Introduction

Philosophy of Economics – An Introduction

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The economic science has rarely been immune from contrasts and contradictions.

Originally a branch of moral philosophy, economics emerged as an autonomous field of social scientific enquiry little more than 200 years ago. In the wake of the natural sciences' dramatic success, economists soon embraced a methodology that treated economic phenomena simply as another class of natural phenomena. This methodological stance progressively led to a more and more formal and rigorous analysis, characterised by a growing mathematization of economic models. Since then, economics has not ceased to receive the admiration of other, more recent, social sciences and its methodology has often been considered as an example to imitate by all those who have been impressed by the precision of its formal results.

Nevertheless, the history of economics is far from being a collection of triumphs. Indeed, the economic science's sophisticated formal analysis and its reputation for methodological accuracy often contrasted with poor predictions, explanations and interpretations of real economic events. The systemic crises that periodically shake the world economy cast a dark light on the practical efficacy of the economic science. It appeared as if economics was destined to be a "dismal science" not because of the unwelcome content of its long-term predictions, as Malthus – one of the founder of modern economics – believed, but because of its incapacity to get things right.

Further, these failures offered an easy empirical argument to all those eager to express their dissent against the naturalistic methodology embraced by mainstream economics. While orthodox economists defended their approach by appealing to the yet young state of economic research, it seemed to more heterodox economists that the contrast between theoretical and practical results justified a more serious complaint about the usefulness of the naturalistic approach to economic phenomena. More specifically, it seemed to them that, qua science of human and social behaviour, economics needed a distinctive method of analysis, different from the one employed for studying natural phenomena.

These tendencies are still alive nowadays. However, they somehow take different forms and expressions in the light of a new phenomenon, which has characterised the last two decades, namely, the growing exchange between economics and other disciplines (e.g. psychology, anthropology, neuroscience, ethics), which followed years of reciprocal isolation and mutual disinterest. Indeed, this interdisciplinary exchange has drawn renovated attention on some of the contrasting features that have characterised the history of economics.

On the one hand, the influence that economics exercises on other research areas has assumed a more pronounced and direct form. The appeal of economics is no longer confined to its methodology, but it derives also from the flexibility of its theories and models, which makes them more and more frequently chosen tools for explaining phenomena pertaining to different domains of research. A clear example of this tendency is the development, in recent years, of various accounts trying to explain, for instance, the evolution of moral norms (e.g. Binmore 2005, Bicchieri 2006, McKenzie 2007) and the behaviour of the human brain (e.g. Platt and Glimcher 1999) by means of the extensive employment of game- and decision-theoretic resources.

On the other hand, the results obtained in research areas outside economics (e.g. social psychology, cognitive science and experimental philosophy) have provided further support to the doubts raised by the predictive failures of the economic science. Indeed, the unprecedented availability of empirical studies concerning human brain and behaviour has put into question the core assumptions on which mainstream economics is based, namely, that individuals are self-interested agents and that they are instrumentally rational. A significant example is offered by recent works in psychology and neuroscience (e.g. Camerer and Fehr, 2006) that challenge the traditional assumption according to which the main economic agents, i.e. consumers and firms, act on the basis of selfish motives alone.

The combination of these tendencies produced a seemingly contradictory result: economics seems, at the same time, to conquer and to be conquered by other disciplines. In turn, this interesting phenomenon opens the space for philosophical reflection. Thereby, the philosophy of economics has been emerging as a, more than ever, fascinating and important area of philosophical enquiry. This is the reason why *Humana.mente* has decided to dedicate the current volume to this discipline and to the exploration of some of its liveliest debates. Before illustrating them in more detail, it is worth to briefly illustrate the main areas of analysis with which philosophy of economics is concerned.

First and foremost, the philosophy of economics is concerned with questions about the method adopted for the prediction, explanation and interpretation of economic phenomena. More specifically, this research area investigates the nature of economic theories and models and the role that they play within the analysis of economic phenomena. Second, the philosophy of economics is concerned with the core assumptions and postulates on which economic theory is based. In particular, a great deal of analysis focuses on rational choice theory, broadly considered, that is, as a theory of individual, strategic and collective decision-making. Third, the philosophy of economics examines the links existing, and the mutual contributions, between economics and more normative domains on inquiry, such as political economy and ethics. For instance, key debates in this area are those relative to notions like well-being, freedom, equality and distributive justice.

The current volume of *Humana.mente* explores the most recent tendencies characterising philosophy of economics research by means of a series of articles written by Italian professors, post-doctorate fellows and PhD students. All these articles touch on themes belonging to one of the areas of analysis presented above.

Caterina Marchionni explores the first tendency illustrated above. She argues that a great deal of contemporary economic research can be understood in terms of the role played by the ideal of scientific unification, which she characterises as "the application of the same principles, explanatory schemata, models and tools to the study of phenomena in different domains". Marchionni distinguishes four level at which unification can take place: explanations, theories, fields and disciplines. She then shows how this conceptual framework can help us understand the emergence of new trends in economics research, like the New Economic Geography, and their "imperialistic" effects on neighbouring disciplines.

To a large extent, the explanatory power of economics depends on its ability to tell reliable causal stories about economic phenomena. *Federica Russo* explores the crucial methodological question of how econometric models come to establish that some correlations involving economic variables are indeed causal. Rejecting a strict dichotomy between purely inductivist and purely deductivist approaches, according to which causality is either "inferred from statistical properties of data alone" or directly "given" by the economic theory, Russo defends a mid-way view, according to which the attribution of causality results from a more dynamic interplay of inductive and deductive elements. These elements form a rather rich apparatus,

which is constituted by background knowledge, statistical, extra-statistical and causal assumptions and a hypothetico-deductive methodology.

As Russo shows, the test of well-defined causal hypotheses is an important step within economic theorizing. Often, but not always, testing involves the use of experiments. In his paper, Francesco Guala explores the reasons why the Ultimatum Game (UG) has become a paradigmatic experiment, employed not just in economics, but in other social sciences as well. Guala emphasises two features. First, UG-based experiments possess some virtues (replicability, robustness and disciplinary cohesion), which make them "standardised" experimental designs. Second, the UG can be used as a measurement device that helps us highlight the existence of significant real-world causal relations to which further analysis can then be directed. It is thanks to these features that, according to Guala, the UG "emerged by a process of social selection in experimental game theory, as a robust design that 'tps on' something that seems to matter for us".

Matteo Colombo explores the question how neuroscience can contribute to economics. Moving from Guala's reflection on paradigmatic experiments, Colombo uses the UG as the benchmark for his subsequent analysis. One of the main features of the UG is the contrast between the standard game-theoretic predictions and the observed experimental results. This feature casts more than one doubt on one of the core assumptions underlying game theory, namely, the assumption that individuals are moved simply by self-interest. Colombo examines Cristina Bicchieri's sophisticated attempt to explain the agents' actual behaviour in terms of the notion of 'social norms'. He argues that Bicchieri's account presents both theoretical and practical limitations, which compromise its usefulness as a predictive tool. Colombo then argues that one way to obviate these limitations consists in enriching Bicchieri's model with neurobiologically-informed evidence. This analysis leads Colombo to conclude that neuroscience can contribute to economics by improving its predictions.

Like Colombo, *David Yokum* and *Filippo Rossi* are interested in how disciplines like psychology and neuroscience can combine with economics in the effort of explaining certain problematic features of individual behaviour. Yokum and Rossi focus specifically on charitable donations. By examining public good games, they show that the standard analysis, based on the assumption of self-interested behaviour, leads to predictions that are at odds with the agents' observed behaviour. They propose four different models accounting for the observed anomalies, which leave room for the possession of non-selfish considerations in addition to selfish ones as grounds for behaviour. Such considerations may include feelings of personal satisfaction, or 'warm glow', and preferences for fairness, reciprocity and deservedness. In the last part of their paper, they consider how these models fare with respect of neuroscientific evidence.

While the previous authors focus on the role of self-interest in modelling and explaining individual behaviour, *Giacomo Mollo* examines the other core assumption underlying economic theory, namely, the assumption that individuals are practically (and instrumentally) rational. His goal is not to reject this assumption, but rather to elucidate how we can understand practical rationality. Mollo examines a position in the literature, i.e. cognitivism, according to which we can make sense of the requirements of practical rationality in terms of the requirements of theoretical rationality. After defending cognitivism against several objections, Mollo argues that there is nonetheless one case where cognitivism is unable to explain the failure of practical rationality in terms of a corresponding failure of theoretical rationality. This analysis leads Mollo to conclude that one can be, at best, only a "semi-cognitivist" about practical rationality.

The last three papers deals with issues of relevance for more normative domains of analysis. *Mauro Rossi* considers the problem of interpersonal utility comparisons (IUCs). According to a long tradition in economics, comparing the utilities of different individuals poses insurmountable epistemological difficulties. This is bad news for several areas of analysis (e.g. normative economics, social choice theory, ethics), which are in serious trouble without the possibility of making meaningful IUCs. In his paper, Rossi assesses one promising strategy for solving the problem of IUCs, which focuses on how ordinary people attribute and compare other individuals' mental states. He argues that all the arguments attempting to vindicate this strategy fail. Rossi concludes that the current state of research legitimates, although does not entail, a moderate form of scepticism towards IUCs.

One area of normative debate to which both philosophy and economic analysis have recently brought a significant contribution is the one concerning individual well-being. *Margherita Bottero*'s paper offers an example of how it is possible to fruitfully combine both disciplines in relation to this topic. Bottero's goal is to investigate whether freedom of choice matters for well-being, when the latter is conceived as "life satisfaction" or "happiness". With the help of a meticulous econometric analysis, she shows that freedom of choice is positively correlated with individual's life satisfaction. Bottero notes that the robustness of the results obtained suggests the existence of a causal relation between the two variables. At the same time, she is careful in invoking the need for further research in order to confirm the causality interpretation and clarify some of its features, like the direction of causality.

Volkan Çıdam offers an interesting example of more heterodox research in philosophy of economics. Çıdam focuses on the question of how we can understand Marx's normative critique of capitalism. The question arises because the traditional readings run into a sort of dilemma. Either they adopt Engel's portrait of Marx as a strict positive scientist, in which case Marx's normative critique appears either unintelligible or ideological, or they ground his normative critique in commonsense moral intuitions, which Marx explicitly rejected in all his writings. Çıdam offers an original way out of this dilemma. Revisiting and modifying Luckas's concept of 'reification', he argues that we can better understand Marx's arguments in terms of "the normative ideal of recognition", which sets the standard of his normative critique of capitalism and which thereby motivates the rejection of "all social relations that succumb to a deficient mode of intersubjectivity".