authoritarian in nature. This is why he speaks about a need to "stop the machine" (p. 308). In questioning whether we should accept the existence of computers, in a way, he appears to suggest that the problem would be solved if we got rid of computers. By doing so, it could be argued that Félix Tréguer falls into the trap of some kind of reverse technological solutionism (Morozov 2014). His provocative suggestion, however, should rather be understood as a call to reflect, and to make us look once more at technology itself, not only its uses or its controversies, through a moral and political lens.

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## Julia Watson

Lo-TEK. Design by Radical Indigenism, Köln, Taschen, 2019, pp. 417

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The wetlands of my home town Bogotá (or *humedales* as they are called in Spanish) are one of the most biodiverse ecosystems of the city and its surrounding plateau. Today they are at the center of many development pressures and controversies, as well as numerous conservation efforts. From politicians, urbanists, designers, to activists, almost everybody has an opinion about how these patches of "nature" should be either preserved or dried out in the name of progress. However, few have said about how we could work with the wetlands to thrive together. In contrast, research efforts in the recent decades have uncovered that these wetlands are not just the outcomes of the particular natural ecological conditions of the area,

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but importantly that their existence is also a product of the intentional stewardship – and later abandonment – of a complex agro-hydraulic land-scape of *camellones* (in English: ridges) tended by local Indigenous groups over millennia (Rodríguez Gallo 2019). This system supported a highly diverse, resilient and rich way of life until the Spanish conquest and further colonization erased, through genocide and ontological occupation of territories and ways of living, the very practices and knowledge that maintained that landscape. All we have left are traces of that landscape as seen from old aerial photographs and from the many indigenous water-related words inscribed in the topography of the area (Rodríguez Gallo 2019).

Julia Watson's Lo-TEK: Design by Radical Indigenism is a highly visual, detailed compilation of more than 100 similarly sophisticated indigenous landscapes and their related infrastructures from around the world. Unlike the vestiges of the ancient *camellones* in the plateau of Bogotá, all examples catalogued in the book continue to support indigenous peoples' everyday lives today. Through their tending and maintenance of these infrastructures, indigenous people contribute to the larger wellbeing of the ecosystems themselves. In the book, this wide variety of human-nature symbiotic infrastructures is reframed as Lo-TEK, that is "sustainable, adaptable, and resilient technologies that are borne out of necessity (p. 21)"; placed in contrast to what are often referred as Lo-Tech, that is "simple, unsophisticated, uncomplicated and primitive technology" (p. 20). Her book has the explicit aim to create a design movement that can help us – though there is very limited explanation about who "us" might be – rebuild an understanding of both indigenous philosophy and vernacular architecture, which as she argues, already generate sustainable climate-resilient infrastructures. To aid in this movement building task, in the book, the author proposes various resources organized in three parts.

First, a very broad outline for a new mythology of technology partly inspired by the methodology of radical indigenism as defined by Eva Maria Garroutte (2018) that is combined with a handful of other eclectic concepts such as cultural keystone species. The second part contains a basic lexicon that is assembled and then identified, and highlighted throughout the examples in the next section of the book. The last section is the compendium of examples proper, concretizing some of the possibilities of Lo-TEK by describing, in accessible terms, how for example the ingenious boma acacia corrals of the Massai, the polyculture milpa forest gardens of the Mayans or the wastewater treatment system developed by the Bengalese in Kolkata emerged and are kept alive. The exemplars in this section are divided by the particular ecosystem within which they work, namely: mountains, forests, deserts, and wetlands. The exemplars are fleshed out through various strategies – for example, descriptive narratives that locate these technologies within their larger cultural context, the sourcing and curating of a large body of photographs, and the creation of a series of compelling architectonic and visualizing devices that document particular 150 Tecnoscienza – 12 (1)

details of their configurations. I consider this section the most vital contribution of the book, and would hope they continue developing. One possible direction for further development is to address the critical need to find non-verbal forms to communicate out not only technical details, but also the relations, ontologies and the forms of governance that make these configurations of people, place, non-humans and stories, possible (see: Haraway 2013). These aspects remain under addressed in the analysis and visual representations in the book. However, there are interesting seeds found in the book to further the "drawing things together" that Latour (2008) once invited designers to explore further. I also found that the lexicon section would merit expansion. More than providing pointers to further reading and examples hinting to how these terms might manifest, it could offer more in-depth explanations and explicit links to think through and communicate collectively; so that important concepts such as "radical indigenism" can be actually applied and mobilized to build the movement.

Many of the issues raised by the book will be familiar to STS scholars, although STS scholarship is not the book's main audiences. The author's narrative and each of the examples in the compendium, draws our attention to the socio-technical character of all technology and the preeminence of infrastructure in contemporary understanding of the world (Star 1999), something discussed extensively in STS, albeit from a different angle. Also, its continuous attempts to reframe what counts as technology and innovation will resonate – and contrast – with feminist STS research agendas that invite us to look critically at innovation (see: e.g., Suchman and Libby 2000) by paying close attention to forms of care (Puig de la Bellacasa 2017), repair and maintenance without privileging preoccupations with the "new".

In general, the book offers an accessible and important testimony of the complex, plural and rich knowledge and practice systems that exist today. I, however, remain curious to learn more about how indigenous communities themselves (and not only unidentified us) could also use these resources to continue repairing and tending to their worlds, and reconfiguring their own ecological knowledge. It seems to me that their ability to mobilize their own knowledge, and not the fact that we (designers or STS scholars) are able to do so, is particularly urgent. As the compilation makes it also painfully obvious, most of these Lo-TEK are under enormous encroaching pressures, putting them at risk of following the steps of the *camellones*, which once supported a unique way of life in the place I call home.

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