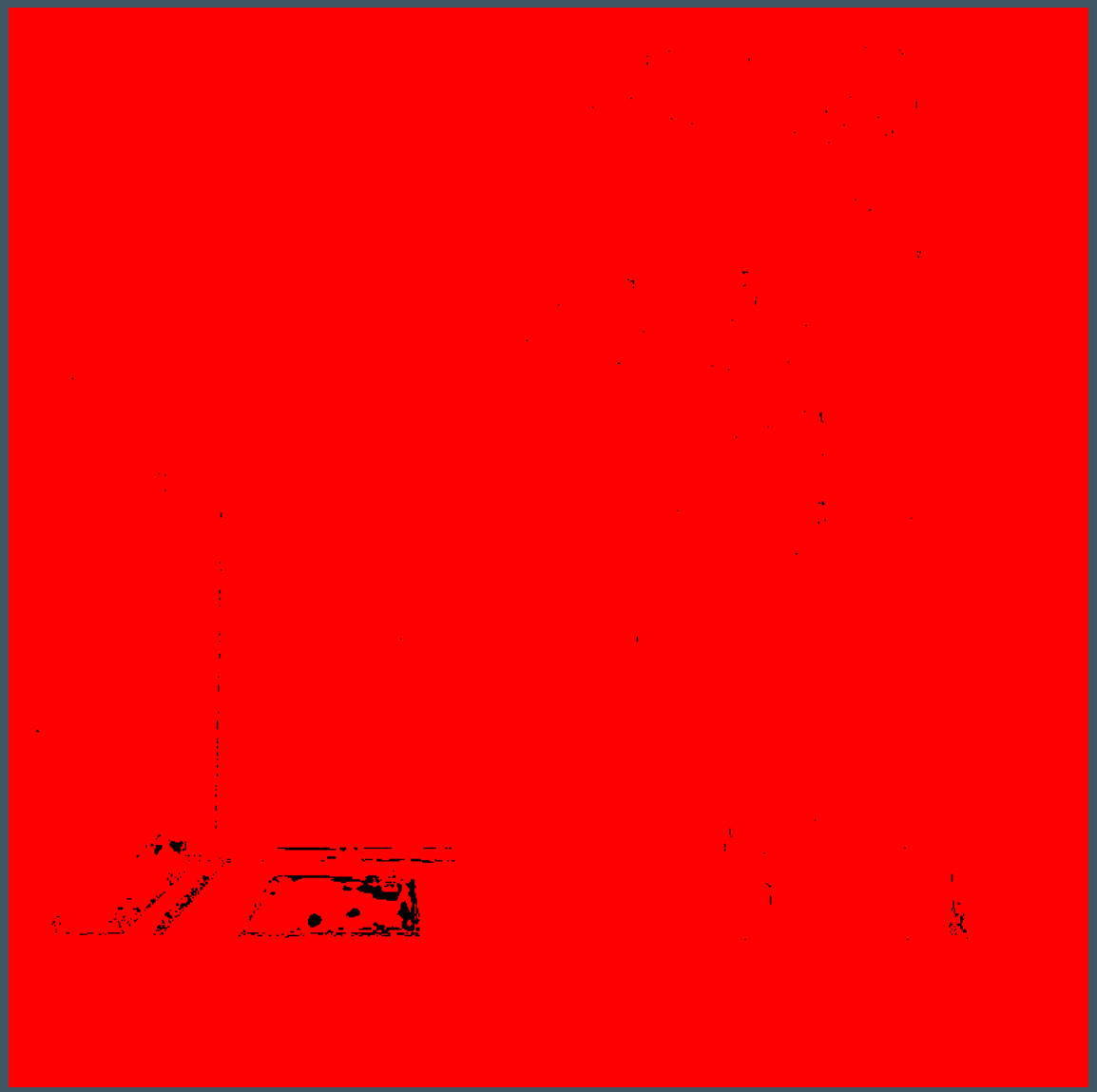

Radical Change: Fall in Love with the Problem that Needs Solving, Not the Product

A conversation between
Óscar Velázquez & Karla Paniagua

A dialogue about three core aspects of changing design culture—social impact, the circular economy, and education—and a call for designers to identify problems instead of obsessing about a product. An overview of social entrepreneurship projects in Mexico and around the world that are meeting social and environmental challenges.

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K.P. **I suggest we discuss three wide-ranging topics: social impact, the circular economy, and education in the broadest sense of the word. Firstly, though, tell me about your professional background and career.**

O.V. I studied Development Economics at Utrecht University in the Netherlands, and I'm mainly interested in how to create socially beneficial economic models. At some point I developed environmental awareness and focused on sustainability, having discovered technology and the potential for making products. Then I was inspired by entrepreneurship and I realized that business could also make a positive impact. This led me to innovation and the understanding that this was how to effect change, create products and services, and produce things that make a greater impact. Most recently I've found out the importance of design.

My work is very focused on researching and producing development models that can make a social, economic, and environmental impact, and that can trigger innovation. After completing my master's degree I was hired by a business incubator in the Netherlands, where I was fortunate to be surrounded by numerous advisors, mentors, and, eventually, investors, who helped me to develop my ideas. I grasped the importance of entrepreneurship and how to do business that makes an impact.

Afterwards I set up a local development consultancy to provide services for local governments and cooperatives. Following that, I worked as Country Manager for Founder Institute—the world's largest incubator—a position I held for a year and which gave me plenty of perspective on processes and tools used in incubation and entrepreneurship.

I returned to Mexico in 2012 after spending eleven years abroad. I joined a project-development consultancy that turned into an incubator and is now an accelerator called Smart Impact with a portfolio of 120 high-impact companies it has invested in. It specializes in the circular economy and hardware. Our need for prototyping led to FabLab Impact, an innovation laboratory I founded in Mexico City's Historic Center, located in a building adapted with tools and technology—a little like a coworking site with a factory for innovators keen to transform their environments. We've trained 11,500 people there since the end of 2015. We work with companies on every scale, helping them to design, improve, and produce their products, which range from software and hardware to business strategy and design.

We also created Fab City, a project that has brought together a group of 28 people designing urban innovations.

Tell us a little about the circular economy. What's your take on it?

For me, the circular economy is a type of production that implies a radical change from the traditional (vertical) form of production and consumption. This means we cannot merely worry about production issues while ignoring where objects or materials are going to end up. If we're talking about production, we must change how we design our products and reduce our ecological footprint to zero. And in terms of consumption, the idea is to change how we consume; how we buy, use, and discard things. I think that, eventually, this can help to reduce global warming, cut emissions, and give environments a chance to thrive. Human beings are capable of consuming vast amounts, depleting resources, and causing our current systems to break down.

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The circular economy can then transcend the discourse, regardless of whether we're talking about households or communities, regions or countries. However, this is neither simple nor glamorous. I understand that it's much more than just about recycling. What kind of obstacles do you encounter when you're trying to raise awareness among potential beneficiaries so that they can apply the principles of the circular economy? How do you manage to get them on the same page?

One thing I've learned is that you must be focused from the outset. When you're proposing or sizing up a solution, you must realize that you're working to meet a need. It's a very binary situation, in the sense that you can either do what you want, or what's needed. A significant part of the culture of production, creation, and design has been centered on what people have wanted to do, instead of what is required. In that sense, our solutions must be targeted at increasing society's resilience or transcendence, and ensuring that the human race can continue to survive on this planet. Design must be the foundation for addressing existing problems and needs, ensuring that these are responsible in how they produce.

To sum this up in one sentence, we might ask ourselves: "How can we design products that people love?" I design for use. I want people to become familiar with, and love, what I'm designing. I think about how I can change patterns of behavior with products and services that people enjoy using. It doesn't have to be ugly or difficult to use just because it's a social or environmental project.

Could you give me some examples or counterexamples that illustrate this idea? These could be national or international projects or organizations where you've seen that the organization or project leaders have succeeded (or failed) in this sense.

Let's start with the example of Uber. There was a very definite social need, related to issues of insecurity and poor service quality. There was a need for a better service because the existing options were terrible. Corruption was also rife in the transport sector: minimum fares were being set too high, taximeters tampered with, and extortionate fares charged at night and by tourist taxi services. This meant that there were various unmet needs; a culture of mafias and corrupt practices, and so on. The service's design was not scalable.

Uber radically changed how the ecosystem works by scaling its level of services without even needing a change in public policy. It met a particular need, using omnipresent technology that didn't require a registration process while avoiding corruption and the need for licenses. The change was drastic and was achieved in just a few years.

Electric scooters such as Grin, Lime, and Bird also illustrate how sustainable mobility is developing. Sometimes you need to bend the political rules. If you wait for the mayor to approve a public policy to introduce bicycles, scooters, etc., it's not going to happen. This type of project comes along, attracts investments, and introduces an innovation. Thanks to this green transport technology that produces lower emissions during usage, though not necessarily in the production, people are encouraged to move around more sustainably. These are two high-impact projects with very strong growth strategies: Grin (a Mexican company) and Lime (from the U.S.) are electric scooter services offering highly efficient options for sustainable mobility, and are expanding rapidly.

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Can you tell us about any other instructive, inspiring examples?

The issue of the circular economy is more systemic and now a part of public policy and private manufacturing strategies. For example, some companies—such as Adidas—are now using better raw materials that have been recycled to produce their shoes by reusing fishermen's nets or PET. Instead of producing many of these materials, they're incorporating resources previously discarded as trash, at the same time as upscaling to create a new product. They're not producing new plastic but using recycled plastic. Another example is Nintendo

and its Labo initiative that uses cardboard kits with biodegradable paint instead of plastic cases; this is an important waste-reduction strategy because consoles end up being thrown away.

Interface, the world's largest carpet manufacturer, provides another example of a huge company with a long track record of sustainability. One day the CEO realized the production process was too polluting and decided that the company had to change its materials and reach a zero-emissions target by 2020. It meant a very significant shift when the company began to analyze where they could generate the supply of materials instead of producing them. They discovered a way of using recycled material and fishing nets recovered from the sea; the nylon from these nets was transformed and became the material used for the carpets.

An example of a Mexican startup is Someone Somewhere, an initiative involving various communities working on the principle of traceability for clothes production. There is also Transition Network, a movement of communities that are reimagining cities and the world in general, based on the experience of local living and the circular economy. And Fab City, which I mentioned before, is a group of twenty-eight cities around the world creating circular inventions, looking for ways to produce strategies or processes to make circular and resilient cities. Another example is Open Ecology, which produces open-source machines using recycled materials. Finally, E-waste Solutions is a Mexican store that collects and upscales electronic waste—we should be aware that Mexico is one of the largest per capita producers of e-waste in Latin America, so we need many more such startups.

How can students take the first step toward making a contribution to the creative economy, at any level?

I think that students—or anyone else for that matter—must begin by finding a need. You should never fall in love with a product, only with the problem that needs solving. Then I recommend understanding the meaning of open innovation, as well as exploring online archives, which are global and enable you to create solutions to specific problems.

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There's no need for students to worry about the overall issue of recycling, for example. They'll never be able to resolve it. But they can find solutions from the user perspective—a specific problem that can affect a particular individual. Once you've tried it and made improvements, then you can scale up.

How do you work from an educational perspective?

Our model involves four processes: discovering, prototyping, incubating, and accelerating, which includes an investment fund. In the exploratory phase we run Makeathons, Hackathons, presentations, events, as well as partnerships to detect needs and devise solutions.

If we spot a good idea and a good team, we move onto the incubation phase: sometimes we invest money to produce prototypes, or else we bring in an investment fund or a sponsor. At a third stage, if we see a functioning team and product development, we put it into a high-impact incubator. Then we invest between US$25,000 and $50,000 with a very specific focus on something that is already being tested in order to reach the proof-of-concept and then roll-out phase. If everything goes according to plan, we put them in the accelerator and create connections in order to optimize the final product and to ensure it's competitive.

Where do projects usually fail? What can we learn from that?

Projects usually go wrong in one of three ways: firstly, in defining the problem; secondly, in the team, since you need talent in a team; and thirdly, in the actual concept of the project or the validation of the model. As you're developing ideas, or certain aspects of them, you must run tests to make sure that those aspects of your product are real.

You've clearly described the crux of problem-solving in general: the need to work on a problem that is actually a problem. To wrap up, what tips can you give students, researchers, and others involved in the creative industry ecosystem?

Whatever you're doing, it's crucial to research and carry out a short benchmarking or comparative exercise to see whether what you're doing already exists or not. It's essential to know your competition, as well as substitute or similar designs. Secondly, it's very important to keep track of results over time and the costs involved. In terms of results, it's vital to continue executing a project with a tight control on schedules and costs, working to ensure that you're making the most of your time and getting a reward for your efforts. ■