data collection efforts. All the power to them. It seems like a huge time sink, though, at the same time.

Siemens: Of course, every test maker is happy to receive as many submissions as possible, because they are the basis for a profound norming process. Everyone spends as much time with his hobby as he can spare. A hard test is often time consuming. But “time sink” sounds too derogatory. There are certainly worse things to spend time on than passing cognitive challenges.

Jacobsen: Have other publishers arisen alongside Tweeback Verlag working in this niche? If not, why not? If so, why so? What were the books needing publishing (plug, plug)?

Siemens: Most Mennonites still use a different written language and Plautdietsch is only spoken. Therefore, the market for Plautdietsch books is very small. I don't know of any other publisher that specializes in this niche. Plautdietsch developed late as a literary language. The first major works were written about 100 years ago and the most important Plautdietsch author, Arnold Dyck, died exactly 50 years ago. That is why we are presenting an *Arnold Dyck Award* for the first time this year to encourage more people to write in Plautdietsch.

ESOTERIQ ID-16: Fengzhi Wu(邬冯值)

Conversation with Fengzhi Wu (邬冯值) on Tokyo, MIT, Technology, INTJ, God, and Iron Man: Founder & President, God's Power (1)

Abstract

Fengzhi Wu (邬冯值) is the Founder & President of God's Power Society & The Chosen One High IQ Society and the author of the Mystery Intelligence Test. He discusses: Ph.D. at MIT; doctoral research question; the findings in the doctoral research; be like "Iron Man"; astrology, horoscopes; a "Meteor Hunter" and "IMCA #3268"; BB and 'Crackberry'; patents; white-hat hacking; Karate; a genius; "smart is the New Sexy"; high-I.Q. societies; Tokyo; move to Japan; studying and researching at MIT; Japanese academics; the Chinese educational system, the American educational system, and the Japanese educational system; amplify the signal of the electrons; technological advancement use; an image showing full visual bandwidth to the user; God; the word of God; INTJ; Iron Man; Nikola Tesla, Howard Hughes, or Elon Musk; the next invention; and the vector of alteration.

Updated June 16, 2022: "Dr." removed as the Ph.D. is incomplete, according to Wu.

Scott Douglas Jacobsen: Why pursue a Ph.D. at MIT over other institutions?

Fengzhi Wu (邬冯值): If I hadn't been accepted to MIT, I would have pursued my Ph.D. at the University of Tokyo (Just kidding) because I knew I would be offered. As the interviewer said, I deserve it. But yes, I admire the rigor of Japanese academics, so I came to Japan as my initial study abroad choice. I learned a lot in Japan, but I wanted to explore other areas of the world outside of Asia.

Jacobsen: What was the doctoral research question or research questions for you?

Wu: The traditional micro-light night vision device uses the image intensifier to convert the weak light into electrons. And then amplify the signal represented by these electrons thousands of times. Eventually, it hit the electrons on the fluorescent screen like the old TV to form the image.

The subject of my research is to hit the electron stream on a special low-light CMOS after the amplification. Then, the high-speed analog-digital circuit converts the electron stream into a digital signal. And eventually, using noise reduction and other algorithms by the central processor to form a full-color, high-resolution picture. The final image is the same apparent effect regardless of day and night.

Jacobsen: What were the findings in the doctoral research?

Wu: I can proudly say that the problematic parts of the above topics were all conquered, and a new micro-light night vision device will change the world.

Jacobsen: Do you strive to be like "Iron Man"? Isn't the Marvel character based on Elon Musk or something?

Wu: God created the world, but someone designed it, and that's the INTJ. They are thoroughly farsighted and stray from the organization. That's why people like INTJ are also called

designers. Whether the universe is designed or not is another story. Still, in this world, INTJs always take on the role of innovation and revolution. They provide the theoretical support for the functioning of the world, whether it's Nikola Tesla, Howard Hughes, Elon Musk, or me in the future.

So, as you asked if I was trying hard to be Iron Man, my answer is a definite yes. And I know I'm going to be the next Iron Man. I do know it.

Jacobsen: Do you believe in astrology, horoscopes, and so on? You list a sign as Libra.

Wu: Yes, and I'm happy being a Libra. The laws of the universe relate to the numbers 3, 6, and 9, while I was born on the 30th of September. And I find it interesting that the more powerful a person is, the less he behaves like his sun sign. Otherwise, he can completely overcome the shortcomings present in his sun sign.

Jacobsen: I need help on these two. What are a "Meteor Hunter" and "IMCA #3268"?

Wu: Meteor Hunter is to hunt meteorites, as a very cool profession. The treasure hunter is someone who looks for the treasure left in the world. The meteorite hunter looks for meteorites that have fallen to the earth and have been observed.

IMCA stands for The International Meteorite Collectors Association, the world's most professional association for collecting and identifying meteorites. Just as there is a GIA association of diamonds, IMCA represents the authority of meteorites. 3268 is my IMCA number. IMCA currently has 424 expert panel members worldwide.

Jacobsen: Why choose BB and 'Crackberry' over another device?

Wu: Blackberry was my first mobile phone, a very handsome device in my junior high school days. It was a pure device that felt great to type on and was very protective of privacy. My goal used to be the CEO of Blackberry. Blackberry has slowly retired from the stage of history, and it seems that there will be no release of a new phone. Still, it has accompanied me throughout my entire youth. It has given me many insights into business competition and life.

Jacobsen: You design, invent, and, in turn, hold patents. What have you designed?

Wu: Well, I have designed and improved a lot of things, including steamers, knives and forks, fruit plates in the kitchen, tables, chairs, children's cars, toys, umbrellas, professional instruments and equipment, forklifts, various robots, electric picks, precision instruments for experiments, etc. I have won hundreds of design awards at domestic and international, including the iF Design Award, Reddot Product Design Award, A' Design Award, European Product Design Award, Spark International Design Award, Genis International Design Award, LITEON Award, DFL International Design Award, DNA Paris Design Award, IDC Award, TEDA Cup Award, BIEAF Award, Goldreed Industrial Design Award. GBA Award, SSR Award, YDSJ Design Award, TAIHU Award, ICVA Award, ADCJ Award, GBDO Award, IAA Award, Golden Crown Award and so on.

Jacobsen: What have you invented?

Wu: As follows.

Jacobsen: What are the patents held by you?

Wu: Underwater salvage robot,

Automatic ultrasonic flaw detection and coupling agent spray cleaning equipment,
 A kind of air cleaning unit for intelligent buildings,
 One type of intelligent building that sound insulation and noise reduction effect is good,
 A kind of fixed-wing uncrewed plane auxiliary takeoff apparatus,
 A kind of Household floor-sweeping machine device people with anti-collision,
 One type of high-accuracy mechanical arm of convenient operation,
 A sort of CCD camera of cranial nerve cell Calcium imaging,
 Mechanical triggering power assisting device,
 A kind of sweeping robot with a warning function,
 Multifunctional umbrella renting and commodity selling all-in-one machine based on the Internet of things,
 A kind of Sewage treatment reuse means intelligent building,
 A kind of dishwasher with water-saving function for large hotels,
 A kind of intelligent building that sound insulation and noise reduction effect are good,
 A heat dissipation power distribution cabinet with anti-soaking function,
 A kind of cleaning equipment based on experimental equipment,
 A type of connecting terminal of electrical equipment,
 An electronic lock with facial recognition function for easy installation,
 One type of Portable sweeper device people,
 Microgrid grid-connected and off-grid smooth switching current and voltage phase compensation method,
 A method to analyze the reliability of distribution network operation based on the four-dimensional index system,
 The rotor shaft adjustment mechanism and the uncrewed plane of multi-rotor uncrewed aerial vehicle,
 A kind of spliced water channel,
 One type of computer host box pedestal,
 The gearbox of wind driven generator,
 One type of force value counts the mouse Mechanical Pain stimulation detection device of a display.....

Jacobsen: What makes white-hat hacking “white-hat” rather than black-hat?

Wu: It is the same reason as choosing to be a superhero instead of a villain.

Jacobsen: Any specialization within Karate for the black belt?

Wu: The black belt represents the beginning of karate’s “Dao” or “Way”.

Jacobsen: Do you consider yourself a genius?

Wu: Of course, I am. I knew from a young age that I was a genius. (I’m a straightforward person who doesn’t like the way that someone lives the life of a whore and expects a monument to the chastity)

Jacobsen: You have a quote listed, which states, “Smart is the New Sexy.” How did smart become the newest form of sexy, though simply a tagline? The Americans with the

Kardashians may disagree. They don't necessarily pay as much attention to Prof. Edward Witten, but may pay attention to Sheldon Cooper or a fictional character. Although, only a moderate amount as far as I can tell.

Wu: I think smart has always been an expression of sexy. There is a term called "Sapiosexual." For me, sexy has never been defined. People are always attracted to what they appreciate or instinctively. I don't like to see people show off, but if someone who is indeed awesome is showing off, I feel cool with that. For example, after learning about Nikola Tesla's patents on electricity, I consider him very sexy, even if I haven't met him. His intelligence formed an attraction to me that is strong enough to ignore his looks, age, and physique as external image features.

Jacobsen: You have joined a number of high-I.Q. societies: "Shenghan Club ITTP Society & DBC Society, Nano Society, Silent House, Silver Hawk High IQ Club, Power Lion, Obelisk, Elegant Attic, SpaceTime Society, SuperNova Society, Misty Pavilion, Hidden Position Society, Secret Society, Dark Pavilion Society, TC Society, Hide The Word High IQ Association, Mediator high IQ society, SYRUP Society, Music Genius Society, The ENIGMA Society..." Which ones are the most interesting or unique to you?

Wu: I'm writing this in the order I joined. In terms of names, I like Nano the most because I'm obsessed with physics and Occultism. In terms of chatting, I have met some great people and made friends in Catholiq, Shenghan DBC Society, Silent House, Silver Hawk High IQ Club, and so on. Each one has its characteristics and is different from each other. Of course, I also have some insights about high IQ societies, so I also created my high IQ society ——God's Power Society.

Jacobsen: What makes Tokyo such a fascinating place to you?

Wu: First, Tokyo is the world's largest and most populous city, with the world's highest GDP. It has the largest metropolitan area in the world. Tokyo has no clear city center because Shinjuku, Shibuya, Ginza, and Ikebukuro can all be called city centers. They all have extremely high population densities and are unforgettable prosperous. If you stay in Tokyo for just a day or two as a tourist, you cannot get to know the city.

Secondly, Japan is a country that combines classical and modern, and it is also the first oriental country to westernize by absorbing the best cultures from all over the world. Tokyo epitomizes Japanese culture. In Tokyo, you can see business people dressed in suits and traditional women in kimonos.

Third, Japan is dedicated to creating the comfort and convenience of life. For example, the train seats are comfortable and automatically heated, without feeling cold in winter. Each public restroom is equipped with free toilet paper. There are convenience stores and vending machines just a few meters away.

Fourth, Tokyo is not only a bustling city but also a beautiful tourist destination. Much beautiful scenery, such as Kamakura, Hakone, and Fuji Mountain. Moreover, Tokyo is in the Tokyo Bay of the Kanto Plain, which is considered a beach city, and you can take a train to Tokyo Bay to see the night view. Even with the population density of such a large city, the ocean in Tokyo Bay is still so blue, which shocks me a lot.

Such a flourishing, lively, modern and beautiful, no fakes, no queue jumping, bowing, and respect is the norm, thoughtful service city; who would not like it.

Jacobsen: When did you move to Japan?

Wu: About seven years ago.

Jacobsen: How Was studying and researching at MIT?

Wu: It's exhausted but happy.

Jacobsen: What makes Japanese academics so rigorous?

Wu: The Japanese people's rigor is not only in their academics but is engraved in their bones and reflected in all aspects of their lives.

Jacobsen: How would you compared the Chinese educational system, the American educational system, and the Japanese educational system?

Wu: This question is a bit broad. In my opinion, education in China is more about grades; in Japan, the ability to work together, and in the US, creativity (in terms of admissions). The Chinese college students, as I know them are worried about exams and papers; likewise, they work harder on their studies. Most of my Japanese classmates don't pursue a master's degree. They are offered by the companies early in their junior year. According to my observation, they study less seriously than the Chinese, and there is no explicit requirement of EI or SCI for graduation. Collaborative experiments and writing papers are the regular patterns. American students have the most daring ideas and hands-on ability but pay the highest tuition fees. Of course, it is not difficult to get a scholarship as long as you are not exceptionally playful. In terms of scholarships directly proportional to tuition fees, China has the least amount of scholarships, Japan is the second, and the US has the most.

Jacobsen: How do you amplify the signal of the electrons several thousand times in the night vision?

Wu: Are you asking about the traditional micro-light night vision device? It uses an image intensifier to convert the weak light into electrons and then amplify the signal represented by these electrons thousands of times through an intermediate discharge circuit as required to get the needed signal. Finally, like the CRT TV, the fluorescent screen is bombarded by a stream of electrons and emits a spot of light corresponding to the brightness and color to form an image.

Jacobsen: How might this, or is this, technological advancement used now? Is it commercial, military, or another use?

Wu: Our technology is essentially a new algorithm for image formation, and night vision is just the most representative carrier. So it's like, although all named TVs, like CRT TVs and LCD TVs, they are essentially totally different things. It's not easy to predict where will apply this technology. Still, I think the military will first apply it in the military. Our initial purpose is not for an armament upgrade. But if it is available for commercial use, it will also be applied to the military.

Jacobsen: Is the final result an image showing full visual bandwidth to the user, whether in the daytime or the night-time?

Wu: Yes, it is no longer like the infrared thermal night vision because it is based on image algorithms instead of light imaging. If it's not for real-time data transmission back but just for observation, it doesn't even need network coverage. It can theoretically handle all harsh environments as long as its battery works.

Jacobsen: How did God create the world?

Wu: That's a good question. I believe in the existence of a Creator, but I don't believe he has a specific appearance.

Jacobsen: Who created God?

Wu: Personally speaking, Man created the word of God. But he definitely exists, in some form or force, I think.

Jacobsen: How might an INTJ design a world?

Wu: INTJ's inner monologue is like that the world is a product. The way the product should be is right there. But it looks nowadays that there are problems everywhere, and it is up to me to solve them all. If I can't do it well, I'll do it again. If I persevere, I'll be able to do it eventually.

Jacobsen: What does Iron Man represent to you – other than “theoretical support for the functioning of the world”?

Wu: Talk about this movie. I would watch it whenever I was sad. So far, I have watched it no less than dozens of times. Of course, I have a different feeling every time I watch this movie. He makes me understand what is the most important and what is called “the man who has everything but nothing.” He helped me find a determined goal and the ideal in my life. And I have been trying to move toward my ideal since the first movie in 2008 until now.

Jacobsen: Why so confident in becoming Nikola Tesla, Howard Hughes, or Elon Musk, in the future?

Wu: I think every successful man has a set of reasons to convince himself. No matter how much people laugh at you or make fun of you, you can convince yourself to keep going. My reasons are because I see the same traits in them as I do in myself. Like, INTJ, paranoia, perfectionism, and there is never a word for giving up in the dictionary of life unless I die.

Jacobsen: What will be the next invention from you, Dr. Iron Man?

Wu: A new kind of indoor lighting component. (Nearly perfect natural light and won't cost you a penny in electricity after installation)

Jacobsen: One can state, “I will change the world. I will be the next Iron Man,” etc. The next question becomes, “How?” What will be the direction of change, the vector of alteration, of the world by you?

Wu: Everyone is changing the world with any small thing that they can do. My idea of changing the world is to improve people's existing lives by designing and producing more functional, more convenient, and environmentally friendly products for them. Making money solves current problems, while having money makes it even easier to solve the issues and solve more.

ESOTERIQ ID-18: Tor Arne Jørgensen

An Interview with Tor Arne Jørgensen on Background, Identity, Mentors, Education, and Interests (Part One)

March 22, 2020

Abstract

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. He has several IQ scores above 160+ sd15 among high range tests like Gift/Gene Verbal, Gift/Gene Numerical of Iakovos Koukas and Lexiq of Soulios. His further interests are related to intelligence, creativity, education developing regarding gifted students, and his love for history in general, mainly around the time period of the 19th century to the 20th century. Tor Arne works as a teacher at high school level with subjects as; History, Religion, and Social Studies. He discusses: family background; facets of the larger self; prescient moments in early formation; guardians and mentors of import; significant books and authors to him; pivotal educational moments; postsecondary education; HRT scores; participating in a like ability community; and main areas of intellectual interest.

Scott Douglas Jacobsen: What is family background or lineage, e.g., surname(s) etymology (etymologies), geography, culture, language, religion/non-religion, political suasion, social outlook, scientific training, and the like?

Tor Arne Jørgensen: As my family background goes, my parents are from a small town further south from where I live today, called Lillesand a town in the south of Norway, my own hometown is called Grimstad. These small towns are very busy during the summer months, but very quiet during the winter months. My mother was a stay-at-home mom and was very caring. My father was active during WWII, and was awarded several medals for his bravery during the last part of the pacific war where he shot down two kamikaze pilots. As education goes, they were not highly educated, just primary school education. As religion goes none of my family is especially religious, even though we come from the so-called “bible belt” in the south of Norway. To the question of politics, then yes I was active in my younger days within AUF, the youth party of the Norwegian workers’ party (Arbeider partiet) short for Ap. I am no longer as active as I use to be, but I am still politically updated for my own personal interest and the fact that I teach within the fields of history and social studies at the high school level. In general, I keep myself very busy with first and foremost regards to my family, then my studies, work, and fitness, intelligence and more. The future endeavours for me are to finish my education and keep moving forward within the social structures of high intelligence. Also with the intent to further educate people about giftedness, and to address equality for all pupils and students alike of both sides of the intelligence scale.

Jacobsen: With all these facets of the larger self, how did these become the familial ecosystem to form identity and a sense of a self extended through time?

Jørgensen: As forming my self extended, I found that serving the people around me to be an intent in the degree of the further foundation for a greater purpose in life. My childhood has shaped me to focus about what does now matter most for me in regards to helping others in

achieving their goals in their lives. As to identity of self-awareness, I had a tough childhood that forced me into making adult decisions at an early age regards to the choices that I had to make for myself and that have guided me ever since.

Jacobsen: Of those aforementioned influences, what ones seem the most prescient for early formation?

Jørgensen: The ability to see past my own boundaries, thus shaping the surrounding elements in early childhood. This has always been and still is my foremost ability as the ground of early formation regards to past, present, and future.

Jacobsen: What adults, mentors, or guardians became, in hindsight, the most influential on you?

Jørgensen: The role models in my life are not many, I like to look at myself as my own role model. I set the standards very high for myself and have always done so. The people around me have that, in some way looked to me for guidance. But there is one person I will bring forward and this person is Winston Churchill, the reason for this is his efforts in bringing about the perceptions about mental determination in regards to the war efforts during WWII. He has by that fact set the standard for the mental mindset to be followed by others myself included.

Jacobsen: As a young reader, in childhood and adolescence, what authors and books were significant, meaningful, to worldview formation?

Jørgensen: Books that have been a big influence in my life is mostly based on facts, I was never a big lover of books about fiction but rather books about facts caught my attention. I started reading at an early age on my own around age 7 and upwards, but I never had a fixed focus I just read everything I could get my hands on at that time. I now read books like; Mark Mazower – *Governing The World: The history of an idea*, E.H. Carr – *The Twenty Years Crises 1919 – 1939*, Peter Singer – *Practical Ethics*, just to name a few. I now would like to dive into world politics, global history, educational systems in a national/global sense, and the world beyond!

Jacobsen: What were pivotal educational – as in, in school or autodidacticism – moments from childhood to young adulthood?

Jørgensen: As to education, the most important learning factor was my intuitive mindset with regards to self-awareness. What does this entail, well my primary school was fine as normal learning curve goes, but what when the school can not provide beyond that fact. Then the self-education comes into play, people with high intelligence can in many ways tap into this self-learning ability in order to compensate for the lack of skills within external learning environments, such as the ordinary school system. This has in many ways been my lifeline as education goes.

Jacobsen: For formal postsecondary education, what were the areas of deepest interest? What were some with a passion but not pursued? Why not pursue them?

Jørgensen: As postsecondary education goes, my interest in history and the time period around the founding of our country in 1814, and the start of democracy, has for me been the biggest interest within this particular field. I have since taken a bachelor's degree in history involved; 1814 and the start of our constitution. I will pursue a master's degree later on, also directed toward the same topic sometime in the future. As passions not pursued further, I would like to have pursued educational language in a much bigger sense, to be able to learn more about

languages has always been of interest, but not followed through educational wise. Why not now then, lack of time, just that lack of time.

Jacobsen: What have been some of the intelligence tests taken and the scores earned over time – with standard deviations too, please?

Jørgensen: I have taken many HR-tests; the test scores vary from low 140+ sd15 up to high 172 sd15. I did many mistakes in my past with regards to early tests as I scored low by the fact of rushing these tests and thus hurting my end score. I have found out later I need to take my time and not stress myself with quick response to the tests themselves. I am a deep analyst. Also, I feel I have not peaked yet, I know in time I will score 175+. Here is some of the test I have tried out so far; Asterix of Jason Betts-153 sd15, World IQ Challenge of Brennan Martin-140 sd15, Gift verbal 1-4 of Iakovos Koukas average score around 164+ sd15, and Lexiq of Soulios 172 sd15.

Jacobsen: What has been the participation in the high-IQ community for you?

Jørgensen: Get to meet new people that share the same interest as me, and to be able to compete against some of the most brilliant minds in the world to solve HR-tests, also to be able to discuss topics such as education, art, science, math and more...

Jacobsen: What are the main areas of intellectual and reading interest for you?

Jørgensen: I will address this last question in the manner of intellectual interest and right of equal education for all.

Last year (2019) I was awarded the WGD – Genius Of The Year – Europe, (GOTY). As an ambassador for the high IQ community, it was a great honour for me to receive this prestigious award. With it, I got to address the Norwegian media about the high IQ community, and I also spoke about the need for equal education for both the gifted pupils as the non-gifted pupils in regards to Norwegian schools and their educational quality thereof. This is for me now the main focus as to my further endeavours, with it I hope to bring about the attention as to what can be done to make sure that the gifted pupils can maximize their true intellectual potential at primary school level and beyond.

An Interview with Tor Arne Jørgensen on History, Internationalism, and Ethical Systems (Part Two)

May 22, 2020

Abstract

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. He has several IQ scores above 160+ sd15 among high range tests like Gift/Gene Verbal, Gift/Gene Numerical of Iakovos Koukas and Lexiq of Soulios. His further interests are related to intelligence, creativity, education developing regarding gifted students, and his love for history in general, mainly around the time period of the 19th century to the 20th century. Tor Arne works as a teacher at high school level with subjects as; History, Religion, and Social Studies. He discusses: interest in history; global governance; ethics; philosophy and ethics; governance as important in a modern world; fundamentalist religion; governance in the highly technological world; human beings in relation to one another and the institutions built by them; a digital world; and future human societies on the risks and promises of the 21st century.

Scott Douglas Jacobsen: Let's talk about history, your interest in it. Why this particular focused interest in history?

Tor Arne Jørgensen: My interest in history comes from an early stage around 10 years of age, and forward. Why? Well as it goes, it all started with movies of the old west, cowboys and Indians an such. This particular time period was very exciting to me, and by that fact started to dive myself into books about old western themes. As time went on, this fascination led me further into the time period as a whole from the early 19th century and up to the late 20th century. Then my interest shifted from the old west, to be more about history divided into sections within numerical fields. By that, I saw history as a big jigsaw puzzle to be solved.

Thus gaining a better understanding of terms and their reasons for why, within; politics, commercial interest, migration patterns, trade routes, and the transition into the industrial revolution, as both national and global interests alike. Specific to Norwegian democratic processes in the year of 1814, and thus paving the new way forward into today's democracy, first influenced by the American Revolution, then followed by the French Revolution, is for me the chief field of interest as to the historical aspect in question.

Jacobsen: As with many gifted individuals, there persists a desire for fresh information. You mentioned Mark Mazower. What about his text provided a context for understanding global governance within a historical contextualization of the issue?

Jørgensen: Angle of reply is to look back at the time of The League of Nations, built on Woodrow Wilson's initiative, and as I would like to point out, idealism in its most fragile state regarding utopianism. A failed project with horrible after-effects on a global scale within numerous fields, like economics, trade, state governance just to name a few. Hereby instigated by greedy state leader, built on the notion of world peace. We all know today how well that went, with reference to the tragic outcome of WWII. Forward into the days of the beginning of the United Nations. The UN then was more effective than today, the leaders of yesterday more robust than the leaders of today.

This organization, is built on the same idealism as regards utopianism, but in a more liberal way now than before. How well is it working, hereby agrees on a long debate on its own merits, but still. The outlines are evident within a structural notion as to the fundamental principles of Effective Altruism regards to global governance. The structural draft from the implementations of wars throughout the ages, the dividing of nations for a better and more understanding world of tomorrow, mirrored in the belief of global imprisonment of idealism within an altered state of mind, as to be debated on a later time.

Jacobsen: Peter Singer remains a controversial and important figure within the atheist and secular community, and within the professional ethicist class in Academia. How does *Practical Ethics*, and Effective Altruism, provide a basis for the advancement of a utilitarian ethic into the area of broader ideas of rights? A current era in which divinity of individual human rights and special privileges afforded to most royals, as in the Divine Right of Kings, collapsed and gave way to the democratization of rights as seen in documents including December 10, 1948, United Nations *Universal Declaration of Human Rights*. We can see this instantiated, even bolstered, by modern scientific findings with the discovery of the evolved nature of human beings in a tree of life and one species amongst a litany of others. Some philosophies, including Humanism, incorporate international human rights and modern science within a set of guiding principles of understanding the nature of the world and for orienting human life.

Jørgensen: Peter Singer and his view on ethics as to the field of Academia, was and is of great importance for all students and scholars alike. His opinions of an ethical nature towards the utilitarianism of theocracy, as an aspect of divinity both on religious ground and an of the notion of constitutional royalism. The aspect of human rights for both humans and all life in general, hereby the equality of human/animal rights. The settlements of an endemic by the termination of these rights, to cross the religious implementations of preserving all life at all cost, but at what personal gain.

The fall of the superior rule of feudalism, to nothing else, then to be replaced by the democratic realism fueled by capitalism. To what aim is this to be understood as nothing else than a replacement of divine powers, driven by the notion of Darwinism. To bring about the understanding of and by the fact, that divinity is to the beholder, in terms of the notion of lust to rule as by personal intent. This thus understood as the implementation of ethics on both sides of the religious spectrum at the cost of democracy.

Jacobsen: What philosophies and ethics make the most sense to you?

Jørgensen: The moral and ethical aspect within a philosophical thought line, now when outline seeks to be debated as to the developing stages regarding its historical continuity. The conceptual fault-lines as a paradigm in its own right with regards to inequality across the political sphere. The social diversity of trade politics within the EU trade organization as to belittling the terms of agreement of the nation's importance, is what I seek to speculate over as ethics of importance.

Jacobsen: When considering history and ethics, and the modern scientific world tied to technology, why is governance more important than ever?

Jørgensen: The importance of governance within the global society of today is indeed a nice angle of question. The technological imprint that is ever more evident, and by that as I see it, spinning more and more out of control. This is maybe one of the most important factors to be

addressed in both present time and forward into the future. If one is to look at the present pandemic outbreak of the COVID-19 virus, governance for how to deal with this pandemic is needed now more than ever, as we will most surely be seeing a lot more of these types of outbreaks in the future. So hopefully in the next event, we will then be more prepared, as to how to contain or at least control its effect on a global scale more effectively.

As to both natural disasters and man-made disasters, the effect that the human race will further expose upon our planet as to an upscaling of global warming, marine pollution, overfishing, overpopulation, and more... What history has shown us if anything, is that the ethical aspect is seen as nothing more than a hindering obstacle to be tumbled over.

But even so, the most worrying factor of the ethical aspect is within economic politics, as the world is ever more seen as an interconnected unity to be profited upon as the cash cow for the greedy government powerhouses to fulfill their most vivid imaginations.

Jacobsen: How does fundamentalist religion work against modernist versions of ethics and governance?

Jørgensen: As an example, I would refer to the ancient religious rules of “hamarabi” in Judaism or “qisas” in Islam, or commonly what we refer to as “an eye for an eye,” these ancient religious rules fuel a tit-for-tat approach to justice, which then leads to escalation and further damage. Indeed, you could contend that much of the troubles in the Middle East are generated out of this single religious tenet of revenge. It directly conflicts with much of our more relatively recent International flora and fauna of conflict resolution from the United Nations and approaches to justice, etc.

Jacobsen: What kinds of governance make most sense for a highly advanced technological society now?

Jørgensen: Where do you start with a technological society? A “technological society” has been around since the industrial revolution – what we are moving to is a predominantly digital society, take for example a drone – a drone (a physical device but also driving digitization) can be used by the police to trace and catch criminals, they can carry food and essential items into inhospitable places, they are also arguably low emission means of carrying goods to peoples homes – yet is it right we see Amazon patenting the use of a ‘drone-zeppelin warehouse’ where drones literally pick up products from a zeppelin and bring them down to that areas houses based on the known demand for that area?

Drones are also now implements of war, controlled by a pilot sitting in a Nevada cave thousands of miles from where the drone is deployed – how do they fit in with the Geneva Convention? So, I would suggest refinement in the question posed. I would suggest the need for checks and balances to manage the issue between state control and individual freedom, and between international standards and national priorities. It is right that governments assess and govern those standards as mandated by that nation’s own standards of its people collectively, and as to what ‘de minimis’ standards and standards of international communications (but what about implements of war, e.g., drones?) – but also that governments themselves are held in check and do not ‘over-reach’ in tracking the populace for erstwhile means.

Jacobsen: How can the world of re-interpretations of ancient mythologies, i.e., religion, and newer ethics, i.e., Effective Altruism, come to bring about better understandings of the place of human beings in relation to one another and the institutions built by them?

Jørgensen: What could we learned from looking to the past, as to ground alone to further seeking answers to bring about a broader understanding of this principle. If one is to look at the religious content of understanding for a speculative better world, regards to redemption for the politics that your religious leaders fault themselves by. For reasons alone to seek guidance, is by that fact to rid themselves of their disciples wants and grievances. The effect that religion has had as to uphold this principle, is indeed lacking as to the content of ethical aspects for personal gain. Effective Altruism as a concept alone with the religion sided out, with that done, we can move forward in redefining ethics or maybe re-interpretation of a better way of an ethical route forward. Understanding how to implement a positive outlook in moulding a stronger and better world of tomorrow. What directions can we take, well in the use of the collaboration of stately institution, governments, support of donations to organizations that gives the biggest effect as to health, medicine support, and more...hereby as a possible suitable paradigm for explorations as an outlook for honourable intentions.

Jacobsen: As we see now, the world of the digital comes to coincide with the world of the material. Digital information as algorithms and biological systems as entities working in unison for a modern form of political systems and ethics bringing about unfathomably complex, previously, forms of human society tied to digital computation with a modicum of intelligence with well-structured and narrow domains. What does this portend now?

Jørgensen: What it portends now is to what aim it seeks to be understood as, and by what intent it appears to the general public, this within a widespread of governing resolutions. What does this mean, well that the purpose of unison politics is now to be understood as a means to endemic widespread propaganda within the governing resolutions of policy. As formatted by its complexity regarding the ethical aspect of combination toward the regulatory system, thus for the sole purpose of bettering, and ultimately preface of consolidation of this structural integrity by alterations of intent, directed by progress within the shift of political alignment. Then the system is modified, as by the underlying legal understandings by the term «ethics of justice». Does the complexity in question as a medium of intelligence serves its general purpose, yes within the framework of contemporary consent, and to the degree of forward-looking intent by structural implementations of governing policy.

Jacobsen: Following from the previous question, what does this portend for the future of human societies into the rest of the 21st century as the promises and risks increase more and more for human societies and the realization of the best and worst aspects of human nature and proclivities bolstered and built upon the incredible power of modern mastery and power of silicon, metal, concrete, and the informational?

Jørgensen: If one is to look beyond our selves as an output of the previous line of question, I would like to point out the following. First on the positive side, that we will further our selves in a way of implementing the fundamentals with regards to structural alterations of the policymaker at the governance level.

The educational fundaments for development into tomorrow with regards to what has been pointed out will ensure and secure positive output throw positive input by these indicators as a countermeasure against ethical fading. Next, human nature is and always will be to seek more complex forms of knowledge, for a reason to evolve oneself to confront the unknown factors within his or her own state of mind. The negative side will start a downward spiral, as within the endemic of revelatory proclamations. For the reasoning of pathetic self-deplorations of content.

We can secure the world of tomorrow through the implementations of personal interest through the terms of Effective Altruism, but also we can just as easily cause our own demise on these same terms.

An Interview with Tor Arne Jørgensen on Historical Knowledge and Application from the Principles of History (Part Three)

June 22, 2020

Abstract

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. He has several IQ scores above 160+ sd15 among high range tests like Gift/Gene Verbal, Gift/Gene Numerical of Iakovos Koukas and Lexiq of Soulios. His further interests are related to intelligence, creativity, education developing regarding gifted students, and his love for history in general, mainly around the time period of the 19th century to the 20th century. Tor Arne works as a teacher at high school level with subjects as; History, Religion, and Social Studies. He discusses: the main principles of global order; principles of understanding international affairs; a rise of conspiracy theories without consideration, or little thought for, scientific skepticism, parsimony; unipolar world with a univocal narrative from the United States of America after World War Two set the tone for the global order; an information-intensive global economy; individual Member States of the United Nations; traditional warfare and information-based warfare; the orientation of the traditional understanding of politics and international affairs; the current points of tensions internationally; and pivotal decisions facing nations in the 2020s.

Scott Douglas Jacobsen: For this third session, I want to focus on the application of historical knowledge and principles of history to the current political moments before us. What are the main principles of global order important to bear in mind for all of human recorded history, insofar as “global” should be a reduced and non-literal term in this context?

Tor Arne Jørgensen: I will divide my answers into two sections, hereby first addressing the following note in reference to majoritarian democracy at the cost of the free market through liberal-idealism. The principle of the free market as to the time period from the 19th century onwards when the power relationship in many ways was to be held on the hands of the mighty few (the bourgeoisie) at the cost of governing majority (the proletariat).

Populist opinions from the grassroots, postulated in the hope of change as regards to economic independence for everyone. This was introduced under the value designation of equal rights brought forward through the principle of international law, and is still today looked upon as one of the major historical shifts with reference to the principle of the free market and global trade.

Secondly, popular sovereignty, with it the reference to the birth or should I say the rebirth of democracy. Hereby to the personified notion of malcontent by reference to the crippling paradox within its own right.

Jacobsen: In recent history, what principles of understanding international affairs have been the most important, most instructive?

Jørgensen: Hereby reference the five principles of politics, and especially the section about the principle of history. By all the turbulence we now see today within a global perspective regards

the Trump administration, and the besudlende effect this causes, has now hopefully reached the optimal wanted result, this by its own crumbling demise of international stability.

We must not wave the steady course of international justice, as to deploy the stately war band, by the mere intent to destabilize the international governance.

As history has revealed before in reference to foreign policy, the path to global stability, global development, and world order in general, is done by way of strengthening ties between states, and not by building high barriers to keep all foreigners out. The global leaders around the world, should only concern themselves as to how we can lead a more open world policy of tomorrow, that will unite us all even more than before, and not divide us by tactics of divide and conquer.

Jacobsen: When we see a rise of conspiracy theories without consideration, or little thought for, scientific skepticism, parsimony, and the like, how has this been reflected through history?

Jørgensen: Point of reference regards scientific skepticism through history as a narrative afterthought. The human wants and needs as bases for self-realization to uncover the truth in whatever manner they may or may not be hidden, is inherent in us all as a cradling need by the content of skepticism in regards to any field of interest. All skeptics alike have been throughout history some of the most powerful contributors to unveiling the real «truth» by means of empirical research. Conspiracy theories with reference to its historical content, has blinded the general public in so many ways as to religion, science, philosophy, justice, and more.

Thus the human race is easily fooled by these various instigators behind these conspiracy theories, to their applauding result. Furthermore in regards to the political governance, and its state leaders, done again in a similar manner, by deluding us the general public from revealing this truth, as to self-protection by means of actively proclaiming government propaganda. Case in point, the military cover-up in the Nevada desert regards to Area 51 back in the 50s, and the cover-up of the JFK assassination in the 60s.

The conspiracy list goes all through history, and onward into the present time. The conspiracy movement is growing exponentially, and will continue to do so into the near to far future.

The skeptics will also continue to make efforts to debunk these theories as best they can. One can only hope that the facts will see the light of day, ever more as time goes by. The thought of these conspiracy theories going ever more viral in the manner that we see today, is indeed alarming, as to the notion of what are we then left to believe in, if we no longer can hold any theory as the fact by its own content. Today we must be more skeptical about everything, can we really trust our own government, do they guide us in the right direction, or do they hold us in contempt by means of delusion for best purposes served. I surely hope I am wrong in my belief of delusional altruism by mind control.

Jacobsen: How did the unipolar world with a univocal narrative from the United States of America after World War Two set the tone for the global order seen now? You touched on some of this before.

Jørgensen: I would like to address the self-proclaimed titling by the United States in many ways as the modern world's «World Police». That all the world's turmoil stands and falls on the United States involvement for world peace, whereby the UN's involvement is no longer direction bearing as global order is concerned. That in the wake of the cold war, has left us with one remaining dominant superpower, with a predominantly trust position by its own merits.

I find myself wondering, are we all best served, in the notion of democratic governance, as to be led by a nation's leader based on his own self-image, to be the global god for peace and prosperity for all mankind. Must point out that it makes my skin crawled by the very thought, regarding global governance and world politics in general.

Jacobsen: In an information-intensive global economy, and becoming more technological and scientific, not less, how is this influencing the orientation of the global order?

Jørgensen: As the endless power struggle between the two designated units by freedom of democracy vs capitalist idiocy within the notion of benevolent dictatorship, again brought through the process of technological renewability. Then the pendulum fluctuation is again fixated to swing even more in the wrong direction, away from it's cradling bosom of democracy and over to the «dark side» with reference to capitalist dictatorship. The worldwide companies of today like, for instance, Google, and Facebook, that take a direct part in steering the democratic progress in the direction «they» themselves want in order to capitalize on the ignorance of it's elected bodies. The policymakers by rule of law lead into intentional blindness, by reasons of constitutional law within the framework of global governance.

The capitalistic movement and it's an apparent effect, is in many ways looked upon as to be protected at the expense of the elected trustee, this is in order to secure self-determination by reasons of global exclusivity. These global companies and their influence range as within the global spectrum, obtained by manipulating means in order to find loopholes afforded by «globalization».

Thus the developing progress that we see today with regards to technological innovation factualized within the rule of law, is in many ways to be seen as nothing else than the accumulation of self-interest at the expanse of international law do «good» by capitalist dictatorship for the sole purpose of technological renewability.

Jacobsen: For the individual Member States of the United Nations, how do they operate under these general principles of international affairs in historicity into the current moment?

Jørgensen: After the fall of the Axis powers in the wake of WWII, the Allies by preventive strategies, regards to the anthropogenic cataclysms that the world had just undergone. The salient dilemma regarding global stability by reasons of self-interest, achieved due to the effect of influencing by way through grounds of common interest. The general principle of international affairs within the act of sovereign rule, by and for every individual state hereby statute fact.

As father justified by the notion of being nothing more, then to be able to coexist within new world governance, again as the direct result of stately rule imbedded by factual sovereignty of the individual state. Concluding fact, the individual states back then and now today, has by that, no other factual reasons then the established rights for purpose alone, done by self-justification through measures of increase right of rule by an act of interference by any foreign state power.

Jacobsen: Traditional warfare involved physical space, geographic maneuvering, and long-range and short-range means of attack and infiltration, respectively. In an era of information, how does this change warfare?

Jørgensen: If one is to look at the concept of «Information Warfare», or (IW) as known, it is nothing new, but still a type of warfare that is growing exponentially. The potential power that lies within the use of IW by criminal intent or not, as to the intentional purpose of toppling one

major state by another major state into political turmoil or vice versa. The cost benefits by the use of IW is today compared to before radically lowered, this in comparison to the cost-effectiveness of traditional weapons warfare. Though the clearest cost savings achieved by any nation as to criminal intent by strategic self-empowerment, goes to the political stage by the meddling of Russia in the last US elections of 2016, were said to secure Trump the presidency.

Jacobsen: Also, how does this change the orientation of the traditional understanding of politics and international affairs by adding another dimension to the typical principles used to understand global order?

Jørgensen: I will bring forward from the previous line of question and add to it by saying, if one is to look at the out of control use of the social media app herby (Twitter) as ones own personal political platform, where «I can say whatever I like and get away with it», because it is my god giving the right to use the principle by freedom of speech like the US president is now doing on Twitter with regards to his opinionated tweets, hereby as a source of outlet aimed at whoever is to be the target that day, well what can one say?! I have never before seen this level of abuse of any media platform in the manner that we see today, this by the clear intent of securing national and global empowerment to everyone's disbelief.

I am shocked by the way Trump is going forward by addressing his nation, and the world for that sake, by proactively state his most intimate feelings about everything from politics, media, law and more in his tweets. The level of verbal filth and the general lack of manner on social media upstaged by President Trump, is not becoming of a major state leader, not now, not ever! We have all witnessed his misconduct on social media, as to verbal abuse of other stately leaders, thus bringing forward more tension between countries and their respective leaders alike. I guess we are all humans in some way, by the meaning of what you and I may say or mean, then later post some of our thoughts on Twitter or Facebook, but not by a major state leader in the manner that we now see almost daily on television.

They should have more self-control as to what may or may not be addressed towards the general public in the intent of NOT destabilize world order. I must proclaim, that the way we are now going forward, makes me ever so worried on the behalf of us all. The ongoing abuse of information technology like what we see today, by the manner of criminal intent, or for the purpose of securing political self-enrichment, will not benefit us in any way in the long run.

What or whom can we then trust from what is being said, not just by the exclaiming of «fake news!», or propaganda like tweets, by the purpose of self-empowerment. Where then is the systemic trust in global governance by the foundation on which it lays, other than by devaluating the status quo regarding the political stability on a global scale.

Jacobsen: What are the current points of tensions internationally?

Jørgensen: The international tensions that we see today are divided into many layers.

First: National border security by reasons as to prevent migration overspill in case of crippling of both the global and national economies alike. The number of global migrants in 2019, from what the UN report stated, was estimated to 272 million on the run caused by either, war, persecution, famine and more.

Second: Political turmoil within international trade policy caused by the COVID-19 pandemic, were baseline forecast envisions of a contraction of about 5.2 percent as to the global GDP in 2020.

Third: Unemployment numbers like the ones we see now today, can only be compared to what we had during the interwar years.

So to the summary of the question of tensions today within a global spectrum, is in many ways comparable to the days of the great depression in the 20s and 30s, in combination with the Spanish flu pandemic just previous of this event. Though the link between the Spanish flu outbreak and the great depression is not linked as a due cause by any means. But in case of, these two singular events in history can not be fully ignored, and can in many ways be seen as a possible link between one and the other of what we now see happening today.

Jacobsen: What, akin to other moments in history, will be pivotal decisions facing nations in the 2020s?

Jørgensen: In short, the more open policy as to border control, the strengthening of foreign relations, and lowering tariffs by means of increased global trade. These are just some of the issues, that the global alliance must address in the 2020s.

In my closing of this third edition, I will feel I must say the following reply. Do not let Trump be the endemic cause of national foreign relations, nor as to domestic relations between American states.

As I was pondering today at work about the way forward for The United States of America, will the future for this great nation, now be shortened into The States of America, where the «United» part, will in effect be no more.

Is Trump leading his own nation into a new Civil War, that could potentially spill over to Europe and father onto the rest of the world, thus bringing us all ever closer to a new world war likes what we have never seen before, I sure hope not!

An Interview with Tor Arne Jørgensen on Societies and Global Trends (Part Four)

August 1, 2020

Abstract

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. He has several IQ scores above 160+ sd15 among high range tests like Gift/Gene Verbal, Gift/Gene Numerical of Iakovos Koukas and Lexiq of Soulios. His further interests are related to intelligence, creativity, education developing regarding gifted students, and his love for history in general, mainly around the time period of the 19th century to the 20th century. Tor Arne works as a teacher at high school level with subjects as; History, Religion, and Social Studies. He discusses: societies in micro as global trends impinge on them; WWII; reportages; the dynamic internal national changes made as nations grappled with WWII; the larger players; the smaller players; national ideologies; Russia sacrificed the most lives; the Russians view the Germans and the Americans; the big national driver bringing the small states into the larger war efforts; and larger facets and movements within the societies.

Scott Douglas Jacobsen: For this fourth session, I want to focus on societies in micro as global trends impinge on them. When we look at catastrophically bad international affairs situations, we come to a large context in which the individuals who have been devastated, displaced, or killed through no fault of their own, simply as a matter of international discourse and political and military action playing out over time. With some of the historical principles governing the world order in mind, these ‘govern’ or guide international affairs. When we look at the national contexts, of even small states, what are some of the impacts on them?

Tor Arne Jørgensen: International implications led by devaluing imperialism rooted within the imperative spectrum. How then can this be regarded as anything less than a regulator narrative notion to speculate piety within the political sphere? Furthermore, the schizophrenic belligerence fueled by the principle of national discontent, regarding the regular implications of the natural world order. Disillusioning the imperialist view of one’s uniform behaviour as an alternate resolution within global governance, or the lack thereof, to be stated as a historical fact.

Jacobsen: Let’s take WWII, what were some of the national journalistic reportages like, as the world was destroying itself?

Jørgensen: The national journalistic reportages during WWII were mainly twofold, where the first order of business was aimed towards strengthening proactive national movement and increasing morale within the general population; secondly, it was aimed to create a feeling of confusion and despair within the hostile enemy states.

Jacobsen: How were these reportages biased?

Jørgensen: Through the means of misinformation and misleading journalism reasoned to strengthen government control over one’s citizens, and at the same time deter foreign hostile states.

Jacobsen: What have been some of the dynamic internal national changes made as nations grappled with WWII?

Jørgensen: During the war effort of WWII the Home Front became a very big ally, where the general public was set to help the combatant forces in any way they could by their direct involvement in the war efforts. The motto of the nations was at that time «all hands on deck», this in order to better prepare the various states for the coming events. The government involvement was directed towards; rationing, home defence, and more... Everyone was in some way helping out in any way they could, in order to defend his or her constitutional right from being overtaken and suppressed by any foreign power during WWII.

Jacobsen: For the larger players, how were they attempting to quell dissent within their respective borders?

Jørgensen: I feel I must narrow the field of application within the question, which refers to the origin of the basic proposal, thus addressing the two-faced inclination facilitated by the socialistic proclamation during the transaction phase of the Soviet regime during WWII.

A Soviet pictorial construct based on their self-perceived characteristics, thus understood as failed self-insight of one's own iconic personification. Stalin and his paranoia caused the death of so many of his comrades in arms. Fluctuating consciousness by a notoriously unstable «commander-in-chief» whose state of mind is crucial to the incoming individuals of the state of war. The layout is meaningful in that this produces the origin's predicative internal control.

Jacobsen: For the smaller players, how did they attempt to adapt to the pressures and chaos ensuing from the fights between the bigger players?

Jørgensen: By the opt of neutrality, as the pressure of the larger states hereby mainly the German/Soviet approach of a hostile takeover in order to increased land area based on the feudal power principle. Small states' policy to avoid the larger states conflicts during this time, were explicitly stated by the self-determined neutrality provisions where they were strategically important by either geographical or political elements, were by that fact recognized as secondary and not of absolute importance by any large hostile state by reference to previous scale conflicts.

Jacobsen: How did national ideologies differ in the context of the larger Allies vs. Axis commitment differences?

Jørgensen: To remark, the two main differences as to capitalistic empowerment through the means of active imperialism, versus the extremist utopian notion of a new world order governed by fascist supremacy. I would also like to address, the ignominious collapse of the nationalist view on the possibility of absolute world domination by both accounts. Further the act of regionalism as a stabilizing counter vector of interrelationship as regarded by grasping the concept of multilateralism in the order of globality through consciousness towards a moral compass directed focused on internationalism.

Jacobsen: Russia sacrificed the most lives in the midst of the war. How was this the case?

Jørgensen: Stalin «the man of steel» a saviour in his own eyes, what a joke, this dictatorial murderer, no better than his arch-enemy the crazed Hitler, permeated paranoia above everything and everyone. The turning point of WWII, where Stalin is more than willing at that time to sacrifice his Red Army to defend the city that bears his name, Stalingrad; the city selected by Hitler for just this reason as to destroy the man of steel and to rip apart the very foundation of the

communist ideology. Stalin was more than happy to defend his country at all costs regarding the life of his own people, just as Hitler did. We will all die before they take us down. Millions of lives are lost, but as the story goes; yes, the war is in the defence of Stalingrad and turned the war effort in the favour of the allies.

Jacobsen: How did the Russians view the Germans and the Americans? Why did they commit so many lives?

Jørgensen: The relationship between Russia/Soviet Union and Germany has through history been betrayed as a turbulent one, or as a better term «friend or foe», but after the fraudulent betrayal of Germany/Soviet-pact and the German invasion of Soviet regarding Operation «Barbarossa» in the summer months of 1941, the scene was set for Stalin to destroy Hitler's Germany by any means possible. The former German-Soviet non-aggression-pact made two years before in 1939, was now a thing of the past.

Ideology: As for both countries (USA, Germany), and the fear of the «Red Scare» regards to the communistic movement, Stalin was hell-bent on communist world domination. This was a direct threat against American capitalism, and the notion of national socialism by Germany.

Why did they commit so many lives? I will here address the invasion of Russia during WWII.

Stalin was caught off guard by Hitler's invading forces, and now his beloved country was being threatened by his former ally, the number of German soldiers that took part in the German invasion of Soviets numbered more then 3 million strong. Stalin scrambled every able body to defend «his» country. Stalin's Red Army marched against enemy lines. Stalin's tactics were to overwhelm the German forces by sheer numbers.

If Stalin had not been so adamant in his overspend on military personnel, he would have been invaded all the way by German forces. We have to remember that the German forces were equipped with state-of-the-art- weapons at that time, and Stalin forces was using obsolete weapons technology. Also, the definite mistake Hitler was doing was the same mistake that Napoleon did some hundred years before, by not respecting the subarctic Soviet climate, also overstretching his supply lines and now having to defend himself (Hitler) on two fronts. The war fought between Germany and the Soviet was named the «Great Patriotic War» it lasted 1,418 days, and cost the lives of around 27 million Russians.

Jacobsen: What was the big national driver bringing the small states into the larger war efforts?

Jørgensen: Access to territories due to the establishment of air bases, army depots, also the element of close strategic positioning to launch an attack upon a foreign enemy power.

Jacobsen: How were larger facets and movements within the societies destroyed as a result of the war efforts? How were other movements, e.g., rights for women, etc., advanced as a result of the war efforts?

Jørgensen: As a start, the changes in the aftermath of war on this scale, will often unleash or in many cases accelerate numerous forces of change, thus within industry or society alike.

When a large scale impact, one either weakens or strengthens that nation's governance. Internal reforms may spur into social change and political reform. In short, one forces through a political revolution within the otherwise traditional democracy.

The paradigmatic shift regarding the structural environment within the various political movements is taking place. Capitalist upheavals of gigantic proportions, as the world licks their territorial and economic wounds. We see the start of a new charter, based on some of the principles of the previous failed League of Nations, by the new uninspiring UN human rights as the predominant global security guarantor by and for all small and large nations alike.

During WWII, the men were sent off to war and somebody needed to make sure that the war machine was going strong, by that I will bring-forth the Rosie the Riveter movement. The importance of Rosie the Riveter movement can not be understated and is viewed as the main turning point for the national female workforce movement, that paved the path forward for an all globalized effect, where the status as a home wife was to be in the transaction from WWII and forward. The labour-leading rights and income for a woman were by that in the starting point of global standardization.

Conversation with Tor Arne Jørgensen on Nuclear Armaments: 2019 Genius of the Year – Europe, World Genius Directory (5)

February 15, 2022

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. He has several IQ scores above 160+ sd15 among high range tests like Gift/Gene Verbal, Gift/Gene Numerical of Iakovos Koukas and Lexiq of Soulios. Tor Arne was also in 2019, nominated for the World Genius Directory 2019 Genius of the Year – Europe. He is the only Norwegian to ever have achieved this honor. He has also been a contributor to the Genius Journal *Logicon*, in addition to being the creator of toriqtests.com, where he is the designer of now eleven HR-tests of both verbal/numerical variant. His further interests are related to intelligence, creativity, education developing regarding gifted students. Tor Arne has an bachelor's degree in history and a degree in Practical education, he works as a teacher within the following subjects: History, Religion, and Social Studies. He discusses: atomic weaponry for the future trajectory of the world; the story of the Manhattan Project; the Americans reluctant to enter into the war with Germany; the anti-nuclear proliferation movements; main governments with nuclear weapons; the reduction and preventative capacity of nuclear armaments; nuclear arsenals acted as deterrents; historians who specialize; the Treaty on Open Skies; the current context of nuclear issues; the Intermediate-Range Nuclear Forces Treaty (INF); President Vladimir Putin and (former) President Donald Trump; the implications for international nuclear safety; the Nuclear Nonproliferation Treaty (NPT) and the Comprehensive Nuclear Test Ban Treaty (CTBT); nuclear-weapon states and non-nuclear-weapon states; some important terms and concepts for future treaties; the main motivation for the treaties; Hypothetical scenario; the opposing case; Einstein; the Doomsday Clock; the systems; nuclear waste; and these nuclear issues likely remain with us.

Scott Douglas Jacobsen: Next, we'll talk about the nuclear armaments of the modern world now. With the splitting of the Uranium atom in 1938, the directionality of the world changed forever. The power to destroy en masse with minimal means at the hands of a few became available. Hiroshima and Nagasaki as the civilian centers' victim to the American atrocities of dropping thermonuclear weaponry on other human beings in the midst of war. What seems like the crucial importance of the creation of atomic weaponry for the future trajectory of the world?

Tor Arne Jørgensen: If one understands you correctly and I think I do, then the focus hereby is on the ability of each sovereign state to produce weapons of mass destruction in order of increased self-security by means of affirming their targets with higher accuracy, through missiles with longer distances capabilities, more destruction capability, in order of a total fear policy through pure desire to create a feeling as mentioned of self-security by their own want for position of sovereignty.

Jacobsen: A single coerced-into-writing-letter by Einstein to then-President Franklin D. Roosevelt set forth the Manhattan Project. How is the story of the Manhattan Project told

in professional political historical circles? Duly note, Einstein was not involved in the Manhattan Project. He was a pacifist or had pacifist tendencies.

Jørgensen: The letter that Einstein signed came at a time when the war was thrown into a state of total chaos. The world was to face its worst enemy to date, with galloping inconsistencies at any cost and by any means. Germany and their desire to develop nuclear weapons that had potential global dominance that we all at the time witnessed then and up through the ages in terms of what the United States let Japan's two regions undergo in hope of ending World War II with regards to both Hiroshima and Nagasaki in late summer of '45. Racing to be the first to either end or start a war is equally wrong and that is what Einstein knew all too well and should later regret.

Einstein's voice and fame was a key factor to ensure President Roosevelt's ear and further ability to follow the advice given for the launch of the Manhattan project. A concerted effort to halt the domination of the Third Reich. Einstein was a pacifist in his belief in the impact of war on peace. But as I previously stated that everyone knows, war never leads to peace. Einstein was all too aware of this, whether they intended in the name of good nor evil. Leo Szilard applied to his former teacher Albert Einstein to get the impact needed in that he and the Hungarian physicist Eugene Wigner together could carry the signature that would be the fortification of the transition within the nuclear age and thus change the world balance for all time to come. The age of nuclear deterrent in the hope of world peace had now begun.

Jacobsen: Why were the Americans reluctant to enter into the war with Germany? Why did they eventually choose to enter into it?

Jørgensen: There are many reasons why the United States did not go to war against Germany, but what is most clear is the divided opinion after failed policies after WWI. The League of Nations and its outcome, furthermore the Great Depression, the despair of all the lives lost in the aid of other states at their own massive expense of human life, and to add an enormous economy expense made the United States divided in its privates to participate in World War II. The idea is, in short, that the United States takes care of its own interests to secure as well as strengthen itself by way of self-preservation.

Grounds for participatory engagement by the United States are clear, the attack made by Japan on Pearl Harbor December 7, 1941.

Jacobsen: In reflection on the aforementioned, this means, still, America is the first and only nation to drop thermonuclear weapons on civilian targets on purpose. That's a horrifying thought. How has this haunted international relations and politics, and helped the anti-nuclear proliferation movements?

Jørgensen: The devastating force that was confirmed by the United States' use of nuclear force to end a war against an unjust state that Japan was and still is, the aftermath was all too clear. The memories and images that are burned into all our minds can only be understood as an eternal warning against repeating such a terrible deed to ever be repeated. The terrible destruction is all too clearly documented as the right obstacle to repetition and as a catalyst for the anti-nuclear movement.

The list to repeat this even now almost 80 years later will probably be deterrent enough to follow the current picture for the next 80 years further as well, one must at least choose to believe. The political agenda is then unchanged in its opinion to refrain from all use of nuclear weapons in

warfare, and it is further believed that this is also not on the waning front of the world community, no to nuclear weapons will continue to advance for full force against disarmament of this type of mass-destroying weapon. The world has plenty of other material that can more than probably do the same benefit if one can put it that way.

The balance of power throughout the Cold War, the rearmament that was then all too clear and which crippled Russia economically, so that only the United States remained as the one clear superpower and by that changed a worldview that made the United States probably the most feared and the most hated authority, a world police whether the rest of us liked it or not. This has probably driven many of the other states to produce their own nuclear weapons to even out the differences, and possibly face the United States on their own terms. This is clearly not a stabilizing factor for securing world peace, nor the opposite, but it is perhaps what works best for everyone sitting on total power through fear of what the other person may or may not do.

Jacobsen: The main governments with nuclear weapons with readiness capacity known include Russia, the United States, France, China, the United Kingdom, Pakistan, India, Israel, and North Korea. What responsibility does this place on those Member States in the United Nations?

Jørgensen: There is a binding agreement or desired agreement on disarmament under the United Nations Convention of; disarmament, manufacturing and/or any testing of nuclear weapons by the member States and non-member states, also a non – aggression act towards any member state by use of nuclear weapons in any sense. This agreement act is being held to a certain extent but as we see today, North Korea is once again in the process of testing launches, not of nuclear weapons but you get the picture.

Jacobsen: What larger international responsibility is placed on all Member States, defined as such, including non-member observer states Palestine and the Holy See, for the reduction and preventative capacity of nuclear armaments?

Jørgensen: International prohibition and common front against all use of nuclear weapons in the application of sanctions against if any member state should take an upgrading path or non - member states that take the same course of action, this to prevent any form of a “final” nuclear war if one can call it that.

Jacobsen: During the Cold War, the nuclear arsenals acted as deterrents via duopoly of military giants locking proverbial ‘horns’ while retaining a mutual want of survival or non-annihilation. In the current era, if a headcount of the aforementioned Member States, we have 9 major national actors. For Russia and America with 90%+ of the global nuclear arsenals, what responsibilities lie with them, in particular?

Jørgensen: The power that lies with Russia and the United States is to focus on disarmament, to be able to be a stabilizing factor for world peace, to be able to act as a champion for bridge building through the re-creation of weapons of mass destruction through a re-creating forum by the renewal of increased clean power for everyone’s best rather than destruction to everyone’s worst. These two countries are responsible for holding both the East and the West in order to maintaining the status quo, i.e. the balance of power, but should in my opinion rather lead the way towards a new world environment of pure clean energy for everyone.

Jacobsen: How do historians who specialize in the matter view the August 2nd letter of Einstein?

Jørgensen: As I am not an expert according to the specific topics here, it seems to me according to what material is available, that a blurred lines can be removed to ensure transparency between the proper agencies. This can again be applied so that a recommendation from Einstein could again ensure that then President Roosevelt would convey thus present a guarantee that the request is fulfilled as intended.

Jacobsen: What is the Treaty on Open Skies?

Jørgensen: Proposal by Eisenhower in 1955 and expanded later in 1989 by Bush senior, including a joint signature of voluntary participating states, allowing aircraft from other states to fly into one's own airspace to create transparency of other states' military activities. There are 33 member countries from NATO and the Warsaw pact that was concluded March 24, 1992. Further comes the agreement on Passive quota which is the number of observations that a state is required to accept from other states, and active quota which are the actual observations to be carried out of by foreign states.

This is a great safeguard with regards to secure evidence to a large extent against the armament of nuclear weapons. Norway has today committed itself to 7 flights in accordance with the terms of agreement thus to ensure that our own military does not put itself in an active rearmament situation. This of course also applies to the extent that we have a lot of NATO exercises towards the border with Russia, something they been known to have repeatedly opposed verbally at top government level. There is also a lot in the media about high level diplomacy between Norway and Russia according to the topics mentioned here.

Jacobsen: What is its relevance to the current context of nuclear issues?

Jørgensen: Will highlight here the obstacle of increased military commitment by the development of nuclear weapons, which has been uncovered in Iran over the past 10 years. Furthermore, it has emerged that North Korea has built up its nuclear arsenal, which is very regrettable for overall world security.

Jacobsen: What is the Intermediate-Range Nuclear Forces Treaty (INF)?

Jørgensen: The 1987 agreement between the United States and the then Soviet Union and their respective presidents Reagan and Gorbachev, in which the agreement consisted of disarming medium-range missiles armed with nuclear warheads. This made it possible to abolish an entire category of weapon systems towards a safer world, whereby global stability was more aimed at mutual trust through mutual understanding of brotherhood and not through fear spreading propaganda of upscale nuclear arms.

Jacobsen: Why did President Vladimir Putin and (former) President Donald Trump pull out of it?

Jørgensen: The short version is that the United States believed that for several years Russia had violated the agreement signed in 1987, by trial testing regarding missile category thus a clear violation of the signed mutual agreement. This was the reason why the United States withdrew from the agreement. Russia, for its part, has repeatedly denied the allegations in a statement issued stating "Similar, baseless allegations concerning Russia's intelligence have been made more than once."

Jacobsen: What are the implications for international nuclear safety given the progress from its inception in 1987 and destruction in 2019?

Jørgensen: The implications of the breach of agreement go back to a kind of “Cold War” scenario that Putin says in the media today with regards to the NATO allies a look back at the uncertainty about nuclear war that covered the world for decades. What is happening today between Russia and Ukraine is inevitable in this context, as war is once again on the doorstep of all of us with unforeseen consequences.

Jacobsen: How important were the Nuclear Nonproliferation Treaty (NPT) and the Comprehensive Nuclear Test Ban Treaty (CTBT) for global geopolitical stability?

Jørgensen: The idea behind these two programs for testing nuclear weapons in space, on land or under water, and disarmament to change the focus from weapons status to a source of clean energy towards a climate-focused society, is all well and good. The only problem is that some of the most powerful and best equipped states choose to say A but not B, they are initially friendly and shows a hint of partly agreement that these are good programs to join, but when the balance of power is changing, well countries like Pakistan will not nor India join when the other party does not want to.

Furthermore, as I said, the United States has joined part 1, but not part 2 of the agreement program, that is, signed with not committed, and then it carries back to the start again. Letting go of power, thus seeing a possible loss of that power for those countries that look upon themselves as gamechangers on a global scale, or see the profits promoted by the gains of nuclear technology, will not yield the obvious gains in either long term or short term. Finally, this is about power security were to let go of one known scenario outcome to give into a new and unknown one may seem like an insecure draw of cards to make; thus the result is already given in advance.

Jacobsen: For the categories of nuclear-weapon states and non-nuclear-weapon states, how might future treaties utilize such terminologies to clarify intents, obligations, responsibilities, and rights?

Jørgensen: By putting pressure from the non-nuclear states onto the states that have nuclear weapons to ratify their plans for the obligation to disarm, limit, transform and secure the waste in safe storage facilities. Will also point out that Norwegian Physicians Against nuclear weapons (NLA) national branch of the International Physicians for the Prevention of Nuclear War (IPPNW) is actively working for the disarmament of nuclear weapons. We are working well in cooperation with the Norwegian authorities to put pressure on the states that are hesitant to commit to a disarmament plan.

This done so that the commitment can enable a reducing unintentional for a safer future. The fact that private organizations in collaboration with non-nuclear states can, to the extent they can, influence enough for change to take place is then the best answer one can give me here about bonds, and active responsibility through pressure from external factors.

Jacobsen: What might be some important terms and concepts for future treaties to consider for improved deterrence capacity frameworks?

Jørgensen: To have a steady balance of power in the world between two dominant actors as during the Cold War between USA and Soviet Union, with the intention that none of the actors was willing to annihilate the world. This balance of fear should not determine the world of tomorrow in the hope that we can continue to live in peace.

The fact that nuclear military power today when we only have this one planet to live on should, in the undersigned opinion, not form the basis for living in peace. The fact that extended use of a missile defense system by the USA as an extended deterrent, and accelerator for the exercise of the terrorist balance. Not to mention terrorist organizations and their role in influencing the current balance of power in any negative direction to end today's existence.

Jacobsen: What is the main motivation for the treaties? Do these treaties seem to work in increasing the level of safety?

Jørgensen: Self-preservation, and no I do not think so, not as a clear intent of global stability.

Jacobsen: So far, we have talked about the NPT, CTBT, INF, and TOS. There are a bunch of others including SALT I, SALT II, START I, START II, START II Framework, SORT Moscow Treaty), and New START. There are many covering different dynamics of the nuclear issue. Hypothetically, let's pretend the entire world framework for nuclear deterrence in the form of treaties is shredded, what happens?

Jørgensen: Today, one still sees that the need for protection through deterrence through the possible use of nuclear weapons is as relevant today as during the Cold War. Countries such as North Korea, Russia and China are investing more and more to secure their own national status as a nuclear power to reckon with if any events occur that could possibly shake one's statuettes.

It is pointed out by various groups that are in favor of disarmament of these types of weapons around the world that today's society is overdue for a change in security conditions where the nuclear power has lost its role. Finding fully automated weapon systems, we turn our gaze to space and those who may bring this that may threaten our existence as a species. But just look at NATO, which can largely be described as a nuclear alliance, no, the age of nuclear weapons is not in decline, no not in any way, quite the opposite in fact as I see it. So, to sum up, do we need nuclear weapons today, yes maybe more now than ever before? This brings me back to the question of origin, "what happens if all the treaties are shredded", I guess a complete global fire sale of governing security.

Jacobsen: Let's take the opposing case, the INF is reinstated, NPT, CTBT, INF, TOS, SALT I, SALT II, START I, START II, START II Framework, SORT Moscow Treaty), and New START remain and others begin to build on them. What happens to the nuclear issue?

Jørgensen: A continuation of the status quo, possibly an increased status of the status quo.

Jacobsen: Ideally, what would happen in regards to the nuclear issue stability as deterrence or elimination of the nuclear option throughout the world, or some other option?

Jørgensen: Some outcomes of what has been mentioned above does not at present time seen as a possible deviation of possible events. But this does not mean that a third alternative cannot arise that has not yet been anticipated and that may or may not tip the scales away from the two mentioned outcome, i.e. an unknown outcome.

Jacobsen: Einstein, unbeknownst to many, was a key player in the prevention of the attempts at manufacturing and stockpiling of nuclear armaments. He argued for a supranational authority as a deterrent because he considered the bomb inevitable. What hasn't been instituted, which could act as another bulwark against guaranteed mutual annihilation from nuclear war?

Jørgensen: An overarching body. What is meant by that, well today it is left to the nuclear states not to comply with the plan of attack. Where deterrence is the one reason for not attacking and endangering the lives of all of us. If then the UN, or NATO, as a function is in the mindset the overriding body so as not to hand over all responsibility to the individual country.

There are many supreme bodies that can try the individual country's decisions and at best reverse decisions that violate human rights and so on. What if when it comes to the danger of nuclear war, that the deterrent factor is dropped from the individual country and is overruled by a common union for the preservation of these weapons is set up. Could such a common international body be tested faithfully? It's the only thing I can think of that power relinquishes – every single country and is protected under a community that most likely does not allow the use of nuclear weapons ever again.

Jacobsen: Human beings made this problem. Human beings must solve this problem piecemeal, probably. What can move the Doomsday Clock dial farther from midnight in the midst of strongmen political gamesmanship, and direct attacks on an international rules-based order and on the rights-based global system of governance?

Jørgensen: Through global cooperation for a safer everyday life, overthrow of standing directives, further by a common front on both sides. Change basic structures through global cooperation, but all this is just utopia.

Jacobsen: There have been a number of instances in which the systems controlling much of the nuclear arsenals have failed with the implied consequence as the annihilation of the human species if not for human intervention. One was the NORAD computer chip malfunction, or more than one in fact. The Cuban Missile Crisis was another. The SACPNORAD communications error yet another. The training tape accident of 1979 was still another. Still another, and on home turf, the Norwegian rocket accident along the northern border of Russia, which plunged into the ocean. Why, if the nuclear are to be kept, should the systems be modernized simply for safety reasons?

Jørgensen: The use of nuclear weapons in any such state is not safe, nor can it be safe. A modernizing condition, or type of upgrade for safety reasons is not advisable due to the release energy potential of the components. The financial gains that follow at both ends advocate the security gain. No, it can be concluded that to modernize to secure, rather to break down or turn into productive environmentally sustainable energy.

Jacobsen: What are some other issues to do with nuclear waste from the stockpile that need some immediate consideration and management?

Jørgensen: Proper storage is a key issue here, storage under water is to some extent what needs to be addressed, it is no longer in extended use for the risk that this poses if leaks should occur for the sea areas in question. What should also be looked at is to move the waste out into space and remove it that way now that Elon Musk and his Space X and or Jeff Bezos' Blue Origin is aiming toward an increase travel schedule for transport into space, also to investigate the use of nuclear reactors as propulsion measures for the space rockets in a much larger extent. But littering in this way is also not, in my opinion, a sustainable solution either. What I am brought back to is transforming the mindset of reintroducing nuclear waste into a resource for environmentally sustainability.

Furthermore, of what should be discussed to a much greater extent than today, let us make use of this clean energy in an innovative and functional way, which is what society is benefited by as a way towards a transition over to a more viable alternative energy source as a direct result with regards to a change of course due to the fossil replacements within a short period of time.

Jacobsen: How will these nuclear issues likely remain with us, even as anthropogenic climate change or human-induced global warming continue to loom over the horizon as two of the three heads of the proverbial Cerberus?

Jørgensen: Today's thinking is based on additional cost and limitation of visionary implements. Cost must go down, it must be seen as an meaningful act towards key actors within government officials, the feud over military accumulation must change, in anticipation of possible future artificially intelligent forms that can help us naïve mortals to see a new solution to the problem, if then, it is not us as creators of the problem who is the problem and by that is in need of a solution...

Conversation with Tor Arne Jørgensen on God, Leonardo Da Vinci, and Religion: 2019 Genius of the Year – Europe, World Genius Directory (6)

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Abstract

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. He has several IQ scores above 160+ sd15 among high range tests like Gift/Gene Verbal, Gift/Gene Numerical of Iakovos Koukas and Lexiq of Soulios. Tor Arne was also in 2019, nominated for the World Genius Directory 2019 Genius of the Year – Europe. He is the only Norwegian to ever have achieved this honor. He has also been a contributor to the Genius Journal *Logicon*, in addition to being the creator of toriqtests.com, where he is the designer of now eleven HR-tests of both verbal/numerical variant. His further interests are related to intelligence, creativity, education developing regarding gifted students. Tor Arne has an bachelor's degree in history and a degree in Practical education, he works as a teacher within the following subjects: History, Religion, and Social Studies. He discusses: one of the more favourite geniuses; an enigmatic and a puzzling character; the source of the myth as an artist first rather than a natural philosopher and engineer; noteworthy quirks of behaviour and personal taste; trends; heretical minds; religion; his lack of religion; gods make the most sense; gods make the least sense; religious denomination within a religion, seems the most reasonable, plausible, and balanced; a belief in God; faith justified; faith not justified; the terms "faith" and "religion" conflated; despised throughout the world; the best argument for God; the best argument against God; where one is born, for the most part, determine, largely, one's belief in a particular religion rather than another; the obsession of religion with women's bodies; religions make only or mostly men leaders; science and religion; the greatest genius in history; the good of religion; the nature of religious community; an interview with a pastor; long chats with religious community leaders; the different major world religions; demographic advantage for the rest of the 21st century; the Norwegian take on religion and religious community; thoughts on the future of religious evolution; evolution via natural selection such a terrible bane for religious ideology; and, Intelligence Design proponents and Creationists.

Scott Douglas Jacobsen: Leonardo Da Vinci, in experience of interviewing a decent number of individuals of the high-IQ communities, is consistently ranked among the favourite geniuses of the communities. He seems to have made a deep impression on them. Which raises some questions for yourself, as you're a growing member of these communities, as a member of more than 50 high-IQ societies, is Da Vinci one of the more favourite geniuses in history for you?

Tor Arne Jørgensen: The answers present it selves with is resounding yes, by the resolute effort he made to meet his nascent and at most pure sense of curiosity about how the world around him worked. That his legacy perceived as something very distinctive and exceptional becomes for me a desire to learn more about the life of this very special man. Will also add to the fact of carrying the seal even with a promoted awe at its way of self being, whereby expressions of one's

inherent disposition are not obscured, but in fact are parade through the streets of medieval Florence with great sense of pride in a time when narrow-minded prejudices, persecutions further by several acts of terrorism due to church and their tunnel vision views of colorful diversity among men.

The Church's normal reply in most cases in accordance with their own views as to uphold their interpretation of "high moral standard", was to deploy its league of death dealers to deliver the lords message of righteousness to the unholy of men. The defiance shown by Leonardo and the likes of him, the fearlessness, the resistance, and unwavering courage at a time when difference was not accepted back then and still replies today is nothing short of impressive, all credit due to Leonardo the character, the man and what he stood for and believed in, is a designation of the highest dignity even overshadowed by its inherent and shining genius, a true persona indeed. This is for me perhaps the most admirable trait and legacy of Leonardo to be honor through the ages.

Jacobsen: Famously, Da Vinci is seen as an enigmatic and a puzzling character, though recognized through inventions and artistic works. One myth to bust is the fact of having less interest in art and more intrigue in – what is now called – science and technology. The art was a series of techniques developed to study geography, anatomy, flight, and the like. What seems like the purpose of this technique for Da Vinci, personally?

Jørgensen: Leonardo's notes are based on what is to be found in information, made in the sense of creating an accepted overview of his surroundings in the eternal search to improve his horizons of understanding presented in his paintings and more ... these notes are massive and noted in many of his sketchbooks, better known as zibaldone. More than 7,200 pages have been found, but it is believed to be at least double that. The notes that Leonardo made are referred to as; " *the most astonishing testament to the powers of human observation and imagination ever set down on paper.* "

Leonardo's codex collections are varied, impressive, and diverse in its fullest sense. His accumulation of notes was further established, it was a kind of "work in progress", whereas changing or improvement of previous thought understanding, were improved upon on or deviated from all together, this done in order of being able to fixate on a more innovative approach to be used as a more practical form of understanding. He paved the way as to pass on further the conceptual understanding of our pictorial views, this was due to his lack of mathematical understanding, as Leonardo saw pattern formations to a much greater degree than through understanding of fundamental perceptions through mathematical calculations.

The same can be said about his understanding of written language of Latin, which he also did not achieve to the extent he himself wanted. Seeing patterns in all movements, which one can add that he studied people's approach, conversation with each other, those of normal hearing and the hearing impaired, namely the deaf, Leonardo who found it extra exciting to observe their sign language, and guidance of understanding each other's conversational appearances. That to be surprised to such an extent to give oneself completely to the elements surrounding him to see into what I experience as the future perlatives, as we back then and still now today allow ourselves to be amazed at his innovative techniques. We must be able to study, learn, admire, seek, and explore what is facilitated by nature and her fundamentals, then and only then can one truly discover one's own preconception believes of the wondering surroundings and precise optimal perception of the known universe.

Jacobsen: What seems like the source of the myth as an artist first rather than a natural philosopher and engineer?

Jørgensen: As for the source of his works, it probably lies in the fact that he defended with great effort on his part what it meant to create a masterpiece. Where color, shading, use of light to create contrasts, and removal of lines used to create the outline by and for the contours, also by incorporation of so many different elements from sculptural constructs, scientific discoveries in addition of the geometric figurations of mathematics to create spatial obscurities. Leonardo mentions in several texts that art moves across so many more layers than mathematical calculations will allowed for compilation with regards to geometrical movements, and or sculptural constructs. Fractal summarized by so many more considerations are needed in order of producing a masterpiece, then any scientific endeavor would ever portray, nor any calculating terms against a preconception of universal laws.

Leonardo and his obsession with experimenting to better understand the world around him was motivated by being able to express himself in a way that could last for posterity and present himself in the everlasting spotlight in his quest for world fame.

The fact that painting at that time was not seen as something that would necessarily secure you money and fame, one had to shift focus in the pursuit of easier income by weapon encroachments for a more prosperous living environment, as an eternal tangle of frills with a clear goal. Will finally point out that Leonardo was not known for signing his works, he spent a lot of time on his artworks, and most were not completed. If then the search for fame was so great, why not make yourself known for posterity by signing your art. Or was that exactly what he did, when he drew himself into most of his compositions, perhaps some of the most famous ones, but left his true identity out...

Jacobsen: He wore purple tunics, wrote left-handed, wrote backwards, and may have been either asexual or homosexual, or pansexual or queer, hung out with mostly men and had a trusted young male friend, Salai. What seems like some other noteworthy quirks of behaviour and personal taste of him to you?

Jørgensen: Firstly, some info about the boy Gian Giacomo Caprotti or as he was referred to by Leonardo as Salai or "Little Devil." Salai in this case came to Leonardo when he was about 10 years old, Leonardo at the time was about 38 years of age, the event took place in July 22, 1490. The relationship that was then to unfold moved over from being seen as firstly of a student, or apprentice, but this is mostly wrong.

The boy started as an assistant at first then later a companion, and eventually a lover at some point in time later on. Now to Leonardo and his other quirks, or extremities if one can call it that.

He wrote down everything he experienced in notebooks, it is mentioned in several texts that he had a pocket notebook with him that was small enough not to be a nuisance, this was used to write down what he experienced of the local community around him, he could bring home with him random people in order to observe them in normal conversations, whereupon there characteristics of their distinctive features appear in a humorous way which could then later be used as sketch drawings where humor, anger, and thoughtfulness was to be expressed. The way forward to create vivid moments, which can be equated today with taking pictures, where the 3-D effect is produced, every detail is recreated and put in its proper element even in its heyday, to

make the image production so accurate as possible, was for Leonardo absolutely crucial, fueled by impression of manic behavior in his search of perfection.

Furthermore, his humor was widely acclaimed through his theatrical spectacles and promiscuous inventions in good company with those around him. There are also his slightly macabre aspects of dissecting dead people and various animals to better understand the human and animal anatomy in detail, this paved the way for groundbreaking work within anatomical knowledge, that is in some way still used today. This of course done so he better could depict his artwork more vividly, to better preform through creative artwork that seemed more alive, more lifelike.

Jacobsen: Some take some quotes out of a larger context of the views of Da Vinci, as if a religious person. He may have had – and seemed to have – deep naturalistically spiritual sentiments, moral convictions, and spelled out personal opinions about God and the soul in paragraphs. He was deeply doubtful of either. Similarly with another character in the history of times before intelligence measurement, William James Sidis, he was clear about personal atheism. These aren't the majority of the opinions but stand out because of the oppressive circumstances or general views of the laity and the societal hierarchs of their times. Even Goethe may have went through spiritual and other circumstances, he, eventually, ended, more or less, what seemed like an atheist. Einstein considered the biblical texts “pretty childish.” These are the typical views one would gather from the world of theological debate without simply looking at the words rather than what people say about the words, the interpretations. Do you see these trends, too?

Jørgensen: Will in this subtask, if one can call it that, by fortify myself further in the same track to ensure a unifying preconception of the main character (Leonardo) life and work. If one is then going to turn towards the more religious aspect, and what known statures and thereby implications this had on Leonardo's life and the work that he did, then one must take the following considerations, which in turn can be presented in a questioning range of possibilities, whereas critical conceptualities and fortified truths may crumble if even just a bit, and will probably appear at best as; (speculative observations bordering on heresy towards Christianity's written truths and religious belief systems).

When one then goes ahead with this task and by that presents what concernments from what one knows in the degree of information is hereby then interpreted, and furthermore is then firstly and foremost to illuminate the following scale view of Leonardo and the supreme position of the Catholic Church according to homosexuality sat era. The era decreed is traced back to the Middle Ages, just before Leonardo returned from Milan to Florence in the late 15th century, I will now refer to a text excerpt from world renowned author Walter Isaacson and his bestseller book about Leonardo Da Vinci the following quote is marked as follows: “*In 1494 a radical friar named Girolamo Savonarola had led a religious rebellion against the ruling Medici and instated a fundamentalist regime that imposed strict new laws against homosexuality, sodomy, and adultery.*” (Walter Isaacson, Leonardo Da Vinci, p.300).

Now it should be said that a radical fundamentalist does not define the statutes of the Catholic Church per se, but the angles towards this type of “deviate» orientation are clearly consolidated in the Bible, which apply still to this day as well. I would then like to point out that the “elephant” in the room by reference to Leonardo's orientation, his appearance, as he does not in any way try hide his orientation in the least either in characteristics, or general clothing style, nor who he appeared with point in term to Salai. Is it conceivable that Leonardo's personal

experience of what the church's general attitude towards homosexuality did not go completely unnoticed? We must not forget Leonardo and his Loki prominent stature, and immense brilliant mind far ahead of his own time, probably the clear dominant intellect in the Western hemisphere at that time. The ecclesiastical council did not quite see from what I can understand, what Leonardo really brought forward to the table as to various works commissioned by the church. It is possible that the interpretation missed completely or at least partial based on the actual intention ambiguity visualized by beautiful and whimsical brushstrokes by the master artist himself.

That the church fathers interpreted the works of Leonardo as an agreed tribute to the biblical characters, for the intended purpose is to me almost a bit on the ridiculous side, no offence intended. With all due respect to the religious believers back then and through the ages, one will imagine that one's own inherent motions and emotions would at some point materialize via some form of personal conflict through their expressional art in many cases across their professional commitments. I must extract a clear case according to the following painting by Leonardo. *Virgin on the Rocks*. Two versions were made, the first version which hangs today in the art museum in the Louvre Paris and the second version which hangs in London. The commissioning of the work was done as many know by the Confraternity of the Immaculate Conception.

If one then looks at the picture that hangs on the Louvre, ie the first version that was not completely accepted as a commissioned work, and had to be redone and what almost imposes itself on the testimonies studied, then one sees a prominent phallus, right behind the head of a Virgin Mary. This center stone is clearly and prominently shaped like what is just mentioned. In this case, I tried a small experiment when I asked my class as I am a teacher of religion about the following artwork: "What do you see in this painting?" The answer that came back was 90% of the 10th grade pupils unanimously agreed with, and without me pointing out the obvious, that; the picture had an erotic twist clearly presented. So, it was concluded that yes, a rock formation of a major phallus was clearly visible in the painting. The question was asked again among my personal friends and colleges, and the same answer came back again. Also, there are several more cases where the artist indulges in their humorously funny elements at the expense of the blindness of the believers.

What then is meant by this, in a clear case about John the Baptist that was one of Leonardo's most admirable figurants, the love he was shown in Leonardo's paintings was not equated with Jesus nor Mary Magdalene This is due to the disagreements between John the Baptist and Jesus and more... So, it does not matter. Short Review, John the Baptist is said to have been arrested and later killed by losing his head, at the behest of King Herod. I must also add that Leonardo's ultimate wish was to become famous beyond national borders at any cost. If one then looks further at the Shroud of Turin and the time around the 13th century, whereby the world's most likely first photograph was taken, and where the separation of the head and body emerges clearly, with reference to the fate of John the Baptist with his beheading.

This image is supposed to be Jesus' shroud in the aftermath of the well-known crucifixion, but the height of the cloth itself is measured at over 2 meters, which would then have made Jesus the foremost giant of all time, but which mysteriously does not appear in any biblical texts. Something that would of course have been noticed had that been the factual case. No, what is the most likely being displayed is not the body of our savior, but rather that of Leonardo himself. What I take for granted from what one sees and reads in various written works is that Leonardo

has managed to fool the whole world with his absolute masterpiece to portray himself as Jesus through ways of ecclesiastical statues, paintings and so on, thus secure eternal fame.

As he liked to paint himself into his own artworks, he visualizes him selves through his sketches and paintings as form of young, old, male, and female version. Will then finally point out that the most famous painting of all time the Mona Lisa, is probable self-portrait of a female expressive Leonardo, same as in the drawing of the Vitruvian Man in full scale. The desire to secure total fame for all eternity is in my opinion clearly accomplished, and I might add brilliantly executed, all credit to you Leonardo for your achievements and your contributions to the world.

Jacobsen: We see similar heretical minds considered singular-ish in their own eras. Those who would not be found throwing rocks at a wall, as in the Great Jamara; a wall representing Satan and intended as a practice to remind believers of the Devil's efforts and to prevent believers from being led astray. Quote-mining is often done by individuals preaching for their interpretation of a sacred scripture. However, the opposite can be done, as suggested above. Hypatia said, "All formal dogmatic religions are fallacious and must never be accepted by self-respecting persons as final." Also, "Fables should be taught as fables, myths as myths, and miracles as poetic fantasies. To teach superstitions as truths is a most terrible thing. The child mind accepts and believes them, and only through great pain and perhaps tragedy can he be in after years relieved of them." During a trial, it is reported that Bill Sidis was an atheist and did not – hilariously stated – believe in the "Big Boss of the Christians." Goethe, by 1931, seemed highly skeptical of the supernatural or faith-based claims, stating, "I have found no confession of faith to which I could ally myself without reservation." Da Vinci stated, repeatedly, similar sentiments, "When the followers and reciters of the works of others are compared to those who are inventors and interpreters between Nature and man, it is as though they are non-existent mirror images of some original. Given that it is only by chance that we are invested with the human form, I might think of them as being a herd of animals." Again, "Along with the scholars, they despise the mathematical sciences, which are the only true sources of information about those things which they claim to know so much about. Instead, they talk about miracles and write about things that nobody could ever know, things that cannot be proven by any evidence in nature." Once more, "Wherever there is no true science and no certainty of knowledge, there will be conflicting speculations and quarrels. However, whenever things are proven by scientific demonstration and known for certain, then all quarreling will cease. And if controversy should ever arise again, then our first conclusions must have been questionable." Finally, "It seems to me that all studies are vain and full of errors unless they are based on experience and can be tested by experiment, in other words, they can be demonstrated to our senses. For if we are doubtful of what our senses perceive then how much more doubtful should we be of things that our senses cannot perceive, like the nature of God and the soul and other such things over which there are endless disputes and controversies." So, these ideas of quote-mining seem silly, in the end, to me, and more indicative of the reasoning given, at times, by profound intellects, more than a proof, evidence, or neither, of some deity. What do you make of these particular cases listed above?

Jørgensen: One can in most cases argue against prudence as to the incomprehensible notion of content presented, where adaptation of that content should be place in order to create a more meaningful utterances for the neglected notion that is being formatted. We cannot forget that the

origin must be consolidated in its natural environment, where tested through scientific explanations, cannot be taken out of its legitimate context. A mixed outcome to secure their beliefs neither -nor from must be confirmed fortitude, on this I agree of what emerges from scientific approaches in favor of their religious alter egos.

Jacobsen: What is religion to you? How do you teach this to school children?

Jørgensen: How to answer something that will not be swallowed up, is also not understood for the purpose for which it is intended. I tend to find that my own experience of what religion is or means to me, can hardly be explained in the context of not being experienced as an incantation of consideration for someone other than the creation itself.

One way I experience religion is to engage by seeking something beyond oneself in one sense or another, which one can then leave to be redeemed from one's sins in whatever fundaments of time this may or may not have arisen, thus dictated against the texts there has its origin in a somewhat sinful state. Or perhaps look inward at oneself, where one's own strength, creation, discovery of inner spirits, whereby one works to accept what can be experienced as load-bearing foundations for creative structures beyond. I prefer the latter, as the desired qualities which are then best sought are answered by searching inwardly towards one's exalted spiritual status, as these have a self-observed quality in being more easily fulfilled in those for accusations whereas conceivable mundane.

To the other share questions about teaching students about the true nature and thereof characteristics by fourth fundamentals through personal experienced religion. Can it be answered more pruned than that of the historical element within the religious regime, that is what triggers my intentions.

What is then created by personal enthusiasm in my religion classes is the students' reflective abilities of and about what is met by informants through teaching situational settings. But it should be said that the principle of neutrality of pure instructive structure where one's own experiences should not be turned against a subject one's will, has thus become a burden that is sometimes too heavy to bear.

Jacobsen: Are you religious? If so, in what sense? Or if not, why not?

Jørgensen: If one can describe oneself as a bearing force that cannot be defined, but which in a way can be worshiped in the hope of having their prayers answered in a very different sense, then the answer is yes, more so than that an abstract spiritual unity in the state of fulfilled ideological from shekels, whereby the outcome of prayer is as always absent with its presence in its all-state. No, I would rather seek towards inherent qualitative value where one can get a reply and receive some kind of factual sign, rather this then the alternative...

Jacobsen: What gods make the most sense to you?

Jørgensen: No God creates a sensible mindset in me, as one can rather say by which inherent identity may seem most likely to lean towards an abstract reason-based unity. The search from within is for me what seems to create correction towards a greater spectrum of truth than a sorry entanglement of spiritual eventualities.

Jacobsen: What gods make the least sense to you?

Jørgensen: Every worship of these false idols is to me a fallacy by their mere absent of tangible essence.

Jacobsen: What religion, in fact religious denomination within a religion, seems the most reasonable, plausible, and balanced to you?

Jørgensen: Which denominations that to me seems like the most likely balanced or probable today is probably none. The fact that religion-based thinking should be founded, where we should all submit all of our humanly faith over to a larger autonomous being, is for me by the very definition wrong. The only thing that can be said to have a touch of balanced intelligibility is what was practiced by tribal societies before mainly, whereby the earthly distributions and their naturally established anchors, formed the fundamental basis in most cases of worshiping.

Jacobsen: Some argue for a need for a belief in God. Others argue for a psychological propensity for the creation of many gods, as in animistic gods. Do these claims seem evidenced to you, reasonable to you?

Jørgensen: Thinking that for most people, seeking beyond themselves and leaving their intentions to a type of false idol, where they can seek understanding, awe, comfort, and security becomes quite clear to me. We live in a chaotic society. The question of “are alone in the universe”, what is the true basis for our existence? Why are we, what is our purpose I life, etc. ...? This loneliness or lack of understanding for us being created, can easily be applied to the fact that we are specially chosen to serve some tasks given to us by a higher benign being, as I see it, the obvious underlying intent of eternal emotional slavery in one sense or another. What is then more understandable than searching beyond what nature has assumed, where our understanding ends, and we of course seek towards the supernatural realm in the eternal search for an account of one’s own existence, a final answer to the all-consuming question of WHY?

Jacobsen: When is faith justified?

Jørgensen: Faith depends on seeking comfort when there is no comfort to be found, I choose to find comfort not to lift one’s own values before a divine figure, but for oneself. To stand to look at oneself in the mirror and find one’s values and see that this is good. That your inherently inviolable values make you proud of yourself and your actions, they are both a reflection of the inherent transcending being and are justified as such.

Jacobsen: When is faith not justified?

Jørgensen: Now a fort can seem harsh against a huge ecclesiastical movement. “Faith can move mountains”, as the saying goes. Further that faith will prevail in the end is for me in these times of war in Europe and has been displayed up through the ages across the globe, that considering all the suffering that mankind has experienced, for me the belief in an almighty good God, whereby a single intervention from the Almighty would have stopped all the evil that takes place.

The fact that God’s will happens for a reason, such as the fact that, if something good happens, it is a miracle through the will of the almighty God, but if something terrible happens, then God works in mysterious ways. To me, the term of a benign Almighty God, in which we should all praise by his mere kindness to all mankind. His goodness is portrayed regardless. In the film End of days from 1999, where it is said by the antichrist played by Gabriel Byrne to the retired policeman Jericho played by Arnold Schwarzenegger, that “God had a fantastic PR agent”, I must reveal that I agree with what was presented here in his statement. So, to conclude I will say, that for me faith is in most cases is not justified in any sense.

Jacobsen: Why are the terms “faith” and “religion” conflated?

Jørgensen: To think of faith and religion as two polarized entities in which a natural bond does not exist, falls on its own unreasonableness. This will not come as a shock to the most people, where one follows the other, or rather the one cannot exist without the other, they exist in an additive relationship, like some similar notion of Yin and Yang.

Jacobsen: Everyone has a right to freedom of belief, expression, and religion. However, not all are treated equally. Why are Muslims and, particularly atheists, so despised throughout the world? I assume the reasons are both similar at some points and dissimilar at others.

Jørgensen: Going against generally accepted norms is probably always seen as disgraceful, if one looks back in time, when people who opposed the ecclesiastical communities, or as Leonardo Da Vinci had a different idea of the dogmatic foundations of the time, where persecutions were carried out to a great extent. Creates emotions even today, where ridicule, expulsion, inflicting shame, and intimidation propaganda such as “you will end up in hell if you do not turn towards God, even in today’s society are very real factor of retribution.

This forms much of the basis for not daring to- speak out, though it should be said that we are now experiencing a greater acceptance of the expression of different opinions, where much of the dogmatic returns are not as powerful as before, at least not executive in their practice to the same degree as now. You can actually survive after presenting your counter-perceptions towards the church, and not be burned at the stake or worse ...

Jacobsen: What seems like the best argument for God?

Jørgensen: Big brother syndrome, or a fatherly figure that will take care of you in some way. This abstract being is for many an anchor point that gives the majority of people around the world a purpose in life, someone to confine in, to seek shelter in, a kind of safe haven.

Jacobsen: What seems like the best argument against God?

Jørgensen: In short, believe in your own powers, trust yourself, trust that you are born without sin, and that you are born perfect as nature intended. You are strong as a self-governing being, you do not need to seek outwardly to some kind of greater entity for acceptance, or approval, you are born with these qualities. Believe in yourself, and thus pray to yourself, only then will great things happen as you would like them to.

Jacobsen: Why does where one is born, for the most part, determine, largely, one’s belief in a particular religion rather than another?

Jørgensen: In short, the social structures determine which way the religious compass directs us.

Jacobsen: What is the obsession of religion with women’s bodies?

Jørgensen: What is described in what a woman’s body is, Jesus is portrayed as thin and muscular, but the woman here in this case is portrayed as a little fat, where gluttony has its distinct origin. Otherwise, in more general terms, the woman is seen as the driving force, where innocence and piety have clearly emerged.

Jacobsen: Why do most religions make only or mostly men leaders?

Jørgensen: Reasoned in the beginning with the distinction that was put out by Saint Peter himself against the potential and actual heir Mary Magdalene or rather “Apostle of apostles”. The feud between her and Saint Peter is recorded and fortified in the eternal holy texts, where Jesus himself had to protect Mary from Peter’s wrath. Had the religious outcome been reversed as to

gender, where Mary was selected as the natural choice to pass on the gospel of Jesus, then the male-dominated expression would probably have been completely different. High-level politics has created the religious layer that has been accepted as right and proper in everyone's eyes, but should this be taken as an actual fact or not, that may be up for a serious debate on what gender was the rightful successor in passing on the gospel to all mankind.

Jacobsen: Are science and religion, ultimately, irreconcilable or reconcilable, e.g., via their epistemologies and derived ontologies?

Jørgensen: Leaning against the scientific justifications, where reality is clearly rooted in both the epistemological and the ontological origins, this cannot be said to the same degree for me, as my views of concern regarding the counterpart of religious and its reason for justification.

Jacobsen: Who do you regard as the greatest genius in history?

Jørgensen: A difficult choice to make, by the allusion that several candidates can easily be labeled as the world's changing individuals, were influential qualities towards a common good are accelerated in the name of development. Since one can probably here in this round lead in the direction of what has been described here as a clear candidate, where the ability to see solution proposals not justified until five hundred years into the future in several cases, can probably and thus easily be presented here in perhaps the greatest prodigy that the world has ever seen by the amazing talents of the one and only Leonardo Da Vinci.

Jacobsen: What is the good of religion? I mean "the good" as in the Good, the positive, the upbeat, the constructive, and so on.

Jørgensen: Religious communities' main purpose as I see it, is by gathering people from all walks of life in a shared form of communion. They get an experience of sharing something very special together. It forms the basis for affiliation, a sense of belonging without the consequences of social division, regarding the working, middle and nobility classes. Everyone has a common understanding of togetherness. This is probably as much as I can bear to muster up of positivity towards the religious community.

Jacobsen: What is the nature of religious community?

Jørgensen: As I see it, separation, from the rest, a them and us, them who are looked upon as the chosen ones that will be allowed to enter paradise through salvation by the lord all mighty, and we the rest also recognized as the enlighten ones, those who are damned for our heretical opinions for all time where the next stop is simply put, purgatory and then hell.

Jacobsen: I recall an interview with a pastor a few years ago. He brought to mind something about the nature of a church, or any place of worship, e.g., mosque, synagogue, temple, cathedral, etc. It's not an empty volume. It's an idea. It's a place in which communally recognized dogmas are renewed, reinvigorated, and brought together under a common ideological framework. Often, superstitious, illogical, anti-scientific, and nonsensical, but, in a way; a certain nobility to the entire endeavour – something with grandeur, while sweet and reassuring: a comfort. Do you find the same or different, or similar?

Jørgensen: For those concerned, and by that, I mean those who finds a need for affirmation of the self through recognition, togetherness, understanding, comfort, and assurance that their imprint in this world is affirmed and further considered by the spiritual world as a sure one-way

ticket into the hinterland. Furthermore, my impression is, well, a hesitant affirmation, furthered by the proviso of common denominators.

Jacobsen: Have you ever had long chats with religious community leaders?

Jorgensen: During my time as a student of religious history, and with my didactic specialization also within religion. I did meet many Christians that had a special personified relationship towards their religious beliefs and debated whether or not their foundations within their faith could be justified beyond what is referred to in various sacred texts. Duly intended as to how they came into their strong religious beliefs, and what they saw as the most fundamental reason for their personal inclinations towards their belief system. Furthermore, what do they think about scientific truths. Their reply was as ever unified notion of; *that science has only so far confirmed what the Bible has always stated and will always state* with reference to its factualizing texts about the universe and all its content etc.

Jacobsen: How do the different major world religions build community?

Jorgensen: There are many variations here, but requiring is done manly through different medium, religious gatherings, among other things. Furthermore, emphasis is placed on, as mentioned earlier, a “them and us”, where a promise of eternal life is promoted, in short, a sure way to paradise. This is just some of what is being done in order to requite new members to their distinct religious beliefs.

Jacobsen: What world religions seem to have the demographic advantage for the rest of the 21st century?

Jorgensen: Geographically, based on the standards that have carried the religious imprint that we are left with today, I see no religious section that has a clear advantage. The changes that may or may not come by way of demographic bliss will thus have the intended alteration, based solely through means of assimilation, based on the pragmatic rule. This is absolutely crucial for the religious imprints of the future.

In sum, the understanding of the dominant religious dogmas of the future will be incontrovertible to which religious directions that will have the most distinctive and thus effective control over its followers.

Jacobsen: What is the Norwegian take on religion and religious community?

Jorgensen: Stable downward trend, where more and more people see the real underlying intentions that we have been taught to follow blindly through fear of eternal damnation promoted by the church’s friendly nature or now more precisely its total absence of that claimed notion of righteous friendliness.

Jacobsen: Any thoughts on the future of religious evolution?

Jorgensen: The religious layer will in the long run diminish, or change into an alternative form, it has always had, since the time when the first humans fortified themselves to the earthly elements, or through religious sacrifice in order to appease the higher powers, by human sacrifice or animal sacrifice. Or as in later times whereupon one exalted oneself to the status of God-King like the pharaohs of old. As long as there are people on earth, religion will exist, but as mentioned, it will probably be diluted in the long run.

Jacobsen: Speaking of, why is evolution via natural selection such a terrible bane for religious ideology?

Jorgensen: Reason being is relatively simple, where the genesis narrative in the beginning of the Bible, so to speak, appears as pure fabrication, against its counterpart relation to what is factualized according to Darwinist mindset. That is, what can factually be proven scientifically. The fact that our total existence does not exceed more than 6000+ years, is to me unfathomable, considering the mountain of evidence that indicates the complete opposite. In sum, the whole biblical fact notion would then be inevitably reduced to nothing more than pure nonsense, and possible resulting in a total collapse of all structural foundations on a global scale.

Jacobsen: Why are Intelligent Design proponents and Creationist so hell bent against it?

Jorgensen: As referred to above, the Bible for one loses all credibility, which in turn can lead to a total collapse regarding the ecclesiastical commonwealth. The religious conglomerates are not interested in losing their mighty and clammy hands over their blind subjects, where high politics governed through lust for power and wealth are at stake. The question is how much longer can this misleading policy be allowed to continue before the world finally wakes up?!

Conversation with Tor Arne Jørgensen on Adolescence and Quirks of Historical Figures: 2019 Genius of the Year – Europe, World Genius Directory (7)

May 1, 2022

Abstract

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. He has several IQ scores above 160+ sd15 among high range tests like Gift/Gene Verbal, Gift/Gene Numerical of Iakovos Koukas and Lexiq of Soulios. Tor Arne was also in 2019, nominated for the World Genius Directory 2019 Genius of the Year – Europe. He is the only Norwegian to ever have achieved this honor. He has also been a contributor to the Genius Journal *Logicon*, in addition to being the creator of toriqtests.com, where he is the designer of now eleven HR-tests of both verbal/numerical variant. His further interests are related to intelligence, creativity, education developing regarding gifted students. Tor Arne has an bachelor's degree in history and a degree in Practical education, he works as a teacher within the following subjects: History, Religion, and Social Studies. He discusses: Bill Sidis; streetcar transfers; *The Animate and the Inanimate*; Newton; the Church Fathers; big discoveries in their mid-20s; earliest memory; earlier indications of a high-I.Q.; academic record; the education of the next generation; the extracurricular activities; the bullying; *Ulysses*; a healthy culture of keeping a gifted student from getting a big head; certain extremes; James Maxwell; Willard Gibbs; brown horse; interests different than the other kid; the competition with the smart girl in class; behavioural signs of talent; strident stories of violence; *Ulysses* appeal; the law of Jante; fuel; and theories.

Scott Douglas Jacobsen: Let's continue with a small addendum on some high functioning people in history, and some who appeared to fizzle out, but simply worked in, more or less, solitude: Bill Sidis, or William James Sidis, is referenced a lot, by a lot of people, in the high-I.Q. communities. What are your first impressions about him – surface level stuff?

Tor Arne Jørgensen: Incredible brilliant person, put in a system that does not “get” him and thereby does not understand his dire needs for acceptance in a far to cruel world. Exploited and give a burden that shorted his lifespan, by the very people his but his trust in and for what, or for who one might ask? Alone, fleeing form the shackles of society and it's presumptions.

Jacobsen: What seemed to be the fascination with streetcar transfers for Bill?

Jørgensen: We all have our quirky little precious gems; this was his to collect and to enjoy.

Jacobsen: How does his perspective on the cosmos in *The Animate and the Inanimate* seem to you?

Jørgensen: I have not read all his work, but from what I know about him and his work, a man far ahead of his time. Sidis work at a young age made him even more so an enigmatic study for our understanding of the cosmos. Sidis can be viewed upon as a beacon, that directs us toward an even more clear comprehension of what to grasp of the cosmological spectrum.

Jacobsen: Newton, apparently, was a notorious asshole in his time. A vindictive person against enemies, unsure if real or perceived as I am not a subject matter expert on his life. Also, a purported lifelong virgin, undisputed mathematical genius, and ‘plugged into the universe,’ according to famous smart person and science popularizer with a specialization in astrophysics, Dr. Neil deGrasse Tyson. What do you think of Newton?

Jørgensen: As you and me both, of what understanding I may hold of him, that the spitefulness and cruel intentions towards his surrounding can be understood in so far as to being left with the feeling of the “misunderstood genius.” The desperate notion of contentment be fulfilled through ones work as in an attempt of despair to be accepted among one’s general population. Engrossed in one’s work can further be understood, whereby the time spent at anything that does not produce a hint of common sense to a brilliant genius is to be avoided at all costs, a clean mental health and physical outlook is to behold as the standard for excellence.

Jacobsen: Why was Newton able to spend more time on the Church Fathers than on mathematics and still able to mathematically map the middle world of space and time as we know it, Cartesian coordinate system stuff?

Jørgensen: I feel the need for enlightenment at this point, mostly due to the lack of knowledge at this point. Can only guess as to why, but his brilliant mind was preconstructed in the pursuit of knowledge within both the laws of cosmos through his understanding of both physics and math.

Jacobsen: Most smart people make their big discoveries in their mid-20s, I believe, or most mathematical geniuses, e.g., physicists, and the like, then never make another big discovery. Newton was making breakthroughs throughout his life, including into old age. Why?

Jørgensen: Look at Leonardo Da Vinci, his was productive until he died at age of 67, the intelligence is solving down by age, but is the same true of creativity?

Jacobsen: You wanted to talk about early life for you, too. So, a quick side step, what is your earliest memory?

Jørgensen: My time at a place called Bråstad which is located about 3 miles inland from the town of Arendal. This was back in 1977, remembering a brown horse that we would go riding on with my father, happy times.

Jacobsen: Were there earlier indications of a high-I.Q. for you? Or was this something simply not noticed by parents and surrounding community?

Jørgensen: No there was not, I just felt a bit outside, a stranger to my elements. I did not like what the other kids liked. Remembered that I was curious of my surroundings a lot more then the other kids, I could find myself asking why is about most things, the reply back was always do not worry yourself about these things it is what it is, leave it alone. Sadly, I did.

Jacobsen: How was your academic record in elementary school and high school?

Jørgensen: As I was a late bloomer, and I had no one to support me in academics at an early stage, I was an average kid with average grades. It was not until later in high school that I excelled, but as to records, it was not popular to be clever, amongst my classmates. But there was one test I did, this was fun as we had a clever girl in our class that was looked upon as smart. The test was a 60minutes test, and to make the story short, I used 15minutes and aced the test as the only one in my class. The second best was the girl, and she used the whole 60minutes.

Jacobsen: What do you try to impart to students at your work? How do you try to mentor and educate your children in a similar manner, if so? The education of the next generation of Norwegians is a huge responsibility, and probably hugely underpaid, so thank you for dedicating your talents and taking a likely income hit in the process.

Jørgensen: Well firstly thanks, and yes, we as teachers is vastly underpaid compared to the work, we put in. In my everyday job I try my best to unlock the students inhered creative abilities in the hope of creating a base for self-development and structured direction of how to get where you can realize your most potent potential for academic success.

Jacobsen: What were some of the extracurricular activities, if any, to stimulate mental activity and satisfy personal curiosity?

Jørgensen: Meditation, done as reason to develop an awareness as to maximize your physical/mental capabilities.

Jacobsen: Were you bullied? If so, how? If yes, or not in fact, how would you advise younger bullied students to deal with the bullying?

Jørgensen: Yes, bigtime! To school and back home again, there was a gang that was hounding me and my brother a lot through many years. We back the got into bodybuilding and fought back, it then stopped. This is not a good solution as violence is never a solution, but it is what it is. Now I say to my students, try to walk away, or to confront through dialog. Most important is to stay strong mentally, believe in yourself, it always wins through in the end.

Jacobsen: What was your favourite book to read while young? One of the books that you re-read a lot.

Jørgensen: Mostly I watch movies, all I could get my hands on, books came later in life in high school. Then it was directed towards history, religion, politics, but if I would pick one, James Joyce "Ulysses."

Jacobsen: How does Norway have a healthy culture of keeping a gifted student from getting a big head about having a more effective cognitive ability than others?

Jørgensen: In short: The law of Jante, keeps us in check.

Jacobsen: Albert Einstein famously was very unkempt. Bill Sidis had a real sweet tooth. Isaac Newton died a virgin. Is this a trend among the people noted as, at least, accomplished or directing their mental energy in a successful direction? A tendency towards certain extremes, e.g., Glenn Gould was a major hypochondriac and used all sorts of prescriptions to reduce anxiety and the like, probably against better medical judgment of experts.

Jørgensen: Did not know about Bill Sidis sweet tooth, funny, I cannot get enough of sweets, I eat as much as I can get every day, not good for my health, try to compensate with more training, I know I am just kidding myself with a healthy output with all the crap that I put into my system, but I can not help myself.

All I know is that time is not on my side, would love if I could live for 200 years, I would then have better time to get around to all I feel I need to do in my life, so for me short meals is an absolute, I do not see food as an enjoyment to be savored, but purely as fuel to keep me going.

Jacobsen: James Maxwell was known to have a huge productive output in a short period of time. How did he do it? History is your expertise, so I'm focusing there. You simply would know more.

Jørgensen: Well, I would hope so, as you say history is my field, but sadly not James Maxwell, I know of him, but not in the extent to say anything that is not already known about him I general. But I understand as to what you mentioned as high periods of output, as this is the case for myself as well. I have these periods where all I do is work on what ever it takes in days end. Do not why this is though.

Jacobsen: Willard Gibbs' footnotes are said to have been the inspiration for several major discoveries in the lifetime research of the next generation of researchers. It has a semblance of Newton; his crumbs are others' lifetimes. Is this mythological more than fact, or is there something of a truth here?

Jørgensen: I think that It at least should be noted as such.

Jacobsen: Do you remember the name of the brown horse riding with your father in 1977?

Jørgensen: No sadly I do not, he had 7 horses in total at one point, but do not remember any of their names as I was from the age of 2-5 years old during the time when he had them. We had at that time a small farm where we kept chicken, was breeding dogs, kept rabbits, and had an angry bull as I recall.

Jacobsen: How were your interests different than the other kids?

Jørgensen: We all did the same things as I use to tag a long, but it gave me little pleasure, especial when it came to ride mopeds, cars, I remembered that my brother and his friends use to talk about rims, tire size, sound system, and machine size, my mind was not tuned in, there was nothing special that I can remember thinking about, just that this was boring to listen to.

Jacobsen: Ah, the competition with the smart girl in class. It's like an old rom-com early life story. Do you know what she ended up doing in later life?

Jørgensen: I think it was within engineering but am not sure as last time I talked to her was about 28 years ago, and I remembered just hearing about it.

Jacobsen: How do you notice behavioural signs of talent in students who may be struggling academically, as this is uncommon, because talent is uncommon, and a hunk of the talented can be spotted in their academic prowess?

Jørgensen: Like myself, one usually sees that something stands out in their behavior pattern that may indicate an inherent talent. It can be so much as to what those who possess this talent usually seek out their field as they then are experts in far beyond what is normal for their age group, and further give indications that they feel that other professional groups are boring, or that they get easily irritating as to their surroundings through the lack of understanding of their own role within a normal school setting.

Jacobsen: Were there any particularly strident stories of violence in the midst of the bullying?

Jørgensen: Yes, but that is a bit hurtful to rip up into now.

Jacobsen: What stood out about *Ulysses* to you?

Jørgensen: Summed up: The way the characters of the story are portrayed is exposed in all its emotional wonder.

Jacobsen: I recall the law of Jante in prior interviews with other Norwegians, and you. This was mentioned in the *Deus Vult* interview with Domagoj Kutle, too. He may have indirectly referenced *In-Sight: Independent Interview-Based Journal* in the opening letter or editorial, in fact, to one issue of the newsletter, in a highly amusing manner. Something about the Catholic Church being under attack – alright then, cool. Also, how did the law of Jante form? Because I have no idea.

Jørgensen: Janteloven is a text written by the author Aksel Sandemose in 1933 and was first presented in the work *A refugee crosses his trail*. This text gives a good picture of “human beings’ inherent evil and ability to oppress one another”, as Aksel Sandemose believed to characterize human beings from their first interaction.

Jacobsen: Other than sweets, what foods are the fuel to keep you going?

Jørgensen: Incredibly simple diet, consisting of crispbread, plain bread, cereals of varied variety. I’m not a chef, and anything that can be made in under 2 minutes is great, will not waste my time on unnecessary tasks in order to fill my stomach with nutrients.

Jacobsen: Do you have any theories about history, about the cosmos, etc., in development or developed?

Jørgensen: As far as history is concerned, it only repeats itself in newer editions, like an onion where more layers are added as time progresses, only to be peeled away at each major historical event, when the whole process starts all over again. When it comes to the cosmos, where an outer unit should be behind everything and we on earth are considered the center. What, then, is the point of creating a universe that is constantly changing, as well as expanding, where the distances are so great that we will never be able to understand its vast content nor for that matter its sublime substance. What was then the intention of basing such a meaningless existence on such a degree, I find myself constantly asking...

Conversation with Tor Arne Jørgensen on Western Europe, Russian Aggression, Putin, Zelensky, China, and India: 2019 Genius of the Year – Europe, World Genius Directory (8)

May 22, 2022

Abstract

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. He has several IQ scores above 160+ sd15 among high range tests like Gift/Gene Verbal, Gift/Gene Numerical of Iakovos Koukas and Lexiq of Soulios. Tor Arne was also in 2019, nominated for the World Genius Directory 2019 Genius of the Year – Europe. He is the only Norwegian to ever have achieved this honor. He has also been a contributor to the Genius Journal *Logicon*, in addition to being the creator of toriqtests.com, where he is the designer of now eleven HR-tests of both verbal/numerical variant. His further interests are related to intelligence, creativity, education developing regarding gifted students. Tor Arne has an bachelor's degree in history and a degree in Practical education, he works as a teacher within the following subjects: History, Religion, and Social Studies. He discusses: European interpretation of the Russo-Ukrainian war; the major losses and wins for the Western countries in this war; Putin; Zelensky; the massive disagreement with the Russian Federation's actions from the United Nations General Assembly; other major players on the world stage; China; African states; the post-colonial states with large economies; this conflict on 1 to 10; reactive commentary; nuclear weapons; the Nordic countries; the U.N. condemnation; the "neutral zone"; health; bold moves and a legacy; a bilateral conflict; a war in the economic sphere; cyberwarfare; democratic development; Sino-Russian relations; and any sympathetic statements by Western European leaders.

Scott Douglas Jacobsen: What is the European interpretation of the Russo-Ukrainian war at the moment?

Tor Arne Jørgensen: The general view that we in Europe have, and with that I mean the Nordic countries bordering Russia in particular, is that with this war and the possibility for aggression that Russia poses against us, especially against Sweden and Finland which are not included as per today into the NATO alliance are viewed as grave to say it mildly.

An imminent accession into NATO for these two Nordic countries will not be an easy decision by the two nations leaders to make, as the border with Russia and an ever-increasing narrowing of the "neutral zone" if one can call it that between NATO alliance and Russia. Thus, it is not an easy decision to make, as this neutral zone and its weathering can accelerate an all-out escalation of the conflict between the West and the East. Russia and the West do not benefit from such a direct neighborhood, a neutral zone must be established so that the war does not become global.

Here in the West and especially Europe, we must hold back, send the proper signals to the United States, not to push more than necessary, by that I mean, purposely to create stability and going forward to perhaps put an end through acts of diplomacy and dissolving warring between Russia and Ukraine. This sums up what we in Europe now hope for in my view.

Jacobsen: What have been the major losses and wins for the Western countries in this war?

Jørgensen: The losses are clear, with the intention of looking at oil and gas, but not nearly as bad as for Russia, as this has so far been a disaster for its economy. Western military victories are probably not something to be viewed, as any territories have not been taken or given over by eastern states. So the losses are seen only in economic terms so far, while the victories are noticed by increased support against dictatorial tyranny, and the advance of democratic values.

Jacobsen: What did Putin underestimate?

Jørgensen: The Ukrainian leadership and the will of the Ukrainian people to resist Russian aggression.

Jacobsen: What did Zelensky underestimate?

Jørgensen: He was probably not aware of the role he was to play during this war, in which the similarities with England's greatest statesman of all time, Winston Churchill has been made openly. Furthermore, the West's enormous support as to both humanitarian and military, and as well as an overall global compassion and support from all generations young and old.

Jacobsen: How has the massive disagreement with the Russian Federation's actions from the United Nations General Assembly changed the international discourse on the war?

Jørgensen: The fact that the Russian Federation has a permanent seat at the Security Council and thus cannot be removed indefinitely by allowing the current government to continue to govern as they please. But the suspension from the UNHRC and the symbolic significance it has is possibly a sign of a shift in the balance of power, or the influential effect that the Russian Federation has in its executive mandate.

Whether this will then be what it takes to create a new or alternative direction through changed attitude towards the United Nations and its Security Council, or whether new guidelines should be considered of what a member state can allowed itself to do in accordance with human rights violations in wartime remains to be seen. That a change in membership conditions should be brought up for debate is clear.

The UN's reputation as a peacekeeping organization during peacetime or not is being put to the test more now than ever before since the organization first began just after WWII and the foundation from which it was built on. Sees now a change of organizational absolutes as an inevitably necessity, viewed from the current situation regarding the Russian-Ukraine war and the powerlessness in which the United Nations finds itself in the same manner as during the time of the League of Nations.

Jacobsen: What about other major players on the world stage either by economy or population size, or both? How is India taking this wartime issue?

Jørgensen: India's economic implications resulting from the war between Russia and Ukraine have their clear effect as to the fall in the global market, prompt from the fall in the stock market, specifically with reference to India's dependence on oil in various forms, including sunflower oil coming from both countries (Russia-Ukraine). Furthermore, technological implicit in the tech sector, not to forget the pharmaceutical sector.

India can certainly adjust towards a more independent policy line, where a rather marginalized strategy, result to a reducing of outsourcing, may in the long run prove to be beneficial not only

for India, but for most countries whereas their independence or promos must be reconsidered as these the type of conflicts as we now see will probably not remain isolated in the future. The protection of one's natural resources, and upscaling of and for one's close bilateral relations across close neighbors, can break outstretched and more insecure imports of the most vulnerable of resources.

Jacobsen: What is China doing now in reaction if any?

Jørgensen: It seems to me that China keeps a low profile still and cleverly so, because one must keep in mind that China has here a unique opportunity to observe the West's and its reaction with reference to the Russia -Ukraine ongoing conflict. How stable and structured is NATO today, where is the community's trust, and to what extent is NATO's military might view today. One must not look at today's NATO in the same manner as to its military capabilities as the former League of Nations and to what it had in its arsenal nor its lack of a tight alliance. NATO is probably stronger today than ever before. But I must admit, that to what extent NATO's role had to play after the fall of the Iron Curtain back in -89, when the need of such an alliance was no longer so pressing in what seemed to be peacetime and added in the Warsaw Pact's dissolution during the summer of -91.

But back to China and the role of the Chinese government now, is I think, to sit tight, wait, stay calm, take notes regarding, strategically, materially, economically, and finally the key most important thing, honor, to keep their honor and not lose face, something that Russia has so solemnly now done perhaps irrepealably damage its own role as an historically important powerhouse. This is probably what will be mostly important for China to do now, furthermore, its role ahead in terms of the China -Taiwan controversy and adding NATO's role in its support of Taiwan and thus resistance from the Chinese government of the probability of an extended formation of a NATO pacific alliance.

Jacobsen: How are African states, e.g., Nigeria, taking this into account in terms of impacts on their economy?

Jørgensen: What cannot be avoided in this context is the importance that Ukraine attaches to the world's food supply, as Ukraine is the main grain stock for many of us. African northern states feel this even more, as many of these states are daily dependent on the supply of stable and secure grain delivery from Ukraine in particular, the same can be said with regards to food oils which then constitute an increased importance in the supplement in grain / food exported from Ukraine to the world.

For those countries that are completely dependent on the safe supply of grain to feed their compatriots, this is a very unfortunate situation to be in, far worse than many of the western countries that have alternative solutions to consider ensuring stability of a stable grain stock etc.

Jacobsen: What about the post-colonial states with large economies, e.g., the United States of America, Canada, Australia, New Zealand, and Israel (and South Africa)?

Jørgensen: If one considers the United States, as they are not dependent on Russian oil to the same extent of what Europe is, with Germany as the most dependent state in Europe of Russian oil and gas. Nor when it comes to access to stable business routes to ensure food deliveries to its own population.

The same could be said at least to some extent regarding Canada, Australia, New Zealand, and South Africa as well, where one should take certain restrictions in the requirement for stable

energy sources regarding fossil fuels, and to a certain extent again in the degree of self-sufficiency of food supply, and the availability of various grains and oils directed towards the food industry. It should probably also be added that Australia's atomic political foundations, are self-supported through sufficiency by and for one's own omittance of the import need prompt to the state's existence, is thereby marked to be define as self-sufficient in accordance with the Australian statutes of sustainability.

Jacobsen: If we scale this conflict on 1 to 10 with 10 being WWI and WWII, and 1 being global peacetime, where does this conflict sit on this spectrum?

Jørgensen: From what you suggested as to what scale to use, I will probably lean towards 3 or 4 out of 10 as of current time, where a upscaled to a clear 4 out of 10 within the next 2 months, for then to be scaled down again to 2 out of 10 within the next 8-12 months.

Jacobsen: There was reactive commentary immediately on social media about WWII. How much of this is simply hysteries rather than realistic appraisal about the situation in the earlier parts of the war and now?

Jørgensen: A changed state in and around the theme of World War III, is for me not from the state one sees as of today nor what was at the start a realistic picture to form or take in. Why do I say this, probably because Russia's interests do not, even if Putin and his state may impromptu us to believe, that an end war is a possible comprehend rum? That a long-term planning as it is then described regards to the world media, one quickly sees that his plan (Putin) and his cabinet failed miserably.

For me, when one lays a plan A, then one lays plan B-C-D... In the early stages of the war, the long supply lines regarding the 6km long convoy that was to make Russia and its immense power for the "world to fear," resulted in a complete ridicule for all of us to watch. After this rather embarrassing mockup by the dreaded Russian war machine, one thinks and sees that this cannot be well planned. If well planned, Russia would have had to be aware of which corner they would paint themselves into when they started their war campaign.

Now Russia is almost looked upon as a global outcast, the Russian leadership is detested completely by a united West. The Russian leader has destroyed the pride of his country and what trace of honor that must be left should now not remain permanently destroyed. A third world war seems to me to be impossible for Russia's people, internal government, nor for Russia's allies. Even the participation of Syrian mercenaries will probably not change the outcome of this war, nor will Sweden's and Finland's incorporation into NATO's safe embrace.

Finally, I would like to point out that the West is a greater threat to a third world war with its constant tightening of the net around an ever increasingly pressured Russia, whereby their allies can counteract NATO's patronage of Russia's autonomy.

Jacobsen: Would Putin use nuclear weapons? Would NATO nations consider the use of their nuclear weapons if so? In either case, these seem insane, as this is "mutually assured destruction."

Jørgensen: We only have this one planet, we all play in the same sandbox, the world has too much to lose. Look at China and all the developments that they are now experiencing, they are one of the world's strongest economies. They and India will not let Russia end the world in the quest to acquire lost lands. Everyone realizes that the Soviet Union and its heyday are over, and the President of Russia must realize this once and for all.

Jacobsen: Will this grave picture from the Nordic countries create a necessity for wartime participation from most of them on the side of Ukraine? If so, which nation-states?

Jørgensen: If one looks with regards to the application for NATO membership for both Sweden and Finland, thus marking a possible historic Nordic shift, then the Nordic alliance in addition to the alliance with NATO as an extra boost security against Russian aggression. By that said, will then Russia remain a lasting threat for the Nordic countries to deal with, do not think so. Separate we are small and maybe few, but united we are strong and somewhat plentiful.

Finland alone has previously shown the world that they can certainly hold their ground, for example during the Russo-Finnish war back in 1939 -40, where Russia invaded Finland, the Finnish forces not only held their stand, but also manage to push back the invading forces for quite some time. But at the same time, it should be duly pointed out that Russia's in that sense increased cooperation in every sense with China, as well as North Korea, where Russia's support in a military sense has been marked in China as well as North Korea's military with reference buildup after the end of World War II.

One should further keep in mind that the Cold War was never really over, but forever-expanding regards to NATO expansion, the NATO alliance has been eating away more and more of territorially sovereignty on its way towards the Eastern Front, whereby the current tense situation now runs counter to everyone's astonishment?!

It should also be said that the United States and its status as the world's only superpower, can no longer be stated as factual.

Iran, Russia, North Korea, and USA, yes, all countries that have nuclear weapons capabilities for use in their arsenal are now to be considered a superpower as their nuclear armaments can reach all targets across the globe. The quintessential question to be asked now is, by what purpose is it to use these weapons, aren't we all still live in the same sandbox?? If we were to start a third world war, then the outcome would be very possible, as Albert Einstein once said, If, this becomes a reality, that is, World War III, then "the next one will be fought with sticks and stones." The idea of being bombed back to the Stone Age, where all hope of restoration is to be regarded as utopian wishful thinking, think of a Mars-like scenario, and end of civilization as we know it, the reality hits you.

Jacobsen: Does the U.N. condemnation, overwhelming, of this situation, justify legal ramifications and an investigation into the crimes and human rights violations by Russia against civilians and Ukrainian sovereignty?

Jørgensen: Undoubtedly yes, although one can ask questions of a more investigative position, so yes, here there is no doubt about its legality nor one's legitimacy.

Jacobsen: How has the "neutral zone" evolved over time?

Jørgensen: The expansion of the "neutral zone" between the West and the East, where a constant invasion, or rather a narrowing of territorial sovereignty based on one's origins after World War II as it is hereby put forth, regards to the eastern part, and then the expansion of territorial sovereignty in pictorial sense, in a more recent historical perspective indisputably proven with reference to Western NATO alliance due presence.

Jacobsen: Putin is old. Is his health an issue?

Jørgensen: When it comes to age, one would say no, Putin's age is not a decisive factor in this context.

Jacobsen: Is there a sense, by him, of wanting to make bold moves and a legacy through the invasion? Or is his concern more geostrategic, or both?

Jørgensen: Simply put, to speak of a person who was despairing of the weathering powerlessness that arose in the following days after the Cold War when the Iron Curtain fell. The dissolution of the Soviet Union, a disintegrating nation where total chaos reigned, no one would nor could respond when a desperate Putin asks for advice of his leaders; "what happens now?" A former KGB agent, who has his special field within spreading misinformation promoted for the desire to create fear and control by the few over the many.

A brilliant bureaucrat, where a rapid rise after the end of the Cold War, in which former President Boris Yeltsin at the very beginning of the 21st century, puts Putin as his appointed prime minister and further heir to the presidency at the very beginning of a new millennia. One now sees, at least in some way a clear comparison with the Nazi leader during World War II.

What can be speculated about now is, will we then see a similar demise like the one we teach our children in schools regarding Hitler's last days in his private bunker or not, will history repeat itself or not once again...?

Jacobsen: What is the process, historically, of other nations being drawn into a wartime scenario, and then a bilateral conflict becoming regional if not global?

Jørgensen: Extensions of alliances, inaugurations of warlords, decisions by and for the incorporation of territorial sovereignty, where a "safe haven" of a supreme guardianship calls out to you. A confident big brother who takes care of the little man, whereby the suppressing duty for little brother is to do everything that big brother says he must do or else, similar to the whim of a madman.

This is a short, but all so true description of the Western alliance, and it does not improve in any way with reference to its eastern counterpart. This is what we (the people) must endure by our wants or not. So yes, the small ones are eaten up by the big ones, the powerful ones rule the impaled ones. Expansions have been made, are now being made, and will in the future be leading for world politics where give and take every day, controls the outcome for peacetime or not ...

Jacobsen: Is this primarily a war in the economic sphere at this point?

Jørgensen: The economic implications that we all see and feel in our everyday lives are palpable. What leads in the future can quickly overshadow the financial consequences. As they are the first to emerge, and what is experienced the longest after the actual warfare is over in accordance with clean-up and all the humanitarian work in the aftermath.

Jacobsen: What about the current forms of war found online with digital technology, espionage, hacking, surveillance, and cyberwarfare in general? Have these been much of the conflict?

Jørgensen: Yes, based on Russia's history of cyber warfare, manipulation, and attempts to gag neighboring states according to their rule of law, democracy, and freedom of speech regarding the general population both abroad and at home. So yes, this is a well-known tactic from the Russian government, historically as well as to current time conflict between Russia and Ukraine.

Jacobsen: How many countries, in varying degrees of democratic development, count as “democratic” globally compared to autocratic? I am aware of a march towards more democratic, secular, and Enlightenment views globally – unsure as to how much, though.

Jørgensen: The democratic index points in the direction of an expanded perspective, with a downward spiral for the autocratic forms of government. If you look at the index today, full democratically governed countries would be around 6.4% and countries with fully autocratic rule would then be around 37% but take these numbers with precaution as they can vary.

Jacobsen: How will, or are, Sino-Russian relations impacting the war? Has the Chinese Communist Party made any formal statements or motions regarding this war?

Jørgensen: The camaraderie between China and Russia is better than it has been for a long time, the border conflict that took place back in spring of -69, has today by no means no remnants of any lasting disputes between these two countries. So no, it does not mean that a consequence of that past tense historical conflict in any regards has been a major factor to calculate into the current wartime conflict between Russia and Ukraine. China and its position now have been all about keeping calm, looking at what is happening by observing the situation in anticipation of its outcome pro-con.

Jacobsen: Have there been any sympathetic statements by Western European leaders towards Putin, as in understanding the aggression against Ukrainian people and the annexation of Ukrainian territory?

Jørgensen: Believes and believes that most Western leaders dissociate themselves from what Putin has now messed up. A clear response in a statement of support for what is happening now, would be met with disgust by a united NATO alliance and a united European population led by the United States. My reply to the initial question is then clearly presented.

Conversation with Tor Arne Jørgensen on High-Range Tests, Writing, Social Media Dieting, and Teaching: 2019 Genius of the Year – Europe, World Genius Directory (9)

August 1, 2022

Abstract

Tor Arne Jørgensen is a member of 50+ high IQ societies, including World Genius Directory, NOUS High IQ Society, 6N High IQ Society just to name a few. Tor Arne was also in 2019, nominated for the World Genius Directory 2019 Genius of the Year – Europe. He is also the designer of the high range test site; toriqttests.com. He discusses: the first one developed; numerical and verbal tests; 11 tests; Zgonglin Li, Nitish Joshi, and Jason Betts; pluses and minuses; Jason Grant; writing and thinking skills in a dialogic format; areas to explore; the world of tests and test construction; written communication; prepare mentally for these interviews; a break from social media as an experiment; needless distractions; the temptation of time wasting; schooling the young; credentialed in the study of some aspects of history.

Scott Douglas Jacobsen: There's an interesting niche community all over the world. One in which you're immersed. I have interviewed people in them, heard and read the vast amount of gossip from people about one another (shocking, hilarious, insightful, and scary, depending on the story). I would, hopefully, engage this more in depth in a separate series, but I want to cover some of the aspects of novice test construction. Individuals with various types of problem-solving skills in the variants of the high-I.Q. communities. What test was the first one developed by you?

Tor Arne Jørgensen: The first high range test I designed was a collaboration with myself and Arne Andre Gangvik back in 2016, and it was decided to be called: Scout, which is a verbal test with 30 tasks of varying difficulty.

Jacobsen: Why focus on numerical and verbal tests?

Jorgensen: Simply explained, that these are the tests that I like best and are best at. When I first started taking these high range tests, I spent far too little time, around 30 minutes to 1 hour on tests that one should have spent 8-10 hours on. I learned a lot along the way about what I was good at and what I was not good at.

I'm not good at figurative tests, they are to be recon as my Achilles heel, then there are the numerical tests that I am somewhat better at, then lastly, verbal testes, whereas the association tests are the most preferred ones. Furthermore, I cannot rush as I am not good at time-limited tests at all, but at deep analysis, that is my strength. This corresponds well with how I am otherwise in terms of physical abilities, where I am a 10-15K runner, and as a cyclist I am to be considered a tempo rider.

Jacobsen: You have 11 tests: Gradus 3 Light, Gradus 3, Quinque, Quinque 2, Quinque 3, Quinque 4, Spot, Scout, Capiuntiq, MVNLT 20, and Lambda XIX. What test has been

taken the most? Who has done the best on them if I may ask? Alternatively, what has been the highest score on the one of your tests on the 1st attempt and on the 2nd attempt?

Jorgensen: The tests that have the most attempts is MVNLT20, then my Quinque tests.

1. To the question of who has the top score, I cannot reveal it, but all the Quinque tests except Quinque 3 have been totally solved. MVNLT20 has been solved 19/20 as a top score, but all the tasks have been solved correctly. The same goes for Spot, Gradus 3 and Gradus 3 Light. The remaining tests have been partially solved according to the 1st and 2nd attempts; this applies to all my tests. It should be mentioned that only Quinque 4 has been solved completely right in the first attempt.

Jacobsen: You link to Zgonglin Li, Nitish Joshi, and Jason Betts, on the website. Why those individuals?

Jorgensen: Simply justified, by the fact that they are according to what I know great people, with lots of talent for creating high range tests among other great qualities. Fantastic, and to add kind individuals that have a solid reputation for being serious test developers.

Jacobsen: Most people who develop tests independently do not have professional qualifications directly relevant to psychometrics or experimental psychology, or neuropsychology. For example, Dr. Xavier Jouve of the former Cerebrals Society has a doctorate in experimental psychology. He's into photography now. Dr. Gina Langan of the Mega Foundation/'Mega Society East' has a doctorate in neuropsychology. Dr. Evangelos Katsioulis, M.D. is a psychiatrist and a medical doctor. So, well-educated people and intelligent exist in pockets of the community with directly relevant or almost directly relevant qualifications. Yet, back to the main observation, most do not. So, what pluses and minuses can arise in this context of a lack of relevant structured formal education or qualifications?

Jorgensen: Since the high range tests, or advance puzzle tasks, as an uneducated person according to what you are referring to here in your line of question, then these tests are not to be considered as intelligence tests, as they are to be considered to be mere logically based tests and nothing more. It should also be noted that I have received the standardization that is requested on my website and on each test. The fact that with each submission, scores from other high range tests must be brought with the persons test submission regarding the need for norm validation, and then a previous certificate from supervised tests is then provided by request from the test author. These supervised psychometric tests are the very best for providing a valid norm.

The norm is then usually based on 30-50 attempts, whereas many are based on these monitored psychometric tests, this in return provides me the test author with a deviation normed base of around 1-3 points at most, this example applies well to my MVNLT20 test, here the deviation has not exceeded on the last 15 attempts more than 3 points deviation plus minus from the supervised tests.

Positive sides regard to high range tests; they are much cheaper than these standard supervised tests, whereas my own tests are free of charge, the standard supervised tests on the other hand cost at least from 50 to 60 dollars as to what I last saw. As previous stated, the deviation from the standard supervised test and my own MVNLT20 test seems to be within 1-3 points.

The negative side is that you will not get the validness as to a correct supervised normed IQ score.

High range tests does in most case, not provide you with a proper IQ score as they are not correctly based on the correct psychometrics and are further not supervised by an certified professional psychologist, thus making them unreliable for a proper IQ score.

Jacobsen: Thank you for the mention in the interview with Jason Grant, by the way, how was the live interview compared to the more formal back-and-forth correspondence interviews done by you and I?

Jorgensen: I liked it very much, a wonderful format that gave me an extra boost. The only thing that was and still is a bit sad, is the time it took and now takes to publish these interviews. Jason Grant is a nice person, but it's slow going to publish each interview, still waiting for part 2 of the interview series... That said, I like the format that we currently work as to the written format, this allows me to be a bit more colorful with regards to my particularities, as my orally flamboyance is not quite on par with my written formulations.

Jacobsen: We can cover more of the high-range test materials in another series, as I will be exploring some of these issues with others. You have some plans to transition, apparently rapidly, from the world of tests and test-development into the world of writing and thought. How have some of these interviews together helped to develop some writing and thinking skills in a dialogic format?

Jorgensen: Undoubtedly yes, these interview interactions that we conduct on a steady basis, the exposure of what is to be covered, as well as the nature of the content produce by its excellent qualitative elements, are thus promoted in dialogue-learning qualities that in turn can be viewed as evolving mantras.

Jacobsen: What seem like areas to explore into the future for us?

Jorgensen: To be able to continue very much in the same direction as now, perhaps direct the focus even more so towards the world of tomorrow and perhaps dig more into the world of fiction. Divide your interview format, create a separate platform by and for a book only format, in the anticipation by the desired intent of a more personal in-depth interview etc. Furthermore, to entertain the notion of a Podcast interview setup, done so to create new innovative appearances for both the interviewer and the interviewee also it gives you the opportunity to get down and dirty with the interviewee.

You have here, a golden opportunity for positive outlook expansion, as well as variety for yourself and the person being interviewed, and to add, that this Podcast format is the most applied platform by todays standard, also it lets you learn more about you the interviewer and the person you are interviewing. You have an absolute unique access to some of the most exciting and brilliant interview objects there is to get a hold off on a global spectrum both inside and outside the high IQ community. Think about the mind-bending opportunities that this could bring for you, both in terms of revenue and publicity. Hope you will one day embrace this idea as many of us would like to see this become a reality!

Jacobsen: Why decide to retire from the world of tests and test construction, and so on?

Jorgensen: Time was apt for change as I can go no further on my quest for new high score records. I currently hold the Norwegian record with my high range IQ score of 184 on my 1st attempt, this is good enough for me. But should someone beat this record, well...

When it comes to designing these high range IQ tests, the selection is so diverse. The creative side of designing something new and exciting as a high range IQ test is valued to be, becomes a bit suspicious to me, due to the fact that the ones I create, are not to be considered as an IQ tests per say, as I am not a certified psychologist, nor am I an expert as to what data I am supposed to collect from the test, i.e., what psychological trait I am supposed to extract etc. My personal excitement of designing these advanced puzzle test, regards to one's creative engagement has for me now ended.

Jacobsen: For those who don't know, you're writing in a second or nth language when writing with me. Most of the high-I.Q. communities tend to do this if taking an international focus. English hasn't been an issue for many of them. Even so, they learn quickly and adapt – duh. Acquisition of an innate sensibility to emotive content and intuitive-instinctive capacities may be too late for most if learning a language past teenage years; however, the content and capacity to communicate with analytical clarity remains a strong possibility and a trend for those who put in the effort. Have you noticed an improvement in written communication since our first interview together?

Jorgensen: For me personally, as I do not know about you and your opinion as to the level of improvement of my English skills, but as to my own experience, the improvement is tremendous, hopefully this spells well for me as I am about to start an English course this coming fall, at; The University of Agder (UIA).

Jacobsen: How do you prepare mentally for these interviews with me? Questions can range widely. Time commitment can be intensive. The audience of the high-I.Q. will be, by definition, more cognitively powerful, so more likely to be critical of any and all content and opinions expressed. Also, why repeatedly choose to be a willing interviewee (victim) with me? (!)

Jorgensen: When it comes to preparing for these interviews here, there is not much preparation necessary for me to do as I am sitting on most of the information needed to be quoted further and just run with the question formulation presented by the interviewer. But it should be said, that when it comes to interviews, which revolve around historical aspects, some preparations must be made as it can be good to freshen up a little on any eventualities that one should not necessarily remember there and then. When it comes to a part with which you mention with people with high intelligence is a little pickier about what is presented when it comes to spelling of sentences, presentation, content, depth, and variation and so on, then this is not viewed upon as a problem at all, rather as I think that it makes everything a little more exciting. I tend to see it all as a challenge, where you must stay on the alert and do your very best when presenting the topic of discussion, it creates credibility as to what is then being presented, which is just as it should be all purpose intended.

When it comes to the last bit where it refers to being a willing interview object. Think in terms of all ones has on one's mind, must then be properly present it in the best possible way, thus it is very nice to be able to relate to the people who are good at presenting good quality question formulations, that allows the interviewee to elaborate on and enjoy. And that in turn creates an interesting topic field that many of the article readers out there can then have the opportunity to take part in, which I personally find very exciting and which I think others may think is exciting to gain insight into.

And so, I must be allowed to emphasize that being a “willing victim” in that sense is just the icing on the cake.

Jacobsen: I decided to take a break from social media as an experiment, as I need more time after returning to work following a back injury. I am noticing *a lot* of time freeing up. Have you tried this?

Jorgensen: In referring to; “time away from social media”, for me it will be a yes and no answer. A bit confusing, I know, but let me explain, I have taken time away from the social media that does not give me enough “feedback”, in the sense of enriching my everyday life. I have become much more alert about which social medias that gets my attention or not. I, for example, was in my earlier years in reference to the high IQ communities, an active person in debates on many different high IQ platforms, I was involved in debates and delivered posts for debate, that could in return be debated. After a while this became somewhat boring for me, as I felt I spent a lot of unnecessary time dabbling on with no real sense of directional purpose. I have a family to considered, and when I had full-time studies and back then as now a full-time job, and to add at that, I spent a lot of time on high range IQ tests, and lastly, I designed my own test page and eleven high range tests, then the hours in a day was just not enough.

Then it was ripe to take stock as to what to remove what could be removed of unnecessary social distractions, so I could again spend my newfound time on what was most important to me. Nowadays I no longer work with high range IQ tests, nor with my test page (toriqtests.com), my focus now is to help bring national and global awareness upon the dire need for proper attention as to correct measurements of education by and for the gifted students. This I have worked on a lot, in collaboration with the school where I work, and the municipal council in my hometown Grimstad, which I am now awaiting for a positive response from the letters I have sent over with propagated directives for educational purposes directed towards the “twice gifted”, this is in collaboration with Professor June Maker from The University of Arizona, who is a pioneer within the field of Psychoeducational Studies. (<https://coe.arizona.edu/person/carol-j-maker>)

Will also bring forth, of my fervent hope of showcasing this most wonderful community of high intelligence society and all its brilliant intellectuals within it, out to the rest of the global population, through what we here do here and what we are all about. This conveyed through various forums like; articles, YouTube clips, and in the future to be able to write books about what makes us the very special and unique individuals we all are.

Topic of; “*time away from social media*”, for me, is to specify what type of media that gives the most back as to enrich your everyday life and enables a pursuit for educational enlightenment.

Jacobsen: With more free time, it seems like one of those needless distractions. Do you think people would have more time and focus for time with family, on hobbies, with their partner, etc., if they took a time off electronic devices a little more?

Jorgensen: No doubt, but one must consider that by changing one's pattern of awareness, whereby one frees up time away from mobile phones, computer games or other things, only to fill it with another activity that meets society's expectations of expected pro-social behavior not necessarily is for the betterment of the person concerned. One's sphere of interest can in many cases be experienced as contradictory to what is expected of one persona. The best solution would then be to work within the realm of the famous *Golden rule*, not too much of anything, nor too little. The acquisition of new knowledge through these technological innovations is not a

waste of time, one must bear in mind that everything is relative according to whom it concerns. The joy of life is doing what you want, even if this comes at the expense of those around you. It is society's expectations of us as individuals, which in turn place limitations on the day's itinerary.

One's social circle should not place limitations on that individuals' specific interests. They should rather be adapted, as I said, everything is relative to everyone's personal field of interest, what is exciting for me is not necessarily exciting for you, and vice versa. We must adapt, restructure our mental constructs. As time free from something, is only going to be filled with time directed towards something else, and in most cases not in favor of the person concerned. Education comes in many forms and shapes.

Concept of "wasting your time" is then no longer wasting your time, the time you spend on whatever content is thereby valuable to you by that reason alone and is therefore to be considered as not wasting your time at all, but rather valuing it on what you hold dearest to you heart, rather than then the alternative.

Jacobsen: Do you think even for smart people that the temptation of time wasting applications is too much? It feels as if it is a pervasive phenomenon at the moment. Different age cohorts emphasize some social media more than others, naturally. Older generations like Facebook/Meta. Younger generations like Instagram and TikTok.

Jorgensen: We're all human; we have all followed the same exploratory path, all humans alike find themselves innately searching for self-recognition through exhibition, we constantly follow the urge to restock on whatever comes our way. The dire need to quench our thirst for recognition on various media platforms is inescapable, age-related, or not. As far as the intellect is concerned, for me at least the jury is still out on that one, but what is clear is that we are all equal regarding our biological blueprints, be that of jocks or nerds.

Controversy or not:

Humans' primordial instincts still to this day manages to overshadow the sovereignty of man's intellect...

Jacobsen: We're doing a series on schooling the young at the moment. What are you hoping to convey to anyone reading it about the importance of proper education?

Jorgensen: That our experience of the concept of education is a fleeting perception of reality. A constantly changing structure, which follows society's need for virulence incentives. History has shown us the purpose of what underlies that existence until now, but my fear lies in whether it has played out its role today or not. The experience of holding on for dear life as to its very existence or not in the future. More and more of the most forward-looking innovators today renounce the importance of an education right down from kindergarten age and upwards. The social aspect in schools today is unchanged, but not its academic content. Social interaction is perhaps more important now than ever before in the age we live in with all the technological temptations we have today. Before, the children didn't want to stay at home, they couldn't wait to get out of the house, now the children no longer want to go out unless they are either taking part in organized sports or being forced to go to school. Yesterday's children used to be directly involved in social interactions, today they are merely indirectly so.

Social anxiety is on the rise, the same can be said in relation to the refusal to contribute to society after finishing school. What was previously mentioned about "what do I need that particular

subject for?", has now developed into "why do I need to go to school", I can just become a YouTuber, Instagram celebrity or I will live on my parents until I inherit everything." The schools' struggle to keep the students' concentration, make them see the importance of an education, and do their homework. A transition from before seeing students present at their school desk both physically and mentally, to now just physical presence but nothing more, as in "I am here am I not, but that's all you get." This does not apply to all students of course, but the transition is significant. Much of this lies in the pupils' ability to access new information, we as teachers are no longer the Wessels of informatics. We are now merely the facilitators of the right method of approach and process of this information. We have gone from lecturers to observers, not that there is anything wrong with that, but this transformation affects the structure of education significantly.

An evolving education is all well and good but based on what terms one might ask. The outcome of this change, for me, is divided into evolving sections. The lecturer as the governing body, a walking encyclopedia that was responsible for all information is handed down. Tired students who had to stay focused on what was conveyed in blocks of 30-40 minutes, are now reduced to lectures with an introduction time of no more than 5 minutes, and then work independently in periods of 20 minutes, then review again by the teacher in periods of 3-5 min, then back to work independently for 20 min, etc.

This use of time flows like this and will progress further according to what I see. Keeping students in school today is mostly of socially importance, but not so much of academically importance by today's educational standard.

When we had the Covid-19 epidemic going around the world, the most important criterion for opening primary schools was the social aspect. It was for the sake of the pupils' mental health that the schools had to reopen as soon as possible. Today, schools are almost only for the students to get social stimulus. All education today can be done interactively as I see it, as almost all teaching is digital.

The students themselves say that we could do this at home, but not under controlled conditions, at least not well enough as of today. It becomes a bit like at the universities, whereas the lectures are outdated, even looking at a separate lecture at the University of Agder, that around 80% of the students would rather watch YouTube, online newspapers, or betting sites rather than to pay attention to what the lecturer has to say to say. Ask yourself as to what one is actually doing at these fields of studies if it is not to acquire important new knowledge within one's chosen field of expertise.

The answer is quite simple and is experienced in a wide range of primary schools, to meet fellow students, again social interaction, or the protection of student fellowship if you will. The vast majority of students are not at school to learn, but as to as what is pointed out, to meet fellow students. The entire school system is missing the target, but this is nothing new, the only big difference is that today it is just so much more visible not only to the researchers who study this, but to us adults, and to the children themselves. We miss the mark of making education important in the eyes of the children, the exciting factor is not made visible until primary school and most of upper secondary school is over for many of these students. The basic package that all students must go through today must be changed drastically so that the content becomes meaningful for all students, even those who hate school. I have previously proposed to

individually adapt the education to create an experience of importance within the student him or herself, which can be equated with the social aspect.

At a much earlier stage, the individual must adapt the content to the individual student's abilities and aspirations. If this change does not take place in an extended volume, then the future of the current school structure will most likely perish. A global educational commitment to interact must be regarded with the utmost importance to be able to keep up with the technological developments. Furthermore, specially adapted positions must be tailored to the individual student's wishes, where groups no larger than 10 per individual teacher, who then work with, for example, space travel, or game development or nature management adapted to their age specific level. In the future, the local, and even national/global companies must go all the way down to the primary school's level, and convey what they are looking for within their specific fields, and what then the students must work towards. Now, in most cases, this does not happen at primary school level, it first starts at high school level, to late I say, where students today get to choose their field of study.

Get this into primary school level.

The teachers of the future should only be subject-specific teachers on hire from the specialist fields of the commissioned companies. My hope is for that the schools themselves will set up what is needed and order in the proper educators of what to focus on for the next 3 years, then either continue in the same path or change direction. What then you say about learning how to write, read, calculate etc., that should, in my opinion, be done by units with general educators, everything else must be brought in externally to meet society's need for innovation. This may seem somewhat extreme, but we are now in a time when the current school structure is becoming increasingly outdated, and many aging teachers are unable to change their old and outdated teaching style, so fresh minds must come in who have their mental clocks set on tomorrow's needs and demands. This will require major structural changes at all levels, but the time is overdue for change anyway, so why not just do it...

Jacobsen: Since you're credentialed in the study of some aspects of history, what are the perennial issues? Those issues affecting every generation cohort after cohort. What are lessons in those trends through time?

Jorgensen: What remains to be seen, or better yet, what has come to light through studies carried out within the subject of the review reads as follows. History has shown us time and time again, that formative changes within people are patterns from previous set systems with paramount constructs, pursued in the eagerness for the next level events beyond believes. We are demonstrably addicted to ever increasing stimuli of that what already is or in the eternal search for whatever may lie behind the horizon. We are driven by our innate curiosity towards a higher state of existence. This craving after intention conditioned innovative permeates all social structures of society from early days and forward into present day. For me, this innate curiosity is our most important quality by renewal towards a new and rendered state of existence. Our drive towards the unknown strengthens us as individuals, this means that we are better equipped to cope with whatever comes next.

The stamp of opportunism that is tattooed upon us all is not to be mistaken by its mere blinding nature. One can almost say that our opportunism in combination with our curious nature, thereby secures our path from this current stage of existence to the next. I am adamant that this is so, in

any case it will be exciting to see what the outcome for our species will amount to in the future of what educational ties to the past has presented to us in the present.

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