In light of multiple (social, economic, ecological) problems humanity is facing, it is no surprise that scholarly interest in responsible innovation (or responsible research and innovation) has gained momentum. In other words, more and more of our fellow ivory tower inhabitants are working on aligning research and innovation better with society’s needs, values, and problems (there is also an academic journal devoted solely to these issues).

Although a noble effort in principle, it seems that various researchers are still trying to tackle these complex real-world problems with outdated and unsuitable methods and approaches. Many economists, for example, are still using what we could call machine thinking. The traditional way of economic thought conceives of the economy in a mechanical way, where rational actors pursue (only) their own selfish interests. In this view, which prevails in economics textbooks to this day, the “market machine” self-corrects towards an efficient equilibrium, the mechanisms of which we can conveniently tackle with a coherent mathematical apparatus. But what if the world were more complex and messy than the traditional models can capture? What if there were no “tendency to equilibrium” and economic systems were constantly changing and evolving?

Well, of course, there are alternatives. As also Eric Beinhocker explains in his evonomics post, more adequate ways of economic thinking exist, which draw on theories and methods from evolutionary theory, complexity science, psychology and many other fields. The major challenge, however, is that the new way of economic thinking also requires new methods and models and does not provide an easily applicable toolkit as the old machine thinking.

As soon as we leave the mechanistic view behind and accept a philosophy of evolutionary processes, which we do in our research, new questions about responsibility and innovation arise. In the evolutionary view, the process of innovation involves many actors that interact, compete, and cooperate with each other, thereby weaving complex networks of interdependence. Some of these actors are the consumers. Researchers from such diverse fields as economics and business ethics alike have long tended to oversimplify or underrepresent the role of consumers by...
aggregating them into “the demand side” that just determines price and quantity of the produced goods and services (e.g. in the manner of Hicks and Marshall), whereby social responsibility is either non-existent (as per the assumption of efficient markets) or shovelled completely onto “the supply side” in terms of corporate social responsibility. This one-sidedness has been conveniently accepted by actual consumers all over the world blaming corporations for all kinds of things not least their own health problems from eating junk food. But there can be a remedy as soon as consumers realize that they aren’t just cogs in the economic machinery but human beings that have power and thus share responsibility with other actors in the complex and evolving economic system.

This also points to a spectrum of views on the influence of consumers in innovation processes. The two poles of this spectrum could be termed a) passive and b) active consumers. In the passive view, consumption is reduced to the purchase decision, and entrepreneurs bring about innovations that consumers can either buy or not. The other pole of an active consumer is associated, for example, with the notion of lead users and consumer innovators, thereby giving consumers much more credit for the creation of novelties.

But even when consumers are just modelled as the end customer, deciding to buy or not to buy, they already have an important role in responsible innovation. In our research, we set out to investigate what changes when we leave machine thinking behind. We have developed and applied an agent-based computer simulation where consumers are still rather on the passive side of the spectrum but now have different and diverse interests (instead of all being coloured with the same brush). Some consumers in our model are more responsible (e.g. environmentally conscious), others just focus on their own selfish interests. Once we also abandon perfect rationality and allow consumers to have incomplete information, we can observe two interesting things: 1. That even a relatively small number of responsible consumers is sufficient for responsible innovations to be produced, and 2. that, perhaps somewhat counterintuitively, in a “perfect world scenario” where all consumers are responsible and demand only responsible innovations, the complex interplay between demand and supply can create situations that are inferior to scenarios with fewer responsible consumers.

Although our model is just a first step in the direction of grasping the complexity of responsible innovation processes, we can already see that also policy-makers, business executives, and non-governmental organisations should start viewing consumers more in terms of co-responsible citizens instead of machine-like sales markets. In the future, it is also well worth asking what will happen once we explicitly consider active consumers, co-designing and co-creating responsible innovations.

In summary, it can be said that much more work is needed to better understand the role of consumers and other actors once we leave the old mechanistic way of thinking behind and take the view of the economy as a complex and evolving system more seriously. This leaves us with more than just selfish quasi-robots, creating room for altruism and responsibility. Dealing with these things is hard, but ignoring them is no longer a valid option.

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Notes:

♦ This blog post is based on the authors’ paper Evolutionary Economics, Responsible Innovation and Demand: Making a Case for the Role of Consumers, in Philosophy of Management (2017).

♦ This blog post gives the views of its authors, not the position of LSE Business Review or the London School of Economics.

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