Review of Anna Horodecka's *Human Nature in Modern Economics: Structure, Change and Perspectives*. Abingdon and New York, NY: Routledge, 2022, viii + 264 pp.

ANDRES LAZZARINI Goldsmiths, University of London

Two crucial methodological questions underlie the construction of formal economic models: (i) is it legitimate to build economic models on the assumption of a purely individualistic 'economic agent', often referred to as homo oeconomicus? And (ii) would adopting alternative conceptions of individuals other than homo oeconomicus allow for the creation of more realistic models, perhaps closer to the original aims of the economics discipline? Anna Horodecka's Human Nature in Modern Economics: Structure, Change and Perspectives (2022) is a very well-researched and comprehensive attempt at addressing these two problematic yet central issues in economic methodology. It does so by investigating the salient concept of human nature in economics, both from a purely methodological perspective and from the history of economic thought. One of the main theses of this book is that how pure theoretical economics (i.e., the search for those scientific relations and mechanisms that are at play in economies) is practised fundamentally depends on which concept of human nature is adopted in different contexts. For Horodecka, human nature is a "key construct" (2) that is needed in order to achieve a thorough comprehension of economic reality, and the changing conception of human nature across the discipline reflects how the economy must make adjustments to adapt itself to a changing environment. Furthermore, differing views of human nature could be the fundamental dividing line between orthodoxy and heterodoxy because opposing conceptions of human nature have determined the evolution and transformation of economics. In this way, the author argues, different conceptions of human nature have established not only different assumptions of economic agency in formal models, but they are also responsible for the way economic policies derived from those models have been implemented. Not surprisingly (for reasons which will become apparent below), most of the changes in the conception of human nature took place within the myriad of heterodox economic approaches since the 1980s.

The book is composed of an introduction, six main chapters, and the conclusion. Chapter 1 introduces different conceptions of human nature and how to study them. It establishes the terminology and structure of the meta-model (or meta-concept) of human nature that will serve as the basis of comparison across different strands of economics throughout the book. Chapter 2 shows how the concept of human nature determines how economics is done, and persuasively argues how the relationship between human nature and the foundations of economics caused the division between orthodox and heterodox economics. Chapter 3 discusses the evolution of human nature as seen in orthodox economics while, at the same time, showing how homo oeconomicus became the starting point of conceptualising alternative concepts of human nature within heterodox economics. Chapter 4 presents a thorough description and analysis of different alternative concepts of human nature for a wide range of heterodox approaches. Chapter 5 emphasises the importance of the environment of the human being and how the economist must take this into account in their characterisation of the economic agent. Finally, chapter 6 discusses the perspectives which are opened to the economics discipline in light of the changing and transforming concepts of human nature.

The topics covered in this book are highly abstract, and they will certainly require the keen attention of the reader. Anna Horodecka, however, does a great job at examining these highly conceptual notions underpinning her main theses. Chapter 1 lays out the specific terminology related to different concepts of human nature. Drawing heavily on philosophical anthropology, the general model developed by the author (which she refers to as a 'meta-model' or 'meta-concept' of human nature) adopts three dimensions that capture the nature of the human economic agent: (i) the ontological dimension, whose job is to explain relations between the human being, nature, and the metaphysical world; (ii) the social dimension, which examines relations among people; and (iii) the individual dimension, which portrays the human being as an individual. Associated with these dimensions are three "vital levels of human nature" (3): action, motivation, and reason, which the author links to the anthropological levels of body, soul, and mind, respectively. The general framework in the metamodel of human nature (31-39) allows for comparisons across both orthodox and heterodox schools of economic thought.

From the standpoint of the methodology of science, anyone trained in orthodox economics may argue that economics performs three wellknown functions: to better grasp the working of market economies (descriptive function), draw accurate diagnoses (explanatory function), and propose economic policies (predictive function). Yet, as the author convincingly argues in chapter 2, these functions are shaped by the conception of human nature adopted by economics, which plays a key role in the context of discovery and justification. The context of discovery refers to the realm of seeking knowledge. Within this context the view of human nature depends on knowledge, cultural embeddedness, ideas, and philosophical approaches that shape theorizing about the economic research at hand. The context of justification, in turn, refers to how views of human nature are represented by assumptions adopted by economic theory which are formed through abstraction and idealisation. At this point of the discussion, the author persuasively leads the reader to ask themselves about the problem of precedence concerning human nature in economics:

If the objective and the method of economics should be set first, followed by a search for a suitable concept of human nature, one might ask about how humans established that specific rather than any other, objective of economics and those, and not any other, methods for studying economic agents, phenomena and processes. [...] To some extent, the concept of human nature precedes that process by definition. It is a *cognitive construct*, like spectacles allowing a clearer view of the reality under examination. Due to their limited perception capabilities, humans see reality through cognitive heuristics (assumptions about human nature and the world). (69; emphasis added)

Indeed, the relationship between human nature and the foundations of economics is central to the division between orthodox and heterodox economic approaches. The criticisms raised by the latter against orthodox approaches are chiefly focused on the concept of human nature present in its theories. Furthermore, the specific assumptions on human nature are not only reflected in the ends pursued by the economic agent, but they also determine the way of formulating the objective, scope, and methods in economics. Precisely because the heterodox approaches originate in the criticism raised against the orthodox view of human nature present in the assumption, it is of paramount importance to understand the evolution of human nature as seen by orthodox economics.

The conception of human nature in orthodox economics is fully examined and discussed in chapter 3. Although this conception is presented in the book in its most oversimplified version (see, e.g., 86-87, 90-91), the author ingeniously shows how the only purpose of introducing human nature into the orthodox framework is to elucidate the systematic relationship between the perfectly rational individual economic agent and their aim to maximise their utility. In other words, the individual (or this concept of human nature) is equated with utility maximising behaviours, thus becoming the key cognitive heuristics used by orthodox economics. Therefore, any change in the context whereby such an individual was ideally constructed would be avoided or pre-empted in advance, because this disturbance would entail a change in the cognitive heuristics (i.e., in the conception of the human nature itself). It thus runs the risk to change, in turn, the objective, scope, and methods of economics and, therefore, the whole of the economics discipline. Therefore, if the general conditions whereby human beings exchange, produce, consume and distribute change, another conception of human nature will be necessary to reflect such changes.

Indeed, as the author makes the case, the criticism of the individualistic nature of the human conception in orthodox theory has become the starting point for heterodox economics to emerge in the history of economic thought. Thus, by employing the meta-model components mentioned above, heterodox economics starts by criticising the treatment of the mind as a calculating tool to maximise utility—which is solely responsible for explaining human behaviour. Drawing on results from evolutionary economics, behavioural economics, humanistic economics, and neuroeconomics, among other strands of heterodoxy, the author argues that orthodox economics has in fact neglected other sources of human action. Motivations such as moral development, adaptation to social and environmental requirements, reduction of imbalances to boost social well-being are also drivers, among others, of human action. They therefore call for a redefinition of the cognitive heuristics, and thus of the conception of human nature used in economic theory. For Horodecka, heterodox economics aims to create a framework where individual activities combine both individual and systemic goals (see, for example, 96-97). Yet, heterodox economics would need to develop alternative conceptions of human nature for that purpose.

In chapter 4, the author presents a thorough description and analysis of different alternative concepts of human nature for a wide range of heterodox approaches, covering ecological economics, behavioural economics, feminist economics, evolutionary economics, humanistic economics, Buddhist economics, and religious economics. Horodecka asserts that heterodox economics' criticism of homo oeconomicus actually implies that economics as a science (positive aspect) cannot be separated from economics as an art (normative aspect). Both aspects are necessarily and simultaneously wrapped up in heterodox economics because the aims and general reflections of heterodoxy not only encompass the logic of the economic system (maximum growth, stability, etc.) but also social wellbeing, moral values, social adaptations, and requirements. Given this broad objective, the concept of human nature adopted entails taking up an in*terdisciplinary perspective*. Thus, heterodoxy borrows different elements from several disciplines, such as psychology, linguistics, philosophy, sociology, and the natural sciences to build its views and conceptions of human nature. The apparent flexibility in the construction of the view of human nature in heterodox economics is chiefly rooted in the *complex* nature of economic phenomena, which cannot be isolated from the historical context and the institutions and norms in which the economy and the individuals running it are embedded. It is the complexity of processes involved in the economic activities and relationships that becomes the main determinant of changes in the concept of human nature in economics. Indeed, the concept of human nature discussed for each of these heterodox approaches is broken down into three core aspects: behaviour (the body), motivation (the soul), and reason and meaning (the mind). One of the main upshots of the chapter is that describing a human being as an 'economic agent' indicates that economic activity is indeed one of the various activities carried out by humans; but also that these activities are pursued by a complex human nature. Acknowledging different degrees of complexity will define, ultimately, how far the concept of human nature adopted by heterodox economics departs from the homo oeconomicus ideal.

The reader is led, in chapter 5, to acknowledge the importance of the changing environment of the human being and how the economist has to take this into account in their characterisation of the economic agent. Once again, by making use of the suitable meta-model introduced in earlier chapters, the author highlights that human action not only involves the individual dimension of their nature but also the ontological and social ones. Therefore, in examining the relationships between an economic agent with others, both the nature and the system of ontological values (e.g., the underlying visions or principles guiding economic agents) have to be taken on board. However, due to an increasingly complex nature of

the economy, the environment is subject to changes which, once acknowledged by the economist, will entail persistent changes in the concept of human nature adopted. Therefore, changing environments will likely lead to changing conceptions of human nature, which will make it all the more difficult for the orthodox paradigm to maintain its rather unrealistic conception of human nature, which sees the individual economic agent aiming at maximising utility under perfect rationality. To come to grips with such tremendous challenges posed by a complex reality, the author proposes that the economist can draw inspiration and eventually adopt new concepts of human nature based on more colloquial views.

The economy (and the embedded actors, societies, political bodies, markets, institutions, etc.) analysed by both orthodox and heterodox economics is claimed to be a 'real' entity. Moreover, human beings share the same structural biology in the same market economy. Yet, in order to deal with such a complex concept as that of human nature, both orthodox and heterodox approaches have highlighted its different, radically diverging aspects for the purpose of building economic models. But can mainstream economics and heterodox approaches communicate with one another? Is it possible to find some commonality between such diverging conceptions of human nature? Such key questions linger in the last chapter of the book (chapter 6), where the author discusses the perspectives which are opened to the discipline of economics in light of the changing and transforming concepts of human nature. The chapter makes the point that different assumptions about human nature will likely bring about both cognitive and practical consequences in economics, and therefore poses the big question of whether orthodox economics will undergo modifications or a paradigm shift; or if economics as a whole will fall into either separatism or a pluralism embracing different approaches. Surely, the sketched range of possibilities may sound quite extreme, and, in fact, it will likely be the case we find the evolution of economics moving somewhere in between. Interestingly, this is the point made by Horodecka in this chapter, where she discusses degree of penetration of assumptions rooted in heterodox traditions into the orthodox paradigm. The author calls this the "absorption" strategy pursued by orthodox economics (229). An example of this can be seen in the late 1930s and 1940s, with Keynesian macroeconomics being incorporated into the orthodox framework (the 'neoclassical synthesis'). Although the neoclassical synthesis is not examined in this book, the historical analogy may be useful to the reader

to understand the complex process of 'absorption' of heterodox elements and assumptions by the orthodox paradigm.

Overall, this is a very-well researched, deeply explored, and widely informed scholarly work, which attempts to understand abstract, general conceptual notions underpinning the different assumptions about human beings (understood as economic agents) in varied economic models. Built on an incredibly huge literature spanning different disciplines, this book painstakingly makes the point that how thinking and theorizing about economics is done is determined by the economist's understanding of human nature. This is indeed a key contribution to economic methodology, not to be found, to the understanding of the present reviewer, elsewhere in the relevant literature (e.g., Becker 1976; Davis 2006; Mäki 2012).

On the other hand, the book has missed out on two important historical episodes that have shaken the development and consolidation of orthodox economics during the 20th century: the Keynesian revolution of the 1930s and the Cambridge capital theory controversies of the 1960s. Both theoretical conflicts, as acknowledged in the history of economic thought, put the orthodox paradigm under serious risks (see, e.g., Harcourt [1972] 2022; Mirowski [1989] 2011; Pasinetti 2009), and yet it survived both crises and continues to inform most economists in academia, industry, and government. There is no doubt that this would have been a nice addition to the historical sketches about the different heterodox schools discussed in the book, but this omission in no way detracts from its important contribution to the understanding of the epistemological and ontological underpinnings behind assumptions about human nature in economic models. Indeed, whether orthodox or heterodox, economists rarely pose the question of what the ontological, social, and individual dimensions of human nature present in their assumptions about the economic agent are. Yet, assumptions about human nature play a key role in creating the cognitive heuristics that enable different schools of economic thought to be able to study highly complex economic processes. At any rate, as this contribution has shown, it is clear that a single concept of human nature, such as the *homo oeconomicus* guided exclusively by maximising utility, would be ineffective to create new theories that can fit and grasp ever-new problems and issues arising in the modern economy.

REFERENCES

Becker, Gary S., ed. 1976. *The Economic Approach to Human Behavior*. Chicago, IL: University of Chicago Press.

- Davis, John B. 2006. "The Turn in Economics: Neoclassical Dominance to Mainstream Pluralism?" *Journal of Institutional Economics* 2 (1): 1–20.
- Harcourt, Geoffrey. (1972) 2022. *Some Cambridge Controversies in the Theory of Capital.* Cambridge: Cambridge University Press.
- Mäki, Uskali, ed. 2012. *Philosophy of Economics (Handbook of the Philosophy of Science, Volume 13)*. North Holland: Elsevier.
- Mirowski, Philip. (1989) 2011. *More Heat than Light: Economics as Social Physics, Physics as Nature's Economics.* Cambridge: Cambridge University Press.
- Pasinetti, Luigi. 2009. *Keynes and the Cambridge Keynesians: A 'Revolution in Economics' to be Accomplished*. Cambridge: Cambridge University Press.

Andres Lazzarini is Lecturer in Economics at Goldsmiths, University of London. His research fields are history of economic thought, methodology and epistemology of economics, and economic development in historical perspective. He has published in Review of Political Economy, Research in the History of Economic Thought and Methodology, Review of Radical Political Economy, Filosofia de la Economia, among other scholarly outlets.

Contact e-mail: <A.Lazzarini@gold.ac.uk>