



Review of Rafael Ziegler's (2020). *Innovation, Ethics and Our Common Futures: A Collaborative Philosophy*. Cheltenham, UK: Edward Elgar Publishing.

In his book "Innovation, Ethics and Our Common Futures: A Collaborative Philosophy," Rafael Ziegler sets out to critically assess the notion of innovation as a driving force in modern-day (Western) economies. He asserts that 'innovation as technological novelty for commercial use is driving us deeper in unsustainability' (p. v), and embarks on a philosophical journey to scrutinize the concept of innovation and its role in modern economies. In doing so, Ziegler aims to develop a sufficientarian notion of innovation, calling to embrace a broad, collaborative understanding of innovation based on pluralistic modes of provision focusing not only on

markets and increasing financial welfare, but instead on nature-respecting sufficientarian principles of enough is enough – 'within justice of a minimum threshold and of respect for upper limits to resource use' (p. 18).

For lack of an existing 'philosophy of innovation,' Ziegler interweaves arts and ideas from the social sciences and economics into a philosophy of a nature-respecting justice based on sufficiency, and the role of innovation therein. The book is truly interdisciplinary, taking from various philosophical traditions to build up towards what Ziegler calls 'enough innovation' (p. 146).

'Innovation, Ethics and Our Common Future' is not an easy read, at least not if one is less familiar with the philosophical discourses the author builds upon. Although Ziegler succeeds in establishing a red thread throughout the book through repeated references to the arts of Greek mythology, literature, and Picasso's *Guernica*, the detailed disquisition of, for instance, Rawls' theory of justice in chapter 3, although important for the argument, is rather thick and complex. This should not be seen as a critique of the book, for its argument is well-grounded in relevant literatures. Rather, as a social scientist with teaching obligations at a faculty of spatial planning, I think the book has a lot of merits for my students, but fear it might be too dense and too philosophical for students with no, or limited, experience with the field of philosophy for it to be fit into the curriculum – which won't stop me from recommending it, for the book has a valuable message for the upcoming generation of (urban) planners.

So, what are, in a nutshell, the main messages that, I believe, make the book worth reading? Firstly, the book makes a timely contribution to a growing discussion about economic growth and (un)sustainability, which, thus far, has largely neglected the role of innovation. As such, the book should primarily be seen as a contribution to the philosophy of economics, questioning the validity of mainstream liberal economic thinking. From this perspective, it asks what mode of provision is needed for sustainability. Building on influential theories such as Rawls' Theory of Justice, Marxism and, more recent, Wright's idea of Real Utopias, Ziegler arrives at the conclusion that, for a nature-respecting sufficiency, 'enough is enough: beyond a threshold of resource use required for living in dignity, there is no justification for further resource use, unless this use is actually beneficial for other beings' (p. 150).

Secondly, there is a call for more attention to, and inclusion of, patients, meaning those groups of affected stakeholders that are not capable of speaking up themselves. These include marginalized social groups, but also natural resources and animals. By

providing these patients with a voice, innovation can become more inclusive, more nature-respecting, and more tailored towards diversity of capabilities. We already see this kind of representation in politics, for instance through nature preservation NGOs or political parties putting animal rights upfront. In the currently pre-dominantly 'second-order innovation society' in which innovation is seen as the (unquestioned) driving force of economic progress, these patients still receive insufficient attention in innovation and innovation policy. Although obviously Ziegler is not the first or only one to call for more sustainable innovations and innovation policy, his explicit attention for different agents, including those that cannot represent themselves, adds to the growing literature calling for a reconsideration of the role of innovation in today's societies.

Thirdly, Ziegler advocates for the importance of certain 'qualifiers of innovation that point to important areas for innovation for sustainability' (p. 146). Examples include responsible innovation, democratic innovation, and social innovation. According to Ziegler, these qualifiers, deepen the innovation discourse, but as he rightly notes, they also 'reinforce a pro-innovation bias' (p. 147). In this context, Ziegler calls for the 'excavation' of innovations that have been routinized and are now taken for granted (called *dinovation*) as a step towards *exnovation* (divesting from previous innovations) – introducing a 'vocabulary of social change beyond innovation only' (p. 8). Although these are important points, one wonders whether divesting from unsustainable innovations alone is enough. The book focuses on sufficiency, but is sufficiency enough to transition away from unsustainability? Or are conscious (social, political, as well as technological) innovations necessary on a path towards sustainability?

Ziegler calls his approach 'enough innovation,' calling for a more open view of innovation that not only caters for technological innovations aiming at increasing welfare in a market-based system, but that includes a plurality of modes of provision, meaning that relevant innovations not only need to emerge in the market but include political innovations as well as social and grassroots innovations. This is not to say that market and business innovations are not important, but rather that they should be bounded and come on an equal level with other modes of provision and other types of innovation. He aims to 'develop the idea of a nature-respecting sufficiency for a transformative approach to innovation' (p. 146).

The role of innovation is important in this respect in the sense that what is needed, according to the author, is a transition to a 'third-order innovation society.' This implies that the rules of second-order reproduction in an innovation society, in which innovation is the driving force of economic progress, need to become subject of public reflection. Thus questioning the need for, and mode of innovation, and seriously considering the role of *exnovation*.

So, is the idea of nature-respecting sufficiency feasible? Ziegler asks exactly this question in his concluding chapter. He does not straightforwardly answer it though, but 'calls for a study of the directionality in innovation with respect to various modes of provision' (p. 154) and hints at some of the directions or considerations needed. In this discussion section, Ziegler remains at the abstract level of a philosophical debate addressing ethical ideals, which, however, do not always match individual decision-making 'on the ground.' His priority principle of nature-respecting sufficiency underlines this: 'A principle of self-preservation according to which it is permissible for moral agents to foster and secure their central capabilities. This is accompanied by:

1. A principle of proportionality that gives priority to central capabilities over other capabilities;
2. A principle of minimum wrong that requires human agents to minimize harm when pursuing their self-preservation;

3. A principle of restitutive justice that requires human agents to make up for harm done under the prior principles' (p. 154)

The principles actually remind of Asimov's Laws of Robotics and call for calculated behavior based on full information. Behavioural economics and theories of practice illustrate that human behaviour tends not to be that rational. Practice theory also teaches us that practices are shaped by norms and structures that, if changed in line with Ziegler's principles, may contribute to a change towards a nature-respecting sufficiency. The underlying ideas, however, call for a radical transformation of (western) economies (the 'American way') away from the dominant second-order reproductive innovation system that will not come by easily.

Concluding, 'Innovation, Ethics and Our Common Future' provides a timely contribution to the critical reflection of the role of innovation in the light of the unsustainability of modern-day (western) societies. As with most fundamental philosophies, there will probably remain a discrepancy between the moral ideal and the real-world interpretations and the real-world changes that result from it. Tensions that Ziegler acknowledges and is aware of. In making a moral appeal for sufficiency and 'enough innovation' the book, although not an easy read for a general audience, should therefore appeal to policy-makers, and essentially everyone as a citizen, as it invites a critical reflection of the role of innovation and markets in the transition to sustainability for our common future.

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