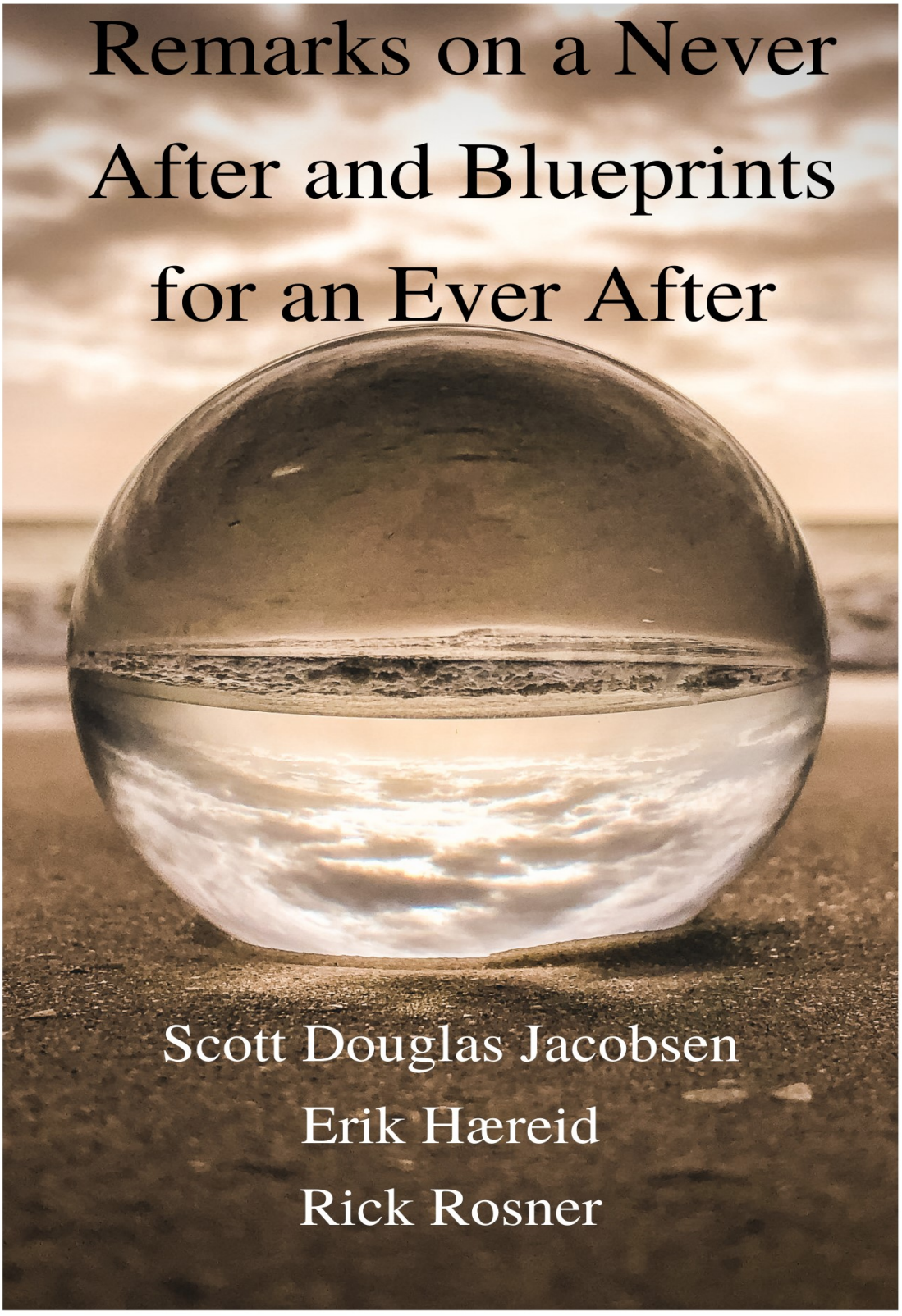
Remarks on a Never After and Blueprints for an Ever After



Scott Douglas Jacobsen
Erik Hæreid
Rick Rosner

In-Sight Publishing

Remarks on a Never After and Blueprints for an Ever After

IN-SIGHT PUBLISHING
Publisher since 2014
Published and distributed by In-Sight Publishing
Fort Langley, British Columbia, Canada
www.in-sightjournal.com

Independent Cataloguing-in-Publication Data
No official catalogue record for this book, as an independent endeavour.

Names: Jacobsen, Scott Douglas, Haereid, Erik, & Rosner, Rick, authors
Title: Remarks on a Never After and Blueprints for an Ever After / Scott Douglas Jacobsen, Erik Haereid, & Rick Rosner
Description: British Columbia: In-Sight Publishing, 2020.
Identifiers: None (epub).
Subjects: | BISAC: PHILOSOPHY / General (PHI000000)
Classification: LCC (None) | DDC (None)
p. cm.

Not printed but available on the internet at www.in-sightjournal.com
1 3 5 7 9 10 8 6 4 2

Designed and implemented by Scott Douglas Jacobsen

TABLE OF CONTENTS

Acknowledgements

To three generations of women who support and tolerate me - my mom, Ruth, my wife, Carole, my daughter, Isabella.

Rick

To the love in my life, forever lost and kept.

Scott

Introduction by Scott Douglas Jacobsen

Erik Haereid lives in Norway. Rick Rosner lives in America. I live in Canada. This tri-national extended conversation represented a sincere effort to start on one topic and maintain the subject matter throughout the entirety of the interview. However, as life goes, the subject matter went from the expertise of Erik with commentary from Rick and further questions, from me, into an exploratory series of conversations on statistics and actuarial sciences, mathematics, politics, gender equality, and more. Each chapter of the twelve chapters of this text represent individual publications from *In-Sight: Independent Interview-Based Journal*.

The individual statements in the questions lead much of the conversation. Although, the overall content of the text ranges widely with little in the manner of consistency other than the participants and the interlocutor. The general idea amounts to two individuals, Erik and Rick, with high performance on alternative cognitive metrics with chapter-by-chapter takes on the questions posed to them by me or implied by one another. I feel pleased with outcome and appreciate the extensive time of Erik and Rick to take part in this session.

Especially Erik as a guest in the larger series of short and long conversations between Rick and I entitled “Ask A Genius” between the two of us, or “Ask A Genius (or Two)” when guests take part in it, the next section comes from Erik with a Foreword containing some reflections. The extent of the content and the extensive reach of the conversations reflected something unexpected and joyous in its presentation of hidden factors and combination of known and hidden factors leading to the lengthy and enjoyable conversations with Erik and Rick. In this spirit, I wish you happy reading.

Scott Douglas Jacobsen

May 23, 2020

Foreword by Erik Haereid

To me, life is about creating opportunities. If you as a child experience love and care from your parents, and avoid traumatic situations, you will naturally feel important enough to see endless opportunities. The world is open to you. You are the explorer. It's no limits. And then you start to learn and build your castle of knowledge and experiences.

It's easier to see the opportunities when we look at our hopefully good childhood, because then we were closest to infinity and to the explosion of sensations and vast impressions. My impression is that we try to get in contact with that feeling all our lives because we seem to walk away from it. Life could be seen as a continuously walk towards our death, with an increasingly narrower view, less opportunities, more illness and despair, amounts of projections and blames in lack of abilities to grasp that this is a view; we can do something with it. I think many have this limited view, often colored by the rigid way we grownups have created our daily lives.

Why do we walk away from something that is basic in our lives? Shouldn't it be opposite; that we should benefit on our experiences and use them to create even more opportunities?

If we only could flourish. But what prevents us? Is it the natural process with our body and mind? Is it every danger that we are confronted with; possible illness, damage, lack of supplies…? Is it each other?

Basically, we have some needs, and we have to fulfill those needs, in a prioritized order. But we have never been closer to fulfilling basic needs than now. Technology has made it possible to provide food for every living human within a sustainable number of people, and it will make it easier to get it for every year. Most people don't have to work eighteen hours each day anymore. We can work a few hours and get what we need. But in spite of this we work as much or more than before, because there is always something to do, something that interests us, something that make us richer physically and mentally. Some calls it greed. Others say that we are curious, hungry for life, knowledge and experiences; that we expand our room of opportunities.

Psychologists talk about the narcissistic child; that we all are because we need to. It's natural. When adults are, it's not that charming. Being an adult is also being adaptable, taking care of each other, treating each other with respect, being decent. It's not only us. We are all.

When our primary needs are fulfilled, we dwell on our illusions, our dreams and wishes, our lesser and larger self-images. In this extended realm of living, we easily lose control and get apart from the necessary path of a synchronized life. It seems difficult to maintain the rhythm with ourselves and the surroundings when we create mental castles about what we can do and be. But why is that? Isn't it unambiguously good that we see opportunities, even draped in illusions, dreams and wishes?

Opportunities are about actual choices. Dreams are actual as dreams, while the content is not at hand at the moment. You can create vast amounts of opportunities within your world of thoughts without creating a single opportunity. It's about what you can do. Choice is not about doing everything you can do, but knowing that you can. It's about access.

Maybe this is a starting point. The realm of opportunities is mental, because even with the slightest physical abilities you have at least one or one thousand opportunities. If you don't, it's mental. I have met people with a seemingly great future, who waste their lives because they don't believe they have those opportunities. They are imprisoned in their own mentality.

I have this perspective: When you are allowed to and allow yourself to be yourself, loving and respecting yourself as the one you actual are, at any moment in your life, through the continuous change life is, you focus on the surroundings, the real world, in connection with your cognitive abilities and emotions, synchronized, such that you adapt optimally to others. When you have this focus, you continue to see solutions and find the optimal paths through life; you create opportunities. Not only for yourself, but for others too. By being self-aware, to give this phenomenon a name, you see variety as something you and others have in common. That's the social clue. Without distinctions there wouldn't be anything. How can you see blue if everything is blue? Then our vulnerabilities become strengths instead of weaknesses.

The opposite is more common. We do not have the inner ability to accept ourselves sufficiently; then we search for that insight outside. Then we don't see other/others per se, without norming it/them; we search for acceptance and identification in the surroundings because we don't know who we are. Then we become larger or less than we really are; megalomaniacs/narcissists or self-destructive and depressed. The challenge is that most societies and people are more or less like this. Popularization, the pop-culture, is based on this phenomenon. Why is that? Because it's a self-reinforcing circuit that amplifies the circles' innate forces; if the circuit is based on acceptance for being an individualistic oneself, this would be the culture, and if no one gets acceptance for being themselves, then everyone will try to change others such that the others can contribute to the single person's way towards self-awareness. If we manage to build a culture where we synchronize in our differences rather than forcing us to be equal in a minimalistic and "perfect" way, we will enhance these traits because it's self-strengthening and ongoing like an in perpetuum mobile.

The turning point is therefore when we see, internalize, that we are equal because of our differences and not because of our similarities. And to make this happen, someone has to start a turning procedure. That's why people with grounded safety in themselves, people who don't try to use others to gain positions, people who know that real power is in self-love (not in the meaning of narcissism) and self-respect, in the meaning that you are accepted and at the end accept yourself, both flaws and strengths, your vulnerability and aggression, all your features and traits, people that don't need to be a dictator or manipulate others to be accepted and get a feeling of self-acceptance, are those people who have to lead us further into the future with social synchronizing.

As long as we believe in popularity, in objective "truths" that are lies and illusions made up by some that don't accept themselves and therefore search for an acceptance by controlling the people's opinions, we will continue to fall into the well of emptiness, that we try to avoid. The thing is that our tries are innate features, like a youth that does crime because it doesn't know better. We don't know better. We want to find ourselves, and I think everyone want others to do so as well.

There is no other animal that are as dichotomic as humans, I believe. We love talking about moral and ethics, and believe in the opposite; survival of the fittest. This tells me that we are searching; we do not understand yet. How can we cooperate if we want to kill each other? How can we say that we want equal rights for everybody and at the same time being pro eugenics in a racist way? Such contradictions are, to me, a proof of that we are not at home yet. We don't know yet.

When humans try to open up and remove single or plural dictatorships, i.e. give people a voice, the same forces that created the reason to give people a voice find other acceptable ways to suppress it. When social media or columns in traditional media where people can speak openly appears, the same happens with ad hominem arguments and personal attacks, showing that it's not, seemingly, any discrepancy or conflict of interest as to cases, but a wish for power. If you ban killing done by shooting and hanging, humans find another way to kill; within the system of acceptance. Most people think they have rights. But no one has at the moment, because humans' need for power and polarization seems larger than a need for compassion and respect. Since we have created cultures that suppress individuality, entailing distorted self-images, we have become slaves of the power, which is changing continuously. It's not the president or king anymore. It's not a democratic majority, either. It's the ability to suppress and convince. It's the subtle whispering of the underground. It's the plural voice that we can't hear. But we know if we don't follow it; everyone is responsive to this voice and will do anything to make us adapt.

Freedom is still an illusion, a hope, that everybody carries. In some ways it's probably achievable, but maybe this is my impossible dream. Sometimes dreams can make us believe in them. We need the oasis in the desert, even though it's mental images that postpone our death one more hour; we still lack the water.

I am optimistic after all. I think we are improving, and I think science is an important part of it, using technology that not only enhances our senses and communications, but also make us process much more information in much better ways; in the direction of estimates that converges towards increasingly more truth and less uncertainty. This is the way we have to go, because self-awareness and detecting opportunities is within the truths and not the illusions and weak approximations. As long as we have the opportunity to guess, we do, and we create arguments for our thoughts; everybody does, until we get closer to something factual that we can't fight against and that we won't fight against, because it contains our freedom; we change an unsatisfactory need with a better one.

Most people are willing to give away the truth, if that's the price to be a part of the community. When the community is based on lies and illusions, overwhelming feelings and inaccurate estimations, then we all start to believe in something that is untruth. That's dangerous. It's manipulative. Then aggression and persuasion become the virtues, and not actual truth. That's why science and similar approaches to gain facts and sincerity, is crucial for human's future.

We will not get to know each other profoundly, presumably because we don't have time and also because we want to create our own world of surroundings. Thus, we use quick, superficial bits of the people around us that we turn into ideals or garbage, something completely different from what these people actually are. We spend less time and energy taking on the surroundings, and more time shaping the surroundings according to our past experiences, desires, needs and inner lives. This is how we take control of the surroundings. This is a special feature of modern man, where we have little contact with who we are.

It goes without saying that we all suffer here because no one sees who we actually are. Everyone has prejudices about us, but no one wants to grasp who we are. It's useless to tell who one is because people reject it; it doesn't match their prejudices. Thus, one ends up changing oneself to adapt to the others.

But this causes the estimates of reality to be far poorer, the distance to the scientific truth longer, and the distance to ourselves becoming larger. To follow the dreams is good, but not to mix dream and reality.

How much should we control of the surroundings, and how much do we need to live good lives? How much do we need because we want to evolve to become something else than what we are? We are trying to unite on something that serves the majority, through democracies. But this discriminates against the minority. It is not optimal.

Perfectionism is about making the surroundings ours, it's a mental condition, and it wipes us out since the surroundings then no longer have an independent will; it's not about finding truths. Control is therefore not about controlling everything, but about a balance between letting the surroundings live their lives and being themselves, while at the same time being within the confines of our existence (for example, we defend ourselves if someone tries to eat or kill us). Here, I believe that the optimal adaptation happens by virtue of being allowed to be ourselves. In practice, that is, we are able to reestablish a self-contact every time something tries to kill us, disturb us, influence us through manipulation, etc. It's about defense.

Life is thus about maintaining self-love, and not as many believe through making others love them. I think self-love is innate, immanent. When we start to hate ourselves it's because we can't defend ourselves against the surroundings.

The narcissistic mind converges as much towards self-annihilation as the depressive mind, because the former believes that it is optimal to own everything, control everything. But as mentioned, this means depriving the environment of independence, free will, variety, and thus wiping out your perception of time and space, and thereby you. By turning all colors into blue you can no longer call blue a color; you have wiped out the color map.

After all, being a life, a human being or an independent self-driven entity, a consciousness, is about defining its boundaries in relation to its surroundings. What makes it difficult is that the boundaries of who and what we are, are changing. And the fact that we have a large and intelligent brain with profound cognitive functions also allows us to view ourselves as different from what we are, and also to confuse who we are with this lovely dream or this nightmare.

Thus, life also becomes a test in constantly knowing who we are at a given time, while trying to change for the better. The opportunities for improvement are huge for people compared to for example ants. And this opportunity we take, but at the same time we end up in moral and other dilemmas since our development in many cases is at the expense of each other and the environment.

What can we define as improvement? The question must be seen in light of the fact that we regard perfectionism as improvement, but it is the opposite; a self-annihilation. Improvement must therefore take care of the variation in the environment to a certain extent. At the same time, humans try to control the environment in one way, but also to preserve diversity (for example by preventing extinction of endangered species). Isn't this a contradiction? No, it's an attempt at a balance.

It's about where the boundary for who we are should go, how big or small we should be, how extensive. Man's greed wipes us out because we misunderstand that the best thing is to take control of everything and everyone. On the other hand, this trait is also the reason why we are the dominant species and have developed our brains.

One possible development and balance is to protect against attacks rather than taking active control of the surroundings by attacking. That way you protect who you are. In this way we will also be able to protect ourselves from others and others who try to take control of us. We let the surroundings be at peace, living with their free will and awareness to the limit of our self-protection.

Understanding the surroundings is not the same as controlling it and its will. This means that we can still operate science and develop our understanding, without depriving the surroundings its intrinsic value. After all, science is about gaining knowledge and respecting diversity, not erasing/displacing it.

Thus, development can be about understanding and dancing with the surroundings more than exploiting and using it. Science thus becomes a tool for recognition of diversity, more knowledge of everything, more variety, better inner maps, as part of being able to move and experience things in this landscape of reality. I believe that the road to an optimal future for the community lies in accepting ourselves, and that we all contribute by accepting each other as we are.

Erik Haereid

May 13, 2020

IN-SIGHT: INDEPENDENT INTERVIEW-BASED JOURNAL

Chapter 1

Scott Douglas Jacobsen: Erik meet Rick. Rick meet Erik. The topic is 'The Future of Statistics and Actuarial Science' for this discussion. Erik, you are a statistician and actuary. That is, you have the relevant expertise. Therefore, it seems most appropriate to have the groundwork, e.g. common terms, premises (or assumptions), and theories within statistics and actuarial science, provided by you. To begin, what are the common terms, premises (or assumptions), and theories within statistics and actuarial science at the frontier of the disciplines? From there, we can discuss the future of statistics and actuarial science within a firm context.

Erik Haereid*:* I thought the topic should be more common. I am not comfortable talking about the latest theories within Statistics and Actuarial Science; I have never practiced as a statistician even though I have an M.Sc. in Statistics. I have worked the last 20 years primarily with insurance administration; as manager, entrepreneur and as a consultant (pension schemes for companies; DB- and DC-plans, pension accounting and so on), and only in the life insurance and pension fields. I have not worked with insurance mathematics in 20 years. If you insist on using insurance as a topic, we must concentrate on life insurance and pension in Norway from 1960 to today. This is my premise. I think that I know the Norwegian life insurance area from the 1960's until today well, but I hoped that we could concentrate on a more interesting and common topic; there are so many things going on in the world today. I thought we should talk about a common topic like refugee problems, economy, politics, war, peace, social psychology, aggression, love, existential questions, as intelligent laypeople, and not about topics related to my profession. I have several profound thoughts about many topics. Rick Rosner and I are both 50+ years and have experienced the 1970's, 80's and 90's. Why not use this fact as a basis for a discussion?

Jacobsen: Let us start with the first recommendation of the refugee problems:

Both of you are over 50+ years. You have experienced the changes of the 1970s to the present. There is a problem with refugees now. Have there been comparable problems within your lifetimes? What seems like the source of this current refugee crisis? What might alleviate the problems associated with it? What might be a general solution for it?

Haereid: One week ago, a Kenyan judge ruled that the Kenyan government's plan to close Dadaab, the world's largest refugee camp, was wrong ("illegal" and "discriminatory"). I think this is a beginning of many refugee camps closures in the future; in Kenya, Liberia, Uganda, Lebanon, Jordan etc.

A lot of migrants moved from Central America to the USA in the 1970's and 80's. The Refugee Act brought USA closer to the UN Convention from 1951. Maybe Rick can say something about this event. The Reagan administration was not too happy about the situation. And I would like to hear Rick's opinion about Donald Trump's apparent xenophobia.

I am born 18 years after the end of WW2, and the first catastrophe I remember is the Biafran War, the Nigerian Civil War, from 1967 to 1970. I remember the pictures of the malnourished children with huge bellies. This was hard. The picture of the famine left some psychological scars in a five-year-old boy from a developed country. The Biafran War led to a huge number of refugees inside the country. Then the Biafran Airlift was established and dropped food and medicines over the camps. Nigerian aircrafts tried to stop them from doing this, using hunger as a weapon against the people. I remember the commitment from the rest of the world, how

everybody wanted to help. The media did a good job there, by transmitting pure pain into ordinary peoples living rooms. It made people feel empathy, and act.

There have been several wars and refugees for the last five decades, but not like today. The many conflicts, and the Syrian conflict as the main, make the situation today the most severe since WW2. There are approximately 65 million refugees in the world today, and about 21 million are refugees in other countries than their own.

The UNHCR and the international community have to take this situation more serious; this is only a beginning of a possible mass migration that has no end. In my opinion, we have to build separate cities or communities spread all over the world, where migrants and refugees can live temporarily in a sustainable environment. The tent camps have to be replaced by ordinary houses and infrastructure. This will be cheap compared to the alternative; more war, more suffering, more violence, an increasing pressure on the stabilized countries... The international community can for instance rent land from different countries that has land to spare.

When integrating or resettling too many refugees we will experience more far-right politics. We can expect a blooming extremism and fundamentalism when we try to integrate too many refugees and migrants in developed countries like the USA and Europe. Xenophobia expands when we don't control the stream of refugees. This is as I see it the most important cause to define a limit of the number of migrants coming into USA and Europa. I have to add that I am myself in favour of diversity in any culture; diversity implies less xenophobia when the integration is done right. We learn to like and love; we can't rush it. The diversity has to rise in right pace. If we move too fast, people get scared and their votes are based on that fear.

We have to learn from the many failures we have done concerning the treatment of refugees all over the world. The Syria crisis is a wake-up call. Today it's about 5 million Syrian refugees outside Syria; most of them in neighbouring countries like Turkey, Lebanon and Jordan. I think we have to use more money on more sustainable solutions, and that one solution is to build more sustainable reception centers for refugees in areas where they can live temporarily with support from the international community; cities or communities with a certain level of infrastructure, independent of local fluctuations in politics and business. It would be like enclaves protected by the international community; UN, the different governments, non-profit organizations etc.

The final answer is, of course, to make the world more peaceful and balanced, but this answer does not help the 65 million refugees in the world today. This is another question, like how to cure cancer.

The sources of the crisis are war, starvation, environment, despotism, population growth, dreams about a better place…

Well, I think building sustainable communities in migration zones may alleviate the problem. The main task is to help the people who suffer beyond our imaginations. Wars are a consequence of instability. People have to feel safe, feel that they can live normal lives. And to achieve this we have to restore the meaning of the word *respect.*

Rosner: *I recently had the immigration argument with a very conservative guy. So, I am generally not overly informed about political stuff, but on immigration, I am slightly less ill-informed than usual. My buddy argues that the US has let in something like 60 million immigrants in the past 40 years, which is somewhat higher than historical percentages. So, if it weren't such a politically charged issue, I could see slightly reducing the rate of immigration*

from the average of 1.5 million per year over the past 40 years, even though that's well under 1% of the U.S. population per year.

I find that for most political issues, there's a large set of facts which most people don't know, and the people who are informing us using these facts cherry-pick the facts to fit their biases. In the case of my conservative buddy, he listens to people who cherry-pick facts about Islam to make Islam sound like the worst thing possible. And because I am ignorant, I can't argue against them very well.

All I can say is, "Well, that sounds way too awful to actually be the case." But I don't have the countervailing facts to fight his facts. One set of facts pertains to the rates and sources of terrorism in America and the rest of the western world. In America, current arguments about immigration are, for the most part, about whether we're leaving ourselves open to terrorist acts and terrorist infiltrators—terrorist sleepers.

My conservative buddy has the additional argument that if you let in too many Muslim people, who, according to him, have a strategy and a religious obligation to have kids at a higher rate than the native population to eventually turn the country into a Muslim majority country. If you let too many Muslims into America, according to my buddy, they will become a significantly large minority, and they will enforce Sharia Law.

He says to look at Germany and other European countries, where the population is at 10% of the country and seems to be causing some problems. And yeah, I can see where there are some problems there. My friend says that in the 70s, we only had like 60,000 Muslims in the whole country. Now, we have 3 million Muslims because we've been letting in immigrants and because immigrants have kids.

My argument is that 3 million is still less than 1% of the total United States population. And even if those 3 million reproduce at a crazy rate, they will not reach the troublesome 10% level in 50 years or 60 years, and in that next 60 years, there will be so many other things happening in America. Muslims are having kids at a faster rate shouldn't be in the top 3 or top 5 things that we should be worrying about.

I would worry about the social and political upheaval because of the crazy waves of technology that we're going to continually be hit with over the next 60 years. I would counter the too many Muslims argument with what another friend who works in software and artificial intelligence (AI) says: "By the year 2100, the world may have 1 trillion AI at various levels of sophistication."

So, I think we need to worry more about how we are going to build a society that can incorporate hundreds of billions of AI rather than whether or not 3 million Muslims will be having too many kids. As I'm speaking, we're 6 or 7 weeks into the Trump presidency. He will soon be presenting the revised travel ban for 7 countries that give Trump the creeps because he thinks they're the source of potential bad guys coming in.

My feeling is that we're already fairly prudent in terms of letting people into the country to live. It takes—I've heard in my ignorant way—like 2 years of screening before people get to move here. In my ignorant way, I know that immigrants—both legal and otherwise—have lower crime rates than native-born Americans. So, it seems to me any adjusting we do does not need to be abrupt and draconian, but if we feel we need to protect ourselves more we can adjust existing practices to lower the level of risk presented by the people we let in as official immigrants.

We'll never get every single dangerous person. This freaks out my conservative friend. He also argues that even if you do get everybody and do let in everybody that it doesn't prevent the radicalization of their kids who grow up in America because, he claims, the first generation born here is more easily recruited to do terrorist stuff than perhaps their parents who came here as grateful immigrants.

Trump's first big issue, which he ran on, was kicking out illegal immigrants. In his early campaign, he characterized them as our #1 threat, which, to me, seems like bullshit right off the top because, if you believe the statistics (and some conservative people don't), prior to '08, we had about 12.7 million undocumented aliens, and after the economy tanked, the net flow of undocumented immigrants was out of the US.

So, 9 years later, we have 11.7 million undocumented immigrants. Some conservatives say, "How do you know? Maybe there are 30 million undocumented immigrants." But that's a hysterical exaggeration. It's around, say, 12 million. At 12 million, that's less than 4% of the people in America, and 4% of the people can't be the source of everything wrong in America in terms of crime, in terms of lost jobs.

It's 4%. So, you're not going to make everything better by kicking out the 4%, especially with regard to crime because that 4% has been shown to have a lower crime rate than people who were born here. They don't have a zero crime rate, there are plenty of bad people among the 4%, but they're not solidly bad people who are destroying the fabric of America.

Obama was deporting the hell out of people. I don't know the statistics, but millions over the course of his presidency. A lot of people got deported. Conservatives will argue those numbers are kinda fake because a lot of the deported people come back in, but Obama deported more undocumented aliens than, I guess any other president, ever. [NOTE: Here's a Snopes explainer of 21st-century US deportation stats. http://www.snopes.com/obama-deported-more-people/]

So, I tend to be on the side of doing what we were doing under Obama and if we need to tighten things somewhat, fine, but we don't need the full-on Trump treatment of immigration. There are a lot of things in the world that should be based on statistics and the best outcomes. Like when you look at instances of possible police incompetence that lead to fatalities, unjustified fatalities, it seems that there should be some statistics-based training of cops the way that sports teams do statistics-based tracking and training.

Basketball, you learn where the sweet spots are. You learn the statistical outcomes. Good coaches know, in basketball, whether you should foul an opposing player or not based on how good he is at shooting free throws. Like Hack-a-Shaq, if somebody's terrible at free throws, then you deny them the likely 2 points of making a basket and make them shoot free throws. You can apply that to a general model where you don't foul somebody shooting from behind the 3-point line because that gives them three free throws to shoot.

All of that stuff is based on keeping a lot of statistics and building strategic models based on those stats. You can do the same thing with certain aspects of policing. When, as a cop, you're approaching a suspect and you're apprehensive about certain things you've noticed about the situation you're in, you should know what potential actions on your part have statistically minimized the worst possible outcomes.

It seems like that kind of statistical training might be helpful. I don't know. I'm not a cop. I don't know what statistics cops keep or what models they use, but, in any case, you can use statistics-

based models for immigration. You look at immigration and related statistics, set your risk parameters, for tolerance of risk based on the US being a beacon for immigrants and for various other social and economic statistics, and you build your models and your strategies based on that stuff instead of on demagoguery and freaking out.

Chapter 2

Erik Haereid: I do not know if you (Rick) think that I am on Trumps and his person's side concerning immigration policy. I am not! I want mixed cultures, including Muslims. I think multicultural societies enrich us as humans. What I am afraid of is immigration on a large scale, which will challenge the welfare states' infrastructure. This will probably lead to far-right movements, and unwanted political situations around the world. The best way to prevent far-right environments, racism and xenophobia, is to understand and respect how people think and react in different situations, as when people feel threatened (if the fear is based on facts or illusions doesn't matter). Mass migration can be the case; consequences of global warming, sea level rise, more wars and conflicts, poverty, hunger… The number of refugees can increase rapidly in the next few decades. This will cause substantial issues, especially moral ones, and on a larger scale than today. I think we have to prepare for worst case scenarios. The best way to do that, as I see it, is to build temporary homes and environments on available areas, directed by UN and the international community; not camps with simple tents and lack of hygiene.

You mention fear of a potential Muslim majority in western countries in the future, pushing Islam and Sharia Laws on the native Christian people. I guess this is a part of the bottomless well of fear that is established, on wrong conditions, among a lot of people in our cultures. Creating fear to gather votes (politicians) and money (Media) is as old as these institutions. Trump is part of a wave of populism hitting the mainland, not only in the USA but also the rest of the western world, like Europe, where we are not that familiar with populism. Trump and his buddies play with people's emotions, with a mixture of illusions and reality, as more or less decent rhetoricians have done since Cicero. Sometimes this is right and necessary. Other times, like that Trump has banned immigration from some predominantly Muslim countries, this is wrong.

You mention statistics as a basis for more true facts, and I agree. In Scandinavia, Sweden, we had a professor Hans Rosling that used statistics effectual to illustrate certain topics. You mention your buddy who believes that Muslim immigrants do get more children than the native population, as a strategy, and eventually turn the country into a Muslim majority country. Well, I looked it up, and for immigrants that came from Asia, Africa and Latin America to Scandinavia as adults the birthrate was 3,5 children per woman (from 1990 to 2004) (compared to Scandinavian women; birthrate = 1,9 children, today). For immigrants that came to Scandinavia as children, the birthrate was 2,2, and for women born in Scandinavia with parents from Asia, the birthrate was the same as in Scandinavia. The tendency is that immigrants adapt to the same birthrate as the country they move to. I did not find statistics for Muslims separate though. But the point, as you indicated, is to collect data, and use statistical tools to remove fear rather than create it.

You say that the immigrants are not the big danger in the future, but AI. I agree that there are several threats, like you say uncontrolled technological evolution, but also pandemics, asteroids hitting the Earth, and environmental issues like global warming are major problems we have to deal with. These issues do not make migrant issues less important, I think. My view is based on worst-case scenarios. A vast immigration, or fear of it, implies that more people vote for far-right movements and parties. Statistics will certainly help, but fear seems to follow its own path. Statistics cannot say much about an unstable future unless it is almost a copy of the past; predictable. You can give Trump and his equals facts, true facts, but he can hit back with predictions that no one can prove; the future is to a certain extent steered by rhetoricians.

Statistics will have an importance to some degree, and then the irrational nature of humans takes over. In crises, like war zones, people stop acting rational. Another fact is that humans become irrational and immoral when we feel that our connection to the group is threatened.

A known psychological experiment is the Milgram experiment from the beginning of the 1960's, which revealed that people obey authorities and authority figures even if apparently causing serious injury and distress. Other experiments show that people tend to be irrational or in lack of basic knowledge, for instance answering "Madrid" as the capital of France if the others answered "Madrid" on that question, when they have the choice between using their cognitive abilities and doing the same as the others.

You mention police violence. Yes, there is a problem if one takes for granted that potential violence is correlated with a person's skin color, the clothes people are wearing and if they have body piercing or not. If the police get into a situation where they feel threatened, why can't they use methods and weapons that are harmless and remove the potential danger until they have clarified the situation?

I think that humans become more human if we understand how to live together in different cultures and take the best out of each culture; remove the violent parts (I know this is more difficult than I made it sound like). The problem is the fundamentalism, the lack of will to learn from others and adapt, and not the differences.

Rosner: *Having read Erik's reply, I think that the Venn Diagram of how we feel about things is a couple of circles overlapping by 90% if not more. Sorry if he thought that I thought he was on Trump's side. I do not think that at all. I think that comes from me arguing against the opinions of a conservative friend whom I have been arguing with extensively about this stuff. No, I do not think Erik holds those Trumpian views at all.*

And Erik's done an excellent job at laying out good arguments for not demagoguing immigration. He has some excellent statistics showing that immigrants are generally not trying to take over countries by making a zillion babies. He does not have those statistics for Muslims, but the hope of any country welcoming immigrants is that the immigrants become part of the fabric of that country.

Newcomers embracing a country's values while adding cultural input of their own makes for that whole rich melting pot kind of deal, and the US has generally been successful as a melting pot. You let people in and you find that for the most part they embrace American values. We are a successful country of immigrants (successful for immigrants and their descendants at least; less so for people who were already here when Europeans arrived).

About the H-1B visas - the smart and talented people visa - it is scary that we might begin turning away people from other countries with skills and some education who want to expand their training or use their talents in this country. They get special visas because, hey, they can contribute. If we scuttle that and if we make the US look inhospitable and unfun for talented people from elsewhere in the world, we are screwing ourselves.

There are other countries - I said this elsewhere - who are very happy to admit smart, skilled people who would have otherwise come here. China seems as if it could be super fun if you are a high-level entrepreneur or engineer. In its industrial cities, you can be a giant of industry.

If you do not mind crappy air quality in places, you can probably live an NBA player-type jet-setty life in Guangzhou or wherever. If the US loses tens of thousands of talented people from

around the world to China, maybe India and Europe - I do not know, wherever else people think they can build great lives for themselves, then we will end up being a dumber, less technically nimble nation, and we will eventually cease to lead the world in technology.

We will eventually become a slightly silly, semi-backwater, like Portugal or Spain - countries that used to dominate and are still modern but not at the very forefront of stuff. Not to mention, matters of international dominance aside, that it is straight out dickish to, in an automatic way, deny American values for purposes of fear and demagoguery, and political advantage.

Haereid: Thank you for endorsing my arguments. I agree that the USA is a successful country of immigrants. It's not easy, and you have done an excellent job the last 200 years. The complications you have had is minor compared to what it could have been. There are victims. But overall you have shown the rest of the world that one can handle a cultural crucible; in less than a couple of dozens of decades.

"About the H-1B visas…"

I agree. That doesn't seem like a good idea. In competition with the newcomer China you will need all the capacity you can get. It's not politically smart to prevent know-how, thirsty young people and bright brains helping the business to evolve; including persons from abroad. We are dealing with the butterfly effect. A few brains in a garage or at the boy/girl room can start companies that survive and grow beyond imagination, like GM, Microsoft and Apple. Bill Gates, Steve Jobs and their mates did something spectacular in the 70's and 80's. They used their eagerness and intelligence to investigate new sides of life; they were at the cutting edge of information technology. Maybe they were smart and lucky; they were first. One should not prevent that kind of people, wherever they come from in the world, to live and nurture inside the USA if they want to.

9/11 was not only a catastrophic act of terror and violence, but also a lack of US intelligence. I don't think we can remove this kind of action from the future by closing our borders. There are several western native boys (and girls) that, because of their lack of affiliation, and despair, go into ISIS/Daesh or other fundamentalist groups to fight against whatever, or just do the violence on their own (like Anders B. Breivik in Oslo in 2011). It is not Islamic beliefs per se that makes violence, even though the text in some ways inspires to kill and get paid after death, but the fundamentalism that is attached to it and to all beliefs, all cultures, and all humans. Humans seem to exaggerate everything; we are so damn dramatic! It's not what we believe in that's the problem, but why we become narrow-minded and hateful. Our brains seem to take a bunch of shortcuts and easy tracks and forget some basic moral rules that our brains also try to establish. It's Dionysus against Apollo, Id contra Superego.

We forget that there were a lot more terror in the 1970's and 80's than today, which we forget because there was less terror in the 1990's. Then 9/11 in 2001 came as a chock to us all. You can say that 9/11 erased the terror in the 70's and 80's from our memories. A new era began; the Islamic fundamentalist-period. The difference between then and now is that the terror is more global; it can hit you anywhere. I remember the IRA (North Ireland) and ETA (Basque Country, Spain). I also remember the Baader-Meinhof Group (RAF) from Germany. These organizations dominated the news 30-40 years ago. Now it's Islamic extremists that spread fear around the world. I don't think it's clever to use fear as an excuse for closing borders and giving birth and nurture to demagogues. Terrorists want to push some buttons more than kill innocent people.

[Ed. Haereid Addendum]

May 7 I read in a newspaper (CBS News) that the 97-year-old prosecutor from the Nuremberg process in 1946, Benjamin Ferencz, said that "war makes murderers out of otherwise decent people". Several people, including philosophers like Hannah Arendt, have written about the Nazism, and asked necessary questions. Arendt meant, as I have read her, that evilness is (primarily) not based on sadism but rather obedience. Are human monsters, or are we obedient? The psychological Milgram experiment from 1961 implies that we are obedient and not sadists. But does it matter for the victims?

Why do humans act evil, not only on macro-level as national or religious leaders, but also on micro-level in the school yard (bullying), as mass murderers, psychopaths, sociopaths…? Is it because of one person's lack of love from his/her parents? Is it because of brain damage? Is it because of a potential destructive pattern we all have inside us? Is it because we get an ecstasy, a rapture that prevents us from acting rational and makes us un-empathic? Is it because of revenge? Or is it because this is the natural and best way to evolve as a species? Is it because we think this is what the authority expects from us?

Is there any way that we can control our monstrous side?

Chapter 3

Scott Douglas Jacobsen: Let us talk about good and evil, what defines good? What defines evil? Do these terms suffice in the representation of the reality?

Or do these terms carry metaphysics and ethical baggage, which detracts from the reality of proper notions of morality? In a discussion on good and evil, we can analyze the topic from multiple levels.

Let us talk about the small acts and thoughts, the little world of good and evil, then the next session can engage on a micro-level foundation into dialogue on the medium- and macro-level forms of good and evil.

What seems like quintessential small acts of good and evil - everyday acts of kindness? Also, as an aside, does religious belief or faith influence personal conceptions of good and evil?

Erik Haereid: I have experienced a strong connection to others based on mutual feelings and empathy.

One time I met a stranger, a man, on the street downtown, crowded with a lot of people walking in their own thoughts, and he looked me in my eyes and I did the same and both smiled warmly.

It was nothing sexual (I am heterosexual, and I guess he was too), only a friendly empathic mutual silent confirmation ("Hey, I see you"). I felt good the rest of the day.

Small actions like that are good because they enhance something in us. We did both, I am quite sure he did too, became better persons after that moment. I smiled warmly to some others, become more tolerant, friendly and inviting.

Most people, at least in my country, do not understand warmly smiles; they misinterpret it in mistrust. Many, not all, of course, think you want something from them that they don't have or don't want to give to you.

The mistrust is basic in our culture. We want the kind smiles and friendly behaviour, but we mix things up. Either we make it sexual, or we think it's irony and contempt. Trust is essential here; you have to believe in yourself to receive good deeds and implement it into your personality and self-image.

When curiosity is replaced by judging people for their genes or personality, we have a problem as a group, if you ask me. Individual freedom has to be supported by respect for every individual in the crowd.

If not, some maybe gain a lot, but society is polarized, and this implies more conflicts. But, as we can see from for instance my country, the lack of winners strangles each individual; you are forced into an average (the average is the winner).

If you are outside the standard, the average tends to attack you. This system creates polarization too; you have to fit into the average to be accepted by the society.

A good deed or thought is when it makes the other person feel better, also in the long-term. It's trusting in it. We have to believe in the behaviour. And the same with evil actions; it has to be pointed at us, and we have to believe that the person wants to harm us.

A good thought and deed are one that strengthens the other person's self-esteem and self-image in a way that does not make him, her or them more extreme egocentric (narcissistic). Evilness is the same with the opposite sign.

In this context, I believe that good and evil deeds (and thoughts) have to make perpetual influences on the object's mentality. If you save a person from drowning, you make changes to that person's mentality for the rest of his life.

If you make a person feel bad about herself as part of her perpetual self-esteem, you make eternal changes to her mind. A rape is such a deed. Being bystander to for instance a school-killing, too.

The deeds and thoughts have to be meant; deeds, where the outcome is good/bad for the object, is not good/bad deeds if it is not intended to be. If it's by chance, by impulse, it's something else. A condition for good deeds is that the sender has empathy with the other person(s).

To hate or scorn someone for their genes and natural behaviour is evil, even though it's impulsive and one can't control the impulse at the moment. This is so, I believe because hate and contempt also are products of some nurturing processes.

You can choose to reflect on your impulsive thoughts, feelings and actions. If you nurture your impulses, you act evil/good. The fact that you have impulses doesn't make them acceptable or true; they can be worked on and changed.

You can blame the forces of evolution, that something is cemented and not possible to change, and then fasten your immediate emotional experiences.

Or you can believe, as I do, in the elasticity of our brains, and that almost everything is possible beyond the present stringent scientific discrimination and reduction; that we in the future with help from AI, nano- and biotechnology will find a way.

It's easier to act bad and evil, than good. Then you control your feelings. But the price is high; you also teach others to act the same way to you.

I think the best good act and deed one can do is to open up, and not close others out from your feelings or thoughts and invite others to express their feelings and thoughts whatever they are. This is, of course, more difficult than it sounds.

It assumes that we can handle our own feelings among other reactions and that we really are open-minded towards all other people. As soon we start discriminating, in thoughts or actions (normative, not descriptive), the tense and stress among all in that social realm increases.

Rick Rosner: *I wanted one more comment on statistics. Now, it is frustrating because I have many, many years of college courses and extensive training in statistics. But statistics is beyond me now, in terms of being able to do it, because statistics is so coding based that I cannot do anything productive in the field anymore. Because I do not code.*

I understand statistics and probability super well, but, at this point, I am nothing but a rank amateur because I cannot build databases, statistical apps, or work with statistical apps.

Now, in terms of good and evil, I look at good and evil as the preservation of order versus the destruction of order, order versus chaos.

Generally, everything is dressed in story and detail, but, basically, when people are fighting for good; they are fighting for the preservation of structure and order and, usually, higher order.

Star Wars *is probably our most prominent good versus evil story now. You can see good as being a higher order that includes individuality and liberty, and the ability to do high-level things. That to be fully developed people who are free to pursue their lives.*

The Empire is a suppressive force, which will blow up your planet if you defy them. It is a lower level of order. It is draconian and rule-based and is based on a few simple rules.

The people who are in favour of liberty, the Jedi and the Rebels, stand for a higher level of, say, information processing. The ability to look at the world and address it in sophisticated and creative ways rather than having to reduce the world into a few simple rules as The Empire does.

Good versus evil is about higher-level information processing versus chaos and lower level information processing. The increase in information and order in the world is basically good.

To further clarify based on the questions from you, Scott, evil is associated with the destruction of higher order, whether it is killing a living being, where the living being is higher order, or destroying works of art that are reflections of higher order and so on.

These terms carry ethical baggage, sure, because the ideas are usually brought to us within a philosophical framework that is often obsolete to some extent and has developed its own repressive and not innovative characteristics.

For instance, America is based on, or a lot of American politics is rooted in, the Constitution is the highest level of rule-giving order.

What we have been running into in today's stupid American politics, the dumber forces in politics trying to justify whatever they do that is reactionary or repressive by saying that it is based on the originalist conception of the Constitution.

That this is immutable. You must let people have as many guns as they want given the Second Amendment to the Constitution. Then people on the Liberal side arguing less persuasively because they do not have the infrastructure and ruthlessness of the Conservative side.

That our understanding of the Constitution must be tempered by 225 years of history. That the Constitution is centuries old and it is not going to adequately address every possible thing.

So, the Constitution of this embodiment or this symbol of good, but it is obsolete in a lot of ways. So, yes, conceptions of good and evil can have ethical and historical baggage that fuck things up.

[Addendum from Rick.]

As an addendum, I have said this at greater length, and so have a lot of other people elsewhere. To quickly point out the political situation in the US, due to some demographic game playing that began with the Republicans 30/35/40 years ago - before Reagan, well-funded Republican thinktanks began to research how to wrangle voters.

They found that dumb voters are easier to wrangle. The current situation in American politics is the result of one party spending two generations getting better and better at manipulating dumb voters.

The Republicans, who started out as a respectable major political party, are, now, at their nadir. Because they have become a party of dumb assholes. Once you start herding dumb people, you have to keep going dumber.

You end with a base and elected officials being more and more amoral/immoral. The values that get lost in the demographic push further and further right. To quickly sum up, it is like smokers.

When I was a kid, a huge percentage of adults smoked, probably well over half. It was in planes and restaurants. Planes would be a bit blue with smoke because so many people smoked cigarettes. Nobody thought anything of it.

I worked in a bar in 1980. 2/3rds of the people smoked. The air was blue-ish with smoke. Over the past 30 years, more and more people have gotten the message about how terrible smoking is - for people and animals around them.

What was widely spread around the general population in 1984, the person who smokes in 2018 is more likely to be either a dick or an idiot. They are like, "Fuck you! I will keep smoking." They either didn't get the message.

Or if they did, they don't care. It is a smaller segment of the population. But in a Bayesian way, as that population shrinks, it keeps proportionately more of the idiots and the assholes. That is basically what has happened with the shrinkage of the Republican base.

If people want a more in-depth conversation on gerrymandering and electoral politics, then they can go elsewhere on other things you and I, Scott, have talked about.

Haereid: I have corrected my view on the evolution process; I see it as brutal, not evil. That's an important distinction. The evolution process seems evil because it (for humans) contains a lot of evil actions, like manipulations that harm others to gain possession. But in a pure form it's basically honest and egocentric. I clarify this below.

First a short comment on statistics and data. I also think that statistical methods and math will benefit more in the future, not least because of the huge access to data, such as Google and other big companies has. Greater storage capacity, stronger processors, and "infinite" data access (AI) in the computers will make statisticians' biggest nightmares, not getting enough data, history.

But, I am not aware of how much and where statistics is used today, but know it's used in many areas (like medicine and psychology).

Back to the topic: I agree that the development and freedom of the individual must be at the center and that we can and should mature to a higher order; as through a Hegelian dialectic.

It is the outcome of a creative, individual free will. This is what I mean when I say that egoism is altruism (see below); that the good exists in individual freedom and not in the appearance of a straightjacket of conformity and normality.

Egoism is altruism in practice (cf. Aristotle's Eudaimonia); I use altruism in the sense that all actions we make lead to a win-win situation or any other outcome where one or all loses, and where altruistic actions create win-win situations. I do not believe in complete self-sacrifice. Therefore, I do not use the term altruism in the strictest, most rigid sense.

The best example of altruism is when we feel better after doing others well. Since I feel better, I did it for me, even if you also felt better afterwards. Win-win. You could criticize it and say that it is lack of empathy. But I don't think so, because the feelings and emotions are contagious.

I do not use egoism and altruism as opposites. When we nurture ourselves, according to our own abilities, opportunities, in freedom, we influence others to do the same, and thus society becomes good (theoretically).

Altruism in the usual meaning of the word, i.e. complete self-sacrifice, often leads to the opposite of intentional intent; violence, war, assault, exploitation, pecking order... It may be a good purpose, but by suppressing your own needs and abilities, your own opportunity to get the best out of your life, and be brainwashed to believe that an overall system, a culture, trumps your own preferences and opportunities, you develop evil.

We become evil of being hindered in our individual growth and development (this is also theoretical: of course not all become evil to others, but perhaps to themselves; self-destructive). The sense of belonging is conditional on being allowed to be oneself in that culture.

In Scandinavia we have a well-developed welfare model, something that I'm a fan of to some extent. And we also have a culture that cultivates equality; by nurturing an egalitarian society everyone gets the same possibilities, worth and we get a good community. This is the doctrine. In practice, it's almost the opposite.

By cultivating differences, people find each other in mutual respect, and then people act good against each other. It's about accepting the strengths of others, and using them as inspiration. When we focus on the weaknesses of others, we spend our time on others and not our own abilities and opportunities.

In short, it is not about being equal but about equal worth, and that equal worth is created through acceptance and respect of inequalities. This is good.

At a macro level, such as nations and global societies, one should (to act good) prepare for individual freedom, safety net for those who, for various reasons, should be abandoned, general healthcare, police, etc. (welfare model), and the right to be different; being ourselves (since everyone is different).

When the focus is on equality, the culture undermines the individual's needs; to develop their abilities, talent, opportunities. Thus, people get frustrated and attack each other.

Egoism (in my sense of the term) is about respecting each other, *narcissism* about not doing so. An egoist knows how to develop his abilities, but also to see what he is capable of and not. A narcissist believes he is God, Lord above others, and that others obey him.

Competition is important to acknowledge and see how far it is possible to develop. You are not competing to make the others worse, but to make the others even better so you have more to aspire after.

Chapter 4

Scott Douglas Jacobsen: With a moderate pivot from good and evil, and morality, into religion and theology, what defines religion to each of you? What defines theology to each of you?

Within the definitions given, and in general, what seems reasonable and unreasonable in theology and religion? What seems true and false in theology and religion? What seems functional and dysfunctional in theology and religion?

Rick Rosner: *The problem with theology and religion in general: it was designed to answer questions via making up stuff that were not yet answerable throughout history by actual understanding of how the world worked.*

Religion has been and is a comfort. It has been a means of exercising social control and concentrating power. It contains a lot of guesses about the nature of things that have turned out, as we have learned more, not to be true.

It does not mean that you have to throw out the entire exercise. Because, to some extent, theologizing and building religions. That is practicing philosophy. It is just that philosophy, especially with it is theological, eventually turns out to be disproven.

On the other hand, as we have recently talked about, there is no guarantee that what we believe as supposedly scientific objective people will not be undermined by discoveries in the future.

I have been saying a lot, lately, that cold random universe is a misunderstanding and will be undermined by an order-based universe. A universe that where everything that exists and emerges from increasing order rather than the universe playing out as a kind of random bunch of collisions among particles bouncing off each other.

Who knows what philosophical implications will be of an order-based universe? But the older religions, the book, Homo Deus*, talked about some of the reasons for the way that the religions of the time meshed with the economic and social structures of the time to reinforce them, to help things function smoothly.*

That the monotheistic religions, where Man in God's image, functions great for a farming society, where we have to believe that we have souls, but we cannot believe that animals have souls because that is too brutal.

Because look at what we do to animals, Man being created in the image of God and everything else being created for use by Man helps agricultural societies function. Then the earlier gods with dozens of gods and spirits and stuff.

Those were helpful in pre-literate periods, where those gods were probably more improvised. It did not matter because no one wrote anything down yet, because there was not language yet – 60,000-70,000 years ago.

So, I like the argument the author makes in the book. Religion is a tool of its era. Each type of religion is a tool of its era to support or provide mental buttressing and societal buttressing for the necessary structures of that society.

But most of religions guesses about the nature of things have been wrong except in the most generous, general terms. It would be weird to think that everything was wrong until now we have science and then we are right about everything.

That seems deluded, arrogant, and counter historical. At the same time, we have all this feedback that we are getting things right because science is so effective at manipulating the world.

So, it is a mix. Where lots of evidence that science is correct, lots of historical evidence that our beliefs at any point in time will be disproven later, my best guess is that the specifics of science, most of them, will survive.

There are definitely 100 or so elements made of protons, electrons, and neutrons. All that is not getting thrown out. It is not some made up a belief system that will be overthrown 200 years from now.

What might get overthrown are the philosophical underpinnings why science works and math works, there's always the chance that what we perceive as protons, neutrons, and electrons will get tweaked to the point that we barely recognize the later versions that people in the 1930s had a hard time adjusting to the quantum mechanical versions of the elements that make up the world.

Einstein famously hated the probabilistic nature of Quantum Mechanics. He worked hard to overthrow it. 90 years later, we are kind of okay with it. In the '70s, there was an ad for a Palm Olive Liquid, which was a dish soap that was emerald green.

It was supposed to be kind to your hands. So, there is a whole series of ads about Mash the Manicurist.

Jacobsen: [Laughing].

Rosner: *She would talk about how Palm Olive is gentle on your hands. The housewife she is talking to in the nail salon says, "Oh, psha!" Mash would always say, "Well, you're soaking in it!"*

Jacobsen: [Laughing].

Rosner: *The woman would look down and her fingers were in this green liquid making them all nice.*

Jacobsen: [Laughing].

Rosner: *It is kind of what Quantum Mechanics is like. We have kind of been soaking in it culturally for almost a century now. What made people crazy in the 1920s and 30s, people say, "Oh, alright."*

Nobody is freaking out about a single photon being able to travel through more than a single slit at a time. We have plenty of freak-outs to come, philosophically, as we move into the future.

One thing that is coming is the era of big data and the discovery of previously unrecognized relationships among aspects of the world that we could not find out because our brains are too small, and our data processing apparatuses are too primitive.

We will get hit with a bunch of new relationships to try to understand. Also, we will get hit with a bunch of black box relationships that will be tough to understand because the correlations will be made within systems that we cannot get at.

With the handiest example being, all the sudden: AI schema that has made computers the unbeatable champions of Chess and Go. We do not know what principles they have developed within their architecture.

We do not know what algorithms that are working off. I think there is a similar thing happening with Google Translate. It has developed a metalanguage within itself. That is not any human language but facilitates the translation among human languages.

That is a big scary black box deal. We will have our big data apparatuses. They will be coming up with all sorts of relationships and discovering new aspects of the world, and correlations.

Why those correlations are, they may be beyond us. I read some science fiction story. Maybe, it as by Chang. The guy who wrote the short story that became the Amy Adams movie.

Anyway, it concerns scientists 150 years from now. I do not know. They write for the Journal of Human Science*, which is a completely bullshit journal because humans can no longer do science because it has moved beyond regular humans.*

It is all being done by massive information processing AI entities. So, what used to be the chief or the noblest pursuit of humanity, it is now this little hobbyist magazine, which would be the equivalent of a model railroad magazine today.

Jacobsen: [Laughing].

Rosner: *We will continue to be surprised. Those surprises will continue to be in philosophical, existential, and theological terms will be good and bad surprises. Theology got hit by bad surprises during the past 2,000 years.*

Earth got knocked out of the center of the universe. The Star System got knocked out of the center of the universe. Humans got knocked out of the center of God's Creation. God got knocked out as the creator of the universe. Theology's ass got kicked.

In some ways, we have gone as far as we can go to kick ourselves to the corner of the universe. Although, I would argue that IC further kicks us, by establishing a super long timeline. So, we are not even favoured by having our own special place in time.

We got kicked out of our special place in space. Then IC kicks us out of our special place in time. A Big Bang universe, every moment of a Big Bang universe is its own unique moment.

But a universe that kind of keeps going as a rolling boil across trillions and octillions of years. There is no favoured place in time really either. But once we have taken it as far as we can go to kick humans and human consciousness into insignificance, there are surprises that will pull consciousness back to a pretty important role in the business of the universe

Erik Haereid: To me, religion is about people, imaginations and metaphysics. It's about what people in general need to believe in beyond their narrowed perceptions, and their struggle between conviction and if their perceptions are true or false.

Religion is also the history about all these imaginations, the doctrines, through history and in every culture that exists and ever has existed.

It's a broad conglomerate of fictions, in the space where we have needs, doubts, we are uncertain and scared, where we are children even though we are grown up. Religion contains our absent or dead father and mother.

Religion fills, for a majority of people, the mental gap people tend to get when they don't feel whole. But it departs from fictional movies and novels because its task is more existential; while ordinary fictions that we know are false are entertaining, religion is nurture and mental food.

Theology is the study of such religious belief. It's the investigation of those histories, trying to prove if it's true or false. To me, it's also associated with the priest, who spoke at school and in the church, and represented an alternative truth and path.

And therefore it's more like telling us the truth, like a teacher in history or geography, more than asking critical questions about if it's true or false. I can't remember much self-criticism from my childhood's priests.

They told us a truth, with conviction and aura. I can't remember that they said something like "…but, maybe what I tell you now is not true". So, theology is, to me, the beginning of and cause to religion wars (Here I link theology to every religion, not only Christianity).

It's the foundation of centuries with quarrels and unnecessary fights. Because it does not contain any doubt. And since religion contains several gods and texts which do not fit into a single truth, theology's lack of respect and humility creates violence and wars.

God does not exist, other than a need, a wish, as comfort, to reduce personal responsibility and emotional baggage. A type like Jesus may have existed. That's possible, and likely.

But most of the figures from the texts are mythical, and some of them may have existed in some way; the texts exaggerate them to fit the reader's needs, the aim of the text.

To me the Bible, Koran and the history of any God is a manmade project, well written, superb actually, fictions that fulfills many people's needs. In addition, it's an edifice of doctrines that force people into certain beliefs and ways of thinking.

It's a "dictator's" voice speaking to his audience, his uncertain and unsafe people, promising them safety and prosperity. And the people, in lack of independence and belief in themselves, listen, grasp and take it for granted.

To me, this castle of fantasies reminds me about how fragile we humans are, emotionally, and how dominating emotions like anxiety, guilt and shame, are. Religions are a tool for humans to abide by in their lives.

Therefore, theology in the sense that it tries to prove Gods existence, or at least to make arguments for Gods existence, is close to nonsense. The main problem is that some really think the text is true, whether it's the Bible, Koran or Vedas. But as fictions, the texts can be rewarding.

What is meaningful is discussing human's fantasy abilities. And our immense needs to build these kinds of illusions and imaginary worlds. And of course our inclination to let us convince; believe in such castles of words, symbols, actions, meaning, even though most people at some deep level understand that this can't be true.

The history of religions is more like a testimony of a wonderful creative human brain. It's absolutely amazing what abilities we have, to let us lead into such fantasy worlds, let us be seduced and directed.

And especially let the imaginations, or rather the people who manipulate, convince us that the imaginations are real. What I think is most interesting, which psychologists certainly can answer better, is where the boundary goes, that's where we let go of the imagination and think it's real.

I don't believe in any God, but in the creative power, human abilities and will that faith triggers in people. The downside is the hate that also often appears.

Faith makes us creative; think of all the monumental temples, churches, mosques, and other buildings and monuments that people have built to worship their God. And all the beautiful texts. And all the complex and wonderful rites and ceremonies. The problem is not all these manmade constructions, but the dogmatic and sometimes hateful content.

What are functional and not? I think there are some moral compasses in some biblical texts that are functional, for instance, the story of Jesus Christ. The Ten Commandments is another example. People use it, and also to the good.

To people who have faith, religious texts, rituals, spiritual leaders and monuments have functioned as a safety net, social acceptance, and as a beam through their lives.

To us who don't have faith, the monuments and rites can be affecting and beautiful. And the music. I have visited churches to calm down, to find inner peace. I like to walk on cemeteries. I feel quiet and peaceful when doing so. When I travel I often visit a church or two, because of its monumental and at the same time tranquil environment. It's relaxing.

Religions are dysfunctional as extreme dogmas, brainwashers, messing up people's perception of reality (in the sense that there is a reality), as inspiration to violence, and as motivation to perpetual religious wars.

A main problem in some religions is the double standard, like the situation in the Catholic Church with the Catholic priests abusing children. And when the theology doesn't open up for new and other interpretations of the texts.

Religions are a lot about extremities. When parents and other authorities teach their children to kill in the name of God, with great promises both in life and after, it's quite obvious that this becomes dangerous when it's systemized. As we can see.

Belief in prosperity or at least a nice continuation after death could be functional to a lot of people, because it reduces the anxiety connected to the thought of the scary and unknown phenomenon *death*.

On the other hand, most religions demand some strict behaviour to achieve the nice continuation, e.g. Karma. This could also motivate people to act good in life.

There is for sure some functionality in religions like Buddhism, where one uses contemplation and meditation techniques and rituals to achieve inner peace. In the secular world, we have adapted it as yoga and learned meditation techniques trying to get the same effects.

One way to conviction is when the belief in God helps you substantially in a traumatic situation in life. If a dogma, a faith, a strong belief in whatever it is, can bring you through the most severe trauma, alive, I guess you lean toward believing that this God or whatever exists in one or

another way, even though it's maybe possible to explain the phenomenon via biochemistry, psychology or something.

I agree with Rick in that religion is an explanation of what people need to know, don't know, and based on an inner pressure of having to know. It's about human needs.

And why can't we live without knowing, without gaining complete control? Curiosity? Anxiety? Probably both based on a need to understand and see the whole picture that makes meaning and sense, and make us survive.

Humans try to explain their lives and the world they perceive, the Universe, based on various reasons. On this road, we get stuck, locked, because we tend to be convinced (because it pleases us).

When something feels odd or dangerous or dislikeable, people tend to reject it even if it's based on data, science, logic, and everything humans see as truth. These obstacles postpone a smooth understanding of how things work.

We need to feel safe in our environment, before we move on. Rick mentions Einstein's resistance to the probabilistic nature of Quantum Mechanics.

I am sure it took people some time, then back in 1543 (I had to look up the year) when Copernicus draw the new picture of where the earth stood in the Universe, and changed people's consciousness from a geo- to heliocentric view, before they accepted that the Earth orbits around the Sun and not the opposite.

We often choose what pleases us; fulfill our needs, even if it's false; even if it's plausible that it's false, and sometimes even if we know that it's false. Then our subjective truth becomes something else than an objective truth.

The irrational nature of us is a part of the truth. We can choose to call this nature whatever we like, for instance, a part of a deterministic Universe that we don't know yet, or that exists beyond what we are capable of ever knowing.

When people find peace, some other, alternative truth can be disturbing. Also, truths based on enormous amounts of data, information, and smart black boxes inside AI-agents. Maybe this is temporary, because we don't know or understand yet.

Maybe there exists an objective truth that is good and not bad, where every human brain and body on the planet fits into a higher level of consciousness. We'll see. Until then we are all more or less separated, with our own, individual truth, and in groups where each individual seemingly fit into some dogmatic truth.

If the absolute truth is a higher level of human consciousness, a summary of all individual truths, then the objective truth is the present truth, including science and religions, knowing, doubting and believing. Knowing can, after all, be reduced to a mental process. Maybe our own technology one day will help us to gain a common truth.

Religion is not wrong in the sense that it's not functional, on the contrary. It's, as Rick says, a tool, like eyeglasses, cars and computers. We always look for the best tool, the most correct map, and adjust it all the time.

It's interesting and rewarding to read Ricks thoughts, like when he says that we, humans, are captured in theology, philosophy and existential questions and definitions, because we can never collect or reach science.

In the future, it's contained in the CI's black boxes with unknown algorithms finding new relationships and correlations to events and phenomenon. We will never be the Masters we dream about, gaining the total control we try to, understanding everything, being superior as we are to other animals.

Because on this road we invent things that prevent us from achieving this. Like AI and black boxes. And because this will happen perpetually, we will always turn us to theology and religion and spirituality, because we can't accept that we do not know everything! If I understand you right, Rick.

Jacobsen: Also, to close the Part Three add-ons, we talked about the little world of good and evil. In relation to religion or the lack thereof, what comprises the middle world and big world of good and evil?

Rosner: *You have been asking questions about various levels of evil over the last few weeks and days. Good and evil on a small scale. This reminds me of a diatribe I went on with you. It was under a different topical umbrella about companies that suck and people who are assholes.*

I assume this falls under little evil. Things that do not directly threaten people's welfare but make life a little bit more unpleasant for everyone. That can include microaggressions and even the refusal to grant cognitive credit to animals.

It allows us to, in America, to kill 10-20 billion chickens per year. We raise meat animals under terrible conditions. Also, milk cows don't have the greatest time. I assume that will be looked at as a greater evil when we have a better understanding of consciousness.

Although maybe not, because the kinds of consciousness that will be more commonplace, more complicated, and more powerful than ours in the future, the life of a chicken may not be any more important than we often view it.

Medium evils are acts that directly harm other people. That threatens their lives. That takes away their money or freedom. That discount their opinions. Right now, we are 18 days away from the mid-term elections.

There is massive voter suppression in the country. That seems like it is, at least, medium evil. The Republicans, or even each party, doing it. But the Republicans have been much more successful and ruthless about it, since 2010.

That is, at least, medium evil. Big evil would be things like war. In discussing all these, you have to discuss whether the actions that lead to the goodnesses and evils are intentional or just a matter of generalized incompetence and not being able to resist our own tendencies.

Also, under big evil, I guess, you would have situations of which we are not yet aware that impinge larger structures than just our planet. It is reasonable to assume that there are other conscious species out there.

That many of them are going to be much, much older than us. That their actions might encompass much larger things. There is the possibility of Star Wars *level of evil. Then there is the possibility that the universe has some intentionality.*

It implies the possibility for universe level good and evil. I realized that talked about evil with all my examples…

Jacobsen: …[Laughing]…

Rosner: *…and no examples of good at various levels. But having decent manners counts as a little good, some Jewish people joke, including us, about Mitzvoth.*

Jacobsen: [Laughing].

Rosner: *When I talk about them, it is about something really trivial I did. Nothing comes to mind like holding a door open for somebody. A medium good might be working to be less of a dick in a long-term relationship.*

My wife and I, as a precautionary measure and not because we have a lot of conflicts, have been going to couples counselling for decades, about once per month. It is like doing maintenance on the relationship and then helping to build an emotional framework.

Where if there is something that annoys me, I can look at it, then decide, "Is this something I can let go because it has no real importance? Or is it something I need to call her on because it has the potential to impact our relationship? Also, are there things I need to work on myself that be annoying and whether I can lose them in the context of the relationship?"

Then there are medium goods, overt acts that have actual impacts on other people and also on you, like giving to charity. Since I have been unemployed, I have been crappy at it. Giving up money or time has a real impact on your life and someone else's life, it seems like a medium thing

It seems like something that you have to do. But it is not simply opening doors as an activity that you're used to, e.g., I was a doorman for years. I am very cognizant of doors. That's all I have time for.

Haereid: I believe that one main reason to evilness on all levels, from person to person, with groups like organizations involved, religious, political and others, and with states, big, medium or little evil, is overregulation (suppression, brainwashing, dogmatizing…).

When people are diminished or overruled by someone else beyond their own needs and opportunities, we seem to produce violence and evil actions, physically and psychologically, against ourselves and others.

We are kind of forced into a tyranny of egality, and of course, we hate it because it's not natural for us. But everyone (my exaggeration) tells us that we need to fit in by being egalitarian. No one (another exaggeration) sees that to fit in and be good we need to be different.

When I talk about equality and egality I mean equal in almost everything else than worth and quality; to achieve a perception and feelings of that humans have the same quality and worth, we have to incarnate that we are substantially different. That's my point.

A little evil could be to be rude by not answer a colleague or neighbour when it's natural to be polite, and you are not distracted by something else. And in general being rude to someone you just don't like, without any constructive criticism.

A little good could be to be more than polite to that neighbour or stranger you meet at the store, and say hello and smile or something like that.

I would say that if you torture one person to death, knowing that this person died under severe pain, it's big evil because of the severity of the pain, even though no state or government or religious organization is involved, and even though no other persons are seemingly influenced.

If the evil is medium or big depends on the amount of the pain, for how long this affects that person(s) and of how many persons this affect. If one person damages a world (by for instance creating and spreading a harmful internet virus, starting a war or intentionally spread an AI-agent that is programmed to kill or hurt as many people as possible), that is big evil.

And if a group of people, like a religious fanatic group as Daesh, creates violence by torturing and killing people, that is big evil.

If you kill a bird because you are hungry, it's not evil but brutal and necessary; it's life, it's natural. But if you catch a bird and make it suffers in some kind of pain some time before you kill it, it's evil. It's, as Rick says, the conditions before killing the animal whether it's by hunting or raising that matters.

Regimes, both secular and religious, and groups like political or religious movements, are good when they teach people to think for themselves, let them act as they want to (to some extent) and evolve as themselves and not necessarily to be approved by others (persons, regimes, groups, organizations…).

When we get what we basically need we tend to accept that other people think and act otherwise than us, and we also approve it and learn from it.

Goodness is about getting opportunities, evilness about not. Religious texts, rituals, cultures can both reveal opportunities and not. The same about secular societies; the regimes, the culture, the organizations need to facilitate, so that each person get these optimal opportunities. This is big good; the freedom to choose, the number of possibilities.

A Norwegian priest said recently that God gives her a bigger perspective of life, and a room to express all her difficult emotions and feelings. Then God is good, for her and her surroundings.

I also believe that faith can raise one's consciousness over and beyond the levels people with no faith usually possess; faith can under certain circumstances make us more intelligent and embrace our emotions in a better way.

Its evil intentionally to focus on others flaws to gain position oneself. This is so on personal level, between groups and states.

Goodness is when for instance a political leader acknowledges and shows respect to an opponent. Such as John McCain did in the 2008 presidential campaign against Barack Obama, when a woman said Obama was "Arab". McCain stopped her, and said that "Obama is a decent family man...". McCain defended his political opponent.

Goodness is to embrace others by confirming them, and make the others see their own opportunities and abilities, talent, like a trainer.

I will also mention the decadence of the western world, illustrated in, for instance, the movie "The Wolf of Wall Street". This becomes evil when it escalates and harms people severely, because we are intelligent enough to know the consequences. I think it's qualified when religions criticize this kind of behaviour.

This decadence can be illustrated by let's say drinking two bottles of liquor containing 40 % alcohol each day instead of two-three glasses of wine to your Saturday dinner. It's about moderation.

Chapter 5

Scott Douglas Jacobsen: How do philosophy and mathematics mix with one another? How do philosophy and mathematics not mix with one another? What insights into reality emerge from philosophy and not mathematics, or from mathematics and not from philosophy? Or do these seem inextricably linked to one another?

Traditionally, philosophy breaks into several disciplines: ethics, aesthetics, epistemology, metaphysics, and so on. Do some of these distinct fields seem unnecessary in philosophy? In that, some sub-disciplines in philosophy seem already explained within others.

Also, what seems like the limits of mathematics and philosophy in providing some fundamental explanation about the world? In that, the rules and principles of mathematics remain non-fundamental.

Same with the purported big questions of philosophy. They remain important. They give insights, even a sense of grandeur about existence. However, they fail, at least at present, for a complete explanation about the world - assuming such a thing exists in principle.

Erik Haereid: Mathematics is an abstract, logical, cognitive tool based on numerical symbols, based on some assumptions, axioms that we agree on. Whether the assumptions are proper or not is a philosophical issue. Mathematics is about structures and exact relations.

Philosophy is some logical investigation into what's true and false, and what's right and wrong. It's a compass in life. We use it trying to finish our mental map. It's a cognitive tool that helps us directing our lives more proper, as we see it, than lives that are lived in the present and based on pure intuition and urges.

Philosophy and mathematics go hand in hand thus that we begin with some philosophical inquiries, then we put some mathematics to those thoughts, then we make new philosophical inquiries and so on. An example is the Big Bang theory. It's reasonable that there many years ago were as many ideas of the Universe, what was outside the human perceptions when watching the sky at day and night, as there were humans. That is, basic for philosophizing is our fantasy; thoughts and emotions in a mental soup based on our genes and experiences. The yellow light we saw at day time on the sky, and we thought were god's candle or whatever, became through philosophy, mathematics, and science to a massive spherical plasma object consisting of such as hydrogen and helium.

Einstein philosophized through his experimental thoughts about how the Universe could function and look like, and he had, for instance, Newton's work in his mind. He got some ideas, like that space is curved and cause gravity, which were reasonably for him, and he put mathematics to it. He also philosophized over that the three-dimensional space and time were not independent, but one four-dimensional phenomenon (spacetime). That kind of philosophy and related mathematics created new thoughts about how the Universe looked like, and what was beyond our perceptions.

Who could think of the Universe as a 13-14-billion-year-old highly dense little object exploding into a vast mess of matter and energy, impossible to imagine, thousand years ago? It was the philosophy and mathematics that dug the ditch. And still are. Because we don't know what's beyond the Big Bang. And probably, if we look to for instance Gödel's incompleteness theorems, we will never know. At least never get the whole picture.

Let's say we could explain the Universe; find some formulas that explained everything (determinism). Then we could explain, prove (based on some axiomatic, logical framework), every statement we had. There wouldn't be any statements that couldn't be proved. But according to Gödel, within any axiomatic, logical framework there are statements that cannot be proved and therefore human can never prove a deterministic Universe even though the Universe is deterministic.

But since we are curious, and maybe naive, we still dig. And then we make new and more fantasies, restrict it into some logical, philosophical frame of thoughts, put some mathematics, even more strict relations and order, to it, call them theories and try to prove them. The final act is to observe it; experience that the empirical observations are in accordance with the philosophy and mathematics. Then it's true, in our understanding of truth. When we have revealed the truth, we don't need to philosophize about it any more. Of course that's not completely true, because we don't believe in our perceptions, and/or we don't know what they are (what is a thought?). So we will continue philosophizing over that, until we get tired and give up, or get mad.

A harmonic alternation between fantasies (chaos), philosophy (order), mathematics (detailed and more order, relations) and empirical experiences (perceptual truth) is the track here.

Humans tend to try to see the surface of the three-/four-dimensional space we are confined in, from the outside. But there is no surface. What is "no surface?" And so on. The only possibility is to make fantasies about it, philosophize about it, create some mathematical formulas to it, but it's confined within our perceptions and abstract images. Our desire for knowing exceeds our possible limits of knowledge. Maybe this drive is crucial for human's evolution

AI and technology, build on better abilities, amplifiers, processors and storage possibilities than we have, could be fruitful for human evolution. We have to respect our limitations, like we do when we make cars, planes, telephones and binoculars. And I think we also do.

I also think we should extend our mind and cognitive abilities to its limit. It's rewarding when mathematicians (and other scientists) find new solutions, invent new concepts or numbers (like when introducing irrational numbers, and later complex numbers).

We need philosophy as long as we don't know everything we want to know, independent of which philosophical field we talk about. In this context a single philosophical discipline's existence is a function of if we still see it proper to try to answer more questions about these topics.

When I know how trees grow, through photosynthesis, and am satisfied with that answer, I don't need philosophizing about trees and growth anymore. It fulfills my needs. But that's subjective, because the process, any process, has no end in the human mind. There are always questions to ask, even when we know "everything" about that topic.

If you see a tree, you can see it as timber to build houses, as a plant that grow and live through photosynthesis, as an imaginary picture of the phylogenetic development, as a family tree, as a nightmare, as beautiful, as a wish, as an oxygen producer, as a producer of apples and fruits, as x times heavier and higher than a human, etc. To discover all these angles and views is the aim of philosophy, in all areas and with everything we have any real perception or imaginary idea of.

To understand is beauty. We have to respect that we will never understand everything, and at the same time respect that there are always new things to learn. It's about a balance. It's like building a monument, like an enormous cathedral or tower; it takes hundreds, thousands,

millions of years, but by putting one brick systematically on top of another we know that we each day get closer to the product; by creating time through successive events we experience that we can reach our goal. And until we know how to live forever, we reproduce and let our children continue the job.

What's the final point? Maybe to reveal a global truth. To reach the very end, where the illuminated revelation is right in front of us. Is this what life is about? Or is it just an uncorrelated mess, with seemingly none or few relations, no goal, a nihilistic travel through emptiness? Shall we reduce life to simple, cynical social maneuvers that suck all the beauty out of it? I choose not to reduce humans to a harsh evolution process, because it's meaningless, it's messy and violent, and it's logical in the simplest way. This makes me religious even though I don't believe in God. This also elevates my experience of life.

It's complicated to see the beauty in everything, and on that road we limit us to exclude what we have not understood yet. But still we unconsciously work towards that goal, because we know on an unconscious level that we need to see everything that exists in relation to each other.

In general, we philosophize about everything and anything, and related to math about such as black holes and singularity, how to express the primes in a formula, multiple universes, artificial superintelligence, and how to travel and meet the aliens somewhere in the Andromeda Galaxy. Dreaming about travelling to the Moon was one thing, philosophizing about it another and the next step, and then calculating how to do it and doing it the final steps.

Obviously, as we can see when we are at AI's kickoff, the human brain has many limitations concerning perceiving, storing and processing data. The black boxes are mentioned, and our lack of knowledge of what is going on there even though we have created these devices.

One of the blessings by being a child was the large quantity of fantasies. In books, stories told, dreams, what we saw in the nature we yet didn't restrict to pure science (Some trees grew into heaven, didn't they?).

Inventions are made by grown up "children". There is one person now and then through history that revealed something important, that made his/her fantasy becomes real; like that we can talk to each other from one side of the world to the other, or travel in space. The impossible became possible. This is an ongoing process which we all are a part of all the time.

Maybe our search for objectivity and truth, a real Universe, has something to do with us, our mind more than it's about if the Universe is objective or subjective. Of course, how is it possible to travel in a subjective Universe? Who are you if my mind is the only mind? How can I interact with something else if this is a part of me?

It's convenient to look at it as me and the surroundings, as different entities, subject and object, because that's how we experience it naturally. But when we go into it, philosophizing, exploring it with our thoughts and logic, it could be that everything "else" is sort of an unconscious part of ourselves. "We" are not confined in our body.

We just don't experience it like that, because we are not aware of it. But by putting it into a thought, we can think of it as a possibility, or just a fantasy. When you travel or do things, I do it, but as during surgery and anesthesia. It's a matter of consciousness and not. Or several levels of consciousness; I am not aware that I think your thoughts.

Don't misunderstand this; it sounds narcissistic. But it's not, it's a philosophical inquiry. If the person thinks he/she is God, then he/she tries to control all other's cognition, acts, behavior. But we don't control each other's thoughts and behavior. It's in this context the philosophical inquiry is done.

Maybe we are tricked by the fact that we experience that something is outside our own control, and therefore experience it as what we call objectivity. If I can't remember that I wrote that sentence or did that thing, how can I then claim that it's my act? How can I be certain of that *me* is confined within "my" body, "my" senses, "my" emotions and thoughts, "my" free will? It could happen that I am something else than I experience that I am, even *everything*. This is about how we identify ourselves, and what kind of responsibility we take.

Let's say that we all are the same. If everyone and everything are a part of you and you are a part of everything and everyone, then all the interactions are a part of us and we are not limited to our bodies. Subject is object. When you speak to me, even though I can't imagine or sense that this spoken sentence came from myself, I have no control over it, I don't know where it came from within what I define as "me", I have to think, from this point of view, that your voice is my voice. It could be a voice from my unconscious part, like my autonomic nervous system.

It's not the chaos that is beautiful, but our adaptation to it in the sense of understanding and accepting the volatility in the surroundings, the magnitude of the Universe and life. This is what make logical practices like math and philosophy beautiful; they are tools evolving our understanding, abstract and not, and revealing that life is more than we have ever thought of before.

We talk a lot about what technology can do for us in the future, and obviously we need some kind of cognitive and emotional amplifiers to be what we want to be.

Inventions like social media, internet, shows creativity and that we are capable of doing almost what we want to. I am sure that evolution has its right pace, also related to technology.

[Ed. Further commentary]

We humans have the ability to think we are something we are not; we have the ability to believe we are gods and devils, for instance, that we are everything and nothing, abstractions or concrete manifestations different from which we really are, and base our existence on that false identity. The advantage of this feature is that we can create great ideas that can be converted into practical use. The downside is that we kill each other; become more destructive than necessary. Great ideas are also created by people that are self-aware, so let's stick with this.

I am in favor of self-awareness, to use a word that is not sufficient and do not cover what I mean; but that's the best word I came up with. It's about knowing that you are an entity, existence, and who you are, as best you possible can achieve that self-awareness through all your identity-changes through your life. It's a continuous struggle. And it's the best way to live your life, if you ask me; for you and the society. It's a state of contemplation, and maybe the Buddhist monks are the best achievers of that state, I don't know. We in the western cultures are not very good at it, though.

When we discuss ontological, epistemological, ethical or aesthetical issues, I choose to start with this: We have to know *that* we are and approximately *who* we are; for real, not as abstract or false features. If not, we are driven into insanity.

When I discuss whether ideas exist or not, I have to profoundly feel that I am the entity that thinks of and discuss this problem with myself or others. If not, I get lost.

If abstraction exists per se, beyond our abilities to think abstract, is a function of what concepts we so far in evolution have developed and defined, and which logical inference and irrational beliefs we have established (knowledge). Proofs of for instance abstractions' existence are based on our, humans, innate abilities and learned knowledge. The core is how we humans define *proof*. And this is about feelings, experiences, profound feeling of and so on; the core inside us (i.e. self-awareness), which is irrational as such.

It's possible to disagree about anything and everything, even though one wizard claims his or her right (like it seems I do here; I underline that this is my experience), and even "proves" it. Bottom line is that it ends here; reality, existence, truth cannot be proved as anything else than that we experience it and call it "truth, reality" and so on. Something is difficult to contradict as real, though, like physical events that "everyone" sees and experience. The closest we get to reality is therefore our experience of it. Do you see what I mean?

I think we have to see knowledge as a human phenomenon, a mental ability that helps advanced organisms like us to provide better identities and lives. Humans should focus more on what is real and not, and what is me and what is someone and something else; who are we, and how shall we capture a sense of that?

It's not about living all life in contemplation, but to evolve the ability to slow down the chaotic lives when needed, and find that inner peace or understanding of whom one is; a meditation skill.

We all change identities every minute, every day, all life, and it's a struggle knowing who we are on this bumpy travel. And since humans have these complex mental abilities, we also have the ability to dissociate, create several personalities, thinking we are something we are not and make a mess for ourselves and each other. I don't say that I think we would be angels if we all had this continuously inner contact with who we are, but I guess we certainly would have been nicer and lived better lives and also chose the right path; because we would have the inner knowledge and wisdom of "here I am, and that is who I am just now". Then the future would be easier regardless obstacles we met on the road.

So, if there is one certain achievable knowledge, it is the knowledge of who we are. No one can take that inner experience away from anybody (even though we try and succeed…). But we have to believe in it; it's not proved mathematically or a result from a syllogism. It's an experience. It's beyond thoughts and emotions, which are tools to gain that inner knowledge and wisdom.

If you want to be rich or a king, go for it, but the point is to experience and achieve an inner peace about who you are on that road. It's not about restraining our lives, on the contrary, but about achieving goals through self-awareness. Do you see what I mean? I don't believe in piety in the strictest meaning of the word, because that's a wrong approach to inner peace. I am more in favor of hedonism, but with that extra ability to always know who you really are, and not the narcissistic or ascending self.

Maybe I am a bit off-road concerning the topic in this thread, but when we talk about philosophy and what kind of mindful activities humans should strive for in the future, I have to mention this which I strongly believe in. We can ask ontological and epistemological questions about reality, existence and knowledge, and questions about what is beautiful and not, and what is good and not, but anyway we end up with ourselves. That kind of self-awareness is the key to evolve on

every other area we deal with. Being human is not only to gain knowledge but also wisdom, and that is to know when enough is enough.

Because we tend to blend our abstractions of who we are with who we really are, also because other people, the culture, plant ideas in our mind about who we are and should be, we build a distance between our perception of who we think we are and who we really are. This creates chaos in our minds and in the culture; socially.

It's the culture, family, friends, activities and your surroundings that function as mirrors, that make you be self-aware or not. If this culture make you believe that you are something else than you really are, then you go out searching for someone and something that mirrors the real you, that make you find yourself, until you find it; because we all have that inner profound wisdom about whom we are, all the time. We just need help; mirrors that lead us towards it.

Self-awareness is also about understanding one's limitations. If you are far away from knowing who you are, you are not capable of capturing your possibilities. It's like a child's growth: The child develops best when its parents function as mirrors for that child; sees it as it is. Then the child is open-minded for strangers and differences, curious about it, and is driven towards new phenomenon. It changes identity every second. And because its parents see whatever it does (not accept everything it does, though), it will continue being self-aware. It's a process through life. When we get older other people function as mirrors, the culture does, and the same rules exists. When we are not seen as we are, when we cannot see ourselves in a film, a book or in a neighbor, we get lost in our minds and develop other and alternative pictures of who we are than we really are. When the culture contains many such individuals and features, then it gets messy.

One of my points is that we become xenophobic and hateful against each other when we abstract from our true self. And the contrary; friendly and inviting when we know who we are. Then ethics is to build a community and culture which embrace values that enhance each individual's self-awareness. A culture that motivates everyone to be something one impossibly can be is an unethical culture, and the opposite. It's not about restriction, but a consciousness about whom we are and who we can be. The sky's the limit in our mind, but not in real life. And I think that is crucial to understand, and making good citizens; people that know how to treat each other with respect and good. And even though it sounds imprisoning, it works opposite; you will actually achieve more in life when you are aware of this. Self-confidence is å product of being self-aware.

You can create a justice system that controls people's actions until a degree, but the basic problems are still the same; the system does not prevent violence. That's because it's still unfair; no such system embraces everyone. The thing, if you ask me, is not to prevent violence and make good citizens by telling people who they are and should be, but letting them be who they are. Then our natural social collisions will make us adapt properly. I think this is a path to more empathy and understanding, as I said before: Egoism is altruism. This is what I mean by that. I don't say this will prevent violence completely, not at all. But it is, in my opinion, the best way to achieve cultures where all live their best lives and that is inside the acceptable for almost everyone. Statistically spoken the expected value, the average, of life quality could be the same but the standard deviation much less. There would be shorter distance between the extremities. We (think) we need more rules and limitations and governmental institutions because we are less in contact with whom we really are, and more in contact with an abstract, false identity; that's my point.

About aesthetics: The idea with art is to elevate us, bring us into the contact I speak about, to our true self. So the idea of aesthetics, say art, is to bring us closer to mutual love and respect, understanding and behavior that we all can accept.

It's about making the right picture, mirroring ourselves. I think it's not a question if, let's say in painting, impressionism is better for us than expressionism, or if that abstract art is better than figurative art, but what that piece of painting and sculpture does with us; like the book we read. I read novels that enhance my feelings of being, existing. It's like travelling and being aware of that. And as with esthetics, it's not possible to draw general and absolute rules. It's individual.

When that is said it's obvious that some with knowledge about paintings can help people to see things in the painting, and through that new insight evolve and appreciate that piece of art. Like in architecture, where you can look at a building and feel that it's ugly until the architect wizard tells you about the details, the reasons; why, where, how. Then it becomes beautiful, as the zoologist thinks when he watches tarantulas.

Should we draw a painting and write a novel as beautiful as possible, far from reality, to enhance our good feelings that we get when we watch beautiful things; idealizing? Or should we paint and describe reality, with the chaotic mix of ugliness and beauty, reflecting our real emotions in our real lives?

If everything in a culture is about creating idealistic, always beautiful art and social installations, we get lost in our hopes and wishes, in our abstractions and thoughts about how we want our lives to be. If we don't create any counterpoise to this, we will probably evolve abstract selves and huge distance to our true selves, and without the opportunity to evolve our true selves as we wish. To gain the optimal evolution we have to create idealistic art and art reflecting reality.

Being a true romantic, as an example, is not about being bohemian or poet, but being bohemian in the weekends, so to speak. Hedonism is a spare time phenomenon. It's about having this inner switch turning you self on and off. A naturalist, a person that embraces things as they are, has also to turn his and her romantic-switch on now and then. Art is not about destruction, but about making us understand that no one survives if life is pure destructive. We have to see, to internalize, that there are good as well. If we don't, it's not because of our existence but because of our culture, art, communications and perceptions of life. It's an illusion that reality is pure destructive. And it's an illusion that it's pure good.

[Ed., further additions]

We can divide reality into a concrete and an abstract world, where the abstractions meet the concretions now and then. It is "impossible" to claim that something created or perceived in the abstract world don't have the opportunity to appear in the concrete world, such as time travels. We don't know the range of the concrete possibilities that lie in our abstractions. We profit from distinguishing between our abstract and concrete identities. The abstractions as phenomenon are far ahead of us, far beyond, but at the same time provide us vast amounts of opportunities in the concrete world.

Example quantum physics: The fact that two particles can function completely synchronized on different physical places, with no concrete relation, is an example of changes in our perception of reality based on evolved abstractions (math). When I say that we must be aware of our limitations, I mean strive for being self-aware, and not that we shall not endeavor and evolve through our abstractions; including convert from abstract concepts to real experiences like time

travels. Abstractions are about aspiring, setting goals, and respect that we reach them when and if we do.

The very first grounds for anything is “because it is like that”. Axioms are established because we feel and experience that this is right, and not because it’s a logical context that leads to the axioms. My point is that all explanations, all mathematics and philosophy are based on an irrational, emotionalized elastic floor that we never can get under or beyond.

Math is about developing numerical logical coherences, formulas, based on some basic rules, axioms that we agree in. When we bump into problems that involve lack of concepts and definitions, we create them. That’s the advantage by abstractions; it’s quite easy to expand and evolve. When mathematicians stop developing concerning formulas containing strange numbers that they until then did not have defined in their number system, they invent new number concepts and symbols (i.e. from natural to rational, rational to irrational and further to complex numbers). They adapt to their abstract needs by expanding their abstract world. Even though complex numbers (square root of negative numbers) seem illogical and incomprehensible by first glimpse, based on traditional mathematical rules, it’s about amplifying the system by thinking beyond what the mind think is possible.

In logical, abstract activities we have the possibility to achieve new coherences and correlations, after developing new abstract concepts, definitions and symbols and the logical rules we attend to, that we possibly couldn’t within the frame of concepts and symbols we are captured into at that time.

It becomes a kind of abstract nanotechnology; we distort basic structures, and create new concepts, definitions and logical rules that we accept.

An intriguing thought: Maybe the prime numbers are math’s enigma to mankind; we have to reveal the formula explaining the primes to understand what life is about; what is meaningful and not. If I was a zoologist I would probably have found another example, though. But maybe it’s impossible to find that formula concerning the prime numbers without expanding into new mathematical concepts.

Maybe rhythm, logic, coherences actually is about developing concepts and symbols, enlarging our abstract world more than trying to gain control over the already existing abstractions we know of. That is, every lack of rhythm and understanding is a lack of new concepts, lack of abstract expansion. If that’s so, it’s not about what we want and not want, but how we can achieve that expanded wisdom.

Rick Rosner: *I agree with Eric that our philosophizing about the nature of the world has been recently constrained in the last hundred years by our finally having a first overall picture of the structure of the universe.*

Although, I would say that our first conclusions, including the Big Bang, are likely not going to turn out to be as right as we currently think they are. But until a hundred years ago, we didn’t even know there were other galaxies.

It was less than a hundred years ago that the expansion of the universe was discovered. A hundred years ago, we didn't know that stars ran on fusion. That's less than ninety years ago. There was no way we would be even anywhere close to right in philosophizing about the universe because we had a very incomplete picture.

Our picture is still well short of, in our current philosophies and science, the overall structure and behavior of the universe; it is still off in the weeds. But it is closer to correct than ever before because we have more observational evidence than ever before, and it is not even a gradual incremental increase in accuracy.

It is an explosive increase in understanding over the past 100 years. We had Newton's universal gravitation, which itself was a huge step and then we had the relativities but they were brand new.

So, anyway we're living in a new era of philosophy and science on the largest scales and philosophy can be considered for science on the largest possible scale with an observational foundation for the first time ever.

Ten thousand years of trying to imagine the universe with some explosive steps towards understanding from time to time going from an earth-centered universe to a sun-centered universe, the discovery of the elements and all that stuff, but we've only gotten the tools for any observation and information based global philosophizing in the past few generations.

And this coincides with the idea that what science is supposed to do is boil everything down to a single general set of principles or a single theory; unification in general. Let's see how many things we can put under a single umbrella.

We wouldn't get arguments from many scientists if you said that biology and chemistry are at their most fundamental levels just physics. And they need to have some quibble saying there are emergent principles in biology and chemistry that you'd have a hard time predicting from physics. So, you can't do away with biology and chemistry.

Then if you came back and said, "Yes but all the physical interactions from which these emergent phenomena arise, that's still all physics." They might have to grudgingly say, "Yeah." You could argue that evolution is a unifying principle of life on earth.

Now still, you can take it all back on physics, but evolution is the framework that encompasses all that and gives you a philosophical structure for understanding what's going on. Evolution is still subject to severe revision.

It wasn't until the 60's and 70's when Stephen Jay Gould came on with punctuated equilibrium. Before that most people and still, most people have the idea that evolution, if they believe in it at all, is this gradual thing that cuts along with occasional mutations being helpful and being integrated into net of life.

Whereas punctuated equilibrium says the species generally go on without changing much for tens and even hundreds of thousands or even millions of years until special circumstances permit for rapid change in evolution on change in a few hundred, a few thousand, or a couple ten thousand years based on either a changing environment or a small segment of a population being isolated.

If you were to graph somehow one finch changing into another finch, it wouldn't be a gradual transformation of one finch into the other. Instead, it would be finch A going along for fifteen thousand, twenty-five, or fifty-five thousand years and then all of a sudden part of that finch population, something happens to it; it gets isolated or the weather changes or some crap happens and then within fifteen hundred years finch B emerges.

But anyway, that's a recent addition to evolutionary theory and then epigenetics is probably even more recent, not that I can even talk about that in any decent terms but I think epigenetics is like Lamarckism that isn't wrong.

Lamarckism is the idea that an organism's life history is somehow incorporated into what it passes on genetically with the standard example being that if a giraffe has to reach higher and higher to get to stuff on trees that reaching is somehow going to be incorporated, it is going to be passed on to its kids because the giraffe had to be so reachy all its life.

It wants to have longer necks, which survive better and pass on their long neck genes. So, it is not individual experience changing, it is the better-adapted creatures pass on their genes and if this happens in enough increments; if there's a niche for longer-necked creatures, then longer-necked creatures are going to have more life success.

That is, they'll get more food. They'll be able to get laid better because they are healthier than the short-necked giraffes. So, the long-necked giraffes will have more descendants than the short-necked giraffes.

What I think epigenetics says, I should probably read the Wikipedia article so I'm not wrong, is that our genome; it has a bunch of junk genes. The genes that are expressed to make us and operate us are like in a teamwork with all the genes we have.

Most of the genes are right along those that have just been passed along because there's no reason for them to be knocked out across several billion years of evolution. But some of these genes can be turned on based on life experience, so you do have an options package based on your life experience because you have all these templates to express other stuff if you run into the right circumstances.

I'm not sure that this means that these will be passed on based on your life experience, except that there will be bias if you survive better because your genes have been turned on. But anyway, that's a whole new area of genetics that would've surprised the shit out of Darwin; he didn't even know we had genes.

We have the bias towards unification looking for overall principles in philosophy, in math, in science and this unifying philosophy is generally successful. You've got the deductive principle and the inductive principle.

I don't know which is which, but like one is looking to generalize and the other is you're looking to specialize; take general principles and make new inventions from what you know. And science has had huge amounts of success going in both directions.

You're going to make a bunch of money going from the general to the specific and they are making these stuff, but you're going to get tenure and by going from this specific to the general.

I agree with most of what he says. It reminds me of three possible future paths for science which we talked about, which is:

1) *We complete science and know everything.*

2) *We complete science without knowing everything because there are things beyond what we can know.*

3) *Science proceeds to acquire a more and more complete picture of the universe but never reaching 100% completeness. There's always more to know.*

That seems the most reasonable path that we'll render with AI, big data. So, our descendants and the things and people that will come after us will find all sorts of relationships in the world that we had no idea existed, probably don't even have the mental capacity to process.

But it is still part of the ongoing but never complete process of understanding the world. Eric also talks about the importance of beauty and emotion and it used to be a stereotype when presenting robots in science fiction that they would be emotionless.

They would make dispassionate judgments just based on algorithms. Some of these judgments would be horrifying. The Terminator *series with this cold logic tells the robots to eradicate the humans.*

I think you can't operate in the world effectively without assigning values to events and things and ideas and link to those values or emotions feeling good when positive things happen and bad when negative things happen and feeling good when you see something that appeals to your sense of aesthetics.

I think that the beings that come after us with much larger information processing capacity will continue to have emotions but emotions that will probably be even deeper than our own. If you can say something like our emotions are deeper than a dog's emotions because our emotions are informed from more angles and based on more information, very few dogs write poetry and I think it makes sense to extrapolate from that that the beings who come after us with their bigger brains will have emotional structures that are bigger and deeper still.

The half robots of the year 2115 will feel deeply and have relationships among themselves and other beings that are as intricate and feeling and reflecting of values as our own and more so. Emotions and values are part of the toolkit that let you operate in the world. They are not for fun.

We as evolved beings; our emotions and values are largely evolved. Love is a cultural overlay; the feelings of love and the idea of love is a cultural overlay on our evolved drives to reproduce and to care for our offspring.

Future emotions and future values will have some of those same structures. People in the future may feel things strongly and the more stoic people of the future may feel emotions as being frippery but, in general, emotions help you navigate the world and help order emerge into the world.

They are a necessary part of conscious life and consciousness itself is probably a near necessary part of increasing order in the world. The point of view now is that everything boils down to physics. If you take biology apart everything happens because of physics, chemistry; because of physics.

So, all the more complicated sciences boil down to complicated instances of the simplest most basic science. I would say that similarly some of the complicated ideas of philosophy may be seen as boiling down to the more basic principles that might be found in math and in physics or even more basic than that in the principles of existence.

The consequence of this scientific program for the past few centuries has been to search for and boil everything down to essential principles and when you can't do that you look for more macro explanations and overarching systems of values and beliefs.

But those overarching systems are subject to being boiled down to more essential principles as those principles are discovered and expanded upon. The current dominant belief of our time is scientism. The belief in science is the dominant and most dynamic belief system of our time.

Humans and human society and the universe itself has been increasingly subject to scientific analysis and most scientifically educated people believe that we are the entirely biological products of billions of years of evolution rather than being imbued with certain magical properties by God.

Now, that doesn't mean that values have to be discarded, instead, we have to discover values within the more scientific framework and there is a lazy default form of science that says everything is random and nothing means anything but that is a misunderstanding of what goes on in an information-based universe.

It is hard to pull a bunch of values from a purely scientific point of view but you can pull some values and then you can build upon those like one value you can pull is that increasing order seems to be good, given how we fit into the world and the desires we've evolved to have.

If you can pull out that you want the preservation of order unless it is corrosive dictatorial preservation of order that's at the expense of other values. You can pull out the golden rule because we know from personal experience that we want certain things and we can assume that other beings share many of the same things, the same desires we have.

And from the preference for order and from the golden rule you can build more complicated philosophies.

Even though we're building not from benevolent God, His goodness, the magic property of consciousness and souls and all, you can still build from basic principles out to an entire philosophy, which will be helpful and necessary when we start to have to deal with the ethics of the new existences; new beings that we will bring into existence via AI and also the future humans and their future multiplicious forms and their augmentation and the new relationships among augmented humans and AI and the whole mess that's going to coming in the next century.

Chapter 6

Scott Douglas Jacobsen: Few people, statistically speaking, qualify for general intelligence quotients above 4 standard deviations. One reason remains the ceiling set on mainstream standardized intelligence tests. Another is the rarity of the population. A small number of people, internationally, developed some tests for above 4 standard deviations.

What is intelligence? What is IQ? Why the limits on the mainstream standardized tests? What is the reliability and validity of the alternative tests for above 4 standard deviations above the norm? How many have each of you done? What is the range of earned scores? What do this score or these scores indicate about the alternative tests, the mental abilities tapped, and the conceptualization of general intelligence?

Erik Haereid: Intelligence is, strictly, about the ability to think abstract and learn new stuff. It's about the g factor; if you are good/bad at one thing you are probably good/bad at another thing too. Since there are a lot of opinions among scientists, psychologists (psychometricians) and laymen, I conclude that there is not one single definition. We don't know what intelligence exactly is, but that it has to do with how we learn, adapt, solve problems and understand. It's more about how we process knowledge than knowing per se.

IQ is a measure of intelligence. One of the main difficulties by making tests that are supposed to measure intelligence is that they can't capture the culture's knowledge; they discriminate because some know things other don't and score higher (gaining higher IQ) without having a higher intelligence. Most people in the world would score poorly if the test was in the Chinese, Norwegian or Swahili language or using ancient Egyptian hieroglyphs.

Other disturbing factors are such as bad preparation and performance anxiety on proctored timed tests, which seem to be the only accepted psychometric IQ-tests today. If you have 20 minutes once in a lifetime to show your level of intelligence, those sort of tests obviously will discriminate on how good you are at dealing with that kind of pressure. As far as I know, that kind of nerves are not correlated with intelligence. Then ordinary timed IQ-tests are not measuring pure intelligence. But which tests are? No tests are, if you ask me. The experts, the psychometricians claim that tests like WAIS is optimal concerning measuring intelligence. So let's stick with that.

Why the limits on the standardized IQ-tests? They have those limits, "low" ceiling, because they are supposed to measure correct IQs. To draw the right statistical distribution, e.g. the normal distribution which one has measured and calculated as the best statistical distribution on measuring IQs, you need plenty of data, scores, testees, in each area of IQs. But since there are fewer and fewer scores at the bottom and top, you can't say for sure that it is the normal distribution, or any other distribution, that fits that area of IQs. The higher (and lower) you get on the IQ-scale, the more uncertain is the calculation of the IQs. We know that between let's say 50 and 150 (standard deviation 15, which I consequently mean) in IQs, we have enough data (scorers and scores) to measure a quite correct statistical distribution; the normal one fits almost perfect. That's not the case deciding IQs under 50 and over 150. That's why you get on most (?) proctored, psychometric accepted IQ-tests have ceilings, and that it's more right to achieve "Your IQ is 150+" than "Your IQ is 172".

When you increase the ceiling (more difficult items, less time), you will also get more uncertainty connected to the highest IQs. So when you gain a 145 IQ on a WAIS-test, this is

probably close to your g. If you gain >155 (or wherever that limited limit on that standardized test is) you probably have an IQ over that level (155+), but without knowing what it is. If you gain 175 on a WAIS-test, you still probably have an IQ>155 and also >160, but with increasing uncertainty. Maybe it's 165, 170 or even 180; it is uncertainty connected to those high IQ-scores compared to those <155 on standardized tests.

The Mensa entrance test (e.g. FRT) is constructed for the purpose of dividing the top 2 percent from those below, so if you gain a >130 IQ on that short 20 minutes test with limited ceiling, you probably are at the top 2 percent of the population because of the many testees in that area, and the fact that the test is highly correlated with other psychometrical tools like WAIS.

Let's say we have developed a perfect measure of intelligence, for every level (as many say the WAIS-test approximately is today for levels < 155 or so); we have a valid IQ-measure. Because of the huge amount (I guess) of testees in the area below 145-155 (let's say on WAIS worldwide), we can be pretty sure about the coherence between the measured data (the scores) and the distribution; they follow the normal distribution let's say up to 150-160 (that is 155). And since we here assume (for simplicity) that the test also measures exact intelligence from IQ-levels of 155 and infinitely (that means that no one will get the full score, never) we only have to destine the IQs related to the scores. But since there are few testees among those who scores over 155, we can't for sure say that the normal distribution counts for these scorers. So far, based on their WAIS (or whatever "perfect" test we use)-scores, we can tell that they are above a certain IQ-level, even though the test measures IQ-levels all the way (has an infinite ceiling), but we can't say that their scores follow a normal distribution over 155 because of the lack of data to confirm that. It becomes just a qualified guess.

So, when we talk about other HR-tests (e.g. high range untimed tests) with high ceilings (>160-170), and compare these scores with standardized tests like WAIS, we can't say for sure that the HR-tests are reliable even though they are correlated with WAIS on the high levels. If you gain IQ 170 on WAIS, LS24 (spatial HR-test by Robert Lato) and SLSE1 (numerical HR-test by Jonathan Wai), you can't claim a reliability on the 170-level even though it seems to be, because also WAIS-scores on that level are unsure. But there is, certainly, a correlation here. Maybe the theoretical true IQ is 180 on the WAIS-test. Then your real IQ (g) maybe is more like 175 than 170. Even though the tests are correlated (you gain the same score on several, different tests) it's not sure that (on these high levels) the statistical distribution (the formula that calculates the IQ) is correct because of the few data to predict that distribution.

When we have few data we can use non-parametrical methods, which is the second best choice. If every person in the world took this test, we would have plenty of data to measure levels up to 180; deciding a parametrical statistical distribution, not necessarily normal, from the population with IQs over let's say 155. Now we really don't know if this distribution (IQ>155) is normal, but we use the normal distribution to decide IQs also in this area, because the normal distribution is right to use for everyone else (IQ<155). We presume that IQs follow the normal distribution also for people >155. But this is a vague anticipation.

I don't have any insight to data from proctored, psychometrical accepted IQ-tests in this area, so I just speak theoretically.

I presumed that the best tests, like WAIS, measures intelligence. But this is also a definition of intelligence, and I mean that the psychologists (psychometricians) are the experts. One thing is

that you have a nice test and plenty of observations (scores), and therefore can predict a solid distribution (like the normal). Another is if that the test and scores really measures intelligence.

As said, let's say you force people to take one 20 minute IQ-test once in their lives, that is said to measure something that important as intelligence, you certainly measure much more than intelligence (nervousness, performance anxiety, your relation to authorities, the culture's weight on such tests…). Then you at least not only discriminate on the mental capacities like intelligence. It's a lot of statistical disturbance that is difficult or impossible to measure.

There are for example some, many, that believe that untimed high range IQ-tests measure something more than intelligence; perseverance, stamina, patience and so on, in addition to intelligence. I am one of those. So when you gain a 180 IQ-score on an untimed credible HRT, you probably do have a very high intelligence, but also a high degree of stamina.

Assume that a person A (preferably a future super AI-agent) take Lato's LS24- and Hoeflin's Titan-test in one hour with all items right. The second best achiever is, let's say a person B that scored 20/24 on LS24 and 48/48 on Titan, but used totally one month. B is said to have 200 in IQ, based on a dozen or two of other testees in the same range (170-200). But how should we calculate A's IQ?

In a parametrical distribution, like the normal one, we would calculate it directly. But is this normally distributed in the end of the tail? Maybe not. The problem is how we should decide, calculate, if A's IQ is 300, 700 or 1,000. We have a lot of statistical methods to measure uncertainty, predicting something that makes it a qualified guess, and the common factor of those methods is that when the data become fewer the guess-factor becomes larger.

This illustrates the problem with little data at the end of the tail. We can say that extraordinary achievement, considering the short time used, deserves an extreme high IQ, but we can't know how high. The distribution is unknown in this area.

I mention two factors that influence intelligence: 1) the ability to solve abstract problems, including different degrees of complexity and a diversity of cognitive problems like in a WAIS-test, and 2) the time used to do so. I can't see any major obstacles creating extreme difficult IQ-tests, because it's about combining degrees of difficulty and available time or time used. It's not any problem creating an IQ-test that measures (theoretically) IQ's at 900 or 1,000-level. If a person solves the Titan-test in six hours, with all items right, she/he/it would obviously have an IQ superior to the most intelligent person we know of today. The problem is to decide the IQ-level, not proclaiming that persons superior level of intelligence.

I have taken something like 30+ HR-tests since 2013, and one proctored standardized test in 2013 to get into Mensa (FRT). I am among the top scorers on several HR-tests with high credibility and ceiling. Before 2013 I was not concerned with IQ-tests. I am more interested in how we humans can use our intelligence than measuring it, but it's a lot of fun doing these HR-tests; you sort of get addicted.

On the tests I have taken seriously I have scores in the range 145 to 185. I have a quite good assembling on some of the most accepted, respected and oldest HR-tests, like LS24, Algebrica, SLSE1, SLSE2, LSHR, some of T. Prousalis' tests and some more. My IQ on these tests with high credibility is in the range 166-176, as I remember it, and maybe my g is about 170-171, maybe a couple of points higher since I score high on different type of tests (numerical, spatial,

verbal); I don't know, and I don't care. I am pretty sure that my IQ (g) is in the range 0 to 200! And I am pretty sure that I am 56 years old.

Rick Rosner: *Intelligence is generally finding consistencies in the world, consistencies and relationships. If you want to be slightly grandiose about it, then it is what separates human beings as generalists from other species whose search for exploitable consistencies don't have as much fluidity as humans.*

That's it. It is figuring stuff out about the world. You do not know if something is inconsistent; until, you are aware of things. Chaos is just chaos when you haven't pulled anything out of it. Until, you've pulled some things, some consistencies, out of it. Then you can find out what is consistent or not.

If you do not know anything about anything, then that means not knowing anything about what is inconsistent. IQ is an attempt to measure intelligence via testing, standardized testing. I don't want to go into the whole history of IQ. You can look it up.

Basically, it started with - intelligence testing that leads to IQ - Binet in France who had a 5-point scale designed to help kids be designed appropriate educational resources. If you are a 1 or a 2, then you need extra help because you're not that smart. If you get a 4 or a 5, then you get extra help because you're smarter than average.

Terman put this on a 100-point scale where 100 is average. He probably is the one who came up with the ratio IQ. If the kid is 10, but scores on an IQ test like the average 12-year-old, then it is 12/10 for an IQ of 120 for the kid. Then largely in America, you had a small intelligence testing industry grow from there.

With the heyday of IQ testing probably being in the 50s and the 60s, people really believed in it. Kids get tested now, as part of school. In the 50s and 60s, kids really got tested. People entirely believed in the results of those tests. Now, they seem old-fashioned and superfluous. People have the same objections to IQ as aptitude and achievement testing, which is part of college admissions in America, e.g., SAT and ACT.

People are skeptical of those. They should be. They say, "This doesn't help us differentiate between the rest of the student's application. It doesn't add anything to an application. A kid who scores 1420 on the SAT is no more likely to be a successful and good addition to your student body, then a kid who scores 1120, 1390, or 1510. SAT scores are not predictive. If you want more on this, I say this all the time with Lance [Ed. Richlin from "Lance vs. Rick"], "Just Google it! Read about it."

Limits on mainstream standardized tests are for efficiency in two ways. One is on group-administered IQ tests. You don't go below 50 or above 150. It goes to Binet's original point of IQ tests. At institutions, people will have to address the kid's needs and behaviours, regardless. It doesn't necessarily help to know whether the kid has an IQ of 55 or 45.

At the extreme limits, or even within the normal range, there may not be differences that can be pinpointed within 5 or 10 points. I used to work with developmentally disabled people. Every kid with a low IQ is unique. You have to treat every kid as a kid, not as an IQ score. It takes work to differentiate between a 140 and 170 IQ.

The IQ testing industry was intended to differentiate at ultra-high levels. Because if you have a kid with an IQ of 140, then you have a smart kid. You have enough information to give this kid

enough study materials outside of this kid's study level. You see how the kid does on the study materials. It is a waste of effort to turn this into a sport, where people are competing to be Mr. 180.

The best test constructors - Hoeflin, anybody who tries to norm the tests. That is, figure out where the test performance stacks up to test-takers' other self-reported IQ scores with a fairly large sample. Those tests are, I think, no worse, no less accurate, in their ranges, as long as you limit the ranges to below what a perfect score will get you.

Because every test blows up with 0 wrong or 1 wrong. It is hard to tell where you are at that point. If you are wondering what a score of 37 or 41 on the original Mega Test might equal in terms of IQ, those scores are no less accurate than a score from taking the group-administered test in a classroom in 3rd grade. They're fine. They have a plus or minus of 8 points.

As long as people put adequate effort into those tests, which, in itself, is hard to put the adequate effort in because adequate effort on tests like the Mega is dozens of hours, if people put adequate effort in from test to test, the scores are bound to be consistent.

When I started taking the tests, I racked up scores from the 160s to the 190s, which is a big range. Also, some of the tests were sloppily normed. I was always looking for tests that were slutty to give me the highest possible scores. I didn't put in the effort on some of the tests. If you look at the range of some of my scores, I have a range of 25 or 30 points.

Part of this is me. Part of this is the kinkiness of various tests. You might see a smaller range if you see someone who averages 120 and then give them a dozen different tests. they may show scores from 105 to 135, across the various tests. I don't know if it was determined whether the Mega or the Titan had a higher ceiling.

As I said, it is hard to determine if it is possible to determine. I think Hoeflin, himself, would say, 'The Titan is harder.' I would say, "It is harder." It is paradoxical. If you have taken the Mega and done a really good job, and worked the problems, it gives a skill-set that makes the Titan easier. Because you have already done the Mega and know how Ron thinks.

If you took a bunch of really smart people and gave half of them the Mega and half of them the Titan, people would probably find the Mega easier. The Titan has been called the hardest test ever. I would argue it is the highest rigorous test ever made. Cooijmans has come up with a bunch of really good, really challenging tests.

I would say that his problems need more leaps of faith. When you've got the correct answer on a Hoeflin problem, you know it. It is still pretty true about Cooijmans's problems. But they are more idiosyncratic, have more personality. You may not be as confident in your answers. It makes them somewhat harder.

The hardness comes from a not exactly poetic and not exactly not poetic kind of freehandedness in the associations, patterns that you're trying to find. That mirrors the world, though, where one indicator of intelligence is picking out the faint signal, the nebulous relationships. They are so faint among the noise.

You could call Cooijmans's problems noisier. The signal that you're trying to pull out will not provide as spiky a spike as a Hoeflin signal.

Jacobsen: As an interjection for the record, did you get a perfect score on the Titan Test on the first attempt?

Rosner: *I got in an article in the* Wall Street Journal *for the perfect score on the Titan. Nothing really about the Titan, specifically. I almost got on T.V. because I scored really high on the Mega, but I fucked it up. I made the guest booker nervous. She cancelled me because I sounded like a lunatic. I thought you supposed to be a lunatic.*

I thought you were supposed to be interesting. It was supposed to be a news show. I worked in bars. It was in the morning. I didn't wake up in the fucking morning. I didn't know it was supposed to be happy and soothing, and not some fucking lunatic in the morning.

I have done like 40 tests. None lately, I don't even know if my brain works anymore. I have been sedated, general anesthetic, like two and a half times in the past year. All of the way out of propofol, which killed Michael Jackson. I was in a twilight sleep when they gave me the once in five years colonoscopy. Unless, you elect to be put all the way out.

Anyhow, I was in twilight sleep, which is sedated and still conscious. You are sedated and not supposed to still remember it. The last time, it was fine to be not asleep. It is watching a camera go up your butt. I was proud of myself. I did not see a bunch of flakes of poop floating around.

The tests have personal meaning to me. I felt like a loser until I started getting kickass scores on these tests. It is not justified because I am not an idiot. I know the tests still don't mean that much. I couldn't get a girlfriend. I was bad at P.E. My orientation was: if I couldn't get a girlfriend, then I was shitty at stuff. A girlfriend was what I really wanted. I couldn't get a girlfriend.

To me, it was a general indicator of my suckiness. I was proud of some of the stuff that I had done. I felt this overarching suckiness because I couldn't hook up.

Chapter 7

Scott Douglas Jacobsen: We come back after a hiatus due to schedules and - well - life. Let's continue forwards, shall we? The next topic in our selection is the true meaning of and metrics of genius. I like the layout in the previous session. On the one hand, the more controlled and precise layout of Mr. Haereid; on the other hand, the experiential and, at the end, motivational components of high-range tests (HRTs), i.e., for Mr. Rosner, the roots in relationship desires, instinctual drives.

Another facet of this comes in the form of the higher ranges of intelligence test scores with "genius" as a category. A moniker denoting some mixture of elements, or the labelling of some productions as in a "work of genius." I want to focus today on the concept of genius in the context of some of the world's top scorers on alternative/non-mainstream tests.

As an important note for the general public or prospective test-takers, 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.

Let's focus today on genius, in particular, in a scientific setting, no unnecessary premises in definitions, even if in the 'soft' sciences, then the proper constructs with the appropriate empirical premises inhere in them. For example, some may look at aspects or factorizations of intelligence tests into general intelligence as statistical artifacts, as noted by the late Dr. Stephen Jay Gould. However, if predictions and empirical results follow from the construct, then a construct appears tentatively, scientifically valid.

To start, on a first pass, in a concrete colloquial sense, what comes to mind about extreme human achievements/productions and extraordinary human talents - mental or physical? In a more precise sense, what seems like the core of genius, as a scientific question? Furthermore, if we look at the petals on this flower, what derivatives come out of this core of genius? Again, in an empirical sense without unnecessary assumptions, what are the outgrowths in talents/productions exhibiting "genius"?

What do you consider great works of genius in the 20th century? Who do you consider the great geniuses within the empirical limits laid out before?

Rick Rosner: The strongest cultural meaning of genius is somebody who changes the course of humanity via a correct original idea. So, we're talking Darwin, Newton, and Einstein. More recently, people will say, "Hawking," maybe, "Steve Jobs." Then you ask those people, "What did those people come up with?" Those people will not be able to tell you and will be presented as geniuses in the media.

Someone who is changing the idea with a correct, original idea is the main idea. That's it in a nutshell. You can extend this to art. Of course, that's more subjective. But still! That's my main answer. The metric of the true cultural meaning of genius is whether the idea survives. You look at Newton. He came up with Universal Gravitation. He was co-discoverer of Calculus.

Has that survived since the 1660s and flourished? Yes! Any reasonable person looks at the biological world through the lens of evolution. Ditto for Einstein, though, most people don't

know what Einstein's stuff means. Scientists who do. They know it has been confirmed probably a million times.

There are cartoons, particularly in the *New Yorker*. They take a common situation, cartoon situation, and give it different punchlines over time, like the guy in the desert situation is a common joke situation. When I was a kid, a common joke situation was a guy in the loony bin wearing a Napoleon hat. The guy who thinks he is Napoleon! Delusions of grandeur are, I guess, not uncommon.

I would assume Bipolar and Schizophrenia can give you that. Maybe, modern culture can give you that because modern culture can give you that through the proper use of social media. There's a whole history of people proclaiming themselves to being very important in various ways. I just got the book about Keith Raniere, a fellow Mega Society member, who formed his own cult to very ill effect and who is now in prison. I guess for life, right?

He swindled people out of money. The people who own the Seagrum's liquor fortune. They own a media empire too. He victimized a couple of the daughters of the Seagrum's billionaires. He talked them into giving him $100 million to invest, which he lost. He made sex slaves out of a bunch of women, including a bunch of women who were under-aged.

I run around saying that I have the world's 2nd highest IQ on Twitter based on my IQ scores. Yet, all I do is tweet all day. But there's no metric for your potential to change the world. Your only metric for changing the world is actually changing the world. Elon Musk was on Twitter today talking about how panicking over coronavirus is dumb. And I think that's dumb, because it is going to be a big deal.

Erik Haereid: *To appear as a genius, you have to be able to translate, convey, an insight that only you have/receive and no one else can derive logically from other knowledge, so to speak. Deductive and inductive processes have to have a dash of flash, something totally new, unexpected, breathtaking, to be genius. It has to change the way we perceive things.*

I consider the ability to communicate as part of the genius; to make the incompatible and complicated understandable to others. After all, IQ-problems contain this, and especially the most complex problems represented by HRT. You discover a pattern that after revelation is understandable to most people, but that only a few manage to uncover. Once uncovered, it's easy for everyone. But IQ-problems are constructed by another human being. One knows that there is a solution. IQ-problems are hide-and-seek. Ingenuity (genius) is based on the uncertainty of whether there is anything of significance, context and utility in the chaos. It can, strictly speaking, just be chaos. This is how ingenuity comes to see the possible in the impossible.

In order for us to call it ingenious, it must contain utility; it must have a meaning for most people. It can be a pattern that is in nature or in the world of concepts, and that you see a connection in as the only one. The connection, the work, does not have to be rational, but it must enlighten us; such as for example "Mona Lisa" illuminates us in a way we cannot simply explain, as Rembrandt's distorted and everyday people awaken something in us that balances brilliantly on the border between the attractive and repulsive. Rembrandt gives us something we need; that we cannot obtain otherwise.

In order to call something genius, it must be exempt from the average trait of development; a lot becomes brilliant when we skip all the steps a development has, for example in medical science. It is the many small advances that create something new. But this I would not call ingenuity per

se. When Copernicus turned our view of the Earth's position in relation to the sun, it happened "instantly" and inside his head, as was the case with Einstein's theories of relativity. Or with Freud's subconscious and the displacement mechanisms. It was not, apparently, part of slow development and change in consciousness. Concerning consciousness, it was more like an explosion. Superb literature and art have the same immanence; the ingenuity of art is about the degree of consciousness change and change of direction for mankind.

I regard life as a process of freedom. We instinctively seek freedom, opportunities, open space. Therefore, I also believe that the condition of genius is freedom, not the absence of freedom. Reality is something that opens up. This also applies to illnesses, accidents, terrible experiences and incidents. If a genius finds that the world is going down in X days, then freedom exists in something else than this apocalypse, even if it is obvious. The ingenuity must then be to open up knowledge that causes us to change course in the direction of freedom. Viewing death as unfreedom is a limited view of life and not brilliant. There are no such things as "Evil geniuses", only very intelligent humans being evil.

Ingenuity is therefore about realizing what reality we need to open up to. It's less about uncovering everything that exists regardless of the consequences. Everything that exists is no matter, too much. We cannot understand everything. One could say that the engineers behind the atomic bomb in the Manhattan Project created unfreedom for humans, but the technology within the atomic bomb is also the reason why there is relatively more peace on earth now than before.

A genius probably has better access than others to this kind of insight that people need. I don't say that for example Andrew Wiles, who found complete proof of Fermat's Last Theorem, is not a genius because most people don't understand the evidence or that this can be useless. Few people understand the mathematics of general relativity. But for me, the public utility and insight become crucial to the definition of genius.

You can solve countless complex HRT-problems without being a genius. You are intelligent, but not a genius. That being the case, I probably consider WGD as 90% oxymoron, myself included. The name is misleading. It should be WID, World Intelligent Directory or something like that.

I think some very intelligent people want to be declared a genius because they have inferiority complexes; it's not sufficient being highly intelligent. By putting an adequate name in one's own position, one gains an identity to bask in. "Genius" is the incarnation and manifestation of their intelligence. The problem is that you cannot call yourself a genius even if you are very intelligent, yes, more intelligent than many geniuses. In order to use the term "genius", one must have done something brilliant. It's not even enough to be the world's most intelligent human being. But it does not undermine the value of being extremely intelligent. It is rather the case that very intelligent people should work to be brilliant, not to brag about that they are.

Ingenuity is about improvement, promoting humanity in a balance with nature and the environment, strengthening the individual, through deeper insights and discoveries that can be communicated to the people; an original insight expressed as science, art or other forms of expression.

If a process, such as this one, consisting of elements that can be diffuse and abstract, leads to a sublimation/refinement of thoughts and a higher understanding of whatever it should be, and that this leads to a long-term gain for the people, either directly or indirectly by others using it as a motivation, I would say that this scenario lives up to its name (Ask a Genius (or Two)).

Ingenuity is not necessarily limited to a moment of insight and discovery made by a person. It may well be collaboration and a process over time. I see that this can be difficult to distinguish from ordinary collaborative processes where results can also seem brilliant. But it's about seizing something no one else has seen, i.e. an instinct, an intuition that, more than based on knowledge and ditto logic, paves the way for something axiomatic.

Brilliant inventions, events and expressions in the 20th century? Spontaneously, I would like to mention the efficient use of energy in the industry and the development of vehicles, such as the internal combustion engine.

The automotive industry. Henry Ford. Conveyor. I do not know whether it is right to call Ford a genius, but he did at least exploit an invention, put the pieces together and created a pattern for mass production.

A better understanding of consciousness and the subconscious; our ability to suppress discomfort, mentally. The division into id, ego and superego (Freud).

Our understanding of time and space (Spacetime) (Einstein) and a logical description of the evolution of the Universe. Deficiency: No explanation of singularity, genesis.

The invention of the computer (Charles Babbage/Alan Turing), and based on the transistor and integrated circuits (microchip) was crucial in the 20th century. The computer and software, including this technology in combination with communications (Internet), smaller devices and efficiency (manageable and economically acceptable). I would say that Bill Gates is a genius.

Jacobsen: Rick, I'll start with you. Your response covered infamous criminal, abuser, con man, and profoundly gifted member of the American populace, Keith Raniere, who went by the cult leader title Vanguard in the organization NXIVM – and, as you noted, held at least one substantially rare high IQ society membership. We see this throughout all communities, e.g., cults, quasi-cults, claiming supernatural powers, claiming special knowledge from or to speak on behalf of God (or some higher being or power) – even claiming to somehow be God or a direct representative of it, falsely proclaiming IQs/inflating IQs, being strong adherents to non-scientific views including creationism, geological catastrophism, and the like. Indeed, even Mensa International, its special interest groups in 2005 once held a creationist special interest group. I like the definition given to Rick Alan Ross [Ed. Founder of the Cult Education Institute] by a friend, as he reports, on cults as differing from con men/cons only insofar as cons bilk for a period, and then go away, while cults are cons that are continual cons, potentially indefinitely. Raniere would have been indefinite, if permitted. You spoke about Newton, who, famously, was vindictive against competitors, and a certifiable genius and an all-around jerk throughout life until death. He believed in Alchemy, turning base metals into gold, etc. Why?

Rosner: Because Newton lived in an incompletely scientific world. I have read that science, the way we understand it, and the scientific understanding of the world didn't begin until Newton's century in the coffee houses of London. Coffee was a new product brought back from the new world. So, you had a bunch of guys. It was largely guys getting coffee'd up on this new drug and enthusiastically trying to be scientific. Science was a niche activity. Newton, we know, spent more time, according to one source at least, searching for hidden messages and meanings in the Bible than he spent on mathematics and physics. Science hadn't won, yet. Unfortunately, now, in America, religious arguments are made by charlatans and idiots. So, it is pretty easy for someone

who is not dumb to find much of religion to be bullshit. 360 years ago, there were a bunch of good people, most people, who believed in some form of Christianity. Most of the people in England for sure believed in some form of Christianity. There were smart and authoritative people making arguments in favour of Christianity or, at least, contributing to the intellectual infrastructure. It was the winning set of beliefs at the time. Newton spent a lot of time thinking about the prevailing belief system, which most people thought about when they thought about any belief system at all. I don't know if Newton had a globally applicable idea of science to fully account for the world. I doubt it because he spent so much time on the Bible. But that's what people did back then, including even the very smartest people.

Jacobsen: Darwin withheld his findings, the common story goes, to save the faith of his wife in a manner of speaking. He didn't want to hurt her feelings, more directly. Even though, he trained to become a religious leader/scholar before discovering Evolutionary Theory or the mechanisms by which biological life grows, develops, and speciates.

Rosner: What you're claiming is that Darwin, among other reasons, sat on evolution because he didn't want to hurt his wife, I heard that he spent years scribbling to make the most persuasive and voluminous set of arguments. Darwin lived with his wife. Darwin, I don't know that much about him. He seemed like the opposite of a prick. He lived with his family and quietly observed the world. He would go out into the world, watch the worms, and do calculations about how long it would take for certain things to happen in the natural world. Darwin is the one who brought the idea of deep, deep time into the world. That the processes that formed the world took many, many tens of millions of years to form. He would make calculations based on what the worms were doing based on how much dirt the worms turned over. He seemed like a quiet, considerate, thinky guy. I think he suffered from some chronic pain. Something that we would have trouble diagnosing now, nebulous, let alone in the 1800s. When he brought his theory into the world, not just his theory, Alfred Russell Wallace, there were people who came close earlier. It was floating around, anyway. Is the general comment that smart people can be jerks and/or nice people?

Jacobsen: I would move the dial on the niceness to extremely compassionate and the same in the opposite direction.

Rosner: I think the general idea might be that smart people of the type that we're talking about think about a bunch of stuff fairly deeply.

Jacobsen: Do you think deep thinking tends to come along with deep feeling, or the extreme opposite? It is almost like their capacities are amplifiers for whatever their base emotions are.

Rosner: There are three frameworks that you can work within. One, "I am entitled to do what I fucking please because I am a colossus who strides the world. I am bringing this into the world. So, whatever I want to do, it is a small price to pay for what you are getting from me." It is the Bill Clinton thing, "I am the most powerful person in the world. It is not a big deal if I jizz around an intern. If I need that to reduce my stress because I am running the world, then okay, I am going to do it." That's more the Newton thing. There's the other thing, which is the Spider-Man deal, which is "with great power comes great responsibility." It is, "I have the ability to do all this shit. But given that my brain can do like 300 pushups without stopping, I should be able to use that brainpower to control my actions in the world because I have this powerful fucking brain." I think you see people on both extremes and people who are in the middle who are like, "I am good at thinking at shit. But when other stuff happens in my life, whatever happens,

happens, I am only on the clock for a certain number of hours of the day. If I, after hours, if I engage in all sorts of hookups, that's just part of the rich panoply of life." Picasso. He liked to do art and he liked to fuck.

Jacobsen: [Laughing].

Rosner: People can have various reactions to their own abilities as they impinge on their personal behaviour, including no reaction and just doing their shit, whether it is thinking smart shit or going on Grindr or some shit.

Jacobsen: What about Feynman?

Rosner: Feynman may be the greatest physicist of the middle of the 20th century. As a young man, he had a tragic love story. While he is working on the atom bomb in Los Alamos, his wife or fiancé is dying of tuberculosis in a sanitorium 90 miles away in Albuquerque. She dies! For the rest or much of the rest of his life, Feynman felt free to be a pussyhound, during the 50s through the 70s, 80s, 90s, I guess. Long before MeToo and being a pussyhound was more acceptable than it is today, Feynman liked to apply thought to everything. As a kid, as a 10-year-old, he was known in his neighbourhood as the boy who fixes everything by thinking. Someone brings him a busted radio. He would sit and look at it, and think about it for a long time, then he would just dive right in, not have to tinker, and then would go right for the repair.

Jacobsen: That reminds me of Glenn Gould, where he would not practice much or *at all*, but would just do that in his mind. There's one commentator, Bruno Monsaingeon, who comments that it was something of the mind, "*Causa mentale*."

Rosner: Feynman applied his analytic skills to picking up women. I don't know all the principles. One of his principles is don't buy a woman a drink. This was the era of something call B-Girls or bar girls. These were bar girls who hung around in bars who got you to buy them expensive drinks. Then the bar would overcharge you. They were working with the bar. They'd split the take at the end of the night. Feynman would run into a girl, a woman, and, in practice, she'd be like, "You buy me a drink." He'd be like, "No, you buy me a drink." It is an early pick-up artist principle. You knock the woman off her pins by not just being another mark. According to the principles of being a pickup artist, you never tell a pretty woman that she is pretty. It just establishes you as another sap who she can ignore. Instead, according to pick-up artists, you start with a neg. You look at her. She looks at you looking at her. She is waiting for a compliment, "I have never seen someone with eyes like yours." Instead, you say, "Do you notice that your smile does this thing?" This shit is almost as old as Feynman shit. Feynman did that shit. In the 70s, there was a strip club close to Cal Tech. He would sit in the strip joint and do equations on napkins and, maybe, sketch an occasional stripper.

Jacobsen: [Laughing].

Rosner: Somewhere, he got married in the 70s, probably. I would assume that his wife was aware. Before he got married, he may have slept with 100 women, including the wives of a lot of his graduate students. I haven't seen a biographical detailing of it, but there was a lot of fucking. It didn't really hurt that he was a fun, bongo-playing guy with great hair. He would have been less successful if he had been Edward Teller trying to get laid.

Jacobsen: [Laughing] Einstein gave a big picture view and a fast flicker film perspective of the world. We can see the big and the fast in different ways in which Newton didn't. Yet, he had some escapades on the side. In short, why are some human personality problems, even

neuroses, amplified by intelligence? How can this go completely off the rails into delusional thinking?

Rosner: Einstein, it has been, I guess, documented that he had roughly 5 affairs, which, if someone wanted to bang him, he'd be like, "Sure! Let's do it." I am not sure that he actively pursued extracurricular sex. But as the most famous genius in the world, he would have opportunities and then take advantage of them. His first wife, he had a volatile relationship with: Mileva Einstein. She may have been as smart as he was. I don't know if she had a doctorate in physics, but she was highly trained in physics and probably went through the theories with him. He was smart but didn't know a lot of math. He and his friends did a lot of math. Same with his wife. He knocked her up before they were married. They had a volatile marriage and got divorced. Then he married a second cousin, who was like a *hausfrau*, who accepted her role as his house caretaker. I don't know if he would stay out all night banging somebody. But she probably went along with the whole thing as a wife of this great man. Was Einstein a bastard? I don't know. He took advantage of sexual opportunities. I don't think there's any documentation that he felt guilty about it. He may just have been pragmatic about it, "Here is an opportunity I am getting as a famous guy. My wife is aware, at least tacitly, of our respective roles. She is okay and resigned to it." Maybe, he didn't worry his pretty little head about it and just went about doing what he did. He did, to some extent, massage his public image. He did know what Einstein the public figure was and would play into that. But I don't know how much ethical agonizing he did over his personal behaviour. He wasn't a total prick. He and Mileva had a child. Mileva gave birth to a child that was, maybe, crippled. Maybe, they gave her up for adoption? I don't remember the whole deal. There was a secret Einstein offspring somewhere. That would be kind of prick-ish. But I don't know.

Feynman, was he a prick? If he is banging his graduate students' wives, kind of, he is leaving a trail of marital destruction behind him? At the same time, he was a whimsical guy and thought everything was fine. But I don't know. The deal is really smart people can take varying degrees of responsibility for their personal behaviour. That leads to the argument that smart people might be psychopaths. That if you think about everything and question everything, then, maybe, you end up questioning the rightness of decent human behaviour. Maybe, you end up reaching the conclusion that extreme decency or common decency is not that big of a deal. I would think that a lot of really smart people would run the risk of being ethically agnostic. But then, there's a step two, which is not being a stupid psychopath. The psychopaths that you see on T.V. will engage in gratuitous cruelty because they can do it. They have no ethical limits.

But I would postulate that there are rational psychopaths who may be freed from normal ethical restraints or may have freed themselves from ideas or from being constrained from good and evil and have decided to not behave like regular psychopaths. 1) It is not fun. What is the fun of being a serial killer? It is just weird and gross. 2) Your life works more smoothly if you're not a fucking psychopath or not doing psychopathic shit. You can be a psychopath. In that, you are free from ethical restraints, but you restrain yourself anyway because not behaving according to these common restraints wrecks your life and wrecks other people's lives unnecessarily. It is more reasonable and efficient to not be a psycho-killer. I have a more commonplace example. To some extent, there are people who are monsters who are successful because most people behave normally and ethically. When somebody doesn't, it is unexpected and somebody can get away with stuff for his entire life and even become president by being a psychopath, who goes full

psycho. Someone who just decides to bullshit everyone all of the time. There's room for a limited number of those people.

If 20% of the population were like that, we would evolve protections against that. But when only 1 person in 1,000 or 10,000 does it; it becomes surprising. My friend J.D. Mata is the piano player and choir director at his church. During a service, he's sitting on his bench in front of the piano and playing when it is appropriate. This woman comes down and sits down on his bench next to him with her kid. She just starts talking loudly to her kid during the whole service. J.D. finds this distracting because he has to play piano and the woman keeps talking. J.D. asks, "Can you stop talking, please? I am trying to do my job." The lady goes crazy on him, "I have a special needs child. I have to talk to my special needs child." I talked to J.D. after it, the day after. He was reeling from it, still, because most people do not do that. Because when you run into someone who is a 3+ sigma, 4-sigma say, dick head, it leads you to question your own judgment because it is just weird that you've had a situation turn into that level of confrontation. So, somebody who is 4-sigma dick-ish can get away with a lot of shit because you win over people who are used to dealing with people using the normal amount of respect. It boggles you. It confuses you. Geniuses, being smart, may be able to figure out, "You can be an asshole all the time and get away with shit." Or a genius may never figure this out because this is not the field a genius is interested in. A genius may just be very smart and think, "If I act like a normal person, then my life will run very smoothly, like Einstein! His first marriage was volatile to a smart physics lady. His second marriage, and this could all be luck or love or convenience, is to a woman who served him, who viewed him as a great man and took care of all of his shit."

You could argue Einstein being smart is in having a wife is what he wanted and simply to have someone who would take care of him as opposed to having an intellectual equal who he had to fight with all the time. There is a bit of psychopathology if he coldly calculated this as what he needed out of a relationship all of the time – if he simply needed someone to be his butler or something.

Jacobsen: Erik, why is clarity key in the explanations of the ideas held by true geniuses?

Haereid: *To understand you need intelligence, to make it visible you need ingenuity.*

It's a matter of definition. It's my subjective view. To be defined as a genius device it must have a benefit; and at that moment people percept it.

It's not the math behind, for example, the general relativity that should be understood in general, few experts does, but the package, the idea, the consequences, and through such an insight people, in general, will experience it, feel it, like when they look into "Mona Lisa"'s eyes.

Sometimes, as with a painting, there is no need for explanations. Other times one needs a simple story to gain the idea and reveal the feeling.

Of course, this is my subjective view. Others define genius differently. But the idea is to claim something more, put more into it, to deserve the label genius than "only" developing some complex patterns or understand something that few do; that's intelligence. It's about the impact on humans in general. Great impacts are understandable for most people; the outcome. When someone solves the energy-problem by let's say the nuclear fusion of hydrogen into helium, using water, with lower energy input than the output, copying the process in the sun, on earth, the general public doesn't need to understand the math. The outcome is obvious. If you find a key to control human aggression in a suitable way without making us into apathetic sloths, and

through that prevent wars and violence, you certainly are a genius. If you deny potential future happenings because you can't see it happens, you are less intelligent and far from genius because you then rely on our knowledge so far; you don't anticipate new and groundbreaking knowledge that can change your view.

To understand a complex problem, like the math behind the general relativity, you need experience (e.g. math skills) and intelligence. To create art like Michelangelo and Rembrandt you need skills and intelligence. But to make the art or math-piece come through, into everyone's mind and heart so to say, you need ingenuity.

Jacobsen: With the prominent story of Hypatia's murder by a Christian mob who hacked her to death, how many women geniuses have we simply lost the brilliance and insights of now?

Haereid: *Men have historically in our culture felt threatened by intelligent women. It's archetypical. It's in our genes. We have to use effort to reorganize it in our minds. And we do! There has been a huge development in the last century. This will hopefully continue. We have missed a lot of female geniuses' presence, unfortunately.*

Jacobsen: In terms of the truly groundbreaking and new discoveries in science, the big theories, have we, possibly, reached some limit in terms of human genius, where the complexity and chaotic mess of the modern world limits the possible grand unifying human theories to the shorter in scales? Are we left to the slow drip of discovery based on mere mortal science hitting some soft or not-so cushy limits?

Haereid: *That's a really good question. I don't know. It's impossible to tell. Suddenly we know if this is the case, but we'll never know if that sudden event is the last one. I don't think that increasing the amount of information, processing of information, and associated complexity leads to chaos in the end. I believe in freedom, in clarity, in essences, in the end. Before peace there is war, before control there is chaos. That there is more chaos could also be part of the development towards clarity. And why shouldn't a bright moment of one or several brilliant brains see what no one else sees? Still. Maybe Einstein was the last one. We don't know yet.*

Jacobsen: With these HRT directories or listings, people can be paid off to have their names placed on them. There can be issues with only the highest scores claimed. If an organization with fellows, board members, or if friends of the founder, then there can be issues with conflicts of interest, potential or actual, in the front-facing appearance of it. Frauds exist. Some HRT tests, obviously, produce a blip score, much higher than true IQ for a variety of reasons. Some can see this with a single test at some of the highest scores in the world, legendary in the HRT world (a very small planet). Any warnings for the general public, in general terms?

Haereid: *You mention "True IQ." I think that's the best solution to the potential fraud-issue (and the issue of scoring actual, honest, ultra-high on one single test). It seems like that the wish for an astronomic high score on one or two tests is more important to some than taking many tests and estimate one's IQ based on an average of the best tests in the market. There are good, mediocre and not so good tests in the HRT-environment. There should be a weight depending on a test's value. But that is, of course, controversial since all test creators try their best. Some parameters are important though; the number of testees, the credibility of the norm, the ceiling of the test, the survival of the test (how many years it has been there)…*

I think one should take every single ultra-high score with a grain of salt, even though 99% of them are honest and fair scores. To decide a person's estimated IQ-level one should claim more than one test, at least three or even six to ten. Rick, Evangelos Katsioulis and Mislav Predavec are examples of persons that have proved their level by scoring high on several tests, not only one.

Some initiators try to establish true IQs by gathering members based on their scores on several different tests concerning the type of test (verbal, spatial, numeric) and test creators. This reduces the fraud problem, and it removes the one-test-impressive-genius factor. And if you spread it over time, you get closer to a true IQ-estimation. I think Domagoj Kutles VeNuS Society is a good example of establishing a list of member's true IQ. It's a start.

When it comes to the frauds, I suggest a democratic process where the ones one think is cooperating on certain tests are confronted with that, and that the proofs are transparent, as in a court. An even bigger problem than the fraud itself is the mistrust that appears inside the environment based on that anyone can cheat; find companions to collaborate with. It's based on trust, and as long as there is no justice, no court to punish the cheaters, no evidence, only claims, no one can trust anyone. Then the whole HRT-environment becomes toxic.

But, I believe that most of the scores are real and clean, still. If you want to take tests, do so! There are a lot of nice tests out there. And don't take tests because you want to prove that you are smart. Forget the IQ-measure and concentrate on doing the job, solving the interesting problems, feeling good when you have reached your potential, when you have revealed a logic pattern that was not obvious. Don't take tests because you want to read that "NN has 150 in IQ".

Jacobsen: Obviously, these are the stronger or among the strongest scores of the test-takers placed on these lists - and self-selected. That is, if I take the listings - all of them or in the future - on face value without critical questions about scores, sample sizes, norming timings, test content, and the test designs themselves, or conflicts of interest and the like, then there are a number of other issues, too. Nonetheless, the idea or concept of intelligence provides, in addition to tests of various mental aptitudes with apparent positive correlations with one another and reasonable effect sizes, a basis for a psychological construct. One with predictions. Something having validity in predictions, and repeatable ones. In that, a valid and reliable measure, over a population and so not with any given/every given individual, found in intelligence for a psychological construct. The question about sample sizes for the highest ranges of intelligence are murkier given fewer cases, statistically and in those properly tested, remains a valid scientific question. Thus, HRT is a valid endeavour based on a psychological construct while, apparently, undeveloped for a variety of reasons. In sum, intelligence can be studied, empirically, and in its highest ranges, validly. Of those more valid HRT tests and ongoing research, what size of samples or controls of confounds at the highest ranges of intelligence would permit reliable and accurate discrimination rather than this standard deviation, standard deviation-and-a-half, or two standard deviation gaps in various tests taken by people who take a lot of HRT tests?

Haereid: *Let's say every human being living today took one perfect valid IQ-test, normally distributed, and did their best such that their scores measured their intelligence. I made a spreadsheet that calculates this:*

People: 7,500,000,000

S.D. 15:		*# people >*
IQ 190	*1,009,976,678*	*7.4*
IQ 185	*136,975,305*	*54.8*
IQ 180	*20,696,863*	*362.4*
IQ 175	*3,483,046*	*2,153.3*
IQ 170	*652,598*	*11,492.5*
IQ 165	*136,074*	*55,117.1*
IQ 160	*31,560*	*237,642.6*

Then we would have 362 persons with IQ>180 S.D.15, and we would for sure discriminate accurately up to 185 (approximately 5.7 standard deviation).

Let's say the sample is one million:

People: 1,000,000

S.D. 15:		*# people >*
IQ 190	*1,009,976,678*	*0.0*
IQ 185	*136,975,305*	*0.0*
IQ 180	*20,696,863*	*0.0*
IQ 175	*3,483,046*	*0.3*
IQ 170	*652,598*	*1.5*
IQ 165	*136,074*	*7.3*
IQ 160	*31,560*	*31.7*

As you can see, it's difficult to discriminate accurately IQs over 160 with less than a million testees. You need a billion to create a test that measures IQ accurately up to 5-5.3 S.D.

If you want to measure accurately in the high range, you also need a lot of very difficult and valid problems with increasing difficulty. A valid IQ-test discriminating accurately in the top area (160-190; S.D. 4 to 6) should have let's say at least 30 items that no one of the <160-testees solve; theoretically. A test of a thousand items, and one hundred of them in the >160-difficulty-area, would be proper and a step to discriminate accurately in the high range. Then you would still have let's say 50 items that no one with <170 solved, and 10 items that no one <185 solved. Intuitively.

So, we need many more testees and (valid) items in the high range area to discriminate more accurately.

Jacobsen: Do inferiority complexes infect some of the HRT community?

Haereid: *There are a lot of good intentions; many persons in the HRT-environment wish to gather and exploit the sum of ingenuity and cleverness through the many high IQ Societies and groups, like WIN.*

But there is some noise in the environment, some activity and mentality based on inferiority complexes.

I respect those who take part in HRT because of the tests, and only that. It's like a chess- or bridge-club. But many are too concerned about the norms and if the IQ-scores are inflated, too high or low or whatever. Forget it. Take the tests because you like the mental challenge. Forget the IQ-thing; don't identify with your estimated IQ.

And the "genius" identification. Why not "intelligent"? It's sufficient.

And all the personal attacks, the ad hominem-arguments and tactics to gain power inside this tiny environment. What's that? Are they kids? Are they playing? I don't know, but it smells of inferiority complexes all the way.

With a few exceptions, the environment lacks self-irony. I miss more of that.

Jacobsen: You typed in Norwegian and then translated into English, "If a process, such as this one, consisting of elements that can be diffuse and abstract, leads to a sublimation/refinement of thoughts and a higher understanding of whatever it should be, and that this leads to a long-term gain for the people, either directly or indirectly by others using it as a motivation, I would say that this scenario lives up to its name (Ask a Genius (or Two))." My life is complete. That's a lovely compliment! Akin (similar, related) to the question for Rick, do psychological 'issues' follow genius more often than not, based on observation and reflection on the issue?

Haereid: *You're welcome!*

The thing with geniuses/very intelligent persons is that they think a lot! That's not a problem per se, but without some contact with the ground; you can easily get mad. Our thoughts are an auxiliary tool developed so that we can make plans and act better and more effective than we could with pure instincts and intuition. Thoughts are maps. The real world meets us through our senses; to gain mental control we have to live through our senses too. Thinkers, very intelligent persons and geniuses use their mind power excessively; forget eating, running, walking and sleeping so to say, forget smelling flowers and watching birds, forget listen to music and sing in a choir or play in a band. It's natural though; it's easier to use your talents and abilities than do something "odd". Many with high intelligence are afraid of their emotional expressions, and suppress them, I think.

Jacobsen: Erik, who do you consider the most intelligent person in history? Who do you consider amongst the greatest geniuses in history? Who do you consider both among the most intelligent and the greatest geniuses in history? Something akin to the tripartite theory of genius/creativity of Paul Cooijmans with the width of the associative horizon, conscientiousness, and general intelligence exhibited to their highest levels - referencing the last question.

Haereid: *The first question is difficult to answer, because we do know about the geniuses but not the most intelligent ones. I could standardize my answer and say Goethe or da Vinci. But they are also geniuses. I guess the most intelligent person who ever lived is unknown; only known to his family and close relations at that time. His or her potential ended at the landfill. Being a genius is also about being known, and being known is about making expressions that impress.*

Among the greatest geniuses? Mozart, definitely. Shakespeare, yes. Rembrandt, ok.

Among the most intelligent and greatest geniuses; persons that have done something right for people, that was introvert and intelligent? da Vinci, Galilei and Goethe have to be considered among the greatest geniuses and most intelligent through history. I don't know about the conscientiousness, though. I should say Einstein, but everyone claims that. He is the modern incarnation of a genius, but maybe not the greatest one in history.

Jacobsen: Who *have been* the women geniuses of the past? Rick and Erik, what kind of geniuses do we need now?

Rosner: The quick and easy answer is that we need collaborative geniuses. This is a collaborative era. When you look at superhero movies and then they roll the credits and thousands of people working on the movie, it is clear that we live in a collaborative era. Not just a collaboration among people, but collaboration as we move into the future between people and A.I. Not robot A.I., but devices that make human intelligence more intelligent. By "collaborative," it means willing to work with other people and not being a dick. This is also the era of MeToo. It means being able to work with people without being an asshole in a number of different ways, including sexual harassment. We have increasing means of hooking up with other people.

For the next year, or so, we are in the first week of the lockdown of the planet because of the coronavirus. Although, this means the end of in-person collaboration for a lot of people for the next year or so. It may mean new inroads into teleconferencing, telecommuting. Right now, everyone is stir crazy. Eventually, everyone will calm down because the deaths will keep getting worse and hospitals around the world become overwhelmed. I think a big number of people will be able to escape the problem by generating work. My wife thinks there will be a renaissance of product creation and creativity. We will have 6 to 9 months of staying at home. People will make stuff. I contradicted myself a little bit. Most of the stuff will be lonely products. I will uncontradict myself because there will be a glut of pitches and new stuff because most of this stuff will not make it into production until it has been vetted by dozens and dozens of people with the edges knocked up, being punched up, and re-written.

The era of production, people still read books. But the products that people pay the most attention to, the intellectual products. The products consumed most readily like T.V. and video games. These modes of discourse rest of hundreds of thousands of people each. Look there, it is collaborative geniuses. Take Quentin Tarantino, he is very enthusiastic about whatever he does. He is able to infect other people with his enthusiasm and then make movies. Your genius does no good. Unless, you can pitch it and sell it - these days. Ron Hoeflin is like the classic lone wolf genius. He has been working on this opus or catalogue of all forms of human thought for like 50 years. All by himself. Eventually, it will get published. I think that it will be a magnificent work. But 1/100th of 1% or 1/1,000th of 1% of people will see Ron's work as who see *Bojack Horseman* on Netflix, which is, itself, a work of collaborative genius.

You've got Raphael Bob-Waksberg. He plus Lisa Hanawalt came up with the idea of a depressed horse. Hanawalt, before this, had created a whole world of people animals. She is the visuals. Together, plus their whole crew of people, they came up with one of the most moving animated products ever made, which everyone should see.

Haereid: *The lack of female geniuses is not lack of intelligent women, but that intelligent women with the perseverance and drive needed have been suppressed in disciplines that men have controlled. If men succeeded they were awesome, if women did, they were witches. That's history and far away, but anyway.*

To be politically correct I would mention Marie Curie. To be modern it's appropriate to say Ada Lovelace, and to be up to date it's convenient with Florence Nightingale.

We need geniuses that can find practical solutions and answers to what can unite instead of split us, in general. It's strange, because these days we are faced with such a phenomenon. COVID-19 seems to unite more than separate us. That's an important experience. Historically, we are familiar with things that separate us. It's like the nature gives us a hint because we are too stupid to let the solutions in.

Digression: There are people who nurture the idea of splitting up, by claiming that people who talk about or work in favour of altruism or related either are morons or megalomaniacs. That's creating conflicts. Such ideas should be addressed and discussed. That's the democratic way of trying to solve it.

I think the human power and goodness, humanity as we like to define it, will be nurtured through a common problem or goal. I also think that our production of everything from clean and cheap energy to suitable political systems and new inventions will explode if we manage to gather.

Jacobsen: Erik, what do you make of smart people, even highly intelligent people, who may claim by themselves they're a genius and then inflate their IQs? Based on reading, membership in a wide range of societies, and conversations, how are these people, mentioned in the previous question, viewed by the various societies and individuals within the HRT communities? How do they poison the HRT environment?

Haereid: *To hold back crucial information in any situation creates conflicts. Transparency is a keyword.*

What is most dangerous to the HRT-environment is when the ongoing personal processes are not transparent. Every one has the right to know if one is a mark for whatever, and on what ground, to defend oneself and be a part of the process. What are unfortunate because of the long-term internal environmental problems it causes are hidden processes, like Kafka-processes, where the accused ones may have clues but don't know exactly what's going on. This is independent of whatever the case and problem is. If someone claims that someone poisons the environment, the accused has to be put on a kind of democratic trial. Otherwise, the environment is based on mistrust and polarizations based on who you like and dislike. That will destroy the environment. A healthy HRT-environment is defined by being open-minded.

If someone means that some are cheating or cooperating or in any way poison the HRT-environment, then this has to be dealt with through a fair trial, let's call it that. We have to address the problem to solve it; we can't just decide that he, she or they poison without making clear what is poisoning and how to deal with it. One of the main problems, as I see it, is that the most trusted and popular ones get a dictatorial right; if such a person dislikes another person,

for whatever reason, he or she can easily spread lies and rumours that compromise that mark's status and integrity in the environment, removing that person or those persons from the environment, but also creating a dictatorship, because people ask themselves: What if I become the next mark, the person that Mr. and Ms. Trusted/Popular don't like?

To your specific question: They want attention. Some are young and want opportunities. Some have low self-esteem and want to identify with a high IQ. Some think they can achieve that with the attention that such a profile gives them. But this is a small environment. Even though some are on national TV's and in newspapers, it doesn't mean that this is a complete picture. Measuring IQ is complex. It's a lot of uncertainty to it. Loosen up. The puzzles are games; it should be funny and mentally challenging. Find your peers with the same interests inside the environment. Take every extreme high level of estimated IQ with a grain of salt. That's healthy.

Jacobsen: What aspects of a culture most facilitate genius?

Haereid: *Forced conformity kills ingenuity and creativity. I lay stress on this: It's not about making people equal, but respecting and accepting that we are different. A premise for this is that every person feels adequate, good enough, as he and she is, with their inborn and other qualities. The misunderstanding, as I see it, arises because we want to adapt; we want people to like us, and since most don't, we have to focus on adapting; compromising ourselves, working against our dreams, wishes and needs.*

Think about it: If you knew that every person, or at least the heart of the culture, accepted you unconditionally as you are, from birth to death, wouldn't that be relaxing and motivating, bringing your creativity to birth? It certainly would with me.

We need common goals and destinies; something essential which we share and are conscious about that we all share. This will link us together in a brotherhood, so to speak.

For god's sake, don't squeeze every child into one classroom. Let the smart kids, or the creative kids, or the playful kids, do smart, creative and funny things. Don't strangle creativity and motivation. We are different, and we will flourish if we gain respect for our individuality.

We will start to accept our differences when we become more conscious and emotional about what we have in common. Then we can grow individually and together. Then we will explore and create.

Jacobsen: What do you mean by belief in "essences" in the end?

Haereid: *It's a hunch. Everything is based on simple facts, obvious cores, axiomatic truths, and harmonic aha.*

If you painted your house your neighbours wouldn't say "Wow!", and neither would they if you proved the Riemann hypothesis (I guess). But if you showed a practical way to copy the sun's fusion process with hydrogen and helium, creating more energy than invested, on earth, most people would say "Wow!".

I think complex structures, in general, should be seen as maps to simplicity, similar to IQ-problems; it's about revealing a simple and obvious truth; essences of expressions, and geniuses are the best to draw such maps and translate them. In the end, everyone will benefit from the drawings because the result will be visible, enlightening and needed; "Was that it? What a beautiful experience! I couldn't anticipate this at any time."

Jacobsen: What HRT tests have the most stringent standards and reliable estimations of true IQ (or true IQ range, only varying marginally by all or most relevant external factors considered impactful on IQ) for those with an interest in finding out in one or a small number of tests, e.g., the Titan Test of Dr. Ronald Hoeflin has been claimed as harder than the Mega Test and among the most highly rigorous (if not the most)?

Haereid: *I have to relate this question to the tests I am familiar with, and I stick to the older ones, except T. Prousalis' newer tests which I find especially good. I would say Jonathan Wai's SLSE1 and Prousalis' INSC19 (numerical) before some (idiots) cooperated and destroyed the tests and norms. I think many of Paul Laurent Miranda's tests had some high quality; x&y (numerical), Asit and Simplex (spatial), to mention a few. unfortunately, he has shut down his IQ-test-operation.*

The legendary LS-tests (spatial) of Robert Lato have to be mentioned, and SLSE48 (spatial) (Wai). And most of Paul Cooijman's and Jason Betts' tests. Ivan Ivec and Mislav Predavec have made some nice tests too. There are a lot of good, relatively new tests too, that I haven't mentioned.

Jacobsen: How can the community bring more self-irony?

Haereid: *The leaders, the most popular and those with most power inside the HRT-environment have to be in front concerning self-irony. It's pleasantly relaxing watching a "superman" looking at his own position with some humour. Life can actually be a joke now and then, especially because we tend to interpret our own lives as extremely serious. There is too much pain to overlook the importance of looking at life from the "wrong" angle, like Monty Python did in Life of Brian. When you hang on the cross singing "Always look at the bright side of life", you kind of understand what I imply.*

Everyone can take responsibility being less too serious about the IQ-thing, the measures, and have fun, find peers and motivating topics, being nice and respectful to each other. I guess that will work.

Jacobsen: How can those of the air come down to the earth, be a Goethe or a Shakespeare in love, and tune into the importance of the embodied self, emotions and such?

Haereid: *It is kind of difficult for highly intelligent people to let the thoughts take a pause, and just drink your coffee or tea, watching the birds and listening to Bach, Uriah Heep or whatever. But I think that's one key to avoid getting crazy. You have to rest. You have to find the ultimate combination of body and mind. But I don't know how. I am not an expert.*

I try to distract myself, cut off, sort of force me to relax, and manage, maybe because I am convinced; I have experienced being close to insane because of my ongoing thoughts and philosophical (and mathematical…) inquiry. This was when I was much younger.

Chapter 8

Scott Douglas Jacobsen: On the flip side of the previous line of questioning, I want to look at genius going awry and the supernatural, as these may be related to one another in some ways. Some obvious; others not. We covered intelligence and genius in an extensive manner. One in which the genius gets defined and affirmed, in talents and productions.

However, what about the opposite or its negatives? What is genius not?

Rick Rosner: With Genius, there is a quality novelty. There is new stuff, new acts of the imagination that are not shitty. When I am talking non-sense to my dogs, most of what I say is not funny or interesting. It is just a flood of stupid syllables or a bunch of bad rhymes. Were it caught on camera, there is no quality there. Non-sense can be inspired like the poem *Jabberwocky*, which is all nonsense syllables. But it is good. The stuff that isn't inspired or can tell where everything came from. That it is just a repackaging of shit that you have seen before. All of that stuff sucks. Sometimes, genius is being the first to express something persuasively that seems obvious in retrospect, like plate tectonics by Alfred Wegener. People throughout history have occasionally proposed that with the coastline, or at least ever since there were decent maps of the world, that the continents fit together. He is the one who made the argument persuasively enough that it stuck. He got the credit and gets to be considered its founder. He took something that doesn't feel like an act of creative genius, like Orson Welles and *Citizen Kane* feels like an act of genius. It wasn't a work of art what Wegener did. He pointed out a truth. You can be creative. You can be true. It has to hit, though. You might be able to make the case that the genius changes the culture. Although, you could argue that there are undiscovered geniuses. People who are unlucky to not have their stuff discovered, at least not until later. That's what the deal is: adding to the load of stuff that belongs to humanity that has been thought up.

Erik Haereid: *It's when you are not creative, inventive, do not use your inner power of ingenuity to make expressions that are visible to others, if you copy others. A society's lack of will or abilities to evolve towards a better community is the opposite of genius. Societies that suppress individual expressions, like dictatorships, represent the opposite of genius. "Better" is disputable, but in my view it's the best for preserving the needs for everyone and all.*

If one "genius"' creative expressions suppress the others, such that the society stagnates or is exterminated it's the opposite of a genius, even though the invention is clever.

Jacobsen: What do you see as the myths about genius?

Rosner: There's the genius who is just bad at life and has a miserable life. There is the miserable genius who is all fucked up, never made money, lives in a hovel, never had a girlfriend, etc. There used to be stories that ran in the *Inquirer* every year or two that was about, "Look at this fucked up genius, aren't you glad that you're not a genius?" Or just genius stereotypes, absentmindedness, thinking about abstract shit and not paying attention to what is going on around him, it is generally a "him" by stereotype. If it is a her, wearing glasses, sexually frigid, needs to have her glasses taken off and hair taken down to release her inner sexy girl, this is a myth that is like the librarian. The girl genius runs into the librarian. The good at math and bad at life, good at academics, stuff. Every *Bond* villain is a kind of a genius. There's the evil genius bent on world domination. There's the busy penis genius Picasso. Usually not a math guy, it is an art guy or a novel guy. His unfettered creativity is connected to his unfettered penis.

Jacobsen: [Laughing].

Rosner: A lot of the stereotypes about genius are connected to people who can't follow, or live, an ordinary life with going to the office and then coming home to the family. The genius who can't do the 1950s parent lifestyle. They have to go and have adventures. Most of the stereotypes bounce off that. A gift to distancing the person from normal human interactions and behaviours. You just go there and then think about what are behaviours that take somebody away from normal lifestyles and behaviours. Anything that you can think of, then you can put on the genius stereotype. It is the wheelhouse of that stereotype without having to enumerate every instance. In *Little Man Tate*, which was about little geniuses, the most obnoxious was the mathemagician who wore all black plus a cape.

Haereid: *Heh, that the genius always is the inventor of the idea. The genius makes an idea visible, known, through a purification and refinement of it. You could have a bunch of highly intelligent, invisible persons evolving several smart ideas, and you have that one lucky, or not of course, bastard that takes all the credit.*

That the genius is always highly intelligent. This is simply not true. That geniuses are mad and avoid any other activity than thinking, and that they are depressed. That's not true either. And the scientific type; good at math or physics. I guess there are some or many of the genius artists, painters, composers and writers through history that couldn't add two numbers.

Jacobsen: What truths dispel those myths?

Rosner: I feel like at various times in the past century. I don't think fame came into its own until the 20th century. But you don't really get the fame industry until the 20th century. During various eras, famous people killed themselves through misbehaviour. Sometimes, it is through shitty behaviour like driving while drunk. William Blake said, "The road of excess leads to the palace of wisdom…You never know what is enough until you know what is more than enough." It is kind of the popular picture of gifted, creatives, where they were out of hand in all areas.

Haereid: *That someone write about those myths as myths? Get to know a genius better? To the public it's boring with ordinary traits on geniuses. So, I guess it's difficult to convince people that Einstein somehow wasn't crazy, like the iconic picture of him somehow tries to paint. I don't know. People are not searching for the truth but to fulfill their needs.*

Jacobsen: What does "out of hand" mean in this context?

Rosner: Drink, druggy, fucky, getting in fights, suicidal, manic, and depressed, it is just that shit, and unhinged. John from the *Beautiful Mind*. A truth of a lot of genius is a lot of people who were really smart have a natural tendency to not be out of hand or have done the math on it and realized that it is less trouble to not be out of hand. The truth behind a lot of genius is that a good fraction of geniuses has lived fairly normal lives. That's not always frickin' true like William Marsden who you wouldn't exactly call him a genius. He invented *Wonder Woman*. He thought women needed a superhero to inspire them the way boys had them. I forget what else he did. It wasn't his main deal. And he had a three-way marriage. He and his wife took in another woman who loved him. They were banging for a while. You've got a certain fraction of a certain segment of the genius population that is going to find it worth their while to make up their own rules about behaviour. These could be overlapping segments. You could have people who live lives that are extremely traditional in some ways and still really weird in other ways. They did a whole T.V. series about Masters & Johnson who mapped sex. They studied human sexual

response and had respectable careers within academia when they weren't getting in trouble for having sex. They had enough weird sex stuff going on with them or around them that they made a three- or four-season T.V. series about them. The truth about geniuses is that sometimes they make up their own rules. Sometimes, they don't. Sometimes, the rules that they end up settling on is that it is easier not to be all weird all the time. Again, this is a whole area, where you could pretty much suss out what you would find with a map of risk-to-reward, or how much energy it takes to do shit and how much energy somebody has to spend on stuff. A couple of years ago, you and I were talking about the economics of thinking [Ed. *Cognitive Thrift: Volume I*]

You don't get thinking for free. It is not unlimited. Similarly, you can imagine geniuses as people who have more cognitive and behavioural money to invest in their lives, to engineering their lives. Given the more energetic situation, they have more energy. They have more stuff to throw at life. That means that you're going to get a wider distribution of behaviours from a weirdness that takes various forms. Within that envelope, you've got normal behaviours for the people who have thought about stuff and decided, "There is enough good stuff on T.V. I do not need to spend 100 nights a year on Tinder, Grindr, or whatever else, having weird shitty sex with strangers." The more I talk about this. The more that I realize that there is a model that when applied to human behaviour, an energetic model or economic model. It would allow you to invent fictitious genius behaviour given geniuses having more energy to do weird stuff, and also being somewhat psychopathic or not constrained by convention.

Jacobsen: What do you make of fake geniuses? Those claiming the status by themselves, for themselves, and, in fact, sometimes fooling a large number of people and garnering followings. They may argue for supernatural powers, as if they can read the future, read minds, have a direct communication or special insight from God, and so on.

Rosner: In the past 25 years, there has developed a pick-up artist community with guys developing strategies for women becoming interested in them. The reason that it is more of a movement now than 50 years ago is because the how to pick-up girls guides 50 years ago were just shitty. They weren't very helpful. They weren't based on any strategies that would get you anywhere based on the modern deal. Modern strategies include things like the most well-known pick-up artist strategy of negging. You don't go up to a beautiful woman and then tell her she is beautiful because everyone tells her she is beautiful. You tell her something designed to confuse her. The standard example: "Your nose does something weird when you laugh." Now, the woman, instead of basking in being beautiful, is like, "What does my nose look like when I laugh?" A pick-up artist is supposed to use the discombobulation to get there. Anyway, to get back to fake genius, it is a way to get stuff, get laid, get money, get recognition – professional or otherwise, to get adulation. It is like being a T.V. preacher. It is a way to have the license to get people to give you shit if you're good at it. There is deluded genius. There are people who *think* that they are super-geniuses. I don't know if anyone has interviewed Raniere extensively or at all because he is in prison. It would be a semi-interesting thing to explore how much of his own bullshit that he believes, probably quite a bit or maybe it varied from moment to moment. He scammed the Bronfman sisters who are heir to the Seagrum's fortune. He scammed them out of $100 million for him to invest and make a shitload of money. He lost the $100 million. When he talked them out of giving him $100 million to invest, I assume that he thought that he was a genius investor and could make a bunch of money from investing. Otherwise, if he was just a scammer who didn't believe in his ability to invest, he would have just deposited it somewhere for his own use and then invested it not crazily. He, maybe, would have been a hedge fund guy

trying to figure out the best way to make money while not losing most of the money. Instead, he probably thought that he had good instincts and lost $100 million. To me, this indicates that, at some point, Raniere really believed in himself. Maybe, the shit changes. I don't know what this says about him believing in himself or not with him fucking his harem of sex slaves. I don't know if he told himself that he was making the women that he was having sex with more enlightened, so it was more worth their while to put up with his shit. There is the potential, among fake geniuses, for delusion, for believing in your bullshit.

Haereid: *People who really think or make people believe they are God or have supernatural powers, are either ill, delusional, hallucinating, or they are just manipulating to gain a benefit.*

Some people manipulate, like an alchemist, or a priest that convince you that the members of the church have to pay him a tithe or something; he's God's representative on Earth. If this priest proclaimed that he sold dreams, that this was transparent, like Hollywood; it would be right and fair, I guess. I gladly paid money buying Paulo Coelho's book The Alchemist*, and not because I believe in alchemy.*

Fake geniuses often utilize vulnerable persons; persons in personal crises and the like. Their "inventions" are dreams, expectations and divinations, and they promise this to happen. A premise is that people really believe in these lies.

There is a problem concerning trust and vulnerability. The optimal case is that we have this healthy skepticism towards any man-god. It's a known thing that charming people, often psychopaths and sociopaths, have the greatest influence on vulnerable persons. I think the society, friends and a trusted family have to deal with that. But there are a lot of power in some people, and the ability to convince and lead is sometimes godlike and misused, unfortunately. I have discussed the phenomenon psychopaths with a couple of psychologists, and asked them what to do when one meets one. And the answer is unfortunately not very helpful or scientific: "Run!"

Jacobsen: How can the general public, akin to warnings about margins of error in the HRT world, be warned about this self-aggrandization and overt narcissism, even treading into delusions of grandeur?

Rosner: The thing that most protects the public against stuff like that is the public could not give even 3/10ths of a shit about genius, whether self-proclaimed or legit generated by an IQ score. There was an era when genius had more clout in the 1960s when people cared more about it. Nobody cares that much anymore. Genius is not that much of today's cultural landscape. You have so-called geniuses who have given us huge chunks of our cultural landscape, like the Bill Gates' of the world. We are more concerned about the devices than the geniuses who created them. Those geniuses, by the way, are captains of industry. There have been a bunch of movies about Steve Jobs. People are, at least, somewhat interested in him. But there's even less interest in geniuses who aren't billionaire captains of industry. Nobody cares about them. Unless, the genius is an engine that drives a fictional story. It makes a certain amount of sense that there is not a lot of room in the world or in the *zeitgeist* for genius. I would argue there is a lot more room. It is a failure of programming to exploit smart people. I did four pilots for shows about geniuses. None of them went anywhere. I've pitched and developed a shitload of projects for T.V. about making yourself smarter, about geniuses competing. All of this different stuff. None of this has gone anywhere. It is a failure of terrible reality T.V., to realize that super smart people are just as exploitable train wreck reality entertainment as any other group of people. There is a

problem of working with smart people. You may have to roll more footage, or maybe not. Also, smart people are not good-looking idiots. Beautiful people, there's always entertainment built around beautiful people. So, if you are casting a reality show, and if you pick the *Bachelor* and the *Bachelorette*, they start with 25 or 30 bachelors or bachelorettes each season. They are looking for people who are interesting and beautiful. I am thinking that there are probably people who could get on the *Bachelor* without being that interesting if they are super duper hot. I don't cast for it, anyway. There's a bar for interestingness when certain reality shows are casting beautiful people. It is a problem when there's another set of criteria that knocks out your beautiful people. For instance, porn, the most beautiful people in the world tend not to do porn, because porn selects from the set of people willing to do porn. That sub-set of everybody generally eliminates the most beautiful people. You can have good looking people in porn, but you can't have the best-looking people in porn. Similarly, if your sub-set of everybody is people who are really smart, it is such a smaller sub-set of humanity. Also, it is a different sub-set than the people who will do porn because the sub-set of people who will do porn overlaps with the people who can make money off their looks. The sub-set of people are really smart has very little overlap with the sub-set of people who can make money off their looks. So, if you are doing a reality show about smart people, then you're going to have to have all sorts of compromises made for those people to also be attractive. So, you'll have a show with smart mostly unattractive people or slightly less smart but slightly more attractive people. In either case, you're a little bit fucked. Also, reality producers are lazy. They're, maybe, not willing to put in the extra work to come up with a decent product. Even though, your people aren't as beautiful as the people on the *Bachelor*. So, geniuses probably should be more in the *zeitgeist*, but reality shows have not adequately exploited them.

Haereid: *I agree with Rick: The public doesn't care. But some outside HRT are interested and curious, and some in the environment are on T.V. and in newspapers too. So, sometimes journalists do show some enthusiasm. They want a story.*

I think that to gain the public's interest you have to be a real genius and not only on paper; you must surprise people with your genius art or invention.

I repeat: It's necessary to clean up within the HRT-environment. There are a lot of good intentions and work, and some turmoil too.

Jacobsen: On supernaturalism, does this seem real to you?

Rosner: Nope!

Jacobsen: [Laughing].

Haereid: *No. What is real is all the stuff we haven't revealed yet. People tend to overlook the things we don't know, and fill the empty spaces with history. Then every unthinkable event becomes impossible.*

I think that everyone has powers that we don't get hold of and not used. It's a lot of social and other depressive forces that prevent us from getting in touch with these innate, nuclear powers; but they are not supernatural. It's a gap between what we do and our potentials. We can see that as a potential per se, and sort of a destiny; we can approach and getting closer to our potential, but never exploit all of it.

8. Jacobsen: Do claims of the supernatural seem like ancient mythologies or extrapolations thereof? A sort of extension of primitive, less rigorous forms of thought into the current more

rational, more scientific era, in spite of the attendant problems of the power of science and human proclivities.

Rosner: Not exactly, when people make up stuff, it is easier to get a better-quality made-up product if you are, at least, grounded in the history of made-up stuff.

Haereid: *You mean like an archetypical inheritance? Or that we need to preserve some materials in spite of what is logical?*

It's maybe a part of it. Perhaps we don't dare to feel safe about science yet; it doesn't give us the comfort we need. We have to trust it more than we do, and meanwhile we rest on the myths and the idea of supernatural forces. That's a thought.

Jacobsen: How do the standard operations of religious frameworks or structures of looking at the world lead to asserted supernaturalisms rather than naturalisms?

Rosner: The deal is, we have only had science for a few hundred years. But people have been looking for ways to understand the world and for understanding for 20,000 years. So, you've got a wrong, bad, but interesting, explanation stretching back thousands of years. That's where most of the religions of the world, probably all of them, are an attempt to order the world, to understand it, and to gain some measure of control, or some solace over the shit that happens. Humans as generalists, as the most thinky species on the planet, are drawn to, our niche is, exploiting regularities in the environment – figuring out how shit works. We are drawn to, or we are compelled to, explain stuff. The stuff that is harder to explain will fill up with wrong explanations.

Haereid: *We need explanations for everything; it's in our blood. Science doesn't give all the answers. Maybe it never will. Birth and death, what's before and after? What are thoughts and why can't I rest in my emotions? Why do I fear things that aren't real? Why don't I instantly understand what is real and not? What is phobia? What is love?*

Thunder is caused by Thor until you rest in peace with another answer, scientific or not. Our culture is familiar to us, we recognize it, and we feel safe about it, whether it's faith or science.

Manipulation, brainwash, culture. We don't have a choice, there are no alternatives. That's another angle. In secular communities, faith could be more of a choice, but then you have the needs, including needs of affiliation; you choose believing in something supernatural because everybody else does. The critical voices belong to the unpopular minority. Then you don't have a choice either, because you need an answer, and since science doesn't, you choose a supernatural solution.

Jacobsen: Are religions factually correct or incorrect to make these assumptions in their views of the world?

Rosner: In the last 100 years, probably the last 60 years, you have Popper and Kuhn who theorized about the history of science, right?

Jacobsen: Yes, and Lakatos and Feyerabend.

Rosner: When people started analyzing how science works via a philosophical framework, or an epistemological framework, philosophers came up with the idea of falsifiability. It is not science. Unless, you can run an experiment and the results determine whether your theory is true. So, shit that is not science that attempts to explain the world lacks falsifiability. That might be the biggest

sword to cut at shit that isn't science or the biggest basket to throw shit that isn't science into. The motivation to do what religion does, to try and order the world, is a good thing to do. But when you end up with a system that cannot be disproved, that rests on faith, then that's not a factually correct thing.

Haereid: *It's an approach to claim that answering such questions are not science until you have proved it empirically; scientifically. It's guesswork. It's for fun. But the resulting wars and conflicts that may come from such disputes are not fun. People use nonscientific methods to claim that their view is the right one, and the others' view is wrong. And they mean that this is it; it's no basis for debate. The problem is when you answer these types of questions without a stringent tool, without some thoughts about the epistemological angles to knowledge* per se*. As long as the conclusions create disagreement either one of the sides is wrong, or there are two equal truths: rationally. Then quarrelling is nonsense, at least in a non-psychological way.*

Jacobsen: Is faith, at this point, net bad or net good?

Rosner: There are different kinds of faith. As optimism, as existential optimism, it is a good thing. You go out into the world and keep doing stuff. Even though, there is a lot of evidence in the world that you won't live forever. That you'll get old and be uncomfortably old, and then die of some horrible fucking disease. There's a lot of evidence that there is a lot of unrewarding stuff out there. But persisting in defiance of that for the pleasures of the world, it is a kind of a faithful optimism; that, I think, is a good thing. Perverted faith like the way a lot of American evangelism has turned rotten is a bad thing. Believing in bullshit or, at least, acting as if you believe in bullshit for political purposes or for financial advantage, like Jim Bakker, of Jim and Tammy Faye Bakker, a religious scammer from way back who went to prison for it in the 1980s. He is back selling bullshit coronavirus cures and preventatives. If you go on Twitter and look around and google, you can see some evangelicals – 4, 5, 6, maybe 8 – or media heavy preachers promising salvation from coronavirus in the U.S. if you just send them money for prayers or bullshit products. That kind of faith, the faith behind that, or perverted faith, is obviously terrible.

Haereid: *Faith is good as an aid to survive inner demons; to survive life. Faith is good if you become a better person to yourself and others; we need more of the Golden Rule as long as we lack resilience. But as a cult, a brainwashing scenario, it's net bad; it has to be a choice, not coercion. If you become a social parasite creating conflicts and wars because of your faith, it's bad, obviously.*

Jacobsen: Finally, why do some real geniuses, or even fake 'geniuses,' fall into supernaturalisms and grandiose proclamations of supernatural powers and some special cognitive powers?

Rosner: I hate talking about slippery slopes. Because if you look at the landscape of effort and reward around people who present themselves as geniuses, like Raniere, Raniere evolved a system, a philosophy, a cult, that, eventually, allowed him to build a harem of women who disciplined themselves to, say, stay super skinny because that is what gave him a boner. So, being rewarded for claiming to be a genius is what propels, sometimes, so-called genius to get fucked up, whether it is sex or money, or self-delusion, or lack of discipline, I've got this theory of the universe, which I've never put on a firm mathematical footing. But I still like thinking about it, and still think that it is right. My laziness means that I can reward myself by thinking thoughts about the universe, which I think are profound and get some emotional reward via the pleasure of thinking big thoughts without putting in the effort. Einstein spent a bunch of years.

He came up with Special Relativity in 1905. It took him until 1915 until he came up with General Relativity. He suffered a lot. He did not have a large library of mathematical technique in his head; he half-understood how things like gravity should work. He had to keep going to his friends to look for mathematical models that might encompass some of his more nebulous thinking; his instincts about gravitation, which took 6 years, 8 years, maybe. I don't know when he started after 1905 on General Relativity. But there has been a bunch written about the false starts and the work and suffering built to get to the mathematical framing of Special Relativity and General Relativity. I have not done this for Informational Cosmology. I have a little bit done of it. But we do not have any math. I still get the wanking…

Jacobsen: [Laughing].

Rosner: … of thinking big thoughts and feeling like a genius. But the lack of discipline means that there is no math. You can get that kind of drift. Let's assume for the sake of this, I am an actual genius. That the physics of this will turn out to be true. But that whole thing could happen with someone who isn't a genius and who is a deluded person. That whole thing about thinking profound thoughts and just wanking mentally. It is one of the potentially dangerous rewards od doing genius-y thinking.

Haereid: *It's human. When you become famous for an invention or piece of art, it's difficult not to elevate mentally. Humans have this abnormal ability to amplify exponentially one's identity; god or devil, more worth or less worth than everybody else.*

Then it's natural to become megalomaniac, delusional. Why shouldn't you? I guess it's the same with popularity in general; it messes up your brain. It's hard to maintain the idea of who you are when everybody confirms that you are something else. If you manage to change peoples' view on something essential, like Copernicus, Newton and Einstein did, I guess it's a hard to stay on earth identity-wise. The challenge is staying mentally healthy if you make giant leaps in our culture, think you do or are extremely popular, whatever reason.

Chapter 9

Scott Douglas Jacobsen: Following from the previous question about the supernatural, and some religion, what is science?

Rick Rosner: Science hadn't really been pinned down since historians and philosophers of science. People knew what science was. There was a Supreme Court Justice years ago who said that he couldn't define pornography but knew it when he saw it. It wasn't until the second half of the 20th century until it was like that. People like Kuhn and Popper said it was falsifiability. You have a theory that makes claims about how the world should behave if your theory is true. Then you test the theory. To me, that is the quickest, easiest definition of science. You can find all sorts of ways to do science that don't use that system, like scientific classification. Just classifying shit is a scientific exercise, which doesn't use that system like scientific classification. Classification is a scientific exercise that doesn't involve falsification. It says, "Look, we have beetles with serrated claws and with smooth claws." It is making observations of the world. So, you must widen the definition of science. That leads to an expanding collection of verifiable knowledge about the world.

Erik Haereid: *Concerning falsifiability, science is a probability process. You will never know for sure, but you will increase the probability for that phenomenon to be true by collecting information that substantiates the hypothesis. I guess this is basically my view.*

Science is about processing as much information as possible trying to get closer to solutions and the truths in an everlasting critical circle. Science is a collection of tools, an instrument with the aim of finding universal truths. Its goal is finding something that everyone experiences and agrees with as objective and that's not trapped within subjectivity. It's about establishing some fundamental axiomatic assumptions that people respect, and to use some methods systematically to find patterns and new perceptions that we experience as true.

It's about evolving something that works in general, some logical coherences or empirical perceptions, systemizing gathered information and treating it consciously using some methods that increases and maximizes the probability of the findings/results being true.

The clue is to develop new knowledge that hopefully will give humans better lives and advantages, and knowledge that is as objectively true as we can get it. Science is, therefore, a system or collection of methods that, so far, most people find as the best way of establishing knowledge.

If everyone experiences something and uses it it's true until the children or the one scientist or someone makes us aware that we are wrong, like in The Emperor's New Clothes. Manipulation and brainwashing can distort science because we need to adapt to each other and follow authorities. We don't believe sufficiently in our own perceptions.

Our subjectivity is something we can live with when we adapt to the objective truth. We need objectivity to survive as subjects.

One of the main features of science is doubt. This defines science. By being critical and never sure about everything you increase the probability of being pretty sure of something; it's a way of collecting safety. It's a way of tricking the mind to think of assumptions as temporary truths and, therefore, safe enough to live with. It's like living by the rule "I don't really know anything,

but since I sit here and write, it can't be that uncertain." It's an axiomatic precaution, like the cogito ergo sum*.*

Science is also about gathering information, thus defining and using symbols that describe phenomena in ever greater detail. It is thus also an extension of objectivity. We want to know more. To Norwegians snow and winter are quite central objects; we have a lot of symbols and words describing these phenomena. But for the Inuit this is nothing, they have cascades of words and symbols describing this, and for the people living around equator snow is almost baffling.

Jacobsen: Why are science and empiricism controversial to so many?

Rosner: Science and empiricism are controversial to people with a creepy hidden agenda or people who have been manipulated by people with a creepy hidden agenda. Some say science takes the mystery out of the world and denies the matters of faith and divinity. But those are horseshit arguments presented by charlatans. Religious people can maintain religious faith and still believe in facts about the world. I don't think people who aren't charlatans or idiots have that many quibbles with science. They might have problems. I could see somebody having problems with scientific frameworks that impose a complete absence of values on the world. That everything happens at random. That there are no higher values. That values are a construct by humans. But that hyper-cold pseudoscientific framework is itself kind of a lazy understanding of science; it has some faith aspects to it, itself. There is room to have values within an evolved universe. The superficial understanding of science; that nothing can mean anything. I concede having problems with that. That framework, an easy way of putting it: reasonable people don't have a problem with the specifics, the specific discoveries and principles, of physics and of various sciences. They may have problems with overreaching scientific, philosophical frameworks. That deny the possibility of values and of divinity. But nobody but an asshole denies the factual discoveries of science.

Haereid: *I think we all need to know that there is always a way out, an entrance where we can escape to; a final home.*

The cultural thing is one cause, the obedience to authorities another. The classical Milgram experiment exemplifies this. The (subjective) truth is captured in our individual psychological needs. I think some are afraid of objectiveness; something they can't control with their own mind and body.

Some are very conservative. This is especially a problem with middle-aged and elderly people. Many feel threatened by new inventions and scientific revelations. Even though, it's based on the sincerest methods we know of. I think some are scared because they don't understand; it messes up their mind, especially when the pace is as fast as now.

Laziness. It's easier to stay where you are, even if that's a world of delusions, than using the energy to adapt to a natural evolution of knowledge and activities. To some it's frightening, I guess.

I think some people find science uncertain, meaningless, clinical. It's easier to believe in elevated, supernatural figures and ideas.

The Norwegian author Henrik Ibsen wrote, in The Wild Duck*, "Deprive the average human being of his life-lie, and you rob him of his happiness." Ibsen didn't mean that one should mix fantasies and reality, just swim into one's fantasies now and then.*

The scientist never knows for sure. There is always something to reveal and find, and the answer will never be found. I think that's problematic for some. They can't find the safety and peace they need inside that realm. Some find rest and peace walking on solid earth while others climb steep mountains.

Many find peace in an almighty power or father that ensures them peace in an afterlife. To them, it's controversial to claim that such a father doesn't exist, or at least we don't know that, and the answer is in some stringent logical methods that to many don't give much comfort. I also think that many people who are critical to science see scientists as cold, cynical and not in contact with their emotions. I don't know. That's a hunch.

Jacobsen: When we think of science in an everyday sense, what is it?

Rosner: It is what we learned about the world with, in most cases, a high degree of certainty and how we've used that knowledge about the world. Most of the stuff that we know with a high degree of certainty is, somehow, tied to science. Off the top of my head, I came up with a system of knowledge that is not tied to science, but is tied to real sloppiness or has less certainty, e.g., the art of picking up girls or women. It had a renaissance in the 1990s or the 2000s. These guys who wanted to hook up with hot girls developed a set of techniques for an attempt to do that, including things like negging – coming up to a hot girl and not telling her that she is beautiful, but saying that something is weird with her. According to the pick-up artist system, she has heard she is beautiful a million times before. That is a system of knowledge that is not reliable because every person is a different person. It is not scientifically established. You can go up and tell someone, a girl, that her nose does a weird thing when she laughs. That may or may not work. It is shitty, in terms of effectiveness and just being established fact that you can pick up a girl by mildly insulting her. A lot of the stuff that is more reliable is based on more scientific fact, like pupils dilate when someone likes you. It may be unreliable, but it is closer to real science. But neither of those is as close to the physics of when you drop a ball. Things we feel close to having 100% certainty are the products of science.

Haereid: *Most of what we see of manmade objects is based on science. Different buildings, skyscrapers and bridges. Vehicles, machinery, roads and traffic. Infrastructures. Economic and political systems. Communication, phones, computers, the internet. Power, like electricity. Medicine. Technology.*

We think of it as basic for a lot of our many devices that we use all the time, like washing machines and smartphones. We think of progress and effectiveness; an easier way to produce food, produce what we want, more spare time, more money, funnier stuff to use, more advanced tech to play with. We think of virtual reality and a totally new world that we dive into. Effectuation of communication. More of everything; more choices, more stress, more demands, more happiness, more sadness. It's a dichotomy in the way that science produces more freedom and spare time, and at the same time, less of that; many struggled because they can't reach everything they want to and feel they need to. Science produces vast amounts of conscious content. It creates a social pressure, and an economic brainless whirl based on the idea that all growth is good growth; reduction in GNP (GNI) is devastating. But of course, it isn't. That's nonsense.

I guess most (young) people think of science as something that gives them more opportunities, choices, freedom and, on average, a better and longer life.

Jacobsen: How does this differ from real science?

Rosner: The everyday understanding of science is using stuff already established or products. Everything we consume, now, is the product of modern civilization. Modern civilization is the product of science. But it is just using the products of science and technology. So, every day, exposure to science is using the products, and doing real science is trying to expand scientific knowledge.

Haereid: *It's about usefulness contra understanding. From "How do I use it, what's in it for me?" to "How does it work, what does it consist of, how can I make it?" You don't need to know how it works to see and use technology, a smartphone or a bridge. The border is the user interfaces. You don't have to understand how a transistor or microchip works to use a radio or computer. You don't have to understand that experiencing the blue planet and sky is due to certain frequencies in the electromagnetic waves. But to describe the phenomena and develop knowledge you must know it, dig into it.*

Jacobsen: If we examine the supernatural, paranormal claims about ghosts, prayer, demons, goblins, reading minds, foretelling the future, spirits, the divine inspiration of purported holy texts, and so on, what are some appropriate scientific answers to them or responses to them?

Rosner: That they are mostly, or most of those beliefs get, squeezed out of existence and attributed to wishful thinking or optical illusions. Like, everybody occasionally sees somebody lurking in a doorway for about a tenth of a second. That's just your brain rebooting its systems. You don't see someone all the sudden materialize in a doorway if you have been staring at the doorway. If you turn your head, then you might for a split second see someone in the doorway and startle yourself. That's just your brain making a bad guess about what is at the doorway. As you look at the doorway, your brain gets more information; then you brain is like, "Oh! Just a doorway." Most of that stuff belongs to the paranormal and gets explained away by science. Some stuff might survive, but only in ways that are mediated by science. Take ESP, or telepathy, some people might be able to read other people's thoughts better than other people because they are able to catch or perceive micro-expressions and can guess what issues most people have in their lives. Most psychics who are good are good guessers and experienced in asking questions that will ring a bell. Do you know anyone whose name begins with J?

Stuff like that. There can be some basis for this stuff. All of it is mediated through normal means, being able to read people's micro-expressions; you're using regular perception not extra-perception. Or you might be using some sixth sense; some people might have it. I doubt it. But like birds, birds can perceive magnetic fields and can be able to navigate using the Earth's magnetic fields. Some people might have some vestige of it. I doubt it. But it would still be a scientifically established sense. There is not a lot of magic syrup floating around. If there turn out to be, they will turn out to be scientifically explained and incorporated into science, like zombies.

There are zombies. But they are the old school zombies like in Haiti before the definition of zombie got hijacked. People in Haiti, I think, and some other Caribbean island would kidnap people and drug the fuck out of them and turn them into these people who are kind of slaves, because they were drugged up and followed simple orders. They couldn't follow complex orders because you drugged them enough to have control over them. Those are scientifically established zombies. Assuming this Haiti thing is real, you could find people in Haiti doing this and find people drugged up. But the new zombie, which is a dead person who came back to life and eats

brains and lurches around; it is scientifically unsupportable. Nobody claims zombies are real, but people claim other shit is real like ghosts. Most of the stuff like that;

that people want to believe is, or are, real. They just don't make sense.

People who live for 300 years, if they stay out of sunlight and drink blood. That's just not supportable. Although, sometimes, when you look at the origins of the legends of these people, you see some people may have had a disease or a psychosis that may have led to the beginnings of these. All this stuff is obvious.

Anyway.

Haereid: *Prove it. Give me more details; more information, things that I can see, understand and experience. Things that I can percept. You tell me something that I can't experience empirically or logically. Then it's a hypothesis. Science fiction is also science in the sense of thoughts about something that can happen, that maybe is real, but is far away from our perceptions of reality at this moment. When you have a mathematical hunch, you think there is a formal connection, but you don't know; you create a theory which you try to prove mathematically. As a scientist you don't claim that theory to be true or false until you have proved or disproved it. This caution and respect, humility, is in the scientist's blood.*

If you mean you can read minds and see ghosts, give me some evidences, something I can build my belief on. If I reject your ideas and say it's nonsense, I am as little scientific as you are. Because I really don't know if what you are saying is true or false. I can't prove it's not true, but I think you make a mental shortcut, that your brain tricks you.

Explain to me what you mean, in empirical and logical details; I need objectivity. If you don't, it's just subjective, emotional, psychological phenomena. We thought the planet was flat until we were objectively convinced it was not, and that a heliocentric view was righter than the geocentric one.

Jacobsen: Rick, you said, "Squeezed out of existence." You mean, "Squeezed out of the mental, cultural landscape."

Rosner: Just squeezed out of the possibility of existing, because in societies that are pre-scientific or early scientific, they have a catch-all of beliefs. There are plenty of empirical beliefs. There might be some systematized beliefs. There are probably plenty of beliefs about spirits and stuff that we don't believe, but, maybe, people didn't have enough evidence to deny them at the time because the accumulation of human knowledge wasn't sufficient to squeeze that stuff out of the realm of possibility. If you have an institution promoting mystical beliefs, like churches, it is very persuasive; the church is invested in accumulating information that supports the beliefs of the church. It takes a long time for that knowledge to be superseded by scientific knowledge.

Jacobsen: Is part of the reason so many people believe in these things related to the lack of appropriate science education interventions?

Rosner: Everybody constructs their picture of the world. People have a variety of influences. It is not necessarily the job of education and people's friends and family to crush every mystical belief out of them, to examine everything that a person may believe and assiduously root out everything that might not be legit. People draw information from several different sources. It would be difficult and mostly unnecessary to drum every unscientific belief out of people. People can believe all sorts of shit and go about their daily lives. Much of the time, it is not much

of a problem. Mostly, it is a problem when people exploit people's ignorance. America is at a high tide of cynical motherfuckers exploiting people's ignorance and non-scientific beliefs.

Haereid: *People who grow up in an inspiring environment where the others "think science," like* some *families, where both parents are teachers or scientists, seem to adopt this culture; understand and like science when they become adults.*

It's about motivation. If you have people around you ONLY talking about other people, small-talking and being interested in superficies stuff like clothes and makeup, or who is who-stuff, social status and so on, you don't get into the interesting features of science. Then you don't get it. You must understand it; go into the empirical and logical details to gain the motivation. You must experience that you get it. It's like building something; it's rewarding because you get that inner feeling of reward, to master something, building your identity. A good teacher can do miracles with the kids making them interested in science. To experience the power in scientific truth is stronger than any godlike power, I think. Then it's more difficult to believe in supernatural things. You start asking questions that are prohibited in these cultures.

Jacobsen: Also, is some of this due to the churches and religious institutions? For example, when I went through the creationist groups in Canada, they almost always present in the churches or places of worship. In other words, pseudoscience gets transmitted with the permission and, in fact, promotional efforts and encouragement of religious groups while done in places of worship.

Rosner: Yes! Churches incorporate mystical beliefs, for the most part. There are some churches like Seventh Day Adventists, Unitarians, or Reformed Jews where mystical beliefs take a back seat to the scientific beliefs and moral teachings. But yes, churches teach a bunch of mystical stuff. But if it teaches them to behave morally, then it is much harm. If it teaches them to behave like immoral idiots like some of the Evangelical congregations are caught up in America now, then, yes, it is a fucking problem.

Haereid: *I think it's more common in North America than Scandinavia, but it's here too. Some institutions use every opportunity to convince people of what they believe is true, even if it's based on wishes and fantasies. It's coercion; you get a reward if you apply and punishment if you argue. The unscientific way of convincing people is basically through reward and punishment, emotional invasion. In science, the answers are rewards and the questions are the punishments.*

It's like the people in the wedding should force the people in the funeral to feel happy, or vice versa. They build a strong culture, and spice it with motivations and rewards. They use psychology to attract uncertain and lonely people to their herd; to build their army of blind soldiers.

Jacobsen: If we look further at the methodologies of science, what are its most advanced manifestations now?

Rosner: We are going to supplant ourselves as the best information processors on Earth. Eventually, we will give ourselves technological immortality. Those are the bigger manifestations of science. Just the rise of AI and super-medicine, if you're asking about the purest manifestation of the scientific method, you could argue that is AI too, because AI – machine learning – is something; we are constantly performing thinking. Thinking is an experiment in predicting, in best predictions. The current fashion in thinking about thinking is

that brains exist to predict and prepare you for every second and every moment that you're about to face. Thinking is an experiment in making assumptions and having those assumptions confirmed or denied and then changing your assumptions based on the new information, brains are super-duper Bayesian. Bayesian Probability is a system of weighting your predictions based on your estimate of how much you know at each point in time and then changing those predictions and your weighting of them based on experience. That's what your brain does all the time. That's what AI do all the time, setting machine learning loose in the world is a testament to constant testing and verification being etched into silicon. Science is informed guessing. You take what you know to try to use that to predict. That's machine learning.

Haereid: *The only scientific, objective truths are the truths who apply to all; that favours all. This is a proper definition. It gives us few truths and a lot of uncertainty; a lot to work with and improve. And it provides common goals for the future information processors; human and AI.*

When we set goals that do not fulfill this definition, they are subjective or democratic; there are always fewer than all that defines them. That's the beauty of math; it's so far the closest we are to axioms and rules that everybody seems to accept. It's objective.

I believe in honesty and clarity as outcomes of science and its methods. In the future, it will be more difficult to lie, to manipulate, to gain power through promoting illusions. That leads us into a more joint and transparent society, where privacy becomes more visible and less private, because scientifically methods is about revealing failure, flaws, and then correct it. What we today see as flaws and failures will change through the process, with and without AI, and definitely with technology, when science develops through an effectuation of its methods. We still have a prehistorical view of what is right and wrong, because science is very new to us. We base a lot of our knowledge on nonscientific cultural stuff and prejudgments. We lack information and effective processors to handle it. With increasingly abilities, we will understand more and get closer to objective truths. We will adjust the goals as part of the scientific method, change direction, continuously, and increasing the probability of getting closer to the truths.

At the beginning, this seems frightening. We will struggle with all our flaws until we see that everybody else has the same ones or related flaws. Then it becomes a joint struggle to improve, like killing Covid-19 and getting rid of cancer. The scientific method, like using technology to expand our brains, will help us to achieve our goals more effectively; faster and more precise.

AI is an approach to how our brains work; it's an amplifier in its very beginning. It uses its advantages over the human brain, like the available amount of information processed and speed. It copies the brain when it comes to our signal system. We speed up when something is important and we slow down when we don't weight that information much. When we mean something is wrong, we reject it, and when something is right we store and process it. It's like a transistor. Basically. This is copied to AI. It's an automatic process inside the AI-brain that is meant to work as (an amplifier of) the human brain when it comes to scientific methods; converging towards better solutions, more truths, by weighting information and results, and do this iteratively continuously towards a goal.

We are constantly improving our brain's capacity, using scientific methods. We use technology to enhance our thinking and data processing. We will succeed in reaching our goals.

Jacobsen: What are the most prominent and accepted findings in the sciences now?

Rosner: Physics. Physics is the most deeply mathematical and deeply verified of the sciences. Then you can look at areas of physics that just without question are true: Newtonian dynamics for instance as long as you're not dealing with stuff not travelling more than 1% of the speed of light, which almost nothing does in the everyday world except for subatomic particles or photons. The Newtonian framework is super-duper verified, so is Special Relativity. Physical dynamics is super verified. Even shit like thermodynamics is super verified, even though, people argue about the philosophical underpinnings of things like entropy and information. But really, there are so many areas of physics that we dead solid know. That footprint probably extends a little farther to stuff that's known ridiculously absolutely, probably keeps creeping outward. Just because Einstein overturned Newtonian Mechanics, when a gravitational field or at high velocities, that didn't invalidate Newtonian Mechanics. It meant that at normal velocities, and at normal gravitational fields. You might have to correct a term 14 places beyond the decimal point, which means you don't have to correct it at all. Because it doesn't matter for what you're doing.

Haereid: *Mathematics is the most basic of all sciences. When something is mathematical coherent, and empirically experienced repeatedly over a long time, we accept it. Like Newton's gravitational laws, which Rick mentioned. It's very difficult not to accept it. Physics, yes. Natural sciences in general. It's a lot inside natural sciences that we accept, in chemistry and biology, in astronomy. It's difficult to pick.*

Jacobsen: Overall, what does this view of the world give us? These different findings from fields of science brought into a reasonably knit together, though incomplete, blanket.

Rosner: It lets us manipulate the world. To some extent, lagging that, it is understanding our place in the world. The lagging behind the certainty of science are the philosophies that may arise from science. Because we jettisoned; there's the internet meme of the guy walking with one girl and looking at another girl. The girl that he is looking at is science; the girl that he blowing off is philosophy. We blew off philosophy because science gives results. Science is incomplete as we've talked about before. Science is nowhere near complete enough. It hasn't given enough of a picture of the universe to give us any deep philosophizing that may have any of the nice certainty, even empirical underpinnings, that science does. What was the fucking question you got?

Jacobsen: [Laughing].

Rosner: Right now, it gives us a bunch of cool shit. Some time in the future, it may give us philosophical understandings of the world. The cheap and shitty and inaccurate scientific/philosophical understanding of the world is that everything is random and nothing matters. I think a more sophisticated view might permit more. We have no idea. We still live at the bottom of a deep well of ignorance about the rest of the universe. We haven't found life on any other planet. Even though, life on other planets must exist in profusion. We don't know what a civilization that has been around for a million years might be like. We don't know what role such civilizations might play in how the universe works, whether they play zero role or play a role in the universe's information structure. That deep civilizations might be part of the way the universe understands itself. Who fucking knows? We have no idea. You and I talk about IC [Ed. *Ask A Genius: Set I.*]. These seem to have some offerings of a more philosophical set of implications if what we talk about is true. It is *a true* that has some nice resonances that seem

like they should be true, but we just don't know anything. But we do learn more stuff; we should be able to do more philosophy to some extent.

Haereid: *We are more perfectionists. Many think as scientists; the culture is driven by scientific approaches and mindset. You can see this especially with young people, young adults. This is my experience; that they are more interested in details, discussing the logic behind phenomena, cause and effect, and that life is about finding the flaws and mistakes and remove it; their goal is to improve themselves; and on that road, they use scientific methods.*

One of the (temporary) effects and downsides with this way of thinking is that it creates impossible expectations; demands that people can't fulfill; we live in a world where no one is as good as they should be. This is because of a scientific way of thinking improvement. Then our brains create psychopathological issues; mental problems concerning self-images and -worth. Science doesn't deal with this problem, at least yet, in a good way. The consequence is that (especially young) people try to change themselves to fit the impossible expectations; distinctiveness is banned. I think we will solve this with science; it's some obstacles along the road. I said something about this a couple of questions ago.

I think we think we can do everything; it's so many inventions and products created by science the last few hundred years, that we get narcissistic. It's easy to believe that we are godlike since we can affect our surroundings into such a degree. One of our advantages and obstacles is that we are capable of mentally enlarging everything. Science is a way of getting down to earth, in the end. It's also a way of using our imagination, and it's easy to mix up fantasies and reality.

Most of the sciences have a positive impact on us, like the evolution in medicine. We do all agree in that fighting against diseases is a common goal; it's nothing controversial in that. It helps us feel better and live longer. Evolving effectiveness concerning food supplies and other primary needs is only good. If we automatize everything, we can do something else. I am not one of those who worry about unemployment in the future because of evolution in technology. On the contrary; the main issue is to provide food and necessary needs, to everyone. This is primarily a distributional problem; we will create all those needs more effectively. People will always act, find something to do, together, paid or not. A job is only some activities. You can get paid, get your necessary supplies, from any source.

Chapter 10

Scott Douglas Jacobsen: Something that I want to dive into more. The idea of something discussed by Rick and me for a long time. We've talked about something dealing with an assumption coming from digital physics with the universe as an information system. Digital physics deals, probably, with the general idea of a computational universe. I do not want to lay an undeserved claim or stake in something developed for 35 or more years by you. However, I made contributions in the efforts in some developments in this area with you, how ever loose and recent. You have respected this or noted this in statements of "we" and "our," and so on. Nonetheless, Informational Cosmology deals with large-scale dynamic implications of this computational view on things, more as a philosophy of physics than a formal physics with the minimal mathematics infused at present. One school of thought in psychology comes from computation, as in the nervous system as an integrated computer-like system. The same general ideas seem to permeate different fields. The human nervous system, as a material and organic object, processes data, in a broad sense of "data."

Now, when we look at the ways in which human beings process information - both in a general capacity and in faulty/crummy ways too, this comes to another idea reflected in some of the thoughts expressed by Rick and me over time. In that, we have the general capacity of human beings as computational entities. We think about stuff. We crunch information produced internally and derived from sensory input from the outside world. We're naturally empiricists with sensory information and rationalists with the ability to think; an endowment from evolution to the human species barring catastrophic cognitive deficits or injuries. The human organism is a naturalistic, integrated system of sensory input and thinking. We're evolved, though. (I like the phrase, "There is no governor anywhere.") We're embodied. We poop. We pee. We drink and eat. We dance, maybe, and love, for most. We have sex. We follow the passions of life, of the moment, and of whimsical thoughts or emotions. I like the example of one of the longest-running iPhone developments ever over 3,500,000,000 years, or more.

Rick, you've been developing these ideas and working on them far longer than me. However, half of a decade or more, we have been working together, writing together, talking, and so on, in the development of a variety of projects. One of those comes in the form of Cognitive Thrift or a loose series of premises about the economy of thought, i.e., the economics of thought in an embodied, evolved computational system while living in an active and dynamic world in which choices, actionable computations, need implementation. Mental resources are finite, non-infinite. You made the argument, earlier, about geniuses, potentially, having more cognitive resources. This seems to build on the notion of Cognitive Thrift. If one has a still-finite while larger-than-others set of mental resources, then an individual can change their internal and external environments more than others and probably with a wider range of possibilities and, thus, more idiosyncrasies as well. Intelligence seems as if another consideration for Cognitive Thrift.

In that, an individual can develop the requisite mental resources for the instantiation of a better survivable environment, a cozy place - mentally (cognitive and emotional) and physically, then the selection quality comes into play too. One's resources within a Cognitive Thrift framework implies, in some ways, a better ability to select, make intelligent decisions based on the quality of thought. Some scattered research indicates

more intelligent people process information more rapidly, more efficiently in terms of energy use. A Cognitive Thrift perspective on this would imply intelligence as a factor here on two levels. One, the better choices made, by definition the more intelligent choices made, on average, compared to some norm or range with permission for failings or bad choices at times or in particular individuals. Two, the efficient processing of information in choices. Cognitive Thrift becomes two-part, on this particular consider though wider in application, with better choices and efficient processing. Both reflected or correlated with intelligence. In the efficiency of energy consumption, I mean physiologically, neurologically in terms of the energy consumed by the brain.

Rick, you've used, I think, some of these considerations for the view of human beings as generalists. Somehow, we are cognitive generalists and then this becomes reflected in the dominance of physical space on the surface of the Earth. What is a generalist in an ecosystem, in an evolved environment and organism?

Rick Rosner: A generalist is an organism that can exploit a variety of conditions and has the ability to exploit new conditions, which involves the ability to analyze situations using some kind of set of tools that are generally applicable. It is circular. But you can imagine a very niche-adapted lobster who has this one technique for cracking open mussel shells. But put that lobster in any other set of conditions and then the lobster is frickin' lost. You can imagine a more generally adapted lobster who understands the mechanism of shells. So, if presented with a variety of different shells, the lobster can vary its shell-cracking technique because it understands the shell is made of two parts and that it needs to get in between them to parse them, or smash them into something. To take this farther, think about octopuses who have a very good mental toolset, it allows them to understand jars. There are octopuses. If you put them in a jar, and if they figure out how to get their suckers up against the lid of the jar, and then rotate the lid, then they get out of the jar.

There was a story of an octopus annoyed by a light on all night. It was able to project a shot of water at the light to bust the lightbulb. It was a lucky strategy. But the octopus had no idea of how the light worked. It was just trying to do whatever it could. I don't know Octopuses have general toolsets. Some octopuses are good at assuming the general shape and colouring of a bunch of different marine animals for camouflage. All this implies many animals have a mental picture of what they're doing. Along with the mental picture are a set of tools, of concepts, that they can mix and match to go after or address new stuff in their environments. Paul Cooijmans talks about one of the dimensions as the width of the associative horizon or associative width. It is how many different analogies that you can apply to a situation. So, the octopus sees the annoying lightbulb and, at the very least, assigns the light bulb to the category of things that might possibly be addressed with a jet of water. Certainly, the octopus doesn't understand thermal expansion.

Jacobsen: [Laughing].

Rosner: Differential thermal expansion in which part of the lightbulb is hot and hit with cold water, and will contract, cracking the lightbulb, wrecking the vacuum, allowing air in, and oxidize the filament and burn the lightbulb out. The octopus only knew a little bit of that. That's being a generalist. One more thing, jokes are, often, applications of generalist-type reasoning. When you come up with a new thing that Donald Trump is like, which is tough, because we've

been coming up with jokes, he's been the thing to joke about for almost 4 years now. If you can come up with a new analogy about Trump, then you are halfway to a decent joke.

Erik Haereid: It's about abilities to draw maps and use it to get what you need and want. You could say that consciousness is a result from evolution and expansion, and entities with a certain degree of evolved consciousness are generalists whether we talk about humans, organisms in general, AI or the Universe itself.

This is a perspective: Consciousness is something someone, an entity, owns. Through that it has some kind of value; to someone. Value has to do with motivation and preservation; it's a reason to exist. With no intrinsic meaning, it's the end as a conscious entity. So, every entity that owns a consciousness has a reason to live, organisms or not. If something doesn't have a consciousness and still exist, like a stone, it is a part of a consciousness, e.g., the Universe or human. The stone has no motivation to survive other than as a part of, an information in, a consciousness. Humans could be entities that in addition to be conscious are within a bigger consciousness (e.g. the Universe).

If you exist as unconscious, nothing has meaning to you; then you mean something to others or not. If this is true, then every organism has some kind of consciousness, since organisms seem to have a drive and motivation for life. Conscious entities have a kind of motor or energy that make them act (drive, motivation), and unconscious entities move or change because of forces outside them. Then consciousness becomes an engine with a goal that motivates it, e.g., bacteria then have a small amount of consciousness, and are specialized, driven towards some simple but clear goals.

If you look at consciousness as an information processor, where one goal is constantly to improve and getting closer to some other goals, using new and old information and innate, internal methods (like human logic) to steer the right way, then bacteria have some simple kind of senses (ability to get information), storing-mechanisms and processors. Ants are obviously more complex, dogs quite complex and humans most complex among organisms. You could say that the degree of "generalism" an entity has is proportional with its amount of consciousness. So, humans are quite good generalists. Ants are more like experts or specialists.

Generalists, as I interpret the word, have more opportunities to achieve the best solution, and through that control the environment. Simpler organisms are "specialists", experts; they are extremely good at some few inborn and learned patterns. But when their habitat is threatened, they don't have many choices; they are less adaptable to novel situations than generalists are. They have fewer opportunities changing the environment into what they want than humans have (humans have a larger degree of free will or ability to make things and create situations that fits us).

It's about understanding causes and effects, and about conceptualization. A generalist can draw conclusions from abstractions and transform it into the physical world. One can make logical thoughts about how things could and probably would work, and try it out; make mental images of possible situations and outcomes. This kind of mental abilities increases the probability for success; achieving what you need and want. If you just practice trial and error arbitrarily, until you hit the target, you'll need more trials, energy and time to succeed. The degree of "generalism" is a function of how much and effective one can use that continuously unreliable environment to gain success; getting food, procreation or rest or whatever one's aim is.

Humans are adaptable but not very fast when some “specialists” threaten us, like a dangerous virus. Our brain is a quite slow tool, after all, and our intuition is not that helpful in some critical situations. When we have to react fast, we often use simpler methods to achieve what we want, e.g. escaping. We need time to adapt, and when we get that time it seems that we are the most adaptable species. We have used our brain to develop methods to postpone whatever we need more time to solve; we are good at making temporary solutions.

Simpler organisms have more specialized features, like changing skin-/fur colour after the colour of nature, like white in winter and green in summer to avoid being seen. They can have quite complex strategies for catching their victims, like the spider and the net. But these methods are basically inherited. You can’t say that viruses are stupid when they manage to control humanity within days. They are simple but effective. Even though they don’t manage to procreate without another organism as helper, they are sort of smart since they overwhelm that organism. Our immune system is not very fast and adaptable, after all. We are big creatures, complex organisms and therefore vulnerable compared to smaller ones.

Humans are kind of not wiser than nature itself. But we seem to be a species that is born to go for that. In many ways, we try to overcome nature, understand it to control it, but maybe that’s where we become dummies because we, into some degree, don’t respect ourselves as part of that nature. I rather think that our aggression, hunger and drive towards the impossible is our way of gaining the generalist label; increasing our ability to survive.

All organisms have a need for safety; avoid getting damaged, ill or eaten; to establish a fundament to live from. Humans make this more complicated than “specialists”. We have bigger demands to stay healthy, safe and motivated. Primary needs like food, shelter and physical protection against enemies are just a few things. You have this Maslow's hierarchy of needs, that suggests which needs we have and how we prioritize them. It’s a whole package, and a part of it is to achieve and preserve a feeling of being home. It’s like when you see a painting or a movie that makes you feel "right", or when you travel and find a single spot somewhere and get that inner unexplainable peace of being in the right place at the right time. To live optimal lives we need an inner feeling of being at home when we explore.

Jacobsen: What might relate the ideas of intelligence described before for the notion of human beings as generalists, i.e., as cognitive generalists more than physical generalists?

Rosner: I don’t even know what a physical generalist would be. You cannot be a physical generalist without being a cognitive generalist. You could argue that we have the bodies of generalists because we’re wimpy. We lack a lot of the protections that organisms that couldn’t make their own stuff would have. We have very little fur. So, we need clothing. We can’t go or run as fast as a cheetah. We stand on two legs. We have our arms free to fiddle around with shit. We have the bodies of organisms who are able to make stuff at the expense of physical prowess. We’ve traded expensive means of moving and protecting our bodies for an expensive brain, which lets us make protection. Because we can make body armour more effective than any animals' body armour. We can make vehicles that can move faster than any animal. So, the wimpy body plus the overdeveloped brain is a generalist body structure. I think that answers the question.

Haereid: Humans become superior in a lot of ways, not because of our physical body but what the physics in our brains can create of mental images and solutions. We are good at transforming these images into the physical world.

It's obvious that we are vulnerable concerning our physics. We are complex, and are victims of attacks from other organisms and threats, and vulnerable concerning damage. We can't fall from more than a few meters before we die. Cats and bacteria can. We have after all a quite vulnerable immune system. We have some nice traits like grip abilities with our fingers, and we can walk and run quite well compared to many organisms (that's maybe an exaggeration). Our senses are quite bad compared to many animals. With a minor brain, we would be extinct or just another species with our local habitat. One of our strengths is our ability to make things that amplify ourselves in sensibility and strength; this makes us better physical than we are. Like with the gun and the combine harvester. So, the combination of body and mind is a natural compromise, and maybe this is one of the natures best solutions. Maybe there are some better natural solutions, theoretically; a more generalized body and brain. I don't know. But it seems like a good compromise and combination; amplifying our physics using our mental abilities. If you control the physical world you could use it to your own benefit.

Jacobsen: Is "generalist" the right term?

Rosner: I think it is a decent term because it prompts a lot of questions about what it means. You have to think about what is required to have an ability to address the world or anything that can happen to you, as opposed to a grasshopper. I don't see grasshoppers as being great generalists. They're good at hopping or flying through the air, landing on plants, and eating the plants. They might have a small mental library about what plants are good to eat and what isn't, and how to react to threats. I think a lot of bugs just have this tool kit that says, "All of sudden, if you are not in shadow and you were, fucking move!" They don't understand motion. If they see moving, then they just move. It is not general. It is a specific tactic: if A, then B. You see bugs in the house, flies and spiders. You feel sorry for them. Because there is nothing in the house for them. If you move them in a cup and trap them outside, then you're screwed. They have no idea what a house is and that they have to get out of the house because there are, likely, no good food sources for them in the house. Maybe, that is not true for the spiders. There may be enough food sources in the houses for spiders. But yes, I think generalist implies a mental model of the world and a toolkit of angles on the world. An integrated toolkit as opposed to a bug toolkit, which involves. Degrees of understanding.

There might be an alternate term for a generalist like world modeller, or something that encompasses the multiple nodes model of consciousness, where you've got a chorus of specialists. All working together to model the world. You could call it choral consciousness, which sounds good but probably doesn't add any clarity.

Jacobsen: [Laughing].

Haereid: I guess so. It's about understanding the conceptual umbrella and its associated concrete phenomena. Generalizing is about evolving general categories that logically and with meaning make us navigate mentally and physically. It's like the (phylogenetic) tree, with the trunk, branches and leaves, that always expands with a larger trunk and more branches and leaves, and categorized into something that we understand and can benefit from.

Simpler organisms can't see the tree because they, let's say lives on the leaves or inside the trunk. They don't understand what a tree is even though they live on and in it. So, talking about something, in general, is putting something in perspective, as much as possible or thinkable, into different views, and settle that map as a navigating tool, always improving it with more information, more experiences, better rules and conclusions.

Jacobsen: Are "generalists," as claimed about humans, truly generalists or merely dominant cognitive pluralists, which may be reflected in lists of cognitive biases and various irrationalities empirically found in the psychological sciences even uniquely found disproportionately among the highly intelligent?

Rosner: Who is in charge, I think it is a better framework than free will. Free will, I think, is a logical fallacy. In that, free will fans want the ability to make decisions free from constraints. But the constraints are often consisting of the information that you need to make decisions. So, a better framing of free will is what you're talking about, "Are we true generalists making the best possible decisions after collecting as much applicable information as we can to the best of our cognitive and perceptual abilities as opposed to beings who think that we are making informed decisions but really the game is rigged and biology-and-evolution are making the decisions? We think we're making the decisions, but our decisions are hardwired and predetermined by our evolutionary nature, our evolved nature. You see this most with regard to sex. We make a lot of dumb decisions. We make decisions that are destructive to other aspects of or lives for sexual gratification, e.g., Anthony Weiner scuttles his life, his party's chances. He fucks up America because he needs to jack off to talking to young girls on the internet. He scuttles his marriage, his career, his reputation, and pretty sure that he fucks his financial situation, goes to prison, only so he can jizz.

That is not an, obviously, very informed decision, not a free decision. It is something about his biology hat got in the way of any kind of other reasoning. The answer to your question is, "In some ways, we are pretty good generalists. In other ways, we are determinists. We are the victims of fairly strongly wired biases in our reasoning and motivations."

Jacobsen: I would call this form of cognitive evolution "rounding the circle." The idea of the more generally applicable cognitive apparatuses or architectures an organism or entity has, then the more closely this organism comes to approximating a perfect circle in terms of approximating perfect or complete generalism.

Rosner: There is an implied question with what you're talking about. It is, "Are we missing a whole lot of tools?" Because we are still in the early days of generalism on our planet. We are the king shit generalists, but we haven't been around that long compared to everything. We are not that great compared to what is to come. What you're asking if there are generalist tools, ideas about the world, that would allow us to address and dominate the world, which we're missing. That is a question that has to be asked on various levels. Certainly, our philosophical understanding of what the universe is about is super-duper incomplete. Beings of the future will have more tools for cosmological philosophy. But does our incomplete deep philosophical understanding of the mean that we don't know what to do with two sticks? There's a sarcastic Twitter term called "Galaxy Brain."

Jacobsen: [Laughing].

Rosner: Would a true galaxy brain be more able to come up with more uses for two sticks than we would? Or are two sticks just materially limited in what you can do with them, conceptually? I would say that there are a lot of things that have limitations because of the basic materialness. The things as things: a rock, an apple. Some advanced creatures may be able to come up with advanced tools for manipulating matter and be able to turn the apple into something else. But in terms of the rock as rock or apple as apple, I am not sure if there is more to be gained than basic feeling situations by having the equivalent of an 800,000 IQ. Could be wrong, though, there's

plenty of science of fiction. I watched the last half-hour of a movie called *Midnight Special*. It is a kid who has these abilities to decipher and manipulate the world. This has been a staple of science fiction for – I don't know – 80 years or more, where some being is so smart that they can manipulate stuff with their mind. They can make stuff rise off the ground; they can make heads explode. They can start fires. I am not sure that that's really a thing. The deeper conceptual understanding means that you can do superhero shit with matter. But I don't know.

Haereid: Constraints are expandable. I like to see us as organisms with a free will restricted to our current constraints. And that we, with increased consciousness, will expand our constraints. Then the free will is a part of the evolution as our limitations are, but in ongoing development. You could argue against this by our obvious restrictions, like our physical limited brain and body, our libido and other apparently dominating and determined drives. But this is who we are now. What or who were we some millions of years ago? Then we had other constraints. Maybe our destiny is predefined. Maybe evolution is wired. It's impossible to tell. What gives meaning to me, as one who doesn't know this is the experience of having a free will inside some constraints. I do a lot all the time that feels like it's not predetermined. You can argue logically that it has to be, but also the other way around.

I think one of our predetermined constraints that is independent of time is that we have drives; that we as organisms are motivated for some goals and for being active alive. The particular goals change over time, but not the concept. An idea is that humans as generalists and conscious entities will evolve beyond what we today can imagine. This implies more general tools, more power, more control, more consciousness, fewer constraints, more free will, converging towards higher consciousness. But I think it's crucial to respect who we are currently; you can't move towards a goal if you don't know where you are. It's one of the constraints of the map.

Control is an appropriate word, yes. We will not manage to see the world as messy even if it is, because that will not suit us. Then we will always find connections, even new ones, that fit into our system of survival. We reject or transform the information that doesn't fit. Our perception of reality tends to become what fits us, what gives meaning to us. This is also a constraint that we operate within, and that is a foundation of how we evolve and what we become in the future.

We have some internal structures that we can't negotiate with, that defines us. One of those is the ability to make a variety of new creations in more complex ways than simpler organisms. But we live in a framework, even though the framework as we see it today could and probably will change in the future, for instance our bodies with technological help and AI.

Are we at some point getting total control, total wisdom? It seems that knowing everything is meaningless to us, and in that view we will always have more information to reveal and inventions to make. The idea that there is always something that we don't know is part of our drive and survival.

Chapter 11

Scott Douglas Jacobsen: Let's talk about a long-standing social and rights issue in the queue before closing up in Part Twelve. Women's rights and abortion, what are women's rights in the 21st century?

Rick Rosner: I don't have much interesting to say about it. It is equality. Where equality has historically been denied, perhaps, a little bit of weighting in women's favour to compensate, to get women up to an equal position. 30 years after the big push to get the Equal Rights Amendment ratified, the 38th state has ratified it, which should allow it to be made an amendment to the Constitution. But it has been so long since the other states ratified it; so, it doesn't get automatically ratified. Now, that whole thing – any attention being paid to that – has been lost in the coronavirus avalanche of other stuff happening. Women's rights also implies rights for people who are differently gendered. People with different sexualities. That's it.

Erik Haereid: *I come from a pioneer country as to women's rights; at least that have been my impression since the 1970's. My generation of men have been told all our lives that women are historically suppressed and have to be favorized to be equalized; in politics, business and traditionally male areas. Some of my answers are biased because of that upbringing and culture.*

It's improving worldwide. In secular democratic countries I think it's close to equality. In some countries, you have these old religious and/or rigid cultural structures that still treat women as slaves or with reduced power and opportunities. I think this will change rapidly because of a global culture that makes it increasingly difficult to treat women in any other way than men. It's the same with any discrimination; when the discrimination becomes visible or transparent to the people, it's hard to maintain it. Open societies are the solution to equality.

Jacobsen: Any personal stance on abortion?

Rosner: Yes, abortion is a basic human right within reason. That is has been wildly politicized, especially lately. It wasn't that big of a political issue for much of history. Any laws in the early 19th century against abortion were strict to protect women's health to prevent people from doing abortions who were not trained to do it, e.g., poisoning women to abort the fetus. It is only when conservatives realized abortion could be politicized to activate, to motivate, their base that is becoming a political issue. Now, it is a ridiculously political issue in the U.S. Because the Right is saying the Left is pushing to abort babies after they are born via late-term abortion. The deal is, liberals want to maintain medical professionals' rights to make decisions about fetuses and babies that are born with catastrophic birth defects, which they won't survive for more than a few days. The main example being anencephalic babies; babies born without brains or babies who die in the womb. It is not really an abortion if somebody is 8-months pregnant and the fetus dies. Then you have to perform an abortion procedure to remove the dead fetus. Democrats don't want to lose the legal right for doctors to make decisions about dead or catastrophically defective late-term fetuses.

Republicans are saying, "No, when liberals insist on maintaining the right to keep from prosecuting the doctors who remove an 8-month-old dead fetus, liberals really want to give women the right to kill a baby, even a newborn, just because having a baby makes women sad." It is a lie; and, it is bullshit. Certainly, there are reasonable limits to put on abortion. A woman shouldn't be able, in my view, to abort a healthy 8-month-old fetus just because she suddenly decided that she doesn't want the baby. But up through 3, 4, or 5 months, it is reasonable to have

the right to abort the fetus. Even the Catholic Church didn't have a problem with abortion until the quickening, which is the perceptible movement of the fetus in like – I don't know – the 4th month of something, that's what I think.

Haereid: *I am in favour of abortion within 12 weeks. It's biased, though. It contains many questions and few answers, like when is life, what is a person and when, when does consciousness occur, what is a life worth and to who…*

We kill people all the time, without major consequences when the power's rules accept it like in wars or within the legal system. We kill animals for food, yes, for fun, and we seem to have a divided view of what a life is worth. That's one reason it's difficult to establish objective rules concerning such as abortion.

One thing is avoiding hurting the individual, like when we kill animals for food. Another thing is removing another soul's and consciousness' opportunity to live a life, even though the victim doesn't feel pain when it's killed. A few weeks after conception, you don't have thoughts or feelings, but you have the potential for life as a person; it's a matter of weeks and a few months.

When does the embryo/fetus become separated from the mother's body, mind, soul? I am pro-euthanasia, because I think we should, as much as possible, decide over our own body. I also think that women should decide whether they want to keep the embryo or not, until we have decided objectively, through common sense, when the unborn life is a distinct human life; it is separated from the mother.

I leave to others to say if that's within 6, 12 or 24 weeks, even though I have my biased opinion. What about the guy? Is it after the conception just a part of the woman's body? You could argue that from conception it's human life or a life-potential. That makes it even more difficult, more uncertain, and more as an object for common sense and compromises; you have equal strong logical opinions in each camp.

Jacobsen: Is this stance altered by personal upbringing or social milieu, in America or in Norway?

Rosner: A lot of things that conservatives currently believe are largely the product of a push from conservative media via deceptive reporting and deceptive conservative beliefs. Conservative beliefs are increasingly extreme and increasingly garbagy because of a continuous push from biased, garbagy conservative news sources. The main one being *Fox News*. The more extreme ones including *Breitbart*, *One America News Network*. No one is effectively policing conservative news sources to root out garbage reporting, masquerading as news. There's a smaller problem with liberal reporting. It is nowhere near as deceptive. It is more a problem of profit-driven news media with 24-hour news stations like *CNN* and *MSNBC*. *CNN* has a number of terrible news habits. But it is less a matter of liberal bias and more a matter of what gets them good ratings.

Haereid: *From 1978 Norwegian women have had the right to abortion the first 12 weeks. So, I guess so. Of course, I have done some thoughts about the issue, as I have mentioned here, but it's difficult to establish a logical and reasonable foundation about abortion and rights, and then one becomes a function of one's cultural view, gut feeling, your parent's virtues and so on. I find profound pros and cons concerning abortion. There are no influential, significant political anti-abortion environments in Norway. It's minor milieus.*

Women's rights have been a keystone in Norway since I was a child. Now it's more discussions about men's rights than women's rights.

Jacobsen: What is the concept of a person in the context of abortion?

Rosner: The idea of abortion and when it is acceptable is that you do not want to abort a fetus that has full human consciousness. That, at 4 months, at 3 months, and before, the fetus is not thinking and feeling to the degree that the baby or a full-grown human being feels and thinks. That's the deal. A more developed consciousness is, I believe, the demarcation between a fetus that can be aborted and a baby that can't be. We kill highly conscious beings for meat and sport. We have all sorts of justifications and rationalizations, or ignore the issue. There's no way that a 10-week or a 2-week fetus is as conscious as a dog, a cat, a chicken, or a horse.

Haereid: *That's difficult to say, because it's a continuous process. I don't know enough about when and how the different organs and parts of the embryo/fetus develop. What do we define as a person? When do we become conscious lives? Maybe it's better to look at it as a life-potential; the prenatal life-process that we undergo during the first nine months after the conception.*

At some time during prenatal development, the fetus becomes kind of a human, with increasing cognitive abilities. But simpler animals, like cats do also have consciousness. But they don't have the same potential; we know what the human fetus will become after some weeks and months, even though it's less conscious than a cat at that moment. If we look at it this way the embryo is also a human or a person because the potential is the same; it's only a matter of time. This makes it tricky; it's not any obvious answer, I guess.

Jacobsen: Will there ever be a sufficient bridge between the conceptual gulf of pro-choice/pro-women's rights versus pro-life/pro-fetus rights? How does the situation compare between America and Norway from relative perspectives for the two of you?

Rosner: No, because – no, pro-life is a politically loaded, particularly so - even though pro-choice is political too, it is couched in religion and religious feeling. That you are ending or destroying a soul. As I said, in the Catholic Church, I think they didn't think a soul entered the fetuses body until there was the quickening. The current religious view being pushed, which is a highly politicized view: upon conception, that thing has a soul; and you kill a baby. So, no, that can never be reconciled with any kind of view that allows for abortion.

Haereid: *It's no clear logical or reasonable solution, no way to a general truth, so I can't see any path to such a bridge because of the highly emotional and cultural fundaments the decisions are based on.*

A woman can have motives to remove the fetus despite of the objective value of the fetus. A common sense of a fetus's value is not necessarily in coherence with the mother's.

If you remove a fetus you kill a 50 percent female potential. If you give women the right to remove their fetuses you can't at the same time say that they have rights, because they remove a (defenceless) future woman too.

Jacobsen: How does the situation compare between America and Norway from relative perspectives for the two of you?

Rosner: In America, we've got 250,000,000 adults. It's a big country. We don't have a handle on conservative propaganda, where other countries, like in Australia *Fox News* is not allowed to call itself "news," which has smaller populations. We have a huge exploitable population. We

have 100,000,000 American adults who are believers in and consumers of conservative propaganda. It is a huge base. It is a powerful political base. There is a whole political media, rich person, complex to continue to exploit these people for political gain. Much of our politics for the past 40 years has been based on exploiting conservatives.

Haereid: *In Norway, equality is more important than a single life. Women's right to have an abortion as part of an overall equalizing process between men and women, is prioritized before saving the unborn life-potential.*

From my angle, it seems that it's the opposite in America. The single life-potential is more important than equalizing. This is a part of the American culture that has made it dominant worldwide, I think. It's the winning concept that everyone has opportunities; it's up to you what you want to do with your life. If you fail, it's your fault, not the society's fault. If you win, it's your profit, nobody else's. Every single youth buys such propaganda. It's extremely motivating. To share is less motivating. At least until the reward is bigger by sharing than improving individually.

I think that most Norwegians (5.5 million) mean that the protection of a life-potential or a right to life starts after 12 weeks.

Chapter 12

Scott Douglas Jacobsen: This is the last of the brainstormed topics: when profoundly gifted and talented and finding something worth their time and effort and intelligence for a life work (if they're lucky), and how society supports or destroys the profoundly gifted. We've covered a wide span of material. I am going to consider this the bees and hive finale. The real crux or fulcrum of the entire discussions focuses on the relation of the high cognitive ability minority in societies and the societies. As Aurelius said, "That which is not good for the bee-hive cannot be good for the bees" - good quote, probably true for the most part.

When certain bees get the opportunity to flourish to their full capacity, which appears sufficiently greater than the norm, what should be the criteria in the selection of life works worth their time, effort, and talents?

Rick Rosner: The glib answer, if they are so smart, they should be able to figure it out.

Jacobsen: [Laughing].

Rosner: I don't know how to answer that. In that, we know about really smart people – a few famous cases – who came up with theories that changed the world, or in other fields, e.g., wrote books or plays, whatever they're still revered for hundreds of years later today. I don't know that it is at all clear to those people of the time that that should have been their pursuit. A lot of stuff was circumstantial. Newton got sent home from school because there was the Plague. So, he thought about Calculus and Gravitation, which set the ground for theorization or later in life. Yet, he spent a lot of his life not researching that stuff. Einstein spent the second half of his life trying to come up with a Unified Field Theory and got nowhere with it. Darwin would have come up with his theory, except that he was hired to be the companion on a boat, a ship, that was doing a 5-year voyage around the world. So, the captain wouldn't get lonely because the captain tended to be depressed. Shakespeare was probably just trying o make a living as a showman and made some art on the side.

So, the idea of people of destiny can choose their destiny, or people can choose to become people of destiny; *I don't know if that is a legit thing*. I don't know if I can offer any advice about life choices for smart people. I can offer all sorts of advice on how to appear to be a genius and, maybe, get laid out of it if you're good at it or get some money out of it. But in terms of how to use actual genius, I am not sure that I know. I've suffered for not having the discipline to really get myself the proper grounding in the mathematics and physics that I need to think about math and physics. I have taken some. But I have not studied it up to a doctoral level. I can't do a Hamiltonian or, off the top of my head, calculate an eigen function. Stuff that people should be able to do if they are going to do good physics. *If you want to do work in a field, then get trained in that fucking field,* but don't limit yourself to the field. Because, sometimes, what gives people an edge are differences in perspective via differences in background, but, again, that's a wild guess. It worked for Darwin. Will it work for anyone else?

Erik Haereid: *The simple but not complete answer is "follow your heart". What motivates you? Answer that, and do it. If the answer is devastating for yourself or others, it's something wrong with your heart. Then use your intelligence to solve that problem. If it's still devastating, it's something wrong with your intelligence. I don't know what else to say. There are different kinds of motivations; it can destroy and it can heal society. But if you have that inner glow towards a goal that don't seem to be destructive, go for it; if you have a talent, it will flourish.*

The society will probably never accept your talent and effort, if people can't see a benefit from it. E.g. many love different sports and athletes because they function as beacon; inspirations towards some goals people have. But geniuses' goals or means are often far away from inspiring. It's invisible and difficult to apprehend for ordinary people. It's odd. Until they are finished; the piece of art, the mathematical problem solved, the invention is obvious. It's like when a pianist or guitarist trains, which sounds disharmonic but is basic to make him or her play professional later. But to be virtuoso you have to practice and do all the stuff that most people don't understand and therefore reject. The resilience is part of making your talent come through. Don't give up even though people in their ignorance do what they can to make you do that. I think that's important. If you have that talent and initially believe in it, it's crucial to know that the social, other physical and mental obstacles are a part of the road. Maybe that's why so many talents get screwed. They can't look through the wall of bricks meeting them. It's difficult to maintain the motivation. Being aware of that could help you maintain your effort.

Jacobsen: Will there be a democratization of talent into the future with the emergence of more powerful computers and sophisticated applications for people to use?

Rosner: There certainly will because people will have more and more access to powerful information processing utilities. The smart people of the future will be smart not necessarily because they were born smart, but because they learned how to maximize the utility of the smart technology that is emerging. It will be democratized. There is already some of that. My standard example is Waze. Waze makes everyone a genius at getting where they want to go and not getting lost. If you don't want to use Waze, then use the GPS in your car past 2012, which will have some GPS Sat-Nav system. People used to get lost. Now, anybody with a phone doesn't get lost. That's a kind of democratization of ability. So, yes, everyone in the future will be both an idiot, from too much time on social media, and a genius from a bunch of apps.

Haereid: *We are in an exponential technological evolution. Everything goes faster, and people thinks faster. People get more and more used to think abstract. The intelligence increases. We communicate more, and share thoughts and ideas. We explore worlds that are virtual, and see ourselves as a part of these realities. We have read fictions and fairytales and lived lives in such alternative realities for a long time. But now we are active inside these worlds. We contribute. We are not pure spectators. We create and communicate in the virtual and fictional universe in new and more complex ways, and that make us better to transform ideas into the real world.*

We live using our internal four-dimensional map, creating the best estimations of reality. Using technological additions to improve that map, is a part of being more intelligent. We develop tech that lessen the distance between estimations and reality. Our prejudgments and different believes are estimates, and they become more scientific or objectively accurate when we get more information that contributes to make us more convinced. When maps become better, they actually draw wood, water and mountain exactly at the spots where you experience wood, water and mountain in reality; we don't have to guess that much anymore. The new generation of maps are not limited to describe the static nature accurately, but also the moving figures. And also identifying and categorizing the moving figures; the different events. One can take pictures/videos of events and reality, from satellites, airplanes or locally, download it into the map and make it available for others as part of the map; the map converges towards objectivity. By searching in an extended part of our "brain", we will expand our internal four-dimensional map, and become more accurate in our estimations about the reality in those four dimensions.

This is e.g. Googles' business idea. Our internal and external technological brain is constantly expanding with help of our talents and intelligence, and everyone can and will use it.

It's also about recognition; people have to understand what's going on. When they do, they accept and internalize it. Then more people will nurture their own talents, and become more intelligent and contribute to technological advancement.

Jacobsen: What do you consider your lifework if you have one?

Rosner: It should be doing physics and coming up with or fleshing out the Information Cosmology. If it is my lifework, then I'm failing at it. Because I am not coming up with a complete enough or a persuasive enough theory. If I do not do better, and if it turns out to be true, then I will be a footnote to the guy who came up with a tight version of it.

Haereid: *I don't have one, but what I think most about and have done the last years is how humans could benefit on exploiting and using each other's different abilities instead of marginalizing humans into an illusion of perfection. It's about control, and about loosen up and accepting diversity as an advantage instead of a hindrance; without losing control. If all could trick the brain to be curious instead of frightened, anxious and superior, we would improve as a species beyond the thinkable, I think.*

Jacobsen: Rick, Erik, thank you both very much for the extensive effort, thoughtfulness, and time over these twelve sessions.

Rosner: Thank you.

Haereid: *Thank you, Scott, it has been a pleasure.*

License and Copyright

License

Copyright