The Trusted Clothes Collection: Volume I

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Scott

A How-To on Composting Your Clothes

April 21, 2016

Can you compost your old clothes? It turns out that you can do it, but it takes a little work and the right kind of materials. And it depends on your degree of fussiness as well. It needs some background, though.

For example, the EPA showed that, in 2012, 14.3 million tons of textiles were produced by the United States. 2.3 million of that 14.3 million were recovered (a difference of 12 million tons!) and not all of the recovered textiles were reused. So what's the major division? There's two major divisions in material: synthetic and natural fibre. Synthetic will not decompose. Natural fibres will decompose.

The synthetic fibres include acrylic yarn, microfiber fleeces, and polyester/nylon fabrics. These will bog down the compost heap without decomposition. Don't worry, there's plenty of natural fibre options.

For example, cotton, hemp, linen, pure wool, ramie, or silk will compost over a sufficient amount of time. The reason being that they aren't some easily broken down toilet paper. They have a durability, which makes them good clothes. It will take time, but they do decompose. In fact, any combination of them will decompose, too.

Some exceptions are cotton t-shirts or jeans. They claim 100% natural fibre material, but this might not be true. It could be, for instance, polyester cotton, which does not break down as easily. You could have the compost heap, plus some not-so decomposed strings.

You can speed up the process by giving more points of contact, that is, ripping them to shreds and then waiting for them to decompose. What about admixtures? That's a good question. It's about ratios and kinds of materials.

If more synthetic than natural fibre, then it's not going to decompose as much. If more natural fibre than synthetic, then it's going to decompose more than if the ratio was reversed. It'll depend on how finicky you are, basically.

There's other consideration to do with not composting stained clothes, depending on what was used to stain it. Don't compost clothes stained with paint or engine oil, do you want those in your compost heap? Nope.

Next consideration, what about the eventual compost material used for vegetables, growing them. Dry cleaned natural fibres might be an issue and heavy prints, there could be some contamination there.

This extends to slogans, designs, aspects of weaves, fabrics that have been soaked. PVC ink could be printed on them too. PVC plastics will not break down. A further note dependent on the individual level of fussiness about these parts of the decomposing planning stage, and eventual process.

Something that can also help with the breakdown of the natural fibres, because you wouldn't use synthetics, are adding vegetable or fruit peelings, cuts from the garden, and other wet and more easily compostable items. And keep the natural fibre content to ¼ of the pile, and no more!

And while we're on the subject of composting and sustainability, try reusing your old clothes, or give them to others to borrow (or even have!). Charities are always in need, and the recipients of the clothes would be absolutely grateful. You can do crafts with it. But, of course, you can always, as in line with some of the information given above, compost the clothes!

International Women's Rights, Farming, and Natural Fibres

April 25, 2016

International Women's Rights are, not-so surprisingly, knitted together, intimately, with natural fibres in terms of harvesting and general farming. How is this so?

Well, this, as well, needs a little background with respect to the international community because women's rights are not limited by national boundaries. It's international after all. And natural fibres were important enough to devote an entire year to, through a United Nations Organ, the Food and Agriculture Organization of the United Nations.[i]

How does the Food and Agriculture Organization of the United Nations self-define?

> *Our three main goals are: the eradication of hunger, food insecurity and malnutrition; the elimination of poverty and the driving forward of economic and social progress for all; and, the sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources for the benefit of present and future generations*.[ii]

Right there, you have an alignment with Trusted Clothes: ethical and sustainable. A part of this connects to the component relevant to us, and our mission – clothing, especially natural fibre-based clothing.

Take into account, we do not exist in a vacuum. Our lovely, and wonderful, writers, more formal, (bloggers, more informal,) come from all over the world, and that reflects the

international character of the explicit calls for provisions for women and for the desire for natural fibre materials for clothing and other productions.

For instance, every year "farmers harvest around 35 million tonnes of natural fibres from a wide range of plants and animals – from sheep, rabbits, goats, camels and alpacas, from cotton bolls, abaca and sisal leaves and coconut husks, and from the stalks of jute, hemp, flax and ramie plants."[iii] That's a lot of natural fibre, and many, many sources for its harvest. How does this tie into the United Nations? It's Charter. Chapter I, Article 1 of the *Charter of the United Nations* states:

> *To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion* [iv]

And some of the economic, social, cultural, and humanitarian items of interest relate to things like manufacture and production of materials for clothes and other things. That includes synthetic fibres, and natural fibres. How much?

There are "10 million people in the cotton sector in West and Central Africa, 4 million small-scale jute farmers in Bangladesh and India, one million silk industry workers in China, and 120 000 alpaca herding families in the Andes."[v] Okay, so we have the major organization, our organization, the UN, and statistics on the number of workers, so what?

Many of these workers are women and, in fact, are as efficient as the men, but do not achieve the same yield rate for the output. That sounds like a paradox, or something contradictory. As it turns out, the reason is not innate or anything like that; rather, it is the amount of resources given to the women in these contexts that limits their yield.[vi] And this connects to international women's rights how?

International women's rights become relevant here because no major discernible difference in farming ability from biology, but from provision for production based on sex. In short, environment not biology. That's the fundamental character of "in solving international problems of an economic, social, cultural, or humanitarian character."[vii] So, we have to work together, directly or indirectly, for the solution to this inequity.

Even further, *Men and women in Agriculture: Closing the gap* states:

> *The most thorough studies also attempt to assess whether these differences are caused by difference in input use, such as improved seeds, fertilizers and tools, or other factors such as access to extension services and education. And the vast majority of this literature confirms that women are just as efficient as men. They simply do not have access to the same inputs, productive resources and services.*[viii]

Furthermore, and according to the same authoritative source, women can comprise as much as 70% of agriculture, in Southeast Asia, to as little as 20%, in Latin America, with an average of 43% of the total agricultural workforce in developing countries.[ix]

So we have the United Nations Charter, the Food and Agriculture Organization for the United Nations, Trusted Clothes, millions of workers and so millions of consumers, natural fibres, and women as productive as men but with less yield and lower employment rates. Take at once, this means something quite simple. Women aren't being included as equally as they could be included in this economic and productivity area, and we're bound internationally to help out. And there's a huge industry, and therefore demand, for natural fibres; and that means the concomitant labor as well.

[i] Food and Agriculture Organization for the United Nations. (2009). Natural Fibre. Retrieved from natural fibres.

[ii] Food and Agriculture Organization of the United Nations. (2016). About FAO. Retrieved from fao.org.

[iii] Food and Agriculture Organization of the United Nations. (2009). Retrieved from natural fibres.

[iv] United Nations. (n.d.). Chapter I. Retrieved from UN.org

[v] Food and Agriculture Organization of the United Nations. (2009). Why Natural Fibres?. Retrieved fromnatural fibres.

[vi] The Food and Agriculture Organization of the United Nations. (2009). Why Natural Fibers?: A Responsible Choice. Retrieved from natural fibres.

[vii] United Nations. (n.d.). Chapter I. Retrieved from UN.org

[viii] Food and Agriculture Organization of the United Nations. (n.d.). Men and women in agriculture: closing the gap. Retrieved from fao.org

[ix] Ibid.

A How-To on Composting Your (Wool) Clothes

April 25, 2016

So now that we know that we can compost our clothes and with the separation between natural fibres and synthetic fibres, and the multiple kinds of natural fibres on offer are numerous, and these natural fibres come with the benefit of being able to be composted, which does include wool.[i] So this one will be about wool, and with some important information as 'food for thought,' consider:

> *Every year, Americans, alone, throw away 11,000,000 million tonnes of fabric and clothing.*[ii] *And 99% of textiles remain recyclable.*[iii] *Traditionally, wool has been used for fertilizer in the district of west Yorkshire.*[iv] *The issue with wool is that it takes a heck-of-a-long time compost. That's a concern, and a valid one if time is an issue for your projects.*

And that waste is not only of the fibre themselves, but of water, and in an increase of pollution as well.[v] But, and to start, there are some general things that can be done to speed up the process for wool, and in fact other natural fibres.

You can chop up your clothes, especially for big harder-to-compost natural fibres like wool.[vi] Apparently, it's important according to the Texas Office of Agriculture. If you visualize it, that means the tough material can have more surface area on net, with each and every piece taken into account, for the environment to working on degrading the wool.

If you're super keen and diligent about biodegradation of the wool, you can, and should, remove the non-biodegradable materials such as the synthetic fibres to permit the complete

composting of the compost pile. Synthetic or man-made materials *cannot* be composted – so any that you do not remove will not go away. You'll have your compost as compost+ or, maybe, compost- with the additional bits of non-wool in it.

Some more involved things include the creation of a hot compost, the addition of earth worms, and recycling the things that cannot compost.

Hot composts – real quick – these can help with the time management concerns of composting that darn wool! Hot composts contrast with cold composts or regular composts. The kind where you simply throw a pile of bio-degradable materials together and wait – that's cold composting.

Hot composting "produces compost in a much shorter time. It has the benefits of killing weed seeds and pathogens (diseases), and breaking down the material into very fine compost."[vii] (Wow!) You can also check out other resources as well.[viii],[ix],[x]

Earth worms can, to no surprise, can help with the compost process.[xi] Worms have been hard at work throughout evolutionary history breaking down materials and returning to the earth once the material came.

Feng and Hewitt said, "Worms eat food scraps, which become compost as they pass through the worm's body. Compost exits the worm through its' tail end. This compost can then be used to grow plants. To understand why vermicompost is good for plants, remember that the worms are eating nutrient-rich fruit and vegetable scraps, and turning them into nutrient-rich

compost."[xii] Reason enough? Good, because even if it isn't, with the other reasons it should be, I think.

So consider a combination of chopped wool bits from the clothing, hot composted, and with earth worms to boot. You'll have that wool composted in no time! And it'll be ready for fertilizing, too, very likely nutrient-rich. And if any questions, check out the endnotes!

[i] alderandash. (2012, July 11). Composting Woo.

[ii] *Mind Your Waste*. (2012, March).

[iii] Fisk, U. (2011, November 7). *Is Fabric Compostable?*.

[iv] Ibid.

[v] Hearts. (n.d.). Surprisingly Compostable Textiles.

[vi] Ibid.

[vii] Deep Green Permaculture. (n.d.). Hot Composting – Composting in 18 Days.

[viii] Bement, L. (n.d.). Hot Composting vs. Cold Composting. Retrieved from Fine gardening

[ix] Government of New Brunswick. (2016). Building A Hot Compost.

[x] Savonen, C. (2003, February 19). How to encourage a hot compost pile. Retrieved from Oregon State

[xi] Fong, J. & Hewitt, P. (1996). Worm Composting Basics.

[xii] Ibid.

What's the Deal with Natural Fibres?

April 26, 2016

What's the deal with natural fibres? Why are they important?

Organic Cotton, Jute, Hemp, Alpaca, Cashmere, Flax, Silk & Wool. Oh My!

So, **what's the deal with natural fibres?** Natural fibres are "elongated substances produced by plants and animals that can be spun into filaments, thread or rope. Woven, knitted, matted or bonded, they form fabrics that are essential to society."[i],[ii]

According to Encyclopaedia Britannica, they are "any hairlike raw material directly obtainable from an animal, vegetable, or mineral source and convertible into non-woven fabrics such as felt or paper or, after spinning into yarns, into woven cloth. A natural fibre may be further defined as an agglomeration of cells in which the diameter is negligible in comparison with the length."[iii]

These can include the fifteen main natural fibres – Abaca, Alpaca, Angora, Camel, Cashmere, Coir, Cotton, Flax, Hemp, Jute, Mohair, Ramie, Silk, Sisal, and Wool, and many others.[iv] That is, natural fibres provide a great variety of possible materials from plants and animals from which to make fibres.

Read more about sustainable natural fabrics here.

Natural Organic Plant Fibres:

The plant fibres include abaca, coir, cotton, flax, hemp, jute, ramie, and sisal. Plant fibres are come from seed hairs, stem or bast fibres, leaf fibres, and husk fibres.

The animal fibres include alpaca wool, angora wool, camel hair, cashmere, mohair, silk, and wool. Animal fibres come from hair, secretions, or wool.

The Government of Canadian Conservation Institute (CCI) provides information on four specific examples: cotton and flax for plant fibres, and silk and wool for animal fibres. [v] Cotton and flax are made of cellulose and vegetable fibres. Silk and wool are protein fibres made of a variety of amino acids from animals.

There are some geographic considerations and plant/animal specific information such as the fact that cotton and wool represent the most pervasively utilized vegetable fibres in North America, and silk and wool as they are animal in origin are subject to affects from ageing of the animal.[vi] However, these are highly detailed bits of information best left for the end notes.

Why are Natural Fibres Important?

It's actually pretty straightforward. The Food and Agriculture Organization of the United Nations argues from five "choices": healthy choice, responsible choice, sustainable choice, high-tech choice, and fashionable choice.[vii]

"Each year, farmers harvest around 35 million tonnes of natural fibres from a wide range of plants and animals…[and] [t]hose fibres form fabrics, ropes and twines that have been fundamental to society since the dawn of civilization," The Food and Agriculture Organization of the United Nations stated in 2009.[viii]

Throughout the last 50 years, synthetic, or man-made fibres, began to dominate the landscape previously carved out by natural fibres in "clothing, household furnishings, industries and agriculture."[ix]

Natural fibres, as a means for production and, thus, "livelihoods of millions of people" is adversely effected by the global economic downturn and the increased and ubiquitous competition from synthetic materials; In fact, the Food and Agriculture Organization of the United Nations declared 2009 the International Year of Natural Fibres to attests to natural fibres' importance to those millions of producers and their consumers, too.[x]

Let's look into their arguments from 2009, which remain as salient as now as they were then. Natural fibres as the healthy choice. There is natural ventilation from natural fibres. Wool can be an insulator in cool and warm weather. Coconut fibre has a natural resistance against fungi and mites. Hemp fibre appears to show various antibacterial properties as well. What's not to love?

Natural Fibres: The Responsible, Sustainable Choice.

They remain the source of economic vibrancy for millions of people including small-scale processors and farmers. That means "10 million people in the cotton sector in West and Central Africa, 4 million small-scale jute farmers in Bangladesh and India, one million silk industry workers in China, and 120 000 alpaca herding families in the Andes."[xi]

Natural fibres are the sustainable choice for the future, and a high technology choice too. That is, the emergent technologies in the coming decades will increasingly be the

'alternative' energies such as wind, solar, hydro, geothermal, and others. That is, the oncoming and ongoing green economy. So that means "energy efficiency, renewable feed stocks," and "industrial processes that reduce carbon emissions and recyclable materials…Natural fibres are a renewable resource," and natural fibres are, as noted in *A How-To On Composting Your Clothes*, are capable of decomposition compared to synthetic materials.[xii]

They're based on high technology with good mechanical strength, low weight and low cost" and are, therefore, "attractive to the automotive industry."[xiii] Take, for instance, the European example with their car manufacturers utilizing an approximate 8,000 tonnes of natural fibres per year for the reinforcement of thermoplastic panels, which, as with all of the aforementioned information from the Food and Agriculture Organization of the United Nations, comes from 2009.[xiv]

Finally, and a more minor, but personally importance choice for many people much of the time, natural fibres exist as a fashionable choice, too. There's a whole area of eco-fashion, or things like sustainable clothing based on clothing for all ages and styles for wearing and disposing, and then, one can assume, for decomposition. The cycle of natural fibre.

Sustainable Fibres: What is Abaca?

April 27, 2016

Natural fibres, as opposed to synthetic or man-made fibres, have a long history, and come in many types.[i],[ii]Typically, these include animal fibres or plant fibres.[iii],[iv]

Animal fibres can be things like alpaca wool, angora wool, camel hair, cashmere, mohair, silk, and wool. Animal fibres come from hair, secretions, or wool.[v] Plant fibres can be things like abaca, coir, cotton, flax, hemp, jute, ramie, and sisal. Plant fibres are come from seed hairs, stem or bast fibres, leaf fibres, and husk fibres.[vi]

Let's zoom in a little on one of them, say a plant natural fibre like Abaca.

According to Encyclopedia Britannica, it is this:

> ***Abaca*** *(Musa textilis), plant of the family Musaceae, and its fibre, which is second in importance among the leaf fibre group. Abaca fibre, unlike most other leaf fibres, is obtained from the plant leaf stalks (petioles). Although sometimes known as Manila hemp, Cebu hemp, or Davao hemp, the abaca plant is not related to true hemp.****[vii]***

So it's a leaf fibre, a kind of hemp without being real hemp. I like that definition by association. **Where did it come from?**

It's native to the Philippines since at least the 19th century, and around 1925 there was cultivation by the Dutch in Sumatra.[viii],[ix] Following this, the United States of America's

Department of Agriculture began to establish plantations in Central America along with the smaller operations, commercial ones, in British-run North Borneo, which is now Sabah or a part of modern Malaysia.[x]

What does it look like?

It's a bit like a banana. Its rootstock produces about 25 fleshy, fibreless stalks in a circular cluster.[xi] Even cooler, every "stalk is about 5 cm (2 inches) in diameter and produces about 12 to 25 leaves with overlapping leaf stalks, or petioles, sheathing the plant stalk to form an herbaceous (nonwoody) false trunk about 30 to 40 cm in diameter."[xii]

Where do they grow?

They grow in puffy, open, and "loamy soils" with decent ability to drain. Mature rootstock planted in the earliest moments of the rainy season constitute its common means of growth. It takes a 1.5 to 2 years for its plant stalk from each mat to be harvested, and the cut on the plant for the separation for that further growing is at the or to the ground of it – "at the time of blossoming."[xiii] They're replaced within 10 years as well.

Finally, what are its uses, and benefits?

For one, it's environmentally friendly. According to the Food and Agriculture Organization of the United Nations, Abaca can be utilized for "[e]rosion control and biodiversity rehabilitation" for things such as "by intercropping abaca in former monoculture plantations

and rainforest areas" in addition to "minimize erosion and sedimentation problems in coastal areas."[xiv]

Erosion control is important because without it crop yields can be reduced because of the soil loss due to the water erosion.[xv] Monocultures can have benefits, but necessarily at every given instant of agricultural production and harvesting, and even in most cases there could be downsides.[xvi] So, in general, the facilitation of biodiversity is a net good, and abaca helps with it. Good stuff!

Biodiversity is the opposite of monoculture; it's lots of cultures, that is, a plethora of biological plant life, for instance; or **it "encompasses all living species on Earth and their relationships to each other. This includes the differences in genes, species and ecosystems.**"[xvii]

Biodiversity rehabilitation relates to monocultures and the assistive properties of planned agricultural activities through abaca, which means it, according to the *Convention on Biological Diversity*, can be used towards the purpose of "rehabilitate and restore degraded ecosystems and promote the recovery of threatened species through the development and implementation of plans or other management strategies."

So it can even help with saving the lives of endangered species, or those animals on the brink of extinction, gasp!

Secondly, it's used for a vast number of things within or associated with the textile industry including Cordage products – e.g. ropes, twines, marine cordage, binders, cord, Pulp and

paper manufactures – e.g. tea bags, filter paper, mimeograph stencil, Handmade paper – e.g. paper sheets, stationeries, all-purpose cards, lamp shades, balls, dividers, placemats, bags, photo frames and albums, flowers, table clock, even fibercrafts, handwoven fabrics, and furniture.[xviii] And even with all of these uses, the darn things are being beat out by synthetic fabrics in cordage products, for example.[xix]

And now? The Philippines continues to dominate the cultivation of Abaca to this day.[xx] And its' widely used as a fertilizer. That's all for now, folks!

[i] natural fibre. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica[ii] man-made fibre. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[iii] Wild Fibres. (2016, February 15).Animal Fibres.[iv] Wild Fibres. (2016, February 15). Plant Fibres.[v] Food and Agriculture Organization of the United Nations. (2009). Natural Fibres. Retrieved from Natural Fibres.[vi] Ibid.[vii] abaca. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[viii] Philippines. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[ix] Sumatra. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica. [x] abaca. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[xi] Ibid.[xii] Ibid.[xiii] Ibid.[xiv] Food and Agriculture Organization of the United Nations. (2016). Future Fibres: Abaca.[xv] Government of Alberta: Agriculture and Forestry. (2016). An Introduction to Water Erosion Control.[xvi] agricultural technology. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica. [xvii]Biodiv Canada. (2014, July 3). What is Biodiversity?.[xviii] Textile Learner. (2014). Abaca Fiber (Manila Hemp) | Uses/Application of Abaca Fiber.[xix] Ibid.[xx] abaca. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.

Microplastic in Wastewater

April 28, 2016

We talk about the natural fibres and the man-made fibres, but do not take into account as much the water aspects of these fibres. As natural fibres come from plant and animal fibres, by definition, their contents come out of the earth and extract and use water in the midst of their production, whether cellulose or proteins composed of amino acids (of course).[i]

But what about the possibility of problems with water in connection with the synthetic fibres? Take, for instance, the issue of microplastics in wastewater. Microplastics are part of the larger categorization of marine litter – gross – and can be defined "as particles of less than 5mm in size."[ii],[iii],[iv],[v]

These small bits of plastics can tend to come in the form of pellets.[vi] However, the source of them are separate processes. According to GreenFacts, those are:

1. *deterioration of larger plastic fragments, cordage and films over time, with or without assistance from UVradiation, mechanical forces in the seas (e.g. wave action, grinding on high energy shorelines), or through biological activity (e.g. boring, shredding and grinding by marine organisms);*
2. *direct release of micro particles (e.g. scrubs and abrasives in household and personal care products, shot-blasting ship hulls and industrial cleaning products respectively, grinding or milling waste) into waterways and via urban wastewater treatment;*

3. *accidental loss of industrial raw materials (e.g. prefabricated plastics in the form of pellets or powders used to make plastic articles), during transport or trans- shipment, at sea or into surface waterways;*
4. *discharge of macerated wastes, e.g. sewage sludge*[vii]

The per annum increase in the consumption of plastics will not by necessity change overnight, but these can continue unabated in the, at least, near future because of the continued increase in the global consumption of plastics.[viii] That is, circa 2013, 299 million tons of plastic was produced, about 4 percent more than 2012, and collection and recycling of these materials does not suffice to keep up with the pace of these developments, even only a couple years ago, and these plastics complete their journey in landfills and oceans.[ix]

There are about "10–20 million tons of plastic that end up in the oceans each year. A recent study conservatively estimated that 5.25 trillion plastic particles weighing a total of 268,940 tons are currently floating in the world's oceans."[x]

This comes back to the industries of natural fibres, biodegradable, and synthetic or man-made fibres, non-biodegradable in the textile and other economic juggernauts.[xi] According to O'Connor's report (2014), "In fact, 85% of the human-made material found on the shoreline were microfibers, and matched the types of material, such as nylon and acrylic, used in clothing," she continued, "It is not news that microplastic – which the National Oceanic and Atmospheric Administration defines as plastic fragments 5mm or smaller – is ubiquitous in all five major ocean gyres. And numerous studies have shown that small organisms readily ingest microplastics, introducing toxic pollutants to the food chain."[xii]

Many organisms eat these materials and thereby poison the food supply with pollutants. And it's ubiquitous, that is, it's everywhere and that means the global food supply chain is being completely filled with trillions of bits of plastic particulate matter less than 5mm small and finding its way into the food chain, which moves up into us.

National Geographic in *Are Microplastics in Our Water Becoming a Macroproblem?* (2015) provides a good overview of the subject matter at hand with the connection between the manufacture, distribution, and lack of recycling measures, and then the consumption by lower-end animals in the food chain and how this moves into our own food supply chain – bigger things eat on the smaller things.[xiii] It's an issue for the environment and a major concern for us.

So are these micro plastics accumulating in our bodies?

We don't know, but there is reason to believe that it is very much likely. And even if it doesnt accumulate in our bodies, do you want this in you? I think, and feel, as with many of you that I firmly do not.

[i] New World Encyclopedia. (2016). Natural Fiber. Retrieved from New World Encyclopedia.[ii]GreenFacts. (2016). Marine Litter[iii] Adventurers and Scientists for Conservation. (n.d.). Global Microplastics Initiative. Retrieved from Adventure science.[iv] United Nations Environment Programme. (2013). Microplastics. Retrieved from UNEP.[v] Ministry of Environment and Climate Change. (2016). Microplastics and microbeads. Retrieved from[vi] Ibid.[vii] Ibid.[viii] WorldWatch Institute. (2015, January 28). Global Plastic Production Rises, Recycling Lags. Retrieved from World

Watch.[ix] Ibid.[x]Ibid.[xi] O'Connor, M.C. (2014, October 27). Inside the lonely fight against the biggest environmental problem you've never heard of. Retrieved from The Guardian. [xii] Ibid.[xiii] [National Geographic]. (2015, October27). Are Microplastics in Our Water Becoming a Macroproblem?. Retrieved from Nat Geo.[xiv] [gedwoods]. (2010, May 11). Polar fleece. Retrieved from Fabrics Int'l.

Sustainable Fibres: What is Camel Hair?

April 29, 2016

It's that time again! That's right a quick recap from part one for those that missed out on natural fibres, a crash course. What did *Sustainable Fibres: What is Abaca* (I) say?

> *Natural fibres, as opposed to synthetic or man-made fibres, have a long history, and come in many types.*[i],[ii] *Typically, these include animal fibres or plant fibres.*[iii],[iv]
>
> *Animal fibres can be things like alpaca wool, angora wool, camel hair, cashmere, mohair, silk, and wool. Animal fibres come from hair, secretions, or wool.*[v] *Plant fibres can be things like abaca, coir, cotton, flax, hemp, jute, ramie, and sisal. Plant fibres are come from seed hairs, stem or bast fibres, leaf fibres, and husk fibres.*[vi]

Which is helpful and a quick description on what is going on with natural fibres, what is its general division within itself – plant and animal fibres, and what even comprises, via examples, those plant and animal fibres. Great! Now, the other fun stuff. Last time we took a peak at Abaca, a plant fibre with lots of neat little uses and history.

Let's take a look at an animal fibre this time, and this one can be Camel hair; first things first, what is it in general? According to Encyclopedia Britannica, it is as follows:

> ***Camel hair,*** *animal fibre obtained from the camel and belonging to the group called specialty hair fibres. The most satisfactory textile fibre is gathered from camels of the Bactrian type. Such camels have protective outer coats of coarse fibre that may grow as long as 15 inches (40 cm). The fine, shorter fibre of the insulating undercoat,*

> *1.5–5 inches (4–13 cm) long, is the product generally called camel hair, or camel hair wool.*[vii]

Bactrian type are, one can assume, a camel from Bactria.[viii] Now, with this kind of encyclopedic description, it can, or might, see a bit overwhelming in terms of the information, but there's some basic things to pull out of it. One, the specialty animal fibres for the natural fibres, and two, its textile use. Three, the description of the size and characteristics of the hair from camels.

Who supplies it?

According to the Cashmere and Camel Hair Manufacturers Institute (CCHMI), there's many, many sources that supply the hair including "China, Mongolia, Iran, Afghanistan, Russia, New Zealand, Tibet and Australia."[ix]Those aren't necessarily a tremendous amount of places, but an enormous land area coverage if taken as a whole especially with a whole continent (Australia) and the largest country in the world (Russia). And who doesn't like cashmere?

How much is gathered and produced for each yield?

It can vary. But there's a common range. For these kinds of specialty animal hair fibres, natural fibres, the gathering or the collecting of the hairs occurs in the molting season or the season when animals tend to shed their hair.[x] That means around late spring to early summer. These can fall off in clumps for collection by standard collection methods from way-back-when – by hand (neat).[xi]

Following this, the “coarse hairs and down hairs of the…camel are separated by a mechanical process known as dehairing,” explains itself, which in turn brings about a yield per camel from as low (not really low, actually) as 8 kilograms to as much as 10 kilograms.

What is its utility, and look and feel?

It is lightweight and naturally warm, is a tan colour, and can be made various color through colouring it – and, in fact, takes in the dye about as well as wool does.[xii]

What about the small stuff like the end product and recyclability?

If you go to that website with the table, there’s a wonderful layout of some of the finer points such as garment care, end uses, virgin fiber, and recycled fiber.[xiii] Garment care is basically the means by which garments can be properly cared for, so “dry clean wovens; knit goods may be handwashed.”[xiv]

End uses are the finalized textile uses such as “Men’s and women’s coats, jackets and blazers, skirts, hosiery, sweaters, gloves, scarves, mufflers, caps and robes.”[xv] Not bad, a decent selection with a certain appeal in its ability to be recoloured; hosiery is the one that surprised me, personally. And it is a virgin fibre or non-processed fibre, and it’s capable of being recycled – and as with many of the lovely variety of natural fibres, the forms and uses provide plenty of reason for consideration of the general consideration about, what I might call, the lifecycle of fibres.[xvi] That’s about it for camel hair, in a brief summary.

Closing thoughts?

Synthetic or man-made fibres can end up in landfills or the ocean and are not biodegradable, but the natural fibres have all of these measures, granted with a little effort (but they can be fun!), to send them back from whence they came after they've spent or expired their fashionable quotient – sometimes in a season, and other times after a decade of cycled fashion trends (you never know).[xvii],[xviii] Come back for part three for the next fibre profile!

[i] natural fibre. (2016). In *Encyclopædia Britannica*. Retrieved fromhttp://www.britannica.com/topic/natural-fiber[ii] man-made fibre. (2016). In *Encyclopædia Britannica*. Retrieved from http://www.britannica.com/technology/man-made-fiber.[iii] Wild Fibres. (2016, February 15). Animal Fibres.[iv] Wild Fibres. (2016, February 15). Plant Fibres.[v] Food and Agriculture Organization of the United Nations. (2009). Natural Fibres. Retrieved from Natural Fibres.[vi] Ibid.[vii]camel hair. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[viii] Bactria. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[ix] Cashmere and Camel Hair Manufacturers Institute. (2013). Cashmere and Camel Hair Fact Sheet.[x] Ibid.[xi] Ibid.[xii] Ibid.[xiii] Ibid.[xiv] Ibid.[xv]Ibid.[xvi] Ibid.[xvii] man-made fibre. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[xviii]natural fibre. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica

A History on Natural Fibres

May 2, 2016

Natural fibres have been around for a long time and will continue to be around for much longer. As described by the Encylopedia Britannica, Natural Fibres are "any hairlike raw material directly obtainable from an animal, vegetable, or mineral source and convertible into nonwoven fabrics"[i]

It's out of the textile industry, or the industry devoted to fibres, filaments, and yarns capable of being crafted into cloth or fabric for the production of material.[ii] That's a huge industry, international in fact, which is connected to the local economies of many, many developing nations.

And these same developing nations have consumers throughout the world – and our concern is for the sustainable and ethical working conditions. With the strong emphasis on natural fibres production because of their variety and their ability to decompose and not simply accumulate in landfills.

Natural fibres, as utilized in small-scale and rather ancient textile industries, dates back to before the era of recording history.[iii] Flax and wool appear to be the most prominent sources in those times of 'pre-history,' which have been found at various Swiss excavation sites dating to the 7^{th} and 6^{th} centuries BC; and this coincides with multiple vegetable fibres utilized in a similar manner by ancient peoples.[iv]

Some would claim that the oldest are "flax (10000BC) cotton (5000 BC) and silk (2700 BC), but even jute and coir have been cultivated since antiquity."[v] The more detailed histories

appear to exist with hemp natural fibre, at least as a cultivated fibre plant emerging out of Southeast Asia, which "spread to China" around 4500 BC.[vi]

After this, along came the introduction, or the development/invention of spinning and weaving linen around 3400 – at least, and likely before that time in Egypt based on the archaeological record, and so flax was developed before that time too.[vii] There were even developments around that time in India with cotton (3,000 BC).[viii]

Lastly, we come to China and silk from this ancient era. The manufacture, and one can reasonably suppose distribution, of silk and its associated products came from them. According to Encyclopedia Britannica, it was "highly developed" at around 2640 BC with the "invention and development of sericulture – a sort of silkworm cultivation to get raw silk, wow![ix]

Phew, that's a lot of information. Part II, we'll cover some of the more recent history of natural fibres, and how they came to be – stay tuned!

[i] natural fibre. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[ii] textile. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[iii] natural fibre. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[iv] Ibid.[v] Bcomp Technologies. (n.d.). Natural Fibre Specialists. Retrieved from COMP.[vi] natural fibre. (2016). In *Encyclopædia Britannica*. Retrieved from Britannica.[vii] Ibid.[viii] Ibid.[ix]Ibid.

An Interview with Abena Sara

May 3, 2016

Abena Sara is a regular contributor and featured author here at Trusted Clothes. Read more about her below through this one-on-one interview with Scott.

Your name is Sara Corry, but you have the name Abena Sara, too. How did this come about for you?

In Ghana, everyone has a 'day name' that corresponds to the day they were born. I was born on a Tuesday, so my day name is Abena. When saying it, the stress is on the first A so it's like AH-beh-nuh – not aBEEnah like most people outside of Ghana pronounce it.

You have a passion for travel, and you're living in eastern Ghana near its capital of Accra at the moment. How'd you get there? Tell us your story.

That's a long story, but I'll try to keep it brief. I was involved with African drumming in Albuquerque, New Mexico where I'm from, for many years. One of my teachers is from Ghana, which piqued my interest in Ghana in the first place. Then, a friend from a drum circle introduced me to a Ghanaian friend who was visiting NM – this was back in 2010. His friend, Godfried, and I hit it off and kept in contact after he went back to Ghana. In 2011 he invited me to come to Ghana and see some of the country, and I went for 16 days. The trip was amazing. I'd never been to a "third world" country and I saw so many things that touched my heart and soul. I fell in love with Ghana, and with Godfried. Then lots of "life" happened for both of us and I didn't return until 2014, for a month this time. When planning the trip, I started brainstorming ways I could spend more time in Ghana, and the idea to form

a business that would allow me to be here more often came to mind. One thing led to another and I realized that my passion is with humanitarian causes and a desire to give a hand up to people who are in desperate situations. In February, 2015 I returned and ultimately spent nine months in Ghana, working on business development – and I'm still here! I'm working on getting residency so that Godfried and I can be together and continue work we've started on a project to improve medical care in villages, and of course to develop Batiks for Life.

Your posts always have great photographs of Ghana. What personal fulfillment comes from it?

Yes, I love photography, although I'm really an amateur. I love nature photography most, but I've managed to get some nice shots of people here in Ghana. Ghana in general is a very colourful and photogenic country! For me, photography can be a spiritual thing. It's soul-nourishing to slow down and see my surroundings through the camera lens.

And you've lived in the desert for over 30 years. How did this come about for you?

I moved to Albuquerque, NM (high desert in North Central NM) in 1988 (after spending a couple of years there previously). New Mexico's state slogan is "the Land of Enchantment" and it's a joke that we say it's the "Land of Entrapment"! Or like Hotel California, you can check in any time you like, but you can never leave! The land does seem to hold onto people! I do love New Mexico and my family is there, so I'll be back to visit at some point. Ghana feels like home now though.

What's a normal day in Ghana like for you?

It's a rather "chop wood, carry water" kind of life – in some ways a little like camping. I don't have a huge income so I can't afford the high rise apartments or fancy gated communities in downtown Accra. Actually I wouldn't want to live like that anyhow, surrounded by mostly ex-pats and apart from everyday people. So I live in a small town in a small house, draw water from a well every morning, wash my clothes by hand, shower from a bucket of cold water, shop for food at the markets and food stalls, and cook over a little gas canister, just like most people here. One challenge is that I'm continually singled out because of my skin colour, which gets kind of embarrassing at times. But whereas a Black person in a predominately white area of the US might be negatively singled out, here "obrunis" are looked upon as an asset to the community. Sometimes this becomes another kind of challenge, when children come to me asking for money for instance, or when the market ladies overcharge me. Even Godfried has said he gets charged more at the market when I'm with him. To be looked upon as a source of easy money is uncomfortable, and creates a kind of entitlement which is exactly the opposite of what I'm trying to do through my work.

Batiks for life has come a long way, what does "Batiks" mean and where did the name of the company originate from?

Batik is a process of creating a print on cotton fabric, by applying wax to form a design, then dyeing the cloth, then removing the wax. It's a traditional way of making beautiful fabrics in many parts of the world and in Ghana, there's a particular way of making batik that's been handed down from generation to generation that's specific to this country. One way of making batik in Ghana involves using stamps with symbols known as "Adinkra" – it's a centuries-old system of symbology with meanings attached to each symbol, kind of like a

proverb in a way. So, for instance, you could tell a story through the Adinkra symbols stamped on your batik! I love these symbols, which tell the story of life in all its nuances. The name "Batiks for Life" is partly about the Adinkra symbols used in batik, but also about the intention that sales of our products will support life – from the people in Ghana who make the products, to the customer. Our batik medical scrubs are one of a kind, and bring colour and liveliness into often depressing environments. We have several repeat customers who remark on how their patients enjoy the batik scrubs they're wearing! Additionally, our mission is to use a portion of our income to support life-giving medical projects here in Ghana. This has been a goal of mine since the beginning of the business, but I never expected to be able to realize this dream so soon. I'll say more about this below.

What kinds of things does Batiks for Life offer, and what is the overall purpose, to you, of the organization?

We started out with medical scrubs, but pretty soon people who don't wear scrubs were asking for other batik products. They wanted to support our mission, but the product wasn't appealing to them. So we're in the process of adding new products that our supporters asked for, like different sizes of bags, yardage of batik fabric, and wrap skirts. Right now our batik artistes are working on some batik wall hangings that I'm excited to put up on the website! I think one of the things that makes our products desirable (in addition to being beautiful of course!) is that customers know that people in this developing country are being supported through their production, and that a portion of income goes right back to the community in the form of healthcare initiatives.

What is the difference between fair trade products and other products?

First off, I want to be clear that Batiks for Life products have not yet been certified as Fair Trade – this is a lengthy process which we will undertake once we are more established. But we do incorporate fair trade business practices – meaning the people who create our products are paid a living wage and work in safe conditions. Actually, they set their own prices and work out of their own small businesses. So there is no concern that they're being exploited or forced to work in unsafe factories like often happens when sewn products are mass produced in China or other countries.

You contribute to a website on wildlife conservation in the continent of Africa. What is its importance as a website or resource, and the salience of larger efforts to preserve wildlife in Africa?

The website is www.safaritalk.net and is a community of people who support wildlife conservation efforts in Africa. Some people own safari lodges, others are visitors to Africa, and some live on the continent. There's always interesting discussion about wildlife topics, amazing photography, and reports on places all over Africa. One of the issues that continually comes up is that most of the problems facing wildlife here are economy-driven. When people don't have another source of income, they will be more likely to poach wildlife. We all know about the plight of rhinos and elephants, but it continues down to the smallest of animals. Poaching here in Ghana is a huge problem because people love bushmeat. Bushmeat can be anything from grasscutter (a large rodent that lives in sugar cane fields), to antelope, to monkey, etc. Anything that moves can be consumed, pretty much. Combined with habitat loss, this has decimated the local wildlife. But, if people have

a reason to keep the animals alive, by and large they'll protect them. Again, it's economy-driven. So some communities have started wildlife sanctuaries which are tourist destinations and bring money into the community. Ghana isn't known for wildlife as are East and South Africa, so through my writing for Safaritalk, I hope that more people will see that we too have wildlife (you just have to know where to look!), which will bring in more tourism, and keep these local wildlife sanctuaries, preserves, and national parks alive.

What is the importance of the companies and organizations such as Trusted Clothes and Batiks for Life to you?

I think that people are in a conundrum when it comes to their clothing. We all know that most of what we get at the department store is produced by people who work in a form of slavery – these clothing companies make a huge profit on the backs of impoverished people in the "third world". Yet while someone may feel bad about supporting these businesses through their buying choices, they don't know their options. We're here to show them the options, and to convince people that it's worth a little extra money to buy something unique and lasting. I value my connection with Trusted Clothes because it reminds me that on top of all the other reasons I'm here in Ghana pursuing this crazy idea of mine, I'm also contributing to a healthier world through promoting sustainable clothing options. Kind of like the cherry on top!

Any feelings or thoughts in conclusion?

I wanted to back up and say a bit more about the healthcare initiative I mentioned above. Godfried is from a little village in the southeastern corner of Ghana. I interviewed

the two nurses who run the clinic – I also write for a nursing website, HireNurses.com – and I'm doing a series on healthcare in Ghana. In doing this interview it became clear that they're doing the best they can, but are really hampered in their ability to provide healthcare for the village for a lot of reasons. I saw the opportunity to do something to help. It was an initial goal of mine that Batiks for Life would give back to the community through giving a portion of income to health related projects, but I never expected it to happen so soon in the life of the business. For Godfried, it's also a dream come true because his great-great-grandfather founded the village and so he's in the lineage of chiefs and very concerned about the welfare of the village. He's also had an idea in his mind for a long time about leading medical mission trips throughout the country. Well, almost immediately we started getting offers of help that were most unexpected! We're pursuing these offers and trying to wrap our heads around the possibilities! It's really exciting and we hope to make our ambitions to help underserved communities with their healthcare a reality.

Click here to read more of Sara's posts from Africa and Batiks for Life.

A Brief Note on Natural Fibrs and Climate Change

May 3, 2016

Natural fibres split into animal fibres and plant fibres with the animal fibres composed of proteins and the plant fibres of cellulose.[i],[ii],[iii],[iv],[v]

These, together, constitute a large set of industries with millions of workers including the textile industry, and they have competition from the synthetic or man-made fibre industry.[vi],[vii] One of these is compostable or bio-degradable, and the other is not.

Plant and animal fibres are bio-degradable such as in a cold or hot compost, and synthetic or man-made fibres are not.[viii],[ix],[x],[xi],[xii] The one's that do not biodegrade will tend to end in landfills and the ocean, and will become broke down cubes such as microplastics.[xiii],[xiv],[xv],[xvi],[xvii]

The lifecycle of synthetic or man-made fibres are different than the natural fibres because the natural fibre lifecycle is shaped like a loop. And the synthetic or man-made fibre lifecycle is basically a straight line with some looping via recycling.

And with this taken in its full implications comes around to one of the major issues of our time, global warming or climate change.

According to the Food and Agriculture Organization of the United Nations via Jan van Dam, the connection between environmental sustainability, climate change, and natural fibres is not necessarily a complicated one. How so?

> *The promotion of the use of natural fibres as CO2 neutral resource is believed to contribute to a greener planet… The transition towards a bio-based economy and sustainable developments as a consequence of the Kyoto protocols on greenhouse gas reduction and CO2 neutral production offers high perspectives for natural fibre markets… On ecological grounds products should then be preferred that are based on photosynthetic CO2 fixation… Growing of crops results in the fixation in biomass of atmospheric CO2 through photosynthesis and has therefore in principle a positive effect on the CO2 balance.*[xviii]

There we go again. A green planet, accordance with the Kyoto Protocol (and likely numerous other agreements), carbon capture, an actual lifecycle for feeding back into its own future generations of growth and product via natural fibres, and even a reduction in the net CO2 in the medium- to long-term. What's not to like – and there's plenty more where that came from.

It can be a complex representation of the information. However, the fundamental principles need little thought. Synthetic fibres do not decompose. Natural fibres decompose. What follows? The former become various direct and indirect pollutants and is, therefore, unsustainable and increases the ongoing climactic warming; the latter amounts to a self-sustaining cycle and is, therefore, sustainable and reduces the ongoing climactic warming.

[i] New World Encyclopedia. (2014, December 23). Natural Fiber.[ii] natural fibre. (2016). In Encyclopædia Britannica.[iii] Food and Agriculture Organization of the United Nations. (2009).Natural Fibres.[iv] Government of Canada: Canadian Conservation Institute. (2015, November 23).Natural Fibres – Canadian Conservation Institute (CCI) Notes 13/11.[v] Food

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But What Can I Do?

May 10, 2016

I felt like writing a less thinking piece. And more of a reflective or opinion piece, based on a feeling, not so uncommon, and not so profound, but worth its weight in meaning.

Something 'struck' me. And it's the idea of reach. Personal reach, emotional reach, the reach of physical work, the reach into the lives and minds of others, and hopefully (if super lucky) hearts of others, and so on and so forth. How far can I possibly go?

Like, if in this endeavour with such a limited capacity in my own life, what could I do? I'm just a person, like most people. There's small contributions: getting informed, knowing a bit, reflection on these things talking, writing, et cetera, etc. There's doing composting – hot or cold – to reduce my personal impact on the environment and eventually on the climate. And I know I'm already bad at that. *I know that*. So I feel as though, at times, it's like, "but what could I do?" Well, a good first step is to learn about these things. Good.

What then? Well, I've done some of the taking in of neat stuff, and then there's writing. Writing? Yup, it's the productive phase past learning about things. I can do some kind of mini-outreach to others through this. I can reference. I can footnote or end note. I can think more, and re-reference (and footnote or end note), and on and on. That's a great tool to learn, kind of.

But does that matter to folks? I don't know, quite frankly. I have an intuition that there's some reach there, but is that good enough? For me: no. What then?

There's reading other peoples' work. Other articles. Other interviews, even chapters or whole books. But that takes a lot of time. And time is short with lots of things going on. Many folks have kids, have work – have lives. Or, in other words, have resources being spent, resources which are likely quite short, like time, money, emotions and energy, or other, more personally immediate, things. Even after those things, there's reflection on all of this together, talking straight about the issues, staying positive, and, maybe, keeping persistent. Persistent writing, persistence reading, persistent thinking, persistent work in general. That's a good start, and it skips a lot of the issues around particularities and funky little details.

Is this all too much waving of hands, and wishing the wishes? I don't know, but can see why it might seem like it. Even with that, it would seem wrong to me in that, even though there's the "but what can I do?", there's also the little voice of "but what can't we do?" 'cause it's an organizational message, a collective and communal effort, a group plan, and a unified network of principles. So I don't know for sure, and could be wrong, but I think the voice of doubt alone can be replaced by a voice of assurance together.

An Interview with Andrea Sanabria

May 13, 2016

Tell us a little about your familial and personal background, as well as some educational background.

I spent most of my life in Peru, but I finished my high school in the US. I lived in Minnesota for a year and went back several times after that. I did all of my university in Lima because after high school, I went back to Peru. Though I am not originally from Lima, I've lived there for, maybe, 10 years. Finally, I stayed working there in advertising and marketing. After a few years of work, I felt the need to change industries because fashion was actually moving in Peru. Before, the industry wasn't much in terms of creative fashion – it relied more on manufacture and production. I wouldn't have really called it a fashion industry, more like industry-suppliers. But at that time, the creative industry was already moving, though in a slow pace.

So I decided to travel to see what the fashion industry was actually like around the world because I knew we were in a very early phase. I decided to move to France to do my Masters in fashion management with thoughts of moving back to Peru right afterwards to help develop the industry there, and build a bridge between the Peruvian industry with the rest of the industry abroad. While I was here in France, I discovered sustainable fashion – which in Peru we didn't know about.

Now, there is a little bit of it. In Latin America in general, there is a little bit of sustainable knowledge, but people talk about it and don't really know about it. Here, even though French

people consider it not that important or developed, to me, it was like, “Wow!” It’s been eye-opening. So, I decided to stay here to learn more about it.

You are a freelance writer and activist for better practices in the fashion business. How does this play out in personal and professional life at the present?

To be honest, until maybe, two years ago, I was really the regular professional person. When I was in Peru, I would work for several companies in marketing. On the side, I would always do freelance design just for the fun of it. When I moved to France, after school I started working for fashion companies. I was on the regular path I guess. But ever since I decided to fully commit to sustainable fashion and the promotion of sustainable fashion in Latin America, starting my own company of course, I quit any possibilities of a full-time job, and have been doing freelance ever since. I have been freelancing for fashion showrooms, for sales, and everything that has to do with writing. Everything that aligns with fashion and sustainable fashion. I do that nowadays. I am an entrepreneur and freelancer. It’s a mess sometimes. (Laughs)

You have experience in the international market and a specialty for Latin America. And you are a featured author for Trusted Clothes. How does the expertise influence the chosen article topics?

I’ve been checking a lot of blogs and writers that are contributing. They write about their own personal experience, which I think is important to start. I also started to write what it is like to start your own business, and I think it is the first step because you are connecting people that are thinking, “Maybe, I should more interested in this than that.” But in the articles that I’ve

been doing afterwards, I've been trying to look at it more from a commercial point of view. At how sustainable fashion and practices is something that you can make profit off. Little businesses, and major brands, are looking into it and developing. I cannot not see that with my background.

I've studied marketing strategies, greenwashing cases, and successful online startups. So when I see it happening, I immediately do a little research and write about it. The last article, which I wrote for Trusted Clothes, and hasn't been published yet, is about the shared economy and how it applies to fashion because it's a big thing right now.

It has taken longer for fashion. So, I wrote a little bit about my thoughts on it, and at the end I always end up mentioning, based on personal observations on the international scene – why it's happening or not happening in Latin America – how it applies there. Because being from Latin America, and going there once a year, I get to see how the market changes, and then I get to compare it with the rest of the world because I want to say the US and Europe are somewhat aligned. However, I feel Latin America is behind. And I try to state why it is we're behind or in different states.

I mix my professional background with my cultural background every day. (Laughs)

It sounds to me, like something personal in that way. As another aside, you would know better than I would; have you looked at the amount of carbon footprint from synthetic fibres compared with natural fibres?

Right, I think at the end I do take it personally because of what I have seen. What pushed me is that Latin America produces a lot of raw material that is high quality. I think the first article I wrote for Trusted Clothes was about farming in Latin America because we are changing our ways to become better.

What I think is silly is that we produce high quality coffee, food, and textiles, and it all goes abroad. All of the footprint you're reducing by changing your ways of production, it needs to be transported to the other side of the world. All your savings went out, again! Actually, we aren't producing it for us. We're producing it for them (developed countries). You hardly find those in the local market. Then we get really low quality products imported from Asia, and so on, we follow trends. We follow the American look.

Low quality products from these far away countries coming all the way to Peru… In my logic, this doesn't make any sense. You're making high quality fibres and not even using them. You're sending them far, far away. So, though my idea, initially, was to produce high quality clothing to sell in Europe where people actually care about manufacture… seeing the situation in my country. I figured this was impossible, something had to be done.

In my eyes, we have full potential. We're just not seeing it. At the end, it's a matter of misinformation. It's not a matter of money. The price is not even that high.

You founded La Petite Mort, organic streetwear company, where "la petite mort" is translated as "little death" or as a popular reference to a sexual orgasm. How do these two relate to one another?

The inspiration for the company is, first, to develop an alternative to streetwear, common streetwear, that we wear every day… but in organic cotton. Farther than organic, I've chosen to work with Pima cotton. You have several types of cotton. The pima one is the cotton that has a longer fiber. So, when you do the textiles, it's going to be softer. You notice that immediately when touching a t-shirt. I really want people to relate the brand to the substance. I decided to work with the best that I could find to make these pieces. If you look at the brand, it's not really about statement pieces. It's a regular t-shirt, so it better be a good one! I also try to make it very approachable.

The second is also that it's environmentally friendly. I wanted to develop the brand with a lower impact, of course.

Then, the inspiration for the name brand… *la petite mort* is, of course, the orgasm. It is actually the moment of the orgasm that lasts maybe half a second. As if you were dead for an instant. It goes farther than orgasm itself. It is the feeling of emptiness – total, ultimate freedom. It is what people look for when they do yoga or meditation, or reach nirvana. It's just another way to put it.

I chose it because when I learned the meaning of it. I thought, "Wow! This is so true, we all look for this" Even before I had the brand, I had this concept in my mind, back of my mind. So, I decided that when the time came to grab it. I am having trouble with it because the new generations of French do not really understand or make the connection with *la petite mort*. It's kind of sad as a name.

Once they get it, they connect to it, some of them. (Laughs) And once you do, it's hard to forget, right? I don't do the whole *la petite mort* when working in Latin America, because French is hard! In Spanish I use the short La P.M. standing for *la puta madre*, which means something super cool. It's slang, urban slang.

To me, La Petite Mort, is the ultimate nirvana. There's no other name to call it. I don't want to use a yogi name! (Laughs)

Any feelings or thoughts in conclusion of sustainable fashion?

I'm going to say it is a lot of work. Sometimes, I feel like the brand, if I didn't mention "sustainable," it would run even better because when you take this approach people immediately back away. I think there is a lot of clichés around it. That's why when I try to communicate I try to be very soft, very positive, and not to make people feel guilty. To this point, I think fashion has been sold in the wrong way.

I wish there was more of this movement in Latin America. I know there are organizations working on it over there, but the road is still long. So, I take it personally to help raise consciousness. It's crazy. We are the ones that get affected the most in the developing countries. *That's all that.*

Thank you for your time, Andrea.

A Man's Underwear and Health

May 24, 2016

You know what they say about a man's underwear: he wears them. He doesn't wear them to wear them alone, though. In that, he might have other purposes. What do you think? I think he wears them for health, if he's conscious and conscientious about these things.

Comfort matters, undergarments matter, but so does health such as reproductive health. In my experience, there are some things men rarely talk about. Nonetheless, the men do at times in Canada – or, at least, maybe, in your county or township. And there's more than the basic idea of "underwear." Men have lots of kinds of undergarments; boxer shorts, boxer briefs, trunks, briefs, jockstraps, bikinis, thongs, and G-strings.

That's a basic visual crash-course in the underwear meant for males. If you scroll or look back up the kinds of underwear for them among the 8 that I know of online – others might exist but I do not know for sure, what's the problem there? There's something off about most of them and we'll get to that in a tiny bit. But what are the testicles, really, and what do they do – in brief?

Testicles are part of the male sex anatomy and sometimes called the testes or gonads. They are two glands that are a main part of the male genitalia. They are housed in a skin pouch and produce one set of gamete cells and one hormone; the male sex cells for reproduction, sperm, and the testosterone, the 'male' hormone. Sperm development is best with temperature slightly below that of the rest of the body.

What is the process for semen? According to the experts, the process takes about a total of 7 weeks. That's something amazing to me. It takes 7 weeks in total. If you look at the seminiferous tubules or the sertoli cells on the diagram above, the germ cells create the sperm. Once gone from there, they move and are stored in the epididymis for maturation for a few weeks, after which time they proceed into and up the vas deferens for admixing with the prostate and the seminal vesicles; That then becomes semen.

What about testosterone? That leaves the leydig cells that are throughout the testicle and the core creator of testosterone for the body. Typical male characteristics that come from the heavy production of testosterone are facial hair, low voice, wide shoulders, and without this the man can suffer from depression, fatigue, hot flashes (men get them too!), and even osteoporosis. You can find out more here.

So what are the health issues? One issue has to do with the innate aspect of the male sex from biology. As with many other mammal and primate species, the innate male sex organ is complicated and prone to problems like most organs and, of course, this includes the testicles. The testicles are outside of the body in human males, and this is the reason why they need to be about a degree cooler, less hot, in comparison to the temperature of the body. Tight underwear can make them too close to the body and even keep too much heat in for that 7-week developmental cycle of sperm and, that means, health sperm or male gamete cell development. Oh, man!

Another issue deals with an intuitive sense of the constriction to the blood flow to the testicles. Tight underwear can cause problems for the testicles themselves by this constriction. Apparently, the loss or reduction of regular circulation in the testicles of men,

such as myself, can lead to some major reproductive issues. What does this do? According to the experts that spend their time writing the medical textbooks and websites, it reduces the sperm count of the man that happens to wear these tight garments. Like this:

That's tight. That's constricting and it can reduce sperm count, which for many, many men that, likely, want children can be a health issue and reproductive concern. I think it's a probability issue. If you wish to increase chances of fertilization as a man, then this is something that you need to take into account for the future, especially with the modern reproductive health services – the numerous ones around – that can assist with family planning. Women have their own concerns and issues with respect to reproductive health. Men have their own too; myself included, because I would want to increase the chances of fertility with appropriate family planning for my partner and I (not dating at the moment, single as a lost sock). Most of the time, people want families, and so this seems like a reasonable concern to bear in mind, I feel.

Even further, there's another issue with a higher surface area for bacterial growth on synthetic materials, which can cause…issues…odor problems. Bacterial growth can cause that, and it is more likely with synthetic materials. And if you have an intimate partner, or consider general genital health, then this can be an even more serious issue. Because I would want to keep my partner included on health things. Why? Well, if married or together with someone, my health, especially sexual health, could have impacts on my partner. And so, continuing with elementary moral truisms such as 'the Golden Rule', I would expect the same of them, and so I expect the same of me.

Finally, and one particular point brought to my attention by Shannon, cotton is one of the least moisture absorbing fabrics, and this can cause irritation to the skin, which is also an issue for the health of male genitalia, and ties into the rest of the points. Thanks for your attention…

By the way, please feel free to disagree with any of this. I'm not a deity or anything like that, I did some research, and presented some information and opinions. Does this make me an underwear connoisseur now? Doubt it.

Natural Fibres' Lifecycle

May 26, 2016

Cycles are loopy, ideally. Not crazy. It's a system that feeds back into itself. Pick a circular metaphor, that's it. It's not necessarily the most efficient in the short-term. But the bet is on the long term. Sustainable for generations to come, and ethical, super ethical because, this loop provides decent conditions for future generations. I introduce the natural fiber lifecycle, not a new idea – *far from it*. So, it's not mine, and I have no idea where the concept (not the title, though,) started out.

Synthetic or man-made fibers might have more productive methodologies in the short-term. But there's basically a one-way line from production to consumption to waste. I mean, look at the landfills and oceans, global catastrophe case in point. The landfills are stocked with synthetic garbage. The oceans have 4.54 trillion pieces of super-small plastics alone. Our recycling isn't keeping with the level of intake-outtake. And the waste that falls through the massive gap is non-biodegradable, which means it will be around forever. So we are left with a mess. A big one. Like that proverbial chocolate on the white dress shirt or wedding gown. It ain't comin' out, except by drastic measure.

Demand in the fashion industry has caused the production for synthetics to increase. Alas, alternatives exist! Natural fibers, on the other hand, are natural thus involving a cycle! Which includes the input, the processing, and the output. Input, involves growing the plant fibers by proper fertilization and watering. For the animal fibers, there's getting the right food like grain or grass, and water sources, and even the occasional need for open fields for that grazing.

Then comes the processing which involves harvest for the plant fibers and a shearing or de-hairing for the animals' fibers. It's a very different set of processes, the outcome, sustainable product which allows cycles to continue! Then comes the fun part! The fashion guru's get to make some hip, even beautiful, products that are sustainable and have the environment in mind. I'm no pro, but there are many options. And they are pretty fantastic work. I would be fumbling to make these things with my clubs for hands, but take a short look at some of the other bloggers' stuff from very recent.

And then comes the last part of this cycle, which includes many, many parts. There's the cutting and composting route with red wiggle worms (Real name!) and a hot composting to help out. This makes fashion bio-degradable. And then there's the waiting…stage…that…comes…next.

Fertilizer: that's the final product that's used in the soil for plant fibers to grow (with some water) and to feed the grazing grounds that grows the grass that the animals eat – camels, alpacas, stuff like that. And that's the natural fiber life cycle(s)! Which makes fashion for the conscious minded individual more enjoyable!

Sisal and Haiti Agriculture, Culture, and Triumph in Tribulation

May 26, 2016

I want to talk about some natural fibres in one particular part of the world that is unique, that part of the world is Haiti, which is under a great amount of duress at the moment following some tribulations and trials (or 'trials and tribulations' in the early part of 2016) in the country.

But first, I want to discuss or point out some of the basic information around natural fibres in the world, and then that part of the world. Natural fibres are composed of mineral, plant, and animal fibres. They can decompose. Mineral fibres only have one kind as far as I have discovered/learned, which is asbestos. Plant fibres are made of cellulose primarily and come from plants, of course. Animal fibres are composed of amino acids linked together in chains or proteins. Animal fibres come from a variety of fauna including camels, alpacas, and others.

Synthetic fibres and man-made fibres differ from natural fibres in that they do not decompose and are prominently seen in such things as polyester. Polyester being made primarily in mainland China based on consumer demand from Europe and North America, I assume. With respect to Haiti, they have a proverb that says, 'Bèf pa di savann mèsi." The ox does not thank the field. That's probably true. Or "Bèl cheve pa lajan." Good hair is not money. For a poor country, which often lacks for the basics of life, then this makes perfect sense. You wear clothes for livelihood or to just have clothing, not as a frivolous garment. What is Haiti?

Haiti is a Caribbean country in or sharing the island of Hispaniola with the Dominican Republic. The Dominican Republic is to East. In 2010, it had a terrible earthquake. That earthquake devastated much of the country, and the country has upwards of 10 million people

in it. In Canada, we have approximately 36 to 37 million people. It's teeny little place with a tremendous number of human beings. The capital is Port-au-Prince. And its official language is Haitian Creole French or French. Recently, a deadly attack was conducted on a Haitian police headquarter as tensions arose in February. The tensions arose and individuals in military fatigues attacked at night in the coastal city of Les Cayes.

Gunmen stormed police headquarters on Monday and killed 6 people in an apparent shootout at a police station. Could the country be close to a civil war? One of the problems with the possibility for the civil war at the present moment is in light of the fact that the country was unable to sign in a new president because it missed a deadline to do so.

The individuals that committed the crime seized automatic weapons. Some of these murderous activities stem from February in terms of a political disagreement for the Caribbean nation. It failed to hold a runoff election. In other words, both deadlines were missed.

How does this relate to the natural fibres? Look at the people, look at the frustration, look at the clothes, it's all intertwined. One giant interconnected web. Sisal, itself, has actually been used in terms of content materials for furniture and construction in addition to cars and plastics and paper products. The plant is quite hardy and can grow year round in hot climates and even in arid or dry regions that are typically unsuitable for other crops.

It does have a difficult time in growing in very moist or saline, salty, soil. It does show that it is resilient to disease, and it is typically harvested after about 2 years from its original planting and its productive cycle or life cycle can be up to 12 years, in which it can produce

up to a total of 180 to 240 leaves for its growth depending on the level of rainfall, the altitude, and the location.

So, this can be of great use to areas such as Haiti in terms of its productive capacity and its capability provide for its own needs with such things as natural fibres. Or by making animal feed. It is interesting to note that the leaves themselves are about 90% moisture and yet still have a rigidity. It seems counterintuitive to me. In terms of its average yield, the dry fibres come to about one ton per hectare. Although, it is reported that East African crop for this fibre can grow up to four tonnes per hectare. That is an astonishing four-fold increase in the amount of fibre that is growing per hectare. What else is Haiti?

It's a religious nation among many other things with about ¾ as Roman Catholic and 3/20ths Protestant with a sprinkling of Pentecostal, Advent, and the universalist religion of "other." So, by any reasonable definition, a Christian *influenced* nation. They have another proverb: "Bondye bon." Or God is good, sounds familiar? For whatever reason, I don't know why, but this is bringing to mind Bach's Cantata 54, BWV 54, for me, which went as follows:

Widerstehe doch der Sünde,
Sonst ergreifet dich ihr Gift.
Laß dich nicht den Satan blenden;
Denn die Gottes Ehre schänden,
Trifft ein Fluch, der tödlich ist.

In Standard English as a translation of the old German, this says:

Stand firm against sin,

otherwise its poison seizes hold of you.

Do not let Satan blind you

for to desecrate the honour of God

meets with a curse, which leads to death.

So, what, Scott? God is good, but Satan is tempting and sin is bad. Well, if it's this kind of a religious nation, and we have good reason to expect this form of religiosity provide the numbers of the religious or Christian population in its citizenry, then the metanarrative for Roman Catholic and Protestant Christianity incorporate these narratives. Besides, those are damn good proverbs by my reading, and fabulous music by Bach too. It's like double-bubble.

Sisal is also a major part of agriculture in the north coast region of Haiti. And it is used for rope, wallpaper, rugs, and other daily items of use to citizens of Haiti in various combinations and to different communities. Near the conclusion of sisal's lifespan, it can grow upwards of 15 feet in height and can have numerous plants and baby plants linked with it.

In other words, it is an abundant source of fibre for the Haitian people. The waste that is not used for ropes, rugs, and so on, is actually used to make, by a particular process, fertilizer or food for animals.

The process mentioned before is called decortication. Decortication is the crushing and beating of leaves by a rotation wheel with blunt knives. Once only the fibre remains, then the fibre is dried to get a high quality fibre by the removal of the moisture in the fibre prior to that the moisturizing process.

After that point, the fibre product is brushed and after that point it is then ready to be used for a variety of products including rope, rugs, wallpaper, and many other things of daily use in homes and various communities in Haiti.

In terms of sustainability and the ethical use of this particular fibre, it is one of the best around, especially for areas of the world where it is poor. It is one of the grand ironies, and not an original point to me or any one individual, that with climate change and global warming. That is, the advanced industrial nations are the major participants in the industries that pollute the environment, and the undeveloped nations or the poor of the world are not and are actually working to improve it. In addition, the indigenous communities of the world are the ones that are partaking in, not the industry, but the social and environmental activism to help with these global problems relevant to their local level.

There were consequences of the Industrial Revolution. We see them today. We see reactions to their consequences, of dead generations' sins, today. On that same line of reasoning, that 'grand irony' of the modern era relates to one of the poorer areas of the world that are even under tremendous political turmoil and at the verge of a possible civil war, and are able to keep an industry that is both ethical and sustainable within the world.

Back to Haiti, and its fibre, sisal produces less carbon dioxide than it takes in and, therefore, it is a net negative carbon producer. It produces mainly organic wastes. To get to the close of this particular article, it is cultivated in many other areas of the world including Angola, Brazil, China, Cuba, Indonesia, Kenya, Mosinee, South Africa, and so on. And the estimated

value of the 300,000 tonnes of output is upwards of 75 million dollars. I do not know the currency. It could be Canadian or American *et cetera*.

And following that earthquake and its own internal problems, which are, quite granted, numerous, there's always some good, if you look close enough.

And by the light of Bach, and via the hope of Haiti: Degaje pa peche. *To get by is not a sin.* And as with everything written, I could be wrong, incredibly wrong – think for yourself and come to your own conclusions. I'm human. I'm a writer. I have biases, fallibilities, and quirks – even some funny ones. My words aren't gold, nor are they a calf. (And no bull!) Although, I will milk it.

Self-Doubt or Hope

May 31, 2016

When you think of individual effort and the problems that affect our sense of self; self-doubt is the most crippling to any form of activity (haven't we all noticed that feeling?). Here at Trusted Clothes, the important part of our mandate is social activism for sustainability, ecologically friendly and ethical fashion. Don't despair, and don't let your hearts be troubled, is what I'd say.

Social activism that involves a concentrated effort to increase the consumption of natural fibres in an economy that relies heavily on synthetic/ man-made fibres is a tall order to fill, but possible to accomplish. Some of the major global impacts that have to do with climate change and global warming are because of pollution to natural resources; such as much micro plastics in wastewater.

Some researches show statistics that estimate over 4.54 trillion pieces of micro plastics in the world's oceans today that are the result of our consumption. There are 7.3 billion people in the world; a significant number of these people live in global economies and this permits them to consume goods at a faster rate than those in developing nations.

What's worse is that our current recycling practices cannot keep up with the rate at which these micro plastics pollute the environment and, therefore, our consumption patterns are unsustainable in the long term *but they can be sustainable to a limited degree in the short-term*. However, this brings forth the question; **what kind of world do we want to leave for our children, grandchildren, and even our future selves that are on the road to aging and ill-health (time always wins)?** The solution to this issue comes down to the individual.

We, as individuals, make up the larger society that participates in this consuming culture. That means an individual with positive intent has some measure of self-doubt, a quality that affects most of us. I concluded a previous piece with the quote, ‘but what can’t we do?’ I have come up with what I think is a suitable answer; any change in history comes from the dead and forgotten in name and action, but it is seen through their triumph over self-doubt via collective action. Name any movement, it was accomplished using this method, which is to overcome the worst enemy of the self, and help others to do the same.

This question ‘but what can I do’ is a reasonable concern that seems grounded, partly, in some form of self-doubt. If I’m an individual, and I’m attempting to do some good for future generations, the health of the environment, and to also contribute towards a sustainable system for all other living being, then I have to take into account that I am a single individual and at times, I can feel devastatingly lonely in my endeavours.

But, at the same time, there are reasons to be hopeful and feel less alone making sustainable choices. I think that one of the main reasons to maintain a sense of hopefulness comes from the fact that people around the world are becoming more connected through the internet. As more people have access to devices with internet connectivity, relevant information is becoming more available to people across all social and economic background and better able to educate themselves on issues that are of great importance to their local communities and the world at large. Therefore, community participation, social activism, and economic activism through the use of more environmentally friendly resources like natural fibres/textiles, can be incorporated into the fashion industry and can also be taken into account within the global perspective. This, I think, is a great reason to have hope.

And as with everything written, I could be wrong, incredibly wrong – think for yourself and come up with your own conclusions. I'm human and a writer. I have biases, fallibilities, and quirks – even some funny ones. My words aren't gold, nor are they a calf.

A History of Natural Fibres: Incan Textiles

June 3, 2016

So, we're back a little more to talk about the history of natural fibres in one context with an ancient civilization. That civilization is the Incan civilization. These peoples had an extraordinary decorative world, and working textile industry that was representative, as with us now, of status and wealth and other things. They did not have paper money.

Nonetheless, they had used textiles both as a tax and as the currency in their culture. That would seem to have a certain psychological effect on what people valued in that culture. In fact, some of the most prized objects were not gold, silver, diamonds, platinum, and so on. Rather, it was very high quality textiles. Think about that.

These were the crown jewel of value in the civilization. When the Spanish invaded, or euphemistically arrived, in the 16th century, they looted, stole, and plundered textiles in greater proportion than metal and mineral, I think, which is a very interesting note to the previous one.

Textiles were the heart of the empire of the Incan civilization. The dry nature of the Andes, and the burial sites around in the highlands in the mountains of that area have stayed in decent condition for archaeologists and others to look at the textile and cultural traditions via the textiles for examples. They were weavers. Men and women were weavers.

We have talked about some of the other main fibres in the world. These were also used by the Incan culture. For instance, llama, alpaca, and wool in the highlands. The capital of the Incan culture was Cuzco. There were state-sponsored workshops in this particular culture. And the

subsidized workers were making the clothing, quite naturally, for the army and the nobility, and, as a speculation, the army most likely protected the nobles alone, the royalty.

There were three classifications of cloth in the Incan culture. There was a very rough one used for blankets and the like. The coarse, or common ones, that were for work in daily life or military applications, and finally the finest cloth was also there for possibly greater than decorative use such as religious rights. Weaving was a highly esteemed craft in their culture. The designs of the cloth had a certain kind of dyed strand embroidery; and the embroidery itself and tapestry was done by either hand or wooden stamps.

They had a certain abstract geometric set of designs in addition to checkerboard motif. The actual patterns by some scholars' speculation were ideograms and may have had specific meanings.

Those specific meanings could relate to many things. One might think religious rights or cultural values. However, I leave that to the experts and scholars that spend their lives researching this topic. Of course, there are also non-geometrical patterns in the clothes, which might include the aforementioned llamas, or snakes, sea creatures, and even plants, which would be common in that area, maybe. You can see the influence of geographic surroundings on the culture and vice versa. Culture becomes human interaction with the environment, even at times to the extent of changing the environment. It depends.

The designs found on the cloth could likely be reflected in the designs on the potteries for the pottery decorations of the Incas. You can see various animals as with many other cultures

such as monsters and half-human figures. These are interesting to say the least. What are the functions of these things? I leave that to you.

Many of the men only wear a loincloth or maybe even a simple tunic. In the winter, when things got quite cold actually, you could see them in a poncho or perhaps a cloak. Women wore more of a body wrap with a waist belt or sash. Both men and women wore cloth hats or headbands in this culture. Clothing, as you might be able to tell from the style and design in the textiles – and for the currency and tax, is a great reflection of the status of someone in a society – such as the reflection it will have on purchases. As with most conquered cultures, they had to pay a tax or a tribute to the central state because they were conquered by the Incas. What happens to civilizations that expand too far, though?

It's just a short note on the Incan culture and civilization in relation to some of their textiles. It seems interesting to me because the text all that was there were a great influence on both the currency and the status. I like the interrelationship of there.

I like the fact that the currency is related to status, even though this is not even distinct. It is not directly related because as with any culture with currency, maybe. The currency is the means through which one makes their own purchases, and these purchases are reflected in one's own goods such as clothing. And then, we see the status symbol in the clothing selected from the purchase via the currency. Thank you for your time.

And as with everything written, I could be wrong, incredibly wrong – think for yourself and come to your own conclusions. I'm human. I'm a writer. I have biases, fallibilities, and quirks

– even some funny ones. My words aren't gold, nor are they a calf. And no bull! Although, I will milk it.

"Misquoting" Great Leaders

June 8, 2016

I would like to explore something about misquotations, as well as two very interesting fellows. I want to start with a picture I came across with a particular quotation about 'The' Albert Einstein. It got me thinking quite a bit, it bothered me enough to want to write something about it. But I had to tie this into textiles or sustainability, one thing about Einstein is that he advocated for vegetarianism. How does that tie in with this global warming era and its consequences?

I know that Einstein was a claimant at one point in time, to saying that people should be vegetarians, or that he was, and so might have not explicitly advocated for others, but described himself: "I have always eaten animal flesh with a somewhat guilty conscience." That picture-meme quote is more descriptive of an ideal rather than prescriptive based on an ideal. And vegetarianism is in the same line as sustainable fibers and a more sustainable lifestyle. Close enough. In that, it is not simply a fashionable thing to do, but rather, it is something that is low in terms of its carbon footprint and possibly even a negative carbon footprint.

And I came across another quotation by a well-known guru, spiritualist, medical doctor, endocrinologist, and popular author.

His name is Deepak Chopra:

If you look at the actual quotations of Albert Einstein and Stephen Hawking, two of the most prominent physicist/cosmologists of the 20th century – and one into the early 21st century,

you can find quotations that refute any notion of them believing in either a “God” in the case of Stephen Hawking or a “personal God” in the case of Albert Einstein. Neither seems to indicate that perspective very much implied by Deepak Chopra. In other words, he misquoted them. Simple. So, let’s compare this with two quotations from Albert Einstein:

> *The word God is for me nothing more than the expression and product of human weaknesses, the Bible a collection of honorable, but still primitive legends which are nevertheless pretty childish. No interpretation, no matter how subtle, can change this.*

And this one:

> *It was of course a lie what you read about my religious convictions, a lie which is being systematically repeated. I do not believe in a personal God and I have never denied this, but expressed it clearly. If something is in me that can be called religious then it is the unbounded admiration for the structure of the world so far as our science can reveal it.*

He is more noted for the structure and mathematical precision of the universe with the and you can now look at a quotation from Professor Stephen Hawking:

> *Because there is a law such as gravity, the universe can and will create itself from nothing.*

This is a problem. It is a problem in accurate presentation, and it seems to be a common either as a conscious tactic, or unconscious oversight or mistake in automaticity of quotation

– or even quoting Chopra in conversation. These things happen, but this seems like a long thought, as a quote. So, that's something to keep an eye out for not only in the more popular among groups, spiritualists, and like, but also in the world of fashion and claims about the efficacy of certain things. I'll leave some of the last words to Chopra:

> *Imagine that you're looking at an ocean and you see lots of waves today. And tomorrow you see a fewer number of waves. It's not so turbulent. What you call a person actually is a pattern of behavior of a universal consciousness. There is no such thing as Jeff, because what we call Jeff is a constantly transforming consciousness that appears as a certain personality, a certain mind, a certain ego, a certain body. But, you know, we had a different Jeff when you were a teenager. We had a different Jeff when you were a baby. Which one of you is the real Jeff?*

Like. Wow. You know?

As with everything written, I could be wrong, incredibly wrong – think for yourself and come to your own conclusions. I have biases, fallibilities, and quirks – even some funny ones. My words aren't gold, nor are they a calf. And no bull! Although, I will milk it, if it's prize goat (or alpaca, or camel, and no can do for cottonmandu). And if gold, I might fleece it, if a winged ram (more the same, more the same).

What is Sisal?

June 14, 2016

Today's sustainable fibre will be ***sisal***. Sisal is a fibre that is native to Mexico derived from the Agave plant (Yay, tequila!), it is a hardy plant that grows in hot climates. In addition, it is actually able to grow in dry areas that tend to be, for the crops, quite unsuitable. These can be cut or crushed. This is then made into a pulp from the fibres. The average yield is about one tonne per hectare with the yield and the staff of about 2.5 tonnes. I find this to be quite amazing because it is an increase in productivity of about 2.5 times, exactly.

The fibre is illustrious and creamy white according to the Food and Agricultural organization of the United Nations. It can measure up to 1 metre in length, and is very durable as well as having an elasticity component to it. It is not able to absorb moisture easily, but can resist deterioration from salt water. Its main cultivation is in Brazil, China, Cuba, Kenya, Haiti, Madagascar, and Mexico. The global production of sisal is collected in moderately large amounts of around 300,000 tons, with an estimated net value, per annum, of $75 million. 35 to 40% of that 300,000 tons is produced by Brazil at about 120,000 tons. And 5/6 th's of that produced by Brazil is exported as raw fibre and manufactured goods.

Sisal fibres are made into rope and yarn that is popularly used to make rugs, bags, bath sponges, and even wall coverings. "New products are being developed continuously, such as furniture and wall tiles made of resined sisal. A recent development expanded the range even to car parts for cabin interiors."

The compatibility and multitude of uses of this natural fibre is simply amazing!

What is Silk?

June 14, 2016

Natural fibres divide into animal and plant fibres. Animal fibres are those that are composed of amino acids called proteins, plant fibres are those made mainly of cellulose. Examples of animal fibres are alpaca, angora, cashmere, mohair, silk, and wool. Plant fibres can be things like in abaca, cotton, flax, hemp, jute.

Natural fibres themselves also differ from man-made artificial and synthetic fibres. These fibres consist of rayon, nylon, acrylic, and polyester. Each of these are unable to decompose.

One such fabric is silk, sometimes called the “queen of the fabrics.” Its original development was in ancient China. Silk is produced from a silkworm. The worm is fed Mulberry leaves, as it matures the worm spins a cocoon.

Once filaments are made of silk, they can have a great strength and can measure from 500 to 1500 m in length, which is quite substantial given the source. The actual form of the woven silk is a triangular structure. Its absorbency is good and it dyes well, and is produced in over 20 countries. These include the major producers, such as Asia, Brazil, Bulgaria, Egypt, and Madagascar. The particular type of industry, in terms of the manufacture of silk from silkworms, is called sericulture.

There are over 1 million workers in China alone with the provision of production for households, and in India, upwards of 700,000, and growing. The production and trade of silk can range from about 100,000 tons to 150,000 tons per annum. Of the producers of silk in the world, China produces 70% of it, with the other more than 20 countries producing 30%.

The price for raw silk is 20 times as much as the raw price for cotton (circa 2008). It does provide a warmth during the cold months and is typically used in fashion such as lingerie and underwear. It is generally used in textiles and upholstery. Silk is diverse and beautiful, lets just try to involve ethics and sustainability when seeking quality!

An Interview with Carolyn Bailey

June 24, 2016

Tell us a little bit about your background such as education, and some personal and professional experience.

My passion for quality clothing and apparel construction drove me to create the business I now own. Growing up in a rural town across the street from a fabric studio was where I learned quality clothing construction and also where I grew a love for quality fabrics. After gaining a wealth of knowledge and experience in sales, marketing and management as a business woman, this gave me the professional skills to pair with the love I have for quality fabrics and apparel construction to create my company, Treasure Box Kids.

What was the inspiration for Treasure Box Kids – and its title?

The inspiration behind the name "Treasure Box Kids" came from my idea that the clothing my company produces are precious treasures for children. Treasure Box Kids is "Ethically Made, High Quality, Socially Responsible, Children's Clothing". My inspiration for the company as a whole is to create quality family heirloom pieces that can be passed down to future generations.

What makes Treasure Box Kids unique?

Our product offering contains styles custom made by Treasure Box Kids in the USA, Independent Designers that make their clothing in the United States and also a new line made in Kenya named Little Maisha, that helps to support women economically. What makes

Treasure Box Kids unique is that you cannot walk into any department store or online store and find this exact product mix.

You sell clothing for girls, girls' dresses, and birthday dresses. Why these products? Where will the product line expand in the future?

Treasure Box Kids began with girls' clothing because of my preference visually to girls' clothing. After learning to perfect that niche, it has sparked my desire to expand our lines. Plans are in development currently to include boys clothing as well as to expand the Kenyan line.

What meaning or personal fulfillment does this work bring for you?

Quality, ethically made apparel is my passion. My fulfillment comes from the affirmation that my customers are getting quality outfits as well as the knowledge that the clothing production is not harming anyone but actually helping the economy, the environment and the people producing the apparel.

With regard to companies like Trusted Clothes and Treasure Box Kids, what's the importance of them to you?

I see the two companies' goals aligned similarly in regard to excellence in apparel construction and the fair treatment of apparel workers. It is very important to educate the consumer on how apparel is made and also how the people who make our apparel are being treated. The consumer will be more aware and ultimately make better purchasing decisions.

Education is the foundation for change and growth in a culture and I see that our two companies can invoke that change.

Any feelings or thoughts in conclusion?

The impact my company, *Treasure Box Kids (a for profit corporation)* has on the wider community, is the need for ethically and sustainably manufactured clothing. I plan to be at the forefront of the growing need to help produce clothing that has a positive impact on society.

Thank you for your time, Carolyn.

Reverence and the Environment

June 27, 2016

Do you ever think about reverence? I don't. So now, I will. If you look at the religious demographic of the world, most people will either have a spiritual, mystical, or religious belief. That means that these people will probably have at some point in his/her life an experience of reverence for themselves, for others, for something outside of human experience.

Perhaps a profound feeling. Something mystical. Something religious. Something unknown that cannot be articulated in words but felt for the people we have in our lives and our surroundings. I think that a lot of the concern for the environment seems to come from two domains. One is a sense of ownership and the other is a sense of reverence. The former is more devoted to the domination and control of the environment, while the latter is based on protection, respect, and interdependency. I think that at some fundamental level, these two ideas are distinct, distinguishable, and mutually exclusive. And that they are unable to be converged or brought together in some relevant practical sense.

Maybe in some sense of higher-order, they can be abstract and brought together. However, I do not think this is necessarily possible at this present time. In a practical sense, I think that the perspective of reverence for nature, or for the environment, is a concomitant of concern for one's own livelihood. It is remarkable that people will risk their own livelihood to go out onto a boat and try to save a dolphin, or a whale, or some form of cetacean that is assumed to have some kind of cognition like to feel pain. Some might even argue a soul. Although, historically, people have argued that animals do not and are machines, and even more to the modern perspective have extended this to people, and that we are not special in this natural

world. That sense of reverence is something that seems to extend into wanting to help the environment and all creatures that live in it.

This is a bit of an evolving discussion. My questions to you: **What is your own relationship to reverence and the natural world?** And does this reflect an environmentalism? Or does it reflect a concern for the well-being of children in terrible working conditions? Or the fact that slavery exists in this modern world?

Reverence is a nearly fundamental aspect of being a person. However, it may not be the most fundamental thing about being a person. But it does seem to be reflected a lot of times in the ways in which activists – economic, social, political, bring themselves to sacrifice their own well-being up to the point of the potential death for an ideal they consider higher than themselves. (And I would make the term "higher" in some sense very metaphorical and not in any way literal). It's overused, cliché, and a sort of toss-away term now. So I would argue that reverence is in some way completely natural and evolved as some mechanism for I know not what, but I think that this is now at the present time possibly expressed in concern for others.

And I don't mean to restrict this to the formal or informal religious or spiritual or mystical communities, in fact, this can be definitely and assertively extended to those that are in the a-religious community such as humanists, skeptics, agnostics, and atheists. These communities themselves have many individuals that promote and advocate some type of practice for self-improvement in many domains. And this is in itself reflective of the sense of reverence for humanity, nature, oneself, or one's own reason. So, this is not something that is necessarily restricted but I think, makes it one of the things that is universal in all of us.

Because it actually shows up throughout the world and across cultures, political systems and societies. Or in different groups of people throughout the world. (Same species: duh) Do you have your own sense of reverence, Scott? I'll leave that for another day.

The Oft-Neglected Mineral Fibre

June 28, 2016

The how much and the what now? (Yep, me too.)

Okie dokie, it's another issue of natural fibres, if you aren't familiar with fibres or fabrics, then see the article below:

Man-made fibres are regenerated and synthetic fibres. Synthetic fibres are manufactured synthetically and do not decompose. While regenerated fibres are an admixture of natural fibres and man-made fibres. In that, regenerated fibres are the ones that are originally plant or vegetable fibres with cellulose in them, and through the viscose method of extrusion and precipitation are given a chemical that gets rid of cellulose in the vegetable fibre. And then by another chemical process have those parts filled in with another chemical so that they then become regenerated fibres. Therefore, the regenerated fibres are a combination of original vegetable fibres and then by chemical process becoming man-made fibres are regenerated fibres.

Man-made, synthetic or regenerated fibres do not decompose. Natural fibres – that's fibres and animal fibres and mineral fibres – do decompose. There are many methods to decompose things by a hot or cold compost, or with wiggler worms.

So we're going to be talking a little bit today about mineral fibres. What are they?

They are, or more accurately it is asbestos, which is the only mineral fibre. It is a silicate of many minerals including magnesium, calcium, iron, aluminum, and other minerals. It is,

amazingly, rust, flame, and acid proof. And its particles are actually carcinogenic and therefore it has a very restricted use.

What is a silicate? Silicate contains an anionic silicon compound. What is “anionic”? It is a negatively charged ion or any negatively charged atom or group of atoms. That means silicate is simply an anionic silicon compound and a mixture. A mineral fibre from asbestos can be made into something like a mineral wool. They can also be known as a mineral fibre or even a man-made mineral fibre.

Well, isn’t that great? Find out about a new fibre, a good ol’ natural fibre, but it is carcinogenic or cancer contributing or causing. I’m not sure whether if they’re contributing or if they’re causing. And I have to take caution at this point in time about the length of exposure and kind of exposure to the asbestos. However, it might be a little bit like the smoking correlation vs causation argument.

Where the amount of smoke that an individual or population smokes is highly correlated with cancer, which shows that cigarettes are so correlative as to be argued as causative of cancer, maybe the same with these. Although we haven’t found any conclusive evidence or studies to suggest that prolonged exposure of mineral fibres (such as in clothing) can cause cancer, we do absorb toxins through our skin.

That’s an interesting property there’s not much more on these little things. However, I think that it was worth exploring for a little bit. Especially because these are actually used in tremendous amounts of housing insulation, and I think that’s worthwhile as a thing to explore or for yourself. You can simply Google “mineral fibre” and “asbestos” (or Bing or Yahoo,

etc, etc) to gain a better idea of this particular natural fibre. That's all for now thanks for your time!

Why Do Ghosts Wear Clothes At All, At All, At All…?

June 28, 2016

If you look at the popularizations of ghosts, ghost-like phenomena (whatever that means, Scott), and many other things, you can see that most ghosts seemed to have an enjoyment in wearing clothing.

John Keats had a poem called *La Belle Dame Sans Merci,* which translates by my reading as "The Beautiful Lady Without Mercy," A few lines as follows:

She took me to her Elfin grot,

And there she wept and sighed full sore,

And there I shut her wild wild eyes

With kisses four.

And there she lullèd me asleep,

And there I dreamed—Ah! woe betide!—

The latest dream I ever dreamt

On the cold hill side.

I saw pale kings and princes too,

Pale warriors, death-pale were they all;

They cried—'La Belle Dame sans Merci

Hath thee in thrall!'

I saw their starved lips in the gloam,

With horrid warning gapèd wide,

And I awoke and found me here,

On the cold hill's side.

Thanks for scaring the crap out of people, Keats.

I don't know about you, but this seems a little bit suspicious to me. Even though these kinds of stories and narratives based on the subjective experiences of individuals (which likely happen) can bring about lovely poetry and tall tales, these seem rather thin in evidence and content other than the elaborations of the reports and the legends and mythos that surrounds them.

I have a natural philosophical bent, so this means that I have a certain bias towards the general scientific and natural epistemological perspective on the world. In other words, my perspective is biased towards modern science, updated natural philosophy, with testability, predictability, and peer review.

If you look at some of the photographs interspersed throughout this article, you can see the clothing that is reported to be worn by these ghosts. It just seems weird. It just seems weird that people would come back in the clothing that they were wearing at the time of their death. Some might speculate that this is some form of immortal soul. How is this an immortal soul taking their clothing with them? Why clothing? Why that clothing from that period of time? Most of the research I have done on supernatural ghost sightings seem to have them clothed in some type of Victorian-era clothing. Where are the ones in just jeans and t-shirts?

These so called ghosts in clothes have inspired some eerie clothing designs like Dead Castle Project – a Sydney-based label – is well-known for combining a variety of styles in their collections from surf to skate to grunge and its 2012 Spring/Summer collection is no

exception. Featuring plenty of black, the models in the graveyards appear disinterested and unperturbed by the fact that they are surrounded by dead bodies inches beneath the surface. This collection by Dead Castle Project is also infused with a slight dose of badass and authority as showcased in the tee-shirt that reads “Cool Kids Can’t Die.”

Paranormal investigators seem to have a hard time telling us why ghosts even wear clothing. So, would people that died then begin to wear just that one outfit? That seems sustainable and within the whole concept of buying less and having better. It would also be the first natural fibre never to bio-degrade – really, really degrade completely and utterly. Textiles in the afterlife, who woulda thunk? That’s all for now.

And as with everything written, I could be wrong, incredibly wrong – think for yourself and come to your own conclusions.

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