

REGENERATIVE POWERS

“(...) The ability to self-organize is the strongest form of systemic resilience. A system that can evolve can survive almost any change, by changing itself.”

(Meadows, 2015, p. 159)

Maria Carolina Garcia¹
Adriana Yumi Sato Duarte²

1 Carol Garcia, PhD, is a professor at the Postgraduate Program in Architecture, Urbanism and Design at Centro Universitário Belas Artes de São Paulo. Specialist in circular economy and participatory design, she is the author of *Errant Images: ambiguity, resistance and fashion culture*. ORCID 0000-0002-0393-0612.

2 Adriana Yumi Sato Duarte, PhD, is a professor and coordinator of the Fashion Design course at the Nossa Senhora do Patrocínio University Center (CEUNSP). ORCID 0000-0003-4441-2691.

A few months before the COVID-19 pandemic brought everyday life to an abrupt halt, a group of surface designers from São Paulo and Rio de Janeiro found common ground based on their interest in sustainable practices, especially botanical printing. This led to exchanges of ideas and techniques, shared via social networks and face-to-face meetings on different occasions. The discussion around the vital energy of nature and the effect of plants on human health, traditionally developed by South American ancestral peoples and previously studied by the Uruguayan alchemist Francisco Piria (1847–1933)³, added symbolic significance to the informal conversations about regional artisanal dyeing and eco-printing processes. As the community grew, the group began to organize a joint exhibition to strengthen their ties and expand the collaborative proposal. Precisely at this time, the progression of the pandemic in Brazil affected artistic expressions and small fashion businesses, as events had to be postponed to comply with the social isolation protocol. As a result, WhatsApp messages had to be transferred to Zoom meetings. As the period of isolation extended, due to the lack of the usual raw materials available, some members started using plants and flowers from their own backyard, translating their findings into digital formats so that they could continue to share them with others.

During quarantine, the simplicity and application of techniques that require no special skills or industrial equipment and the reuse of available materials for applications other than their original use became an unavoidable option for small entrepreneurs in the creative industries, who inventoried unusual stocks, including rags, paper, plants, and other items that could be reused. These people, without realizing it, adopted circular economy practices, using household materials, some of which could even be considered waste—such as dry leaves, fallen flower petals, seeds, and by-products of food preparation. The circular economy, in fact, is based on regenerative principles of natural and social capital, which focus on the development of practices that allow reuse, repurposing and longevity in the wise use of materials whose scarcity is pressing. This model “represents a systemic shift that builds long-term resilience, generates business and economic opportunities, and provides environmental and societal benefits”⁴ (Ellen McArthur Foundation, 2017).

The practices of the aforementioned group began to be disseminated in online workshops in the face of growing social isolation and are an interesting example of how the circular economy can be applied beyond the reuse of materials per se, but also in reflexive options based on sharing and the application of technology as an adjuvant. The different ex-

3 Piria inherited ancestral knowledge dating back to the Knights Templar of a Jesuit monk and has devoted her entire life to the study of Latin American biodiversity, working with local herbs and flowers under this alchemical vision.

4 Different schools of thought have synthesized this vision since World War II, including the performance economy approach as presented by Walter Stahel; the “cradle-to-cradle” design philosophy by William McDonough and Michael Braungart; the biomimicry approach organized by Janine Benyus; industrial ecology as described by Reid Lifset and Thomas Graedel; natural capitalism as understood by Amory and Hunter Lovins and Paul Hawken; and the “blue economy” approach articulated by Gunter Pauli.

pressions presented in this dossier amplify this belief on various fronts, which bring together education, popular wisdom, and the understanding of an economy concerned with natural resources, human health, and responsible innovation using new business models and manufacturing processes with less dependence on virgin raw materials, known as the circular economy. In the circular economy model, materials and end products are not discarded; a sustainable, restorative, and regenerative cycle is built in principle, from the design of products to their post-consumer disposal (Ellen McArthur Foundation, 2017).

Three strands guide the selection of articles: rediscovering the power of waste and refuse, reviewing teaching-learning practices in the face of blended models, and taking a different look at the idea of collaboration rather than competitiveness, reclaiming these principles as important inputs for academic discussions. The Colombian researcher Arturo Escobar (2018, p.2), in his work *Designs for the Pluriverse*, argues that the whole concept of design can be rethought based on participatory, ethnographic, and collaborative proposals. If the initial step to migrate from a linear logic to a circular model in the fashion business lies in analyzing opportunities to create better processes, products, and services, broadening value propositions, capturing unperceived or even lost values presents itself as a path in which ancestral wisdom—whether from native peoples, family heritage, or migration between cultures—becomes an important reference. In this sense, in the article *Proposal for fabrication of knitted upper using the circular economy model*, Adriana Duarte and Regina Aparecida Sanches discuss how the reuse of textile waste enables the production of seamless knitted uppers, made on rectilinear knitting machines, leading to a transformation in the understanding of waste as a raw material in the industrial sphere. Following this logic, but focused on artisanal practices from the Santa Catarina tradition, the group of researchers Monica Vieira de Alencar, Lucas da Rosa, Luciana Dornbusch Lopes, and Dulce Maria Holanda Maciel addressed this principle from the perspective of manual making, presenting the path of bobbin lace in Florianópolis in *Bobbin lace and upcycling: an innovation proposal*.

We have therefore moved on from natural capital to social capital, in which education plays a leading role as a foundation for restoring these values. In *The challenges and curricular possibilities of the Fashion Design Course at the Federal University of Ceará*, in front of Covid-19, Cyntia Tavares Marques de Queiroz, Emanuelle Kelly Silva, and Francisca Nogueira Mendes analyze how this role had to be reinvented during the pandemic, with action research, implemented and tested within this context, whose evolutions extracted from the daily experience of teaching-learning processes show transformations. On the other side of the globe, considering the universality of this challenge, the Turkish researcher Şakir Özüdoğru presents how the Department of Textile and Fashion Design of the Faculty of Architecture and Design at Eskişehir Technical University in Turkey reacted to the implementation of the blended learning model, reinventing practices using technology, in the article *Call for*

rethinking on fashion design education in the era of post-pandemic: Insights from Turkey.

School has had to reinvent itself along with society, as has informal education. Vanilsson Luís de Melo Coimbra recorded this fact in his article *The shared experience and participatory research in fashion photography*, in which he explains how the effect of the act of sharing works as a springboard for spiral collaborative learning, which recycles itself one step further than the previous one. The author shows how structures hidden beneath the surface of collective photographic experience can be identified and connected to the events around us, enabling the joint construction of more lasting and systematic solutions via exchange, rather than isolated reactions to a momentary event with little systemic impact. This same principle guides the ethnographic research conducted by Simone Grace de Barros and Manoel Alexandre Ferreira Silva on the “rolêzinhos” and “pós-rolê” in Recife and Olinda in February 2020, when the pandemic was about to break out. Both discuss the mechanisms of identity construction in the article *Body and Aesthetics: immersion in a Maloka Passinho stroll in Recife*. This social weaving, learning from nonschool spaces, proves the existence of multilayered systems in operation. Therefore, the observation and discussion of values in circulation that promote regenerative intent, collective exercise of empathy, and proof that waste for some is definitely power for others, material and symbolic, face-to-face and virtual, is necessary.

Referências:

ELLEN MACARTHUR FOUNDATION. **A new textiles economy: Redesigning fashion's future.** 2017. Disponível em: <<http://www.ellenmacarthurfoundation.org/publications>>. Acesso em: 25 ago 2021.

ELLEN MACARTHUR FOUNDATION . **Economia Circular.** 2017. Disponível em: <https://archive.ellenmacarthurfoundation.org/pt/economia-circular/conceito>. Acesso em: 23 jan 2022.

ESCOBAR, Arturo. **Designs for the Pluriverse:** Radical Interdependence, Autonomy, and the Making of Worlds. 2018. Durham: Duke UP.

MEADOWS, Donella H., WRIGHT, Diana. **Thinking in Systems:** a Primer. 2015. White River Junction: Chelsea Green Publishing.