



RE:GEN-ERATION PODCAST

EPISODE: DEBRIEFING 'LINEAR HISTORY' & SYSTEMS THINKING

A: Hello, everyone! Welcome back to the Re:Gen-eration Podcast where we'll be having conversations about the circular economy from an intergenerational perspective. Today's episode is going to be a little bit different because it won't be as lecture-y and intense, we want it to be a little bit more conversational, and we'll be debriefing the information that we discussed in our Episode 1: "History of Linear Fashion". So in the future, for this podcast, we hope to be more conversational and interview based. But we did want to include the first couple of episodes talking about the history of linear fashion, and creating some common definitions to serve as a crash course. And make sure that we're all on the same page, before we get into the really exciting things that we have planned for the episode. And just as a little bit of a sneak peek into the future of our podcast, we want to talk with both producers in the circular economy and businesses that are striving to close the loop so to speak. But we also want to get into consumer psychology and what goes on in the mind of individuals like you and me who aren't necessarily seeing the behind the scenes business aspect of the circular economy.

S: Alright, so let's talk a little bit to begin with about the importance of history not repeating itself. Alexa, there is a clear way in which you and I have talked about offline about how the fashion industry has repeated, a lot of I don't want to necessarily call them mistakes from the past, but ways of doing business that are no longer appropriate now that we are trying to transition from a linear economy and models that are take-make-waste based, to a more circular model, a regenerative sustainable model that respects the environment, and wants to be responsible to our labor forces and pay them a living wage. You were talking a little bit about systems in that history, So and the importance of looking at systems. So, why don't you talk a little bit about that?

A: Yeah, I think that in today's day and age with cutting edge research and technology that we have available to us, it's easy to kind of forget the past. So it really is important to think about history. And there are so many issues going on, and topics of conversation like Black Lives Matter, and even the pandemic, gun violence, and environmental justice that rely heavily on systems. And we need to analyze the systems in order to form solutions. So, if you think about Black Lives Matter, how racial injustice is systemically embedded in our political systems, our economic systems, and all of these issues that I've kind of just talked about, have deep-rooted causes that need to be unpacked in order to address them.

S: Yeah, we've had systems in our lives the whole time. It's now that we're trying to do such a radical turnaround in the way we do business and, and form a more inclusive society that respects both unique individualism as well as cooperative models of doing business relating to one another, it's important to look at the systems that are in place. Because without that, and you mentioned Black Lives Matter. So many people have such a difficult time talking about race and systemic bias that we want to make talking about a system a more natural, collaborative way to approach change. It doesn't have to be that you get one group's defensiveness up, we're trying to look at what we've done in the past that we want to eliminate or evolve into the current and future. It's the only way I believe that we're going to get to a place where the majority of us, meaning you, the listeners, the general population, to collaborate on new ways of doing things. Without that participation, we're not going to have much of a change. And that's where the system and looking at the history really, really comes in handy. Because if you decide that you want to make, in our case right now, the fashion industry more circular, more sustainable and more regenerative. You really need to start at the beginning of how you put things together. There's no way of putting together a recipe without, pulling out the ingredients and looking to see if your ingredients matches the recipe. I and I always like these kinds of food references. But that's what we're doing. We're taking everything apart to see what created the system that we have, so that we know where to replace, doing things one way with doing it a different way, a new way. And for me as a designer, that starts with looking at the materials you're using, and looking at the factories you're using, and how well they treat the employees.

A: Yeah, I really like the recipe example that you used Sharon, it can be easy to say, I don't know, maybe you're not a fan of ratatouille. And maybe right off the bat, say, I hate this, let's make an entirely new dish. But if you understand what exactly is not working in the dish for you, you can try to look at that particular ingredient and create change rather than scrapping everything and starting new. And so I think that that's kind of a good analogy for what we're trying to do with the economy is we need to look at the parts that aren't working, and intentionally change them, based on history and based on research, as we'll talk about in a little bit, to the changes that we hope to see.

S: Well, aren't you a system chef? I think we should call it that now. I think we are systems chefs. It's the ingredients that we have, and we make substitutions that make more sense. And, and cater to the result we want.

A: Right? Exactly. Yeah. So just kind of moving on from that. I think that there were a lot of really cool things that I personally learned about doing research for this episode. And something that, Sharon, we kind of started talking about, during some of our first Zoom sessions was how World War II was such a turning point in the way that we consume things with the increase of single use items and plastics. This was something that I didn't really realize, and just reflecting on the fact that my grandparents were in their adolescence during World War II, and what a different experience they had growing up than I do. And it's really given me an appreciation coming to that collective understanding in our upbringings.

S: Some of the things I took away from that episode that was so heavy with history and the evolution of things was about the Quick Response Model, I had never heard of that. We just called it knocking things off. And it got faster and faster. The places that I worked, we weren't so interested in a quick, fast fashion kind of turnaround, we planned a season pretty much 9 to 12 months ahead of time and took a lot of time to go from concept through to production, because everything was supposed to have a lifestyle look to it. Meaning basically that the line that we produced, closed you from soup to nuts for a season, and everything should coordinate and go together and look like it was part of a way of dressing in outfits. So that's not what fast fashion really does. They may they may interject some of that. But we were more interested in getting great styles and great color combos, the right print and patterns in the line. So it wasn't as dependent on what color the color and silhouettes were dependent on fashion trends. But we we dressed women who were looking for career and casual clothing, that all kind of worked together, a different, a different focus. But I never realized that the quick response model was an actual labelled systemic way of transforming the fashion industry to a more fast fashion model.

A: Yeah, and similar to your sort of newfound understanding of the Quick Response Model and how there actually was a name for that, I kind of had a similar realization when we were talking about built in obsolescence, because as we mentioned in the episode, I had been a slave to getting a new iPhone every couple of years because my old one wore out, or we talked about the lawsuit that was going on in Argentina, I believe, of consumers of Apple products that were accusing Apple of, basically, built in obsolescence. And I hadn't known that there was a term for that, and the fact that it's actually commonly talked about in the design world kind of boggles my mind. But yeah, that was something that I really enjoyed learning about from this episode,

S: You know, competition, I think drove, really, built in obsolescence to be as embedded as it is today. Yes, Apple builds in, they won't, they basically, they won't guarantee their products for more than a couple of years, because they know things are going to start to fail. And I don't know whether it's intentional, at this point that they start to fail after a couple of years, if they're really engineering that in, or if it just happens with the delicacy of the parts that they're using. And maybe there's an opportunity there to build a more durable phone that doesn't succumb to the the faulty system that has, you know, suddenly your, your, your text messaging isn't working, or it stops connecting properly to the internet. And I don't know if some of the right to repair laws that are coming in, will, will fix that, but you can, that you have a way of repairing your existing phone, so that you don't have to constantly buy a new \$1,000 iPhone. I don't want to accuse corporate America of engineering in obsolescence, the way that I spelled it out for Volkswagen. It was, you know, it's a way for corporations to deal with competition.

S: And I think it's worthwhile to challenge corporate America, the fashion industry included, to build better products, fewer of them, and find new models that will let them be assured that they have an income stream that will eliminate the need for built in obsolescence. So, you know, one of our future episodes, I really do want to talk about new business models, because this is all based what we're talking about on linear models. And there's all these new kinds of models that people are coming up with. So...

A: Right. Yeah, I almost wish I could just be a fly on the wall in the Volkswagen design headquarters or the Apple design headquarters, just to see how that conversation goes with built in obsolescence. But regardless of whether it's intentionally designed in or not, as you kind of mentioned, it's become an imperative strategy for businesses to maintain customer loyalty and it keeps them afloat, the revenue streams resulting from built in obsolescence keep them afloat.

S: And there's so little, there's so little customer loyalty anymore. I know that when I was growing up, we only bought like Tide detergent, that's all we ever bought. But all the other companies started to reengineer their products to have the same results, as in this example, Tide detergent. So you didn't need to be as loyal to one brand. They do a lot of expensive marketing, all kinds of brands for all kinds of products, to try and inspire their customers to stay loyal to their brand and their products. But, you know, Amazon is this amazing marketplace now, as are many big box stores, that they carry multiple brands. And it's often a price war that, you know, brands offer prices that are so low to try and convert customers to their loyalty. But it's a different, it's a different time, we have much more choice at our fingertips, we don't necessarily have to go to a particular store, we can do it all online, or we can go to a big box store and have the choice of multiple national brands, or some even some up and coming brands that offer, say some level of sustainability or environmental commitment. So maintaining that customer loyalty is a very difficult thing these days, there's a ton of competition.

A: Right.

S: And, and, you know, we talked you and I talked a little bit last night as well about not knowing whether or not one product or one service is better than the than another for the environment. Remember, we took I took the example of paper napkins versus cloth napkins. So is it better to take a tree-derived paper that is used to wipe things and soil the paper? Or is it better to do the cloth that needs to be produced and incur all of those environmental impacts and then constantly be washed? Is that better? And what did it come down to? Doing an LCA!

A: Right.

S: You want to explain LCAs because you do this in school?

A: Sure, Yeah. And just kind of to elaborate on that topic, I've heard a similar argument with the company called Rent the Runway. Basically, they're just a clothing rental service, and you can rent their clothing for, you can select the amount of time you want to keep the clothes, and then send it back. And the idea is to keep all of these clothing pieces in a material loop. But there was kind of a controversy related to if their model actually produces environmental benefits, because the clothes have to be transported back and forth. And it's a very water intensive company, because obviously, the clothes need to be cleaned between each user and all of the repair that goes into that. So I have seen those discussions...

S: Or dry cleaned, because a lot of those things that they rent are dry clean only. And that's a whole bunch of chemicals.

A: Right.

S: I'll just throw that in there.

A: Right. Definitely. But basically, yeah, so to resolve this dispute, there was a lifecycle analysis conducted or an LCA. And basically, an LCA or a lifecycle assessment is just a method of analysis of environmental impact of a product, or potentially service from cradle to grave, or the entire life cycle. And really, in practice, LCAs are a really complex process, whereby you have to identify all of the inputs and the waste of creating a certain product. And for LCA practitioners and people who conduct these assessments regularly, they really have to adopt that Systems Thinking mindset that we were discussing earlier in the episode. And so really critical to a life cycle analysis is the reference flow and the scope of the assessment. So basically, the reference flow is the specific unit that the analysis is based on. And if you're looking at the results of an LCA study, like for example, the carbon emissions that come from producing a t shirt or something like that, a lot of these underlying assumptions that are made about the process are not really understood. But when you're actually going through this process, and something that I learned as I was conducting LCAs is that there is a lot of very specific details that need to be established in order to really properly conduct this analysis. So as an example, for a reference flow, if you're looking at, let's say, Diet Coke or something like that, you could either make your reference flow a single can of Coke, it could be an entire box of coke cans. And all of this obviously, will impact the environmental metrics and impacts that are ultimately calculated for the reference flow. And I don't necessarily want to get into all the nitty terminology and details of an LCA. But another related term is a functional unit. And basically, it is the very specific purpose of the reference flow that you're looking at. So when I was first learning about LCAs, in a sustainability capstone course that I took, the example that was provided was about a can of paint, and the specific functional unit for that, so the purpose that it was serving, was a in our it was an off white coat of paint on a one meter squared, piece of brick wall, outside in Chicago in the winter, at, let's say, 20 degrees Fahrenheit.

A: So you have to be really specific about what the product is serving, the purpose that it's serving, so that it can be compared to other similar products. So if you're comparing, you know, a 20 ounce plastic water bottle to a 20 ounce stainless steel water bottle, that would be more effective when you're looking at the environmental impacts than just saying a plastic water bottle versus a stainless steel water bottle, if that makes sense. And so, basically, this is a very complex process, but the TLDR is that there are a lot of assumptions that go into lifecycle analysis. And it's really, really critical to understand the scope of the analysis so that you can make effective decisions based off of the conclusions that are drawn.

S: Well, as we're talking about data and how important that is, yeah, and you have to have data you don't know. We don't know, what's important to focus on until we measure the impact of certain behaviors. And a lot of people that I've talked to: friends, family, strangers, get lost in this, they they're like, it's not worth doing any of it, it's how are we ever going to know. But there are scientific ways of measuring things and coming up with standards, which is what they call them in LCA data, templates, and tables, that you can estimate. It's not exact, it's never going to be exact, but you can estimate within a reasonable amount, so that you can compare the environmental footprint of a napkin that's made of paper that's made of paper and another one that's made of cotton, and another fabric napkin that's made of plastic or polyester, or fossil fuel derived fabrics. So that you get a sense of what's most likely going to have the least impact, because that's what you're trying to get at. And then you want to measure as you're doing as you're making that change, so that you have even more accurate data, what the impact of producing and using cotton napkins is, cotton fabric napkins.

A: Yeah, I thought that LCAs are most helpful in the sense that not necessarily providing an absolute value like this is the amount of greenhouse gas emissions coming from this product. But it's really most helpful for comparison, and decision making purposes, which is definitely what we need. But with clear data, we can make more informed decisions.

S: And and you have to realize too, or the audience should realize, that what's good for one place might not be good for another place. So that if what you have available to you, is a lot of water, say you're an island nation, but you don't have so many trees, because you're an island nation, that the paper may be the paper napkin may have a larger footprint because you had to import wood pulp from a place that has more trees, rather than producing a textile napkin, because you have the water to wash it. Right, you can replenish the water supply relatively easily, and have facilities in place that return wastewater into drinkable or water that you can restore to the natural environment that you have. So it depends on where you are, and what your conditions are. And that's why LCAs are important to do that have been done from different places for the same products, because you take all of those things into as being factors.

A: Right. Yeah, there's a lot of trade offs that are implicit in LCAs when you're considering the results. There's basically a model that the US EPA endorses, it's called the TRACI model, which is used for environmental impact assessment. And it has six major, basically metrics. And so that's kind of left up to the decision maker, whether it's worth it to have these adverse effects on other areas besides global warming.

S: And it's a science. I mean, like many things, it's a science and you have to have boundaries as to what you're looking at. Otherwise, your queries get way too far field. And you're, you're, you're taking too many factors into consideration. So and, honestly, LCA is and this kind of analysis for environmental impact are expensive to conduct. And they give you guidelines, but they don't give you decisions, you still have humans that need to make those decisions about what is the most effective way to do things in a new way. And that, if any, if nothing else, is a system. It's a system of analysis. And so many industries use that to decide how you invest your money or in our instance, which clothes are better for you to buy, which which fibers are better for you to use for the function that you're putting them to. And it's not simple, and I, I can't blame the average citizen for not knowing or understanding. Is it better for me to buy a cotton lycra leggings or a polyester lycra leggings? Because there's so much to consider that you have to rely on standards and people who are in the design end of things, making, looking at those analyses and saying, This is the best thing that we, this is what we want to produce, because it has the best performance and will fit the needs that you have, whether you're mountain climbing or doing yoga or going grocery shopping. And it's it's a lot to ask the design world to do, in addition to styling everything and picking out fabric and color. So, you know, I would like to, within the fashion industry make some of those analytical details that data available, and explain it. So provide education around it, so that designers and companies can make informed decisions.

A: Yeah, and I think that the value of collecting this data not comes not just from the decision making perspective, but also being able to understand the trajectory of things and trends. And obviously, this past episode was focused on understanding the history. So we really do need this information for the purpose of reflecting on where we're going, and how we can make longer term effective solutions. Like we had discussed earlier in the episode about this fake factoid about how the fashion industry is the second largest polluting industry in the world, which was taken out of context, and isn't really true as we kind of dispelled. But if we had this information, through LCAs and other research based methods, we could really understand the problem more clearly, and make more effective solutions for the long term.

S: Oh yeah, without data, your, your, your solutions, the things that you want to implement the things that you think are going to make this or any industry more circular, sustainable and regenerative, without having data, you really don't know, if you've been effective. You know, it, you wouldn't go on a diet, necessarily, and not weigh yourself at the beginning.

S: You know, it would be, you wouldn't know what you've lost, you wouldn't know if the way you've changed your diet or your exercise has been effective, unless you had some sort of, literally, scale to help you analyze that. That's all that's all we're talking about, really, here is systems change based on informed data. You know, I'm, I'm sure if you look at cars, let's say, and what the environmental impact is, from a fossil fuel or a gasoline powered car, versus the hybrids versus the electric vehicles that are now out, you'll see an immediate difference in impact. It's, it's a real, it's such a radical change that you know, that not using the fossil fuels is clearly better for the environment. But you really need to do an analysis of what goes into making an electric vehicle and what the electrical impacts are. You need to look at the system of how people are going to be able to charge their electric vehicles, you need to look at what does break down in electric vehicles, is it, and quite often, from my understanding, it's the battery does the offset of not spending on fossil fuels, pay for the more expensive battery in the end?

A: Yeah, I'm not to get too into the electric vehicle debate. But something else I've heard a lot about is if the source of electricity for these vehicles is coming from fossil fuels, is that actually providing a benefit? And yeah, I think this just goes again, back to really the idea of systems thinking and how that plays in tandem with data collection and how how dire that is for moving towards a circular economy, whether that be in the transportation industry, or the apparel industry.

S: Yeah. And I'm not saying that either of us have all the answers, but I do know from talking to you, Alexa, that your generation has more of a familiarity with systems than say, probably mine does. But we, my generation has more knowledge of how we got here more knowledge of the system that exists and how it turned into perhaps one that is completely detrimental to the environment for usually quite often economic reasons. And your your generation sees solutions, but doesn't necessarily know how to turn the system that exists into the beneficial system that you're aware of. So that's where I think you and I talking or the generations talking and collaborating and cooperating to bring your, the things that you're familiar with and enthusiastic about, and the things that we and by we, I mean, my generation or older generations, what we've put into place, why that works, and why that was done that whole history, we need to come together.

A: Right.

S: So I think that's, that's the underlying reason that you and I are doing this, and I learn something from you, each time we talk about, about how you think your generation is consuming, in this case, fashion. You know, we talked about the rental versus the purchase to own model and the resale models. And that that plays a huge impact. The Rent the Runway example is a perfect example, that most people say, Oh, well, you know, they get to produce less, the manufacturer gets to produce less, and they keep renting the same garment.

S: And so they produce less, they take less raw materials from the environment, and not so much ends up going to landfill because you're producing what you need rather than excess. But that you'd have to figure in the cost of dry cleaning and washing those garments and putting them into new plastic sleeves to ship out to the next customer and the cost of the transportation back and forth to the customer. And most people don't think about that. That's the system. That's the system of changing a new for a new model where the old linear one is purchase and hold it in your closet and use it whenever you do, and then get rid of it. Trying to introduce that circular model is fantastic, but you have to analyze it. Same thing.

A: That's right. Yeah. And each of these issues, I mean, Sharon, you've just mentioned and that we've talked about throughout this episode are so complex, and honestly, we'll probably have upcoming episodes, full episodes on each of these topics, like we talked about built in obsolescence, different business models for circularity, there's a lot to dig into. And we're excited to do so and engage you all and have interviews with other people in the space of different ages that are doing good work in these areas. So yeah, there's there's a lot to talk about.

S: I wanted to mention here the exciting news that New York State just introduced the Sustainability and Social Accountability Act, also known as the Fashion Act. If passed, it would be the first state with such legislation and require that manufacturers and brands with 100 million plus dollars in annual revenue, map at least 50% of their supply chain within 12 months. This would cover farms producing their virgin contents through production and shipping. Companies would need to provide transparency about labor forces and wages, energy usage, GHG emissions, water and chemical use, and their plans to reduce their numbers to meet Paris Climate Accord targets, while also revealing production volumes for materials usage by fiber content such as cotton, polyester and leather. It's a really big progress in legislation.

A: Yeah, I was extremely astonished when I first heard about this legislation, and just the depth of the social and environmental transparency that could potentially come from it. And from my understanding, it's not even just the fashion industry in New York City or New York State. But this could have much broader implications on major fashion corporations, right?

S: Yeah, indeed, the great thing about this is that it's a requirement put on larger companies that can afford to do this expensive, what's usually quite expensive, series of LCAs, and supply chain mapping functions. Because smaller companies can't really afford to do it, because they need to be transparent about it, they provide information for smaller companies about how to go about doing their own mapping and LCAs perhaps less expensively, because they're providing a transparent look into data and resources.

S: And it's a fiscal incentive because if they don't comply with this, they don't get to sell in New York State. And that's a huge market, especially New York City. So if these companies can provide that information in a transparent manner, everybody benefits and when other states and countries see the benefit from that, they can also craft their own legislation that mimics what New York State has done, so that everyone's doing sort of the same thing. And they're forced to help bolster the adoption of circular models or more circular models, models, as they're, as they're perfecting them.

A: Precisely Yeah, I think that this legislation would not just be a win for more transparent, a more transparent fashion industry, but it will ultimately, hopefully cause a shift in business models. And we were talking a little bit about this earlier in the episode. And we hope to have future conversations about what what business models are potentially could potentially create the changes that we're seeking and the positive environmental impacts that we're seeking. But yeah, I think that this all kind of ties back to the business model conversation. And I'm really excited to see what the future is for this legislation.

S: I would like to know what the systems thinkers and business model professionals think of this new legislation and how they think that's going to impact their consulting, because the larger companies will be paying to do this, and carry because they do more, they get more of the revenue anyway, they'll carry some some probably proportional burden for the cost of doing this, but it's going to be worth it to them, because the cost of the revenue they would lose probably far outweighs the the cost of doing this supply chain analysis and creating plans to reduce their numbers. Well, I think we're all gonna learn a lot from it, I really hope it passes. None of this is easy. None of it. But I think having this intergenerational conversation, lets people become aware of what's involved in transforming business models into from linear to circular, which is our whole goal. And anything that one comes that Walmart learns, I want Patagonia be able to benefit from that anything that Patagonia learns, I want some startup in Timbuktu to benefit from that, so that everyone's improving all the time.

A: And yeah, that's why we hope to have such a diverse audience, whether that be representatives from companies that are built on long lasting, sustainable products, who care about fair labor and responsible sourcing, or whether that's representatives from corporate America, or whether that's, you know, my neighbor, who's just interested in supporting sustainable companies and the circular movement. We're really excited to have all of us engaged so that we can really encourage this knowledge sharing.

S: I want to have guests that are CEOs of major corporations that are struggling. And I want to hear from people who are Sustainability Consultants and work in all sizes of companies in all different industries, to share knowledge, to express frustration, to crowdsource solutions, and to even hear if someone disagrees with the things we're saying here and has a better solution because it's all about being open to ideas, and to trying them out and to seeing See what works on a corporate level, on an industry level, on a government level, and on a consumer level, you know, to change hearts and minds about this stuff,

A: Completely agree. We're all about changing hearts and minds. And we hope that through this podcast, you start to challenge yourself and those around you to be a more ethical consumer. But yeah, so I think that's it for this episode. Unless Sharon, you have anything else you wanted to talk about?

S: Well, as you know, Alexa, I could talk about this for three weeks, but at some point, I have to, I have to edit myself and say, I think we've covered episode one plus a whole bunch more. And I really, really hope to hear from people on our website, in our comment section, if you have if I've left something out, or we've left something out, if we've in any way, shape, or form, misrepresented anything that we've said. And again, I just want to express that I'm not trying to call to the mat, any company, or any industry. I'm using examples that I hope will educate and inform. And I would love to hear from anyone that I've talked about any label any brands to hear what you're doing, what what improvements you're trying to make whether or not we said anything that was inaccurate, so that we can correct that if it if it was and to share with our audience, what you're doing in the future, what you want to work on what you could use a crowd of concerned consumers and just our audience members, what you would like help with?

A: Yeah, that's right. We're just we're really here to empower and educate and celebrate. And we know that these issues are not easy to tackle. So if there's anything that we can do as a community to foster that, that's the goal.

S: Yeah.

A: So yeah, thank you again, for tuning in. And please follow us on our LinkedIn page, which is @Re:Gen-erationpodcast, and visit our website, which is www.re-generationpodcast.com. These will be linked in the show notes. And yeah, you can also learn more on our website and sign up for our newsletter. So please also share this episode with fellow concerned consumers or anyone else that you think would be interested in following along our podcast journey.

A: And if you have any feedback for us about this episode, or anything related to the podcast or the circular economy, there is a submission form on our website where you can leave your comments and we'll get back to you and hopefully address them in an upcoming episode. So thank you so much for listening, and we'll catch you next time.