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## SHIFTING BOUNDARIES, WITHIN AND OUTSIDE ECONOMICS

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In recent years, a considerable debate on the present and future of economics has involved (mainly heterodox) economists, methodologists and historians of economic thought. The appearance of new strands of inquiry, innovative techniques of investigation, and unprecedented patterns of cooperation with other social sciences has stimulated the need to discuss the possible evolution of the discipline. Attention has concentrated in particular on the current state of fragmentation of the discipline. This fragmentation is not simply due to the opening of new areas of investigation and the resulting emergence of new domains (such as experimental economics, behavioral economics, complexity economics and neuroeconomics, to mention only some): it instead appears to be the byproduct of more profound changes in the discipline. Far from representing a purely taxonomic problem, therefore, the growing number of economics sub-fields or approaches is raising questions about the foundations of the discipline, and it has inspired a not negligible discussion which is, at the same time, *at* and *on* the margins of economics.

In sum, the received view of the economic discipline is under attack. In particular, the discussion concerns the changing face of mainstream economics, the relationships between orthodox and heterodox economics, the nature and consequences of a possible pluralist era in the discipline. While leaving the citadels of their specializations to venture into such new realms, economists are forced to re-discuss the foundations of their discipline. This task requires competencies that, for a variety of historical reasons,

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economists seemingly do not possess. However, there is a strange breed of specialists – economic methodologists – who focus in their work on the generality of the discourse on economics as science, so as to be able to pose questions concerning both the epistemological and ontological dimensions of the current fragmentation, while devoting specific attention to how economists “do” economics. Another, equally strange breed of specialists, mainly interested in the evolution and diffusion of ideas over time – historians of economic thought –, can perhaps attempt to untangle the reasons why a heretofore seemingly compact discipline has fragmented, or better, work with this ultimate (and ultimately) impossible aim in mind. And, joining together to pursue this common purpose, the two kinds of specialists might be able to identify the origins of this fragmentation – one possible explanation being that fragmentation is, in truth, the (only possible) foundation of today’s economics.

Aiming, in general, to promote and enhance the interest of economists in the history of economic thought in their teaching and research activities, the Italian Association for the History of Political Economy (STOREP) devoted its 12<sup>th</sup> annual conference (University of Torino, June 11-13, 2015), entitled “Shifting Boundaries: Economics in the Crisis and the Challenge of Interdisciplinarity”, to exploring the relationship between economics and other disciplines, especially, but not exclusively, in the recent history of economic theory. This issue of *History of Economic Ideas* presents a selection of papers given at the conference, in the hope that it may contribute to the current debates on the methods, foundations and prospects of economic theory.

It is unsurprising that a scientific economic association and a journal specialized in the history of economic thought have decided to address such issues. The history of a discipline provides a necessary theoretical frame in which to understand how methods, problems, subjects, and techniques evolve over time, while in principle, the approach used to investigate the past can be fruitfully employed to explore current tendencies as well. “Present as history” is the expression, prevalently used in philosophy and historical methodology, which synthesizes this perspective. History matters, in a double sense: besides being evidently implied in the analysis of evolving economic theories, it is embedded in the series of economic events which induce the revision theories hitherto considered to be well-grounded. This is well illustrated by Kirman’s 2010 article on the economic crisis as (also) a crisis for economic theory, showing that the financial meltdown of 2007-8 and its consequences cannot be explained by current macroeconomic and financial mainstream models, with their unrealistic assumptions. Data and events are simply incompatible with the idea that aggregate behaviour can be likened to that of a “rational” individual. Dynamic Stochastic General Equilibrium “normal times” models, based on micro-economic foundations, are structurally unable to explain the fundamental features or even the occurrence of the crisis, whereas, Kirman argues, only complexity approaches – which view the economy as a complex interactive and adaptive system – can help accomplish this aim.

Kirman's arguments anticipate a number of questions regarding the relationships between the orthodoxy and heterodoxy of the discipline, between its mainstream and the periphery, as well as between economics and other sciences. However, some preliminary considerations about the use of historical and methodological approaches to study the uncertain boundaries of economics can be of help before beginning the analytical treatment of such topics. Owing to the rigidity seemingly embedded in the topic itself – the idea of boundaries as constraints, or limits not to be trespassed but only extended – the issue of the boundaries of the discipline has traditionally been regarded as a problem. Yet the current era of fragmentation not only calls this rigidity into question, but also allows reformulation of the problem in positive terms. In *The Great Chain of Being*, of 1936, American philosopher Arthur O. Lovejoy introduced the notion of the *history of ideas* as opposed to the history of philosophical systems. Some ideas, he maintained, transcend and cross the boundaries of (however different) philosophical systems and schools of thought. This distinctive perspective does not assert that systems of thought are always compatible by reason of some shared ideas. Rather, it shows that certain concepts may constantly reappear in re-contextualized forms within the boundaries of systems of thought that may be radically different from the one previously encapsulating those same concepts, and even compete with them for dominance. For instance, one could argue that the notions of use-value and exchange-value characterize both classical and Marxian economics, which evidently come to very different conclusions as to the values of commodities. Nonetheless, these ideas delineate a conceptual horizon of an epoch of economic thought. And many other examples can illustrate the problematics of the continuity/diversity of approaches in economics.

Consider Herbert Simon's contribution on bounded rationality. Simon introduced the concept in connection with artificial intelligence. This conferred a highly structured form on the notion itself, which was consequently specified in terms of well-defined symbolic operations. No room was left for ambiguities. But bounded rationality was then re-examined by James March, who on the contrary emphasized exactly the ambiguity and inconsistency of preferences, and the weakness of structure in decisional processes. The notion was then used by Oliver Williamson in relation to that of opportunism, although Simon claimed that Williamson's approach to rationality was enclosed in a neoclassical framework. Then came Richard Nelson and Sidney Winter, who coupled bounded rationality with the concept of tacit knowledge in an evolutionary theory of business behavior. In this context, tacit knowledge – knowledge that cannot be made explicit – has to do with (and provides evidence of) insurmountable limits to rationality, in a view in which rationality is connoted by automatic capabilities which reveal the limits of the conscious mind. But Simon expressly criticized Michael Polanyi's concept of tacit knowledge: consequently he did not use it to explain bounded rationality. Daniel Kahneman and Amos Tversky employ Simon's bounded rationality without referring to his symbolic approach, and, on examining "fast and frugal" heuristics for making decisions, Gerd Gigerenzer frames the concept of bounded rationality in relation to biological and adaptive mechanisms, a view which does not resort to symbolic systems. However, although Simon is a major

influence on Kahneman and Tversky, as well as on Gigerenzer and colleagues, the former maintain that the use of heuristics is at the origin of systematic errors, while the latter suggest that simple heuristics lead to reasonable and accurate inferences. This shows, in sum, that the concept of bounded rationality can be interpreted in two diametrically opposed ways (further details can be found in Fiori 2011).

In truth, there is no need to identify the author or approach most faithful to Simon's vision; rather, it should be simply recognized, following Lovejoy, that specific ideas are used by different approaches. As a result, the boundaries of those fields and studies that are traversed by such concepts are modified, especially if ideas have their origins in other disciplines. The concept of bounded rationality originates from Simon's studies in computer science and artificial intelligence, but it owes its fortune to the use that Simon made of it in economics. Then, however, the attempt to recast (some provinces of) economics itself by using the concept has been made by specialists from other disciplines, like psychology (Kahneman and Gigerenzer), philosophy (M. Polanyi), and theories of organization (March, Williamson, Nelson and Winter). The recombination of ideas within new theoretical frameworks engenders novelty, but it also restructures the domains of a discipline, and how "internal" systems of thought work to oppose each other. Moreover, it engenders novelty exactly by doing so, since – if we are to follow Lovejoy (1936, 4) – "the seeming novelty of many a system is due solely to the novelty of the application or arrangement of the old elements which enter into it", where "the elements of philosophical doctrines, in differing logical combinations, are not always readily recognizable".

This perspective can help throw new light on possible dialogue among schools of thought in economics. Sheila Dow (2004, 279) remarks that "in Kuhn's framework, incommensurability does not mean an absence of communication, but rather difficulty of communication": even Kuhn's drastic (but early, see below) philosophy of science does not rule out the possibility of interchange between paradigms, and therefore of reciprocal criticism. Social sciences live prevalently in a condition of "immature" science, the pre-paradigmatic state, to use Kuhn's expression, in which several paradigms legitimately coexist, and plurality is the norm. Thus, the distinction between normal science and moments of potential (paradigmatic) revolution becomes blurred and, despite difficult translation problems, it "is still possible to learn other languages in such a way as to allow communication". Which is exactly "what facilitates the transition from one paradigm to the next" (Dow 2004, 287). In sum, considering how single ideas can (sometimes tacitly) move from one school of thought to another, their diversity notwithstanding, helps to modify the view of schools of thought as monolithic structures, and to understand the shifting character of their boundaries.

As Dow herself (2008) reminds us, plurality (of schools of thought and approaches) does not (necessarily) mean pluralism, let alone advocacy of pluralism – if we accept Mäki's (1997, 39) broad definition of pluralism as plurality *plus* "arguments or reasons for plurality". As Dutt (2014) has recently observed, the meaning of "pluralism" in economics lacks clarity. Six dimensions (epistemological, ontological,

methodological, normative, prescriptive, theoretical) should be considered in order to define the distinctive traits of paradigms, and to distinguish among them. These six dimensions “are in principle independent in the sense that choices in one dimension do not necessarily dictate choices in any of the others. Despite this, however, a choice in one dimension can in fact affect the choice in another one” (Dutt 2014, 484). More pluralism in one dimension does not imply more pluralism in other dimensions, and may even result in *less* pluralism. Examination of the variety of levels characterizing pluralism can help understand how ideas transmigrate from one theoretical context to another, and how they consequently assume new configurations.

Following Dow (2004), Dutt maintains that pluralism is compatible with adherence to specific schools of thought exhibiting different epistemological, ontological, normative and prescriptive foundations. The defence of pluralism involved in this and other proposals implicitly borrows from the political-institutional metaphor of a democratic republic of ideas, which welcomes competition and coexistence of concepts. This metaphor also implies prohibition of practices of exclusion exerted at the institutional level against heterodox minorities (obstacles to pluralism in academic teaching, limitations in academic careers opportunities, and ostracism in the discipline’s journals). Yet, however ideas are conveyed, and whatever dimensions they involve, it is unsurprising that each school of thought advocates its own paradigm as superior (an attitude typical of “first-wave” pluralism, to borrow from Garnett, Olsen and Starr 2010). As such, the persistence of alternative, irreducible paradigms is not at odds with processes that involve communication and contamination of ideas. Pluralism thus acquires also an ethical meaning which is distinct from the methodological-epistemological one (see Screpanti 1997, 306).

These problems have provoked controversies among supporters of pluralist (and heterodox) approaches. Lee (2011, 541; see also 2012) maintains that “contested scientific inquiry between heterodox and mainstream economics does exist and that the existence of distinct, different, and conflicting theories is legitimate for a scientific discipline”, although differences should be dealt with in a climate of tolerance. This view rejects the implication of theoretical pluralism, advanced by Colander *et al.* (2004), Sent (2006) and Garnett (2006), that “contested scientific inquiry should not exist and that heterodox economics is not a distinct alternative to mainstream economics” (Lee 2011, p. 541). By contrast, Mearman (2011) criticizes Lee’s conviction that mainstream and heterodox are non-comparable, and opts for a “structured” form of pluralism (as suggested by Dow 2004) founded on a plurality of heterodox schools of thought that segment the heterodox system of thought along lines chosen to understand reality differently or throw light on specific different aspects of reality. Notably, closures must be provisional, so as to allow cross-fertilization (Dow 2008). Dobusch and Kapeller (2012) go so far as to suggest an “interested” variety of pluralism that requires heterodox economists to actively engage in constructing a pluralist conception of economics and in practising pluralism, rather than contenting themselves with tolerance for a pluralism of paradigms.

Dutt's invitation to consider the several dimensions of pluralism should be extended to the analysis of its past and recent history. As Morgan and Rutherford's (1998) and Bateman's (1998) historiographical accounts make clear, pluralism characterized economic theory during the interwar period, when institutionalism and neoclassicism could coexist while also developing different 'internal' perspectives. It was only after World War II that tendencies toward monism took shape with the decline of institutionalism. Morgan and Rutherford suggest that the rise of formalism, the resulting association of mathematics and statistics with objectivity in economics, and consequent changes in academic funding, etc., played a major role in this complex story.

Consideration of the different dimensions involved in the evolution of a discipline implies rejection both of the Whig historiographical view of progress – since “it is not clear that the evidence can support a history that neoclassicism won out because it offered better theory and better explanations” (Morgan and Rutherford 1998, 24) – and of “the conspiracy theory, in which neoclassical economists in positions of power ganged up on the heterodox” (ibid.). Extending Morgan's and Rutherford's reasoning, Sent (2006, 88) maintains that “the present situation in (mainstream) economics may be characterized as one of moderate pluralism”: in her view, mainstream economics has failed to achieve monism. On the one hand, it “has no notion of the social other than the summing up over individuals. On the other hand, it cannot maintain a unique focus on the individual because this would preclude complete explanation of competitive markets. At the same time, microeconomic findings concerning the individual were shown not to carry over to the social level, as illustrated by the Sonnenschein-Debreu-Mantel result” (Sent 2006, 93).

Lee (2011) connects Sent's view to Colander, Holt and Rosser's (2004) reflections on what we may call the shifting boundaries of mainstream economics. They distinguish between orthodoxy (the – once – dominant school of thought of neoclassical economics) and mainstream economics, this latter referring to “ideas that are held by those individuals who are dominant in the leading academic institutions, organizations and journals” (Colander *et al.* 490). Here, “heterodoxy” denotes approaches which develop outside the mainstream. But Colander *et al.* direct attention to the work of influential economists who are critics of the orthodoxy despite belonging to the mainstream. The “edge of economics” would thus consist of “that part of mainstream economics that is critical of orthodoxy, and that part of heterodox economics that is taken seriously by the elite of the profession” (492). In this perspective, mainstream economics is a complex and dynamic system of evolving ideas whose frontiers are moveable. The acceptance into the mainstream of approaches (non-linear dynamics, simulations and agent-based models) that expressly challenge the traditional concepts of rationality, selfishness, and equilibrium is contributing to modifying the conceptual horizon of economics.

Conflicts between paradigms, or alternative research programmes, are in any case destined to remain, despite economics' openness to new ideas that may produce a change in its structure over time. This



situation becomes apparent both in complexity economics, which induces to rephrase the concept of equilibrium, and in experimental economics, which “suggests that the entire approach to thinking about the appropriate mix of induction and deduction needs to be rethought” (Colander *et al.* 2004, 494).

Davis (2006) labels “mainstream pluralism” the co-presence of a variety of research programmes in today’s mainstream economics that significantly deviate from the neoclassical core, are pursued by different, often separate communities of researchers, and have their origins outside economics. Such pluralism induces one to wonder whether a new period of dominance can follow, since historically, Davis (2008) argues, pluralism and monism have been the two phases of a cycle, in which the new, monistic, mainstream emerges from the struggle, in the pluralistic phase, between alternative candidates to dominance. In an age of “reverse” imperialisms, the outside-economics origins of many of the research programmes of today’s mainstream pluralism are likely to have a not negligible impact on the future configuration of the discipline. Important hints in this regard are offered by the recent history of behavioral development economics (that is, the application of the insights and methods of behavioral economics to the analysis of development issues, see Davis 2013). This is a field that – owing its existence to the incursion of psychology into economics – is currently impressing an imperialist turn on development economics. The selective appropriation of Kahneman-Tversky heuristics and the progressive marginalization of Gigerenzer’s and the ABC group’s ecological rationality is functional to recasting non-market dimensions in terms of behavioral economics, while imposing the “social and cultural imperialism” of “its utility theory-based policy recommendations” (and therefore, the economic values of liberal society) on developing countries. The outcome contains an important novelty with respect to Gary Becker’s old-style economic imperialism: “If that imperialism was an inherently difficult project in virtue of needing to impose a foreign content on the other science domains to which economics was being applied, by contrast a behavioral economics imperialism seems to be a project with a reasonable prospect of succeeding because it brings an originally non-economic content (from psychology) to bear on whatever science domain to which it is applied – albeit after that non-economic content has been reframed as ‘economic’” (Davis 2013, 130-1).

Davis’s argument has some points of contact with Fine and Milonakis’s (2009) reasoning on the “new” forms of economics imperialism stemming from the development of the information-theoretic approach since the 1970s. In general, however, one could say that the metaphor of “shifting boundaries”, invoked by Fine and Milonakis to represent the results of economics’ pugilistic attitude towards other social sciences, can in truth be taken as the general rule for the discipline itself, in an age of fragmentation – perhaps without drawing a (too strong) distinction between the internal and the external dimension. The recent debate on the plurality and pluralism of (mainstream) economics illustrates, in the end, how frontiers among schools of thought can be redefined, how ideas move from one discipline to another, but also how the mainstream of economics can lose compactness under the weight of the various re-conceptualizations

of ideas, often culminating in the development of views that are (even radically) alternative to the established ones, which accompany such processes.

One of the tacit dimensions of pluralism is fragmentation (see Cedrini and Fontana 2016). Mainstream pluralism is (also) evidence of the fact that economics has become that “fragmented world of specialization” to which John Pencavel referred in 1991 (85) while trying to guess the future evolution of the discipline. The then editor of the *Journal of Economic Literature* was well aware that economics was becoming a highly specialised discipline, and that this was, to quote Turnovski (1991, 143), an almost “inevitable consequence of the maturing of economics”. Pencavel (1991, 86) foresaw that future scholars would be “well versed in ongoing research” only within their specific subarea of specialization, compelling the profession to “assume a more pluralistic character”. Specialization (better, the new heights it has reached) perhaps represents the most evident symptom of the blurring, which it somehow presupposes, of the concept itself of boundaries in today’s economics, while at the same time de-emphasizing their importance by promoting a conception of scientific progress that essentially builds on local knowledge. The “late” Kuhn (see Cedrini and Fontana 2016, and the bibliography there cited), in effect, saw specialization – rather than scientific revolutions – as the main engine of scientific progress. Mainstream pluralism in economics is also the result of the power of the self-reinforcing strategy of narrowing expertise when facing the otherwise insurmountable problem of the burden of accumulated knowledge. To innovate, researchers have to reach the frontier, but the “necessity” of specialization boosts a continuous process of niches-creation, where specialized economists are free to develop conceptual innovation in conditions of relative insulation both from the orthodox core of the discipline and without interference from other subfields in economics. It is here, at the niche level, however, that economists meet (and necessarily so) specialists from other disciplines and selectively incorporate concepts from these latter. With the result that the relationships (not to speak of the boundaries) between disciplines are continuously redefined.

Finally, it is worth mentioning that metaphors and analogies occupy a role of primary importance in the processes redefining the boundaries among disciplines or subfields and schools of thought. They operate by exploring unknown domains in light of the properties of known realms, thereby reorganizing our conceptual horizons, as Black’s (1962) “interaction view” has clarified. Metaphors do not make preexisting similarities explicit: rather, they create new ones, and “play an essential role even in mature fields, in the development of new theories as well as in the extension of old ones” (Bicchieri 1988, 104). For this reason, they are constitutive of theory (Boyd 1993). Various authors, for instance Hesse, Kuhn, Boyd, Bailer-Jones, have argued that scientific models work as metaphorical redescrptions because they create new similarities on the bases of analogies. Metaphors and analogies have characterized economic inquiry since the dawn of the discipline. The metaphor of the invisible hand allowed Adam Smith to explore the dynamics by which order is achieved in the market. Modern neoclassical theory was dominated by

analogies and homologies borrowed from rational mechanics (Mirowski 1989, Cohen 1994), while evolutionary approaches resorted to biological metaphors (Hodgson 1999, 60-126). In short, metaphors reveal that some tacit or even unconscious but powerful mechanisms are continuously at work below the surface to redefine the frontiers of disciplines, while determining criteria of relevance and structuring scientific discourses.

This volume collects eight contributions presented at the 2015 STOREP Annual Conference. The presidential address and three keynote lectures are followed by four papers selected from among those discussed at the conference. The feature shared by the papers is their reflection on the shifting boundaries of economics (focusing on concepts like economics imperialism, paradigms in economics, pluralism and interdisciplinarity) in a historical perspective, with particular regard to their connection with liberalism and neoliberalism. An implicit assumption behind this special issue is that, by accepting the challenge and responsibility of exploring the current era of fragmentation, the history of economic thought can provide the theoretical 'glue' required for the analysis of economics in a post-foundational phase.

This is one of the reasons why the issue opens with Maria Cristina Marcuzzo (STOREP President) and Giulia Zacchia's quantitative-in-nature (and positive rather than normative) examination of the work of historians of economic thought, illustrating trends and tendencies which have developed in the last twenty years or so. In general, it seems fair to point out that the history of economic thought is not enjoying a favorable moment: Marcuzzo and Zacchia find evidence of the concentration of history-of-economic-thought articles in a very small set of specialized journals, with a general strengthening of the boundaries separating the historical analysis on evolving ideas in the discipline from what economists do. Three more specific, interrelated tendencies in the history of economic thought emerge from the investigation. First, a move towards inquiries into "minor" figures and/or economists from a more recent past. Second, a preference for archival research on correspondence and unpublished material. Third, a tendency to substitute research on individual authors with investigations attempting to uncover networks, and to trace the links between intellectual circles.

Still, as said, the history of economic thought may be destined to recover a more central position in a less and less unified discipline like today's economics. For instance, as Alan Kirman shows in this issue, it can help throw light on the deep-lying reasons for its recent failures by examining some of the unjustified claims that continue to impair the validity of modern orthodox economic theory. Kirman's critique points at this latter's inability to provide a formal justification for the fundamental idea that the invisible hand mechanism leads society to a desirable state by harmonizing individual and social interests. This assumption – which is also the one upon which social and political liberalism was erected – tells us nothing

about how such a state is attained. Erroneously built upon a conception of society as a collection of isolated individuals, the Walrasian tradition has proved simply unable to demonstrate the stability and uniqueness of general equilibrium, as the famous Sonnenschein-Debreu-Mantel result shows. Likewise, the hypothesis of rational expectations is vitiated by the idea that individuals' expectations can be dealt with as if they were those of one individual. Kirman here casts serious doubts on the "cornerstone of the justifications for socio-economic liberalism" – i.e. that in the presence of appropriate incentives an economy self-organizes in a socially correct way – and illustrates the potential disclosed by considering economies as complex adaptive systems.

In this regard, Kirman argues, economics has much to gain from other sciences. But the story of economics' relationships with other disciplines, and particularly social sciences, is a troubled one. In his essay, John B. Davis suggests a distinction between "interdisciplinarity", which supports a conception of sciences as relatively autonomous from one another, and "multidisciplinarity", which he associates with the idea that the sciences can have reciprocal transformative effects on one another. Davis focuses on Edward Lazear's (2000) now classic article on economics imperialism, and aptly reconstructs the context in which Lazear proposed his defense of economics' pugilistic attitude towards other social sciences, and the strategic reasons for this defense. While employing a trade theory to explain economics' success in terms of comparative advantages, Lazear adopts an "interdisciplinarity" view of sciences, but does so in a context of (with the aim to oppose) reverse imperialisms, in the awareness that sciences may indeed have transformative effects on one another. Caught in the impasse, Chicago school neoclassicism has only one exit strategy available, Davis claims: that of evolving a new strategy that ultimately extends the economics imperialism program (as against the possibility of pluralism) by fostering a performative conception of neoclassicism itself as a theory that sees the world in its own image or as a mirror of itself.

One might add that neoliberalism adopts a not dissimilar strategy, or even that it adopts an even more radical performative approach. Liberalism and neoliberalism are the focal points of the next two articles of the issue. In his invited talk, Viktor J. Vanberg discusses Hayek's (and Buchanan's) legacy, starting from a critique of the "cognitive" assumption of rational choice theory – the idea that individuals are cognitively able to identify in every situation the course of action that will work out best for them. In particular, Vanberg concentrates on one of the main issues at stake in today's Europe – the role of rules as tools for governing – borrowing from Hayek the idea that complexity is a real and binding constraint on our ability to shape a desirable order by discretionary interventions. To discuss politics in its quality of a tool for social coordination, Hayek's view is complemented by Buchanan's "constitutional political economy" approach and by the ordoliberalism of the Freiburg school. These approaches share the idea that the main instrument with which to correct the inadequacies of economic systems consists in changing the rules of the game, and not in adopting arbitrary interventions.

Ordoliberalism is also dealt with in Ceyhun Gürkan's article, within broader analysis of Foucault's "history of governmentality", the long and complex historical process in which a general economy of (exercising) power has been established since the beginning of the sixteenth century. Foucault's perspective serves here as the required theoretical bridge from classical liberalism, as modified by early neoclassical economics, to neoliberalism, with the aim of deepening the understanding of the peculiar connection, in particular, between neoclassical economics and neoliberalism, and not only as theories. The fundamental break between the "naive naturalism" (Foucault 2008, 120) of classical liberalism and the "active policy" (2008, 120) of neoliberalism is in fact to be understood, Gurkan argues, in terms of governmentality: that is, as the passage from the idea of governing *because of* the market to governing *for* the market. This requires going with Foucault beyond Foucault himself, paying especial attention to neoclassical economics and its governmentality, as well as to the intimate connections among power, government and knowledge on which concepts like economics imperialism rest.

Fernando Chafim's article adopts a philosophy-of-science perspective to deal with the relationships between economics and other social sciences. The focus is here on hybridization, a process by which the boundaries among sciences (particularly social sciences) shift, and concepts, theories, methods are continuously fragmented and recombined. A quite normal process, and an important driver of scientific knowledge, hybridization is here shown to have played an important part in the case (however counterintuitive this may appear *prima facie*) of economics imperialism, today's "mainstream pluralism", as well as heterodox economics, yielding interesting results, and more generally outlining a perspective (which involves changes in the relationships with other disciplines), for pluralism in economics.

Two essays in economic methodology and epistemology, both adopting an historical perspective, bring the issue to a close. Irène Berthonnet provides an intriguing perspective on how key concepts in economics might evolve over time, undergo transformations, and be the object of collective appropriations. Berthonnet reconstructs, in particular, how the meaning of Pareto's concept of "maximum of ophelimity" (which we tend to associate, in modern jargon, with "Pareto-efficiency") changed over time. Pareto was unclear in specifying whether the theoretical place of this notion was to be positive or normative economics: this hesitation is at the origins of a century of debates on the normative or positive essence of the notion, and therefore the use to be made of it. While welfare economics, by introducing the term "optimum", privileged the normative view, Allais, Arrow and Hahn (who used the expression "Pareto-efficiency") opted for a characterization of this concept as a descriptive, not prescriptive, qualification of specific types of general equilibria. The quantitative and lexical analysis presented in the article shows that, in recent decades, a general tendency to adopt the concept of Pareto-efficiency instead of that of Pareto-optimality has clearly emerged.

Paolo Silvestri's article is an attempt to understand the nature of the academic discourse that seeks to found, demarcate or defend the autonomy or the boundaries of a discipline, and to explore the reasons why this discourse sometimes turns into dogmatic-excommunicating wrangles among disciplines, schools or scholars. If an interpretative framework that rests on the analogy between institutions and disciplines as dogmatic systems is used, scholars' discourse can be understood both as a discourse on the legitimacy of their own disciplines, and as a self-legitimizing discourse. This is shown to raise an issue of the identity-legitimacy of the scholar *qua* scholar: dogmatism and the resulting excommunication (keeping outside the borders) are, in fact, also a function of the degree of identity between scholars and the disciplines that they practice. The article explores the issue of disciplinary boundaries by reexamining Pareto's, Croce's, and Einaudi's discourses on the demarcation among philosophy, economics and value-judgments.

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