

Polyester, Pragmatism and People

Material Matters podcast with Grant Gibson – 17 November 2022

Guest: Professor Rebecca (Becky) Earley, University of the Arts London

<https://www.youtube.com/watch?v=YLdRsQnqkY0>

Grant: Hello, and after a short break, welcome to another episode of Material Matters with Grant Gibson. Just to let you know, I took some time off after launching the Material Matters Fair – it transpires that putting on this kind of event is quite a lot of work. Huge thanks to all the exhibitors and to everyone who visited; it was wonderful to meet so many of you in person. We are returning next year, so watch this space for more information.

But back to the pod. I've been doing this for nearly four years now, would you believe, but for listeners who might be new to the show, the idea is that I speak to a designer, maker, artist or architect about a material or technique with which they're intrinsically linked, and discover how it changed their lives and careers.

I'm completely delighted to tell you that my guest today is Professor Rebecca Earley. Becky is a design researcher and award-winning team leader at the University of the Arts London, and is based at Chelsea College of Arts, where she's Professor of Circular Design Futures. She initially trained as a printed textile designer before creating her own fashion label, B. Earley, in 1995, and her prints and garments have been commissioned by the likes of Björk and Damien Hirst. They're also in the collections of the V&A and the Pitt Rivers Museum in Oxford.

More recently, though, she's carved a global reputation as one of the leading thinkers around the need for fashion to become circular, with projects including HEREWEAR, which investigated how bio-based agricultural waste could be turned into material for clothing that was made locally, and Trash-2-Cash, which brought designers together with scientists to find ways to regenerate cotton waste and polyester. Not only that, but she also co-founded World Circular Textiles Day in 2020.

In this episode we're going to talk generally about fashion and circularity, but I suspect we'll hone in on arguably the industry's most controversial material: polyester. Becky, thanks very much for doing this. How are you?

Becky: Hello Grant, I'm very well, thank you.

Grant: Oh good, I'm glad to hear it. First and foremost, I've got to ask – well, where are you? You've got loads of clothes hanging behind you. I'm quite intrigued.

Becky: Yeah, I'm down the end of the garden, actually, in my shed. It's a little wooden hut which we built when we moved here nearly 20 years ago, and it doubles as a recording studio, a textile studio and a sort of hangout for the teenagers now as well.

Grant: Very nice. You've got loads of clothes behind you – are those yours, or are those the teenagers', or how does that work?

Becky: Yeah, no, there's a combination: my work here, an archive of my work, current things I'm working on, as well as – actually, I have to admit – lots of things I'm waiting to sell on eBay. So quite a bit of designer clothes I've grown out of.

Grant: Right, fair enough. I was thinking about this, actually. I was thinking I'm probably the least best person to talk about fashion with anybody. I have a fetish for corduroy and a bit of tweed. I keep T-shirts for decades. I have a couple of pairs of jeans. I was looking through my wardrobe the other day and I still have a T-shirt from university – it's got a big DM footprint, or bootprint, on the back, where I fell over and somebody trod on me. So I'm quite nervous about this, Becky, I'll be honest with you.

Well, look, I was kind of noodling around trying to work out how to get into this interview, and I spent a bit of time in your Instagram feed. There's quite a bit of swimming on there – I guess what's called wild swimming nowadays. So no heating, no concrete, no chlorine. You don't wear a wetsuit, I notice. What is it about swimming?

Becky: Yeah, wild swimming. It's the cold water – it's a huge sort of hit to the brain, really. And it's just nice being in nature. It's definitely the way to relax and switch off from the kind of pressures of working in the climate movement. And actually, the older you get as a woman, the better it is for you, which is why you find lots of mums like me queuing up at the lakes and the ponds to dunk themselves. Rather than being dunked as witches, we're dunking ourselves now.

Grant: And where do you do this? Do you have a favourite pond?

Becky: All over the place, really. Ireland – I'm married to an Irish actor and we spend a lot of time in Ireland. But I go to Hampstead Ponds, and I go to the lakes outside of London. The motorways of London were built from gravel pits that have since been filled in, and you can sail on them, and some of them you can swim in. So I go to a range of places.

Grant: Very good. The other thing I noticed on your Instagram feed, which I was intrigued by, is that you've colour-coded your books at home. I'm always intrigued by people's books, and by how they store them. What is that about? Not liking visual clutter? I'm just wondering what it says about you.

Becky: Oh, I'm looking through the window out of the studio down to the house, and the clutter – that's making me laugh so much. Okay, that's just novels, for a start. All the other books are in other parts of the house, and other buildings, even. I keep a lot of my art books in my office at work, and we have plays and textile books as well as all my theory books. So that particular shelf was more of a joke, really. I was sat there on a Sunday afternoon and I just wanted to see some order. I will keep talking about climate change in this interview, I'm sure, but it just gave me a huge sense of pleasure to line things up. And on Stories I said, 'Shall I do this? Please stop me!' I knew it was going to take me a couple of hours and people would think I was strange, but I enjoyed it.

Grant: It's difficult to know where to start. You have this extraordinary list of what you call 'outputs' on your website – a vast array of things that you've done, said and written. And then I came across this blog post, or essay really, on your site about the future of polyester. Polyester, as I'm sure many listeners will know, is a polymer – a plastic, really. It's derived from oil and is generally seen as a problem. We know this from the likes of David Attenborough, and we've had it drummed into us for the past decade or so that plastic is a bad thing. There's a welter of statistics, from your essay and from various

others: Europeans use nearly 26 kilos of textiles per person and discard 11 kilos of them every year; 87% of clothing ends up in landfill; and the majority of those garments will contain polyester. However, you mount a kind of case for the defence of the material. You write that it's one of the most viable solutions to meeting our global clothing needs, albeit with huge changes to how it's used and reused. So can we talk about our relationship with polyester – but also, I guess, your relationship with it, because you used it as a textile designer?

Becky: I did, yes. First of all, I think it's brilliant that that's what you picked up on and that's what you want to talk about. Depending on when this goes out, listeners might be able to think straight away about what Just Stop Oil looks like as a campaign, and the disruption it's currently causing on the M25. We have had a rise and rise and rise in volume about polyester, which has really intensified in the last couple of years, very much linked to the David Attenborough documentary you mention, because it's linked to plastic. And from an academic point of view, a research point of view, I've definitely wanted to spend some time really clarifying the different elements around polyester, to get to a point where we can make some actionable decisions. Although I agree with Just Stop Oil – and we should – it doesn't seem that possible, because we have a juggernaut of an economy and of an industry. So actually it's more about steering and slowing down as best we can, rather than just stopping.

Okay, I'm going to go to the bit of your question which was about my relationship with polyester.

Grant: Yes, let's start with you, Becky.

Becky: I've got so much to tell you about it! I actually got into it completely by accident. I was a print designer and I worked in the Central Saint Martins print studio, which at that time was in Soho, on the ground floor. It was a really fantastically creative space, but very, very busy, so getting hold of screens to do my silkscreen printing onto silks – which was what I had done previously – it was really hard to get the time and the space. So I started to use a piece of equipment in the corner that no one was using, purely because I needed to crack on, and it was a transfer press. It works with polyesters: you basically put the dyes onto paper, you make your design, and then you press it onto the polyester. This is still how polyester is printed in industry today.

I began to really experiment with it. I think some tutors said, 'Oh, that's just for swimwear,' but actually, the more I shopped around and went looking for materials that had a polyester content, the more of a palette I had to be creative with. I ended up doing my MA fashion graduate collection with quite a lot of polyester in it, and I developed a new technique for printing on it, called a photogram, which predated digital printing. I was able to airbrush hundreds of different colours onto two-dimensional objects that could be squished under a heat press, and make these eerie, semi-photographic – they're not photographic, of course – impressions of objects onto shiny polyesters. So I created something that had a really strong visual impact and a totally different look for the time, and from that my work with polyester just snowballed. I started working for stylists and agents, which enabled me to dress pop stars and do one-off shoots, and it was all about making a really strong visual impact with this material that could be really manipulated by a textile designer.

Grant: Is that why polyester's so popular – it can be easily manipulated, it's easy to use?

Becky: No, actually, I would say it's because it's cheap. It is possible to do lots of things with it – it can be heat-formed, it can be printed now using digital papers or transfer roller printing, and of course Issey Miyake makes incredible pleats with it – so it has had appeal from that point of view. But the real reason it's such a major part of our fibre production is that it's cheap.

Grant: And presumably when you were using it, you had no sense of the environmental impact it might be having?

Becky: Absolutely none whatsoever. Really none – that came later. It was purely a decision of: how do I get the idea that's in my head onto fabric and into a garment to finish the course? At that time I wasn't really thinking any further ahead than completing my master's and then going on to the next thing. I didn't even know what the next thing was. I didn't particularly want to get a job in fashion, and my thesis was all about campaigning and activism, so I guess the hints were there. I'd written about feminism on my BA, and then on my MA I'd written about Katharine Hamnett and Judy Blame and all of these activists who were using fashion to try to change things, and that really appealed to me. So I was holding on to my core interests and beliefs, but really just wanted to make a visual impact. And then I started teaching, and when I started teaching I met a really interesting group of staff and makers and fabulous students, and from that the conversations really grew around our choice of materials, and I began to understand a lot more about polyester.

Grant: So we have all this polyester in the world. What do we do with it? We can't get rid of it, so what do we do?

Becky: Well, we can get rid of it, and it is being got rid of – by being burnt. That's one way. Governments do want the incineration, to reclaim the energy that way, which is very short-term thinking, but certainly some Scandinavian regions do that. Otherwise it goes into landfill – it doesn't go away. We've got to find ways to use what we've already produced. That would be my thesis on the subject: we've understood that this comes from oil; oil is not a regenerative resource; it's incredibly toxic and polluting in the drilling. But the industry is hooked on it, and they've produced a huge amount of it already. We need to unearth that and fold it back into recycling systems, and we need to begin to replace oil-based polyester with other kinds of synthetics that give us the weight, the quality and the aesthetics that polyester and other synthetics have been giving us. So we can have bio-based polyesters.

Grant: Right – which are made from what?

Becky: All kinds of things, but generally plant-based. Think of what you get other oils from – you can then refine that into a synthetic fibre.

Grant: Because it seemed to me that the thesis of your piece on the website was that we actually need to change our perception of it, and there has to be more nuance in the debate around polyester. In other words, not all plastic is bad – we have plastic, and we have to find different ways of thinking about and using it.

Becky: Yeah. Well, the main part of that essay, I think, is really about what we're drilling oil for and where oil gets used. Of the huge amount of oil that is being drilled, it's not being drilled for polyester – that's a tiny percentage of the use. Crude oil is made of different component parts, and a fractioning process divides up the different qualities of that oil. So although oil is drilled primarily for gasoline and fuel, only 40% of what we drill

is actually suitable for that, and the other parts go to other applications, but with an extreme amount of processing. So we're using polyester and plastic pretty much because it's the by-product. You've got to drill and get this other part out to help us travel, but we're then producing this other stuff that needs using up, which is why it's so cheap.

Grant: So it's a waste stream, fundamentally – is that almost what you're saying?

Becky: It's a low-value element of a bigger supply chain, let's say. I mean, nothing should be seen as waste. For me it's about the difference between the idealistic view of what needs to happen to be a sustainable industry and to reduce climate change, and the on-the-ground reality of what it takes to actually bring change about – and how much resistance there is in the economic systems, obviously in big corporations, and then in the political systems, to changes that will negatively affect the economy. We're also talking whilst COP27 is on, and we're all aware of just how difficult it is for people to make the decisions that lead to the change that's actually needed. So that idea of reframing polyester – looking at it differently, rather than spending a lot of time and effort saying 'ban it, never have it in your wardrobe' – it's more a case of: it's not going to go away, so how can we use it differently and value it differently so that it benefits us and our wardrobes? That's a really exciting design challenge.

Grant: Well, it was a basic question of how we value it differently and how we use it differently.

Becky: Yeah, so there are lots of examples of that. I already mentioned Issey Miyake. Those polyesters are very smooth; they're not likely to be very fibrous – although I have to talk to you a bit later on about where fibres in the ocean actually come from. There's some interesting research coming to light around what it is that's polluting our oceans and where that comes from. I think what we need to look at is examples of where polyester is really, really good in our wardrobes and really works for us. It's an amazing waterproof material, for example; it's lightweight; it dries quickly, so you don't have to tumble-dry it and iron it. Obviously sportswear brands are big users of it. But it shouldn't really be in the cheapest of fashions. That's the paradoxical situation we've got ourselves into: we're using these long-lasting fibres like polyester in cheap, fast-fashion clothing that's been designed and made not to last very long – it's very trend-driven – when in actual fact something like cotton is a regenerative material and would be much more suitable, in some ways, for clothing that's trend-based. So my work, and the work of my team at University of the Arts London, is all about really looking at the value systems that we've built around materials, and questioning those.

Grant: Talking about value systems, there are some interesting points in the piece on your website, including a comment from Charles Ross, a sportswear and outdoor wear specialist, academic and journalist, who points out that cotton is eight times weaker than polyester, so it produces more pollution, which doesn't necessarily biodegrade more quickly if it's been synthetically dyed.

Becky: There's so much information that gets lost in the way our fashion gets reported and talked about. It's all context-specific, and there's a huge amount of detail that we really need to understand and examine. I suppose my bolder bits of writing have been about asking people to look beneath the surface of simplistic messages a little bit more. But I'm a campaigner with Extinction Rebellion; I support Just Stop Oil. Those voices need to be heard – we need to raise the dial on the whole of this debate. But in parallel to

that, I'm saying we need to come up with solutions that are actionable and don't cause violent disruption. And by violent disruption I actually don't mean the M25. I mean that if you try to ban something, you'll create livelihood loss and developmental damage in areas and regions that are based on textile production. So it's a transition rather than a revolt.

Grant: For the wider public, I suspect – in fact, I know – it's incredibly confusing. Isn't it probably best if we just wear hemp and flax?

Becky: You wear cord, so actually you're wearing – yeah, and tweed – so you like your cotton and your wool, and your cotton T-shirt, which has been around since college. And I meant to say, when you said that, you're a very typical male profile in some ways. Consumer researchers look at men and their buying habits, and they fit into a style early on, then they stay with it, and then they buy multiple versions of that same style because they don't want to spend the time shopping around. So you can go into someone's wardrobe and just see, 'Oh yeah, that's the T-shirt they like.' And of course our wardrobes as women are just not really like that. I find that fascinating. What was the question again?

Grant: Well, I don't know! What I was going to say is that what I've realised over the last decade or so is that I'm increasingly dressing like my father, and my father dressed like my grandfather. It's subconscious, but it's just happening. The other day I saw him wearing a corduroy jacket and I thought, 'Oh, I really want that. I think that jacket's great.' But you can't wear the same jacket as your father, can you? It's embarrassing.

Becky: I don't know – I quite like the idea of that. I don't want to look like my mum, but I am slowly turning into her and my grandmother, who's actually still alive and rather fabulous. So there is something about ageing that changes our wardrobes, which actually points the focus back on to talking about younger people. If you look back – for me anyway – at my wardrobe over the years: oh my God, what I was wearing in my teens, and then in my 20s, and then in my 30s, and then I became a mum. Although I've still got stuff going back to my college days, my body shape has changed, so I can't fit into a lot of it. But my sense of self and style changes quite regularly. It's such a psychological part of our lives; it's so enriching and so enjoyable.

Grant: Can you pinpoint the moments where your taste in fashion has changed? You mentioned having kids being one, and you started talking about decades. It can't be a ten-year cycle where you suddenly go, 'I'm going to change my wardrobe' – can it? Because everybody always talks in decades. It's such a weird thing to do, really.

Becky: Well, obviously it's happening slowly to you. But yes, there's that pattern of lifestyle, of different needs. You do dress differently after you've had kids, because you're basically covered in vomit a lot of the time. The practical needs of life really change – from being young, free and single, a party-going teenager, to having kids, and then being a very busy person looking after ageing parents, being in the middle of it all. And now I barely have time to decide what to wear, she says, looking down at the pyjama bottoms she's wearing off-screen.

I think the point of this bit of the conversation is that we could do so much with design and fashion that we're just not doing, because we don't tap into those mental, emotional, real-people scenarios when we set out to make clothes. It's a mass-

production, highly optimised system that's built on exploitation and profit. That's the greatest shame of all, to me – that it could be a really enriching industry.

Grant: It's enriching some people, presumably.

Becky: Oh yes – in that sense of the word, financially enriching the people who shall remain nameless right now.

Grant: Well, can we talk a little bit about your background, Becky? Am I right in thinking you come from a farming...

Becky: Farming and building, yeah. Country girl, completely – Wiltshire countryside.

Grant: And were you encouraged to make things and draw as a child? Where did the interest in textiles come from?

Becky: Oh, completely. My mum and my grandmother still knit – I was actually knitting just now, about an hour ago – and they mended everything. There was no waste in our house; everything had value. Hand-me-down clothes, of course – why wouldn't you? Buildings built out of things that were lying around. It was a fantastic outdoors upbringing, in which I learned about how scarce resources were. And it was pre the '80s and '90s – pre the kind of affluence and abundance era that we've just lived through. So I definitely have that in my family DNA.

Grant: So you were on a farm, in a farmhouse?

Becky: No, my grandparents were on a farm. My parents were really young, and I spent a lot of time with my grandparents – my gran was about 40 when she became my gran. My mum had left the farm and married a local lad, and he had also left his family farm and gone off to become a builder. So they were striking out on their own – that first generation that was striking out on their own and, in some ways, breaking up the family unit.

Grant: Did you enjoy the countryside?

Becky: Oh, yeah.

Grant: Were you determined to leave as a child, or did you enjoy it?

Becky: I did enjoy it, but of course I had a profound sense that exciting things were happening somewhere else, and I wanted them and I couldn't access them. So I was actually very naughty, and I ended up having to be sent to boarding school aged 14 – at which point I became even more naughty.

Grant: Well, how did naughtiness manifest itself?

Becky: Oh my God, my kids actually know these stories, so I won't... Just the usual 14- or 15-year-old behaviour: a bit of stolen alcohol, disobedience, being very cheeky and not doing my work. So academically I wasn't at all bright then – I was bright, but in a different way. I've actually started looking at neurodiversity, and I've got a strong suspicion I've got ADHD, which could account for my resistance to sitting still and concentrating, which is probably where a lot of that behaviour came from – a frustration.

Grant: Traditionally, boarding schools often aren't great at tolerating that kind of thing. How was yours?

Becky: Mine was very intolerant, but had the structure to channel me into some really positive actions. I had to read all my school reports recently as part of this investigation

into neurodiversity, and they said, ‘Becky’s really likeable,’ and, ‘Becky can make a positive contribution to society and culture, but she really needs to sit still, concentrate and stop being distracted.’ All the signs were there, but nobody was picking up on it. So what they did was channel you into sports. I was part of teams, I played a lot of sport – I played hockey for Wiltshire – and they helped give the ones that were naughty a sense of structure, and helped them achieve at the things they were good at. So I got an art scholarship, and that really defined my path.

Grant: Right – interesting. So it started with art.

Becky: Yeah. And then I went on to a foundation course, and on foundation you have a year to play and to explore all the other elements of the art world. And it’s really trite: the girl I loved, who I’d just met – she was beautifully dressed, her name’s Claire – she chose textiles as the tutor went round with his clipboard. I hadn’t even heard of textiles as a thing to study, and so I said ‘textiles’ too, in this rash moment. I had been looking at graphic design, but I’m afraid I said textiles just because Claire did. But it turned out to be quite a good impulse, I have to say.

Grant: So that was a decision made by chance. And then, as soon as you stepped into the workshop or studio, were you like, ‘Oh yeah, I’ve arrived’? Did it happen like that, or was it a slow burn?

Becky: No, it was perfect, actually, because from the background I come from, I was told I wasn’t allowed to be a fine artist. I was only allowed to go to art school – and you have to bear in mind I was the first person in my family to go to university – on the basis of, ‘You can go and study art, but it has to be design, and we want you to be a commercial artist,’ which is what they used to call a graphic designer. So off I went to do internships in graphic design studios, which I found really boring. But when I chose textiles, my tutor, who hadn’t really seen it coming, went, ‘Oh yes, because you can do really graphic kinds of prints, but on soft surfaces, and maybe for fashion.’ He totally got it. His name was Mike Rennie, and he was this amazing tutor who went on to teach loads of really brilliant people, and he totally had me. I needed the softness; the paper was too hard, if I was to be a graphic designer. So I did feel like I’d arrived. And it was fibres and fabrics and knitting and mending and painting – all the things that, in a way, my grandmother and my mother had already been doing, but hadn’t given a formal place in their lives. It was just what they did when they sat down to have a cup of tea and make something useful for the family. That element’s really important to me now, because this undervalued place of textiles and women’s work in culture and society is something that really, really interests me now.

Grant: Do you know what, I was going to ask you about that, because what’s kind of interesting is that you received grants and things from organisations like the Crafts Council, and you were on the cover of Crafts magazine in 1996, I think. It seems to me that you were always more in the textile world than the fashion world. Was that conscious?

Becky: Gosh. All I can say – and I’m finding out a lot more about this now – is follow your gut instincts. There’s a voice inside you that speaks to you, and lots of people will tell you other things, but there’s something about that instinct you just have to go with. I ended up doing fashion, but I always felt very uncomfortable in that world.

Grant: Why was that?

Becky: Harsh words, unkindness, the value placed on how one looks being above other values. It just didn't sit comfortably with me. I was in it, and I was having a great time, and I loved everybody in it – it just wasn't going to be the right place for me. I could produce very provocative textiles and prints and garments because I didn't care. I wasn't in it to win it; I was in it to get out of it. Almost a kind of perverse approach, I suppose. And in that awful article – I say awful, Caroline will kill me for that – all I talk about is not wanting to be in fashion. I read it back the other day and I thought, 'Oh God.' That's the thing: if you get a lot of coverage when you're young, you say so much stuff that later on you think... I was alone in London and really scared, struggling to cover the rent, out of my depth and overwhelmed, and busking it – busking it big time – signing on and getting grants at the same time, and doing everything I needed to keep a studio together. And it was brilliant and exciting, and there were such good parties, but oh my God, it was so stressful as well.

Grant: You wrote on Instagram about that piece, I think, that you thought you could – and I'll quote – 'fight against the invisibility cloak that textile designers often find themselves wearing'. Did you succeed in that fight?

Becky: Yes and no. Okay, it is a yes-and-no answer. I think a lot of textile designers would say that I've done quite a bit to expand the space for us, but recent economic pressures have shown me that we are still very much falling under the umbrella of fashion. But there is investment, funding and recognition now for the role of women in the industry and those who work with textiles, and there's a sort of comeback, if you like – another wave of textile feminism. I'm part of an EU project at the moment called SheMakes, which is funded by the EU to really raise the profile of female textile makers, designers, workers and entrepreneurs, and to start to address some of the inequity in the system by encouraging more outspokenness and more creativity.

Unfortunately, I do think we're still part of the supply chain, and a lot of the innovation that's going on in fashion is based on the textile designer who's probably working quite silently in the studio. But I've gone right back to the source of that, because it's fascinated me – it's connected to my own story as well. All the girls I've taught over the 26 years I've taught at Chelsea: who are they, where did they come from, and where did they go? All these textile designers – there are thousands of them. The reason I'm on Instagram is actually that I keep in touch with lots and lots of people after they've left, and there seem to be some common themes coming through, based on how they're raised as girls and how they're educated, and the psychological and emotional landscape that develops from being a female in the world, and in the creative world. So part of me is beginning to look at the education system as a place where, alongside textile design, we need to be teaching feminism, and – as well as climate issues – psychological wellbeing. I think we all need to step up and step out and show ourselves a little bit more if we want change to take place.

Grant: It's an interesting one, isn't it? I've been going to the New Designers exhibition, which is a two-part event at the Business Design Centre every July, with all the graduates leaving. Week one in particular is dominated by hundreds and hundreds of, basically, young female textile graduates. And you do wonder what they do with themselves afterwards, because the world can't need this many textile designers – and whether those skills are transferable. Are they transferable, in your experience, Becky?

Becky: It really depends on what course you've studied. I counted at one point that there are about 3,000 graduates every year in the UK coming out of textile courses. So no, the world probably doesn't need that many who are going to go and just design textiles for an industry. At UAL we definitely bring in a broader sense of what the skills are and could be, and the directions people could take. The bottom line is that the degree is such a solid, fundamental part of the educational journey of a designer. If it's taught well, and if it's opened up the ability to question and go and research, you can go and work in any creative field. Whether or not we're producing enough confident young women – women of whatever age, actually, because we have lots of mature students – who really have that ambition, that's another question. I really think more work needs to be done around women's sense of their place in the industry and how they can change things.

I'll give you an example, because I realise I'm being a bit fluffy. For a while I was coaching graduates on how they could bring sustainability into the companies they had gone to work for. This became a regular question to me: they'd leave, having done the sustainability component of the course, and they'd be, say, a knitwear designer in a company, and they'd be like, 'Becky, I can't forget all those conversations, all the passion we have for changing things. How can I make the change in this company I'm in?' And you can't make a sustainable brand, or make a transition happen, overnight. Actually, as a designer in the studio, you have no power at all to make any kind of change, really, other than doing your best with the product. But the advice I've given has ranged from doing research together once a month on a Friday, to keep up to date on low-impact materials; to joining any internal advisory boards or committees, to make sure their voice is heard on the change of direction the company might need to take; to getting involved in research projects and bringing in interns who might lead or support changes. I've mentored some of my graduates on how to bring change about from the inside, and in some cases I've helped them move on to jobs where they can be more impactful – maybe leaving textile making and production and moving into activism, or even policy work. The common thread in all of that is how confident the individual woman is about taking some bold steps forward.

Grant: I want to concentrate on your story again for a moment. I think I'm right in saying that you studied with the Dazed & Confused team when you were at Central Saint Martins, and you started making clothes for Björk and Kylie, I think, and you had the label we talked about in the intro, B. Earley, and a studio on Brick Lane. So I'm interested in why you decided to go from a career in the textile/fashion world – more the textile world, however you want to describe yourself – into teaching. Why did you start teaching?

Becky: God, Grant, when I asked you to send me the questions in advance and you said no, you'd rather have a natural conversation, I knew I was in trouble! You've read a lot of my social media posts, haven't you? No, I'm joking – I'm quite happy to talk about this. It was part of that journey I was talking about earlier, where I found being a little label with a studio, with all those overheads and all the pressure, really, really difficult. I had thrown myself into the fashion world. Katie Grand was on the BA course; I was dating the graphic designer of Dazed & Confused, which had just been set up. There were lots of parties and launches and events, and tons of opportunities to be creative and have a lot of fun, and that was all really exciting. And in a big way they helped me become known, by using my clothes, getting them worn by different people, and introducing me to the stylists who would then put my stuff on the covers. It was definitely a network, as we

know everything is. But I wasn't completely comfortable; I didn't feel right in my skin. I either felt like I had impostor syndrome, or that I was out of my depth, or that I just wasn't ready for that kind of career. So I took every chance that came along, and I ended up feeling pretty burnt out, I suppose.

But at the same time, luckily, my work also caught people's interest – when you get that kind of coverage you get approached to give lectures and talks – and I found myself, unexpectedly, in my happy place, which was teaching: talking to students about their ideas, supporting them, mentoring them. After a while of teaching at lots of different places, I stumbled across Chelsea and a really fabulous team there, and I can't describe it to you – it just feels like home when you find a group of people you really get on with and you share a vision. And the vision became about creating and supporting textile designers who would consider the sustainability of their work.

Grant: As you've alluded to – but I think it's worth just going back on that, because some of your practice was already dealing with those issues. In the late '90s you did the exhaust-printed recycled textiles, which won a bunch of awards. Can you explain what that series was?

Becky: Yeah. Like I said, I had always worked with polyester, and I carried on. As I began teaching, I became aware of the impacts of the different materials and dyes. Up until that point that had never been mentioned on my BA or my MA, but when I started teaching at Chelsea I became aware of how different a cotton would be to a polyester in terms of its chemical, water and energy footprint, for example. So I had already been working with polyester, and I had in my hands the ability to make something that was quite low-impact, because when you do a heat transfer print, for example, you use a lot less water, chemicals and energy than you would doing a traditional print. I had that on my side, but I also had the opportunity to use a recycled PET polyester made from plastic bottles – and honestly, this was '99, so the fact that it's still being touted as a new invention is hilarious. I did the first set of scarves, hand-printed with my technique, and what happened was the recycled polyester shrank slightly and went softer and smoother, and I created something that felt almost like a merino wool scarf rather than a polyester one. So I stumbled across a really aesthetically pleasing product that looked original, but was also made from recycled polyester. And again, it's that instinct thing: I felt like this was a really interesting space. It was stimulating; it was generating a lot of attention and feedback. And I realised that if I kept looking for low-impact solutions and testing them out with my hands, I could bring things into the shops that would really start to raise awareness of the impacts of the industry. And that's what happened.

Grant: Looking at your research, Becky, there's this feeling that we already have enough materials, and what we actually need to do is create a new system. After the years of work you've put into this, do you have a sense of what that system might look like? I watched a conference you shared on YouTube recently – the launch of World Circular Textiles Day in 2020 – and there was a three-phase model being presented.

Becky: Yeah, yeah. So, okay – systems design. From farming and building, to textile design, to fashion design, to teaching, to research, to the inevitable systems design. You arrive at a point where you understand that the materials you're working with need to be carefully considered, but that they are actually part of a system. And as a designer – look, who knows what change I can bring about – but it is such an interesting question

and such a collaborative space that it's really beguiling. You have to be able to see the material as part of all kinds of phases of the life cycle and all kinds of production.

So that phase model for World Circular Textiles Day is about what it would look like to change the textile industry to create completely circular paths for all textiles. Polyester needs to go down a different route from cotton, so the processing plants are different – significantly different. Worn Again, who are partners on that project, also separate out polyester and cotton, which is the most common blend in our clothes – also important, but another kind of plant. So it's about showing governments and big business the kind of development that's needed to send materials into localised hubs, and then have those hubs trade with each other, so that materials go into specified routes but we still have a full material palette available to us from region to region. Right now that needs technical development, but it also needs economic plans, and it's about these logistical flows.

By working with somebody like Worn Again, you can see that a technology company has to think in phases of development and then pitch to get funding for what they're envisioning, which could be 30 years away. Textile designers never think like that. But what we can bring is material knowledge, and knowledge of the user, of clothing, of trends and habits and behaviours, and work alongside these partners to see where the system blockages are and help to break them. For example: will people get stuff out of their wardrobe and bring it back into a recycling process? What have you got in your wardrobe? You've kept your T-shirt since college, so you're not having that – the cotton industry is crying out for your DM-boot T-shirt! The reality is that – not you, actually, Grant – but lots of people have a wardrobe stuffed with clothes they don't wear. What they wanted at the time was a quick hit and to make an impression, and then they've either outgrown it style-wise or outgrown it body-wise, let's say. That stuff would be much better flowing in systems. Re-wear it, regift it, repair it, remake it – do all those things first – but ultimately the materials can be regenerated. So that's what it's about now. My work is really about having these bigger, more visionary conversations with all kinds of stakeholders, to see how the future could look.

Grant: So you're a systems designer now? Is that how you describe yourself?

Becky: No, I haven't changed my title. I think that as a designer you can probably move between these areas quite easily. So it's about the team I build – and of course it's not just my team; there are lots of brilliant people collaborating with us. One of our researchers' expertise is complex collaboration – complex design collaboration – and she's in the team not as a maker. She has great materials knowledge, but she understands materials from a communications and partnering point of view, and that's brilliant. Everywhere I go, the science partners are arguing with the design partners about what needs to happen, and her job is to come in and get them to work together nicely.

Grant: One of the things that was alluded to in that conference on a couple of occasions, but never really dwelt on, was the friction between sustainability and circularity. Now, I'm a journalist – I love a bit of friction. What are those issues?

Becky: Oh well, I can iron that out for you with a big fat iron, in that case! Again, it's the way it's oversimplified and reported, I suppose. Sustainability is about the long-term viability of any industry – of our life on the planet. Circularity is a way of getting there.

Grant: Only one way?

Becky: Only one way. Probably since that launch, the WRAP Textiles 2030 report has come out, and that made it clear that, by their calculations, the UK could halve its carbon emissions from textiles by 2030, and circularity could provide half of that 50%. So 26% of the UK's [textile] carbon emissions could be eradicated if we had more circularity. That means using recycled fibres, making clothes last longer, and then making sure those things are recycled at the end of life. So circularity is a solution and a great tool. The friction is that it's getting all the airspace and all the funding, and the other elements of sustainability – labour, for example, ethical labour – are getting left behind.

Grant: So in other words, circularity isn't a panacea for all the world's ills.

Becky: Not at all, not at all. But what we're finding is that it has brought a great amount of acceleration to action. By presenting this solution to people – this opportunity to brands, let's say – for the first time we've seen them really ramp up their efforts and get more of their company involved, because circularity is about the supply chain. You can't just do it with designers; you've got to bring the whole team in, and then suddenly the whole company is talking about circularity. And then, almost like a Trojan horse, you can bring in the other sustainability issues. That's the way I see it, anyway.

Grant: That's an interesting thing, Becky – it was on my list of questions to ask you, because the way you work interests me. You're happy to collaborate with global brands. In other words, you aren't looking to upend everything; you seem to want to work within the system.

Becky: Yeah. It is a difficult place to work as a researcher, because of course we are impartial, and we know that from a climate change point of view the big brands are the big emitters. But it's never made sense to me not to work with them. If they are the big emitters, what do you do? Create a campaign and say 'stop shopping there'? Yes, that is one way, but that's not my way, because I'm a trained designer. So my way was to go in and see what they were doing and see if I could help. And I very quickly worked out that I would have a better, more positive impact on the planet if, rather than making my own recycled polyester scarves, I went and looked at a product that was produced in the millions and helped the brand reduce the impact there. Those conversations, those projects inside the brands, are actually really emotionally tricky, because you know that the change they can make at that time is incremental. But you go in there with the hope of being inspiring and positive and energised in such a way that you'll plant the seeds of greater change. And that hasn't always worked. But I do think change from the inside and the outside, and understanding the benefits of both, is probably what I'd rest on in the end.

Grant: So global capitalism and circularity, and that need for growth – they can be bedfellows?

Becky: Oh, now you've just twisted my words there! No. We do need – dare I say it – degrowth would be a good thing in terms of our overproduction and overconsumption. Do we need to make less stuff? Yes. Do we need to consume less stuff and have less stuff knocking around our homes? Yes. How do we do that without creating economic downturns? Because no one in a company can take a decision that will create economic harm, financial harm – that's not the way change happens. Is there an opportunity for

brands to flatline their resource use? Yes – we’ve seen brands do that, and do it really well. How do you do that in fashion and textiles? You look at the emotional needs that can be met with non-material offers – in other words, services that give people the hit they get from fashion, or the pleasure or satisfaction they get from clothes, without always giving them new clothes.

Grant: So rental?

Becky: Yes. Repair, yes. Actually, there’s a whole load of alternative ways of having fashion that I don’t think we’ve even begun to understand or invent yet.

Grant: Interesting. We’ve mentioned your kids – is their attitude to clothes different to yours at their age, I wonder? Do they have a grip on these issues?

Becky: Oh yeah, they’re funny. I am using them as a little experiment every now and then.

Grant: Do they know this?

Becky: Yeah, of course – I have to ask them. I’m no longer really allowed to post about them on Instagram, which is a great shame, because they’re just entering the most interesting phase. They’re 14 and 16, and the cycles they go through are fascinating. We spend a lot of time talking about climate change; they know what I do for a living; we’ve watched all the David Attenborough programmes. I’m absolutely doing my best to make them well-informed, well-rounded consumers. But they are like every other teenager: they want to look good, to feel good, to be part of the gang, to impress the boys or the girls. You can’t help it. They’re London kids – I can’t remove them from the culture. I’ve got them into second-hand stuff, basically, especially my son, because he loves sportswear. I was just like, ‘Oh my God, on Depop or vintage you could get so much more for your money, and I bet you could get really good-quality stuff that’s hardly been worn. Why don’t you look?’ And that was it – he was in. So it’s a mix, really: the occasional new thing, but a lot of dropping parcels off at garages and little lockers. It works very differently these days, because it’s all on their phones, whereas I was getting the bus into Bath to go to the antique market to buy vintage black lace dresses to dress like Madonna or something. It was a very different process to go and dress up as a teenager back in the 18th century!

Grant: Has the pandemic changed attitudes, I wonder? Being stuck at home, relying on shopping exclusively over the internet, that kind of thing?

Becky: I’ve been looking at that a little bit, and I would love more research to come out – I think it’s definitely on its way. But yes, momentarily people’s habits did change, but apparently they very quickly went back to buying the same volumes – and of course switched to loungewear. The need to consume, the need for the dopamine hit, is what drives a lot of people. They literally want the chemical response, the pleasure of buying. So it became even more accessible and even more needed. But people stopped buying dressing-up clothes and high heels and switched to loungewear and trainers and gym kit. So the pandemic was an amazing moment to study human behaviour, because of the argument that we could be told we need to change our fashion habits and we would be able to. For a long time we’ve known that we should change our habits, but we just aren’t able to, because we’re addicted to the pleasure that fashion and shopping give us.

Grant: Well, there's that, but also we're confronted with it the whole time, aren't we? It's forced down our throats. It's the same with the meat industry: we know that eating meat is not necessarily great for the environment, but we continue to do it, and that's because we're getting advertising and deals hurled at us the whole time, and expensive ad agencies telling us what we should do and think.

Becky: You're absolutely right. It is the huge growth of ads coming into the kids' iPhones that contributes to their desires, for sure. Maybe that's accelerating it, maybe that's what's intensifying it. But it is very much there in the playground, as it were.

Grant: We're coming to the end of our time, and there are a couple more things I want to quickly ask you about. One of them is kind of financial, because one of the things I was intrigued by on your website is the number of times the letters E and U crop up. I'm wondering if Brexit has had an effect on the kind of research that you do.

Becky: Gosh, Grant, I thought you were going to ask me for access to my bank balance then!

Grant: Well, if you're happy to give me that, Becky, that's absolutely fine!

Becky: I knew it was going to be a tough time. I set up the Centre for Circular Design just over five years ago, and at that point we hadn't had Brexit, we hadn't had a pandemic, so I wrote a five-year plan that I thought was entirely reasonable – and it's proved to be a very, very difficult, very tricky five years. The funding, the collaborations, the ideas we've explored with EU funding have been just brilliant. We've really been able to get closer to new industry solutions – and they aren't that radical, if you look at, say, just the material reprocessing. It's the collaboration, the new areas that have been opened up, because you can get Swedish scientists working with brands from Finland, supported by academics from London. The sharing of expertise, the energy and the commitment, and then the actions that follow, are incredibly powerful. The government has injected some funding. The problem is that with circularity you need this bigger network. It's all very well asking how we can be circular within the UK, and we will get so far, but at a certain point we really need those broader networks.

Grant: Yeah. Environmentalism never really came into that debate, let's face it, did it?

Becky: No.

Grant: Our time is up, really, Becky – I ought to let you go and do some proper work. Thanks very much for your time. The final question, really, is: what can we expect from you next?

Becky: I suppose, if I have enough energy to go ahead after all of this, my questions are becoming much more about the social sciences and maybe a little less about the technical developments. I can kind of understand now what's needed technically, and it's very much about big business and investment, and plants that need to be built. I still think our greatest change will come from understanding ourselves as individuals, and our ability to act and to change and to create new futures together. So for me, I'm interested in gender equity issues, in psychology – the psychology of consumption – and the importance of creativity in our lives. I would like to look at textiles and fashion through the lens of social research questions, and then look back into the circular future and draw those things together. Obviously these are new ideas, so I can't articulate

them any more clearly, other than to say that for me it's about people, and not just about materials. That's what it's about: people.

Grant: Very good. That was a wonderful way to finish. Becky, thank you so much for your time.

Becky: Thank you for having me, Grant.

Grant: And to discover more about Becky, go to beckyearley.com. As ever, there are images from the interview on our Instagram page, [@materialmatters.design](https://www.instagram.com/materialmatters.design).