

MAINSTREAM CRITICS, HETERODOX REPOSES: A NORMATIVE DEFENSE OF PLURALISM IN ECONOMICS

Theodoro Cesar de Oliveira Sposito¹

RESUMO: A crise financeira global de 2008 levou a uma maior discussão sobre a importância do pluralismo na economia, com apelos públicos para uma maior diversidade de pontos de vista. No entanto, mesmo passados 15 anos, a economia continua pouco aberta a novas abordagens metodológicas e epistemológicas, enquanto as perspectivas pluralistas são alvo de intensa contestação. Este artigo confronta as críticas recorrentes ao pluralismo na economia por economistas *mainstream* com possíveis respostas heterodoxas a cada ponto. Defendemos a importância do pluralismo como fundamental para a integridade, capacidade de resposta e credibilidade da disciplina de economia face ao mundo real e todas as suas complexidades. Para tanto, este ensaio está dividido em três seções, além de uma breve introdução e considerações finais: na primeira, apresentamos uma tipologia das práticas pluralistas, os diferentes domínios do pluralismo na economia, e definimos importantes conceitos adjacentes; na segunda seção, sintetizamos as principais críticas ao pluralismo na economia e as confrontamos com possíveis respostas heterodoxas; finalmente, a terceira seção apresenta uma defesa normativa do pluralismo na economia.

Palavras-Chave: Diversidade de Perspectivas; Apelo ao Pluralismo; Economia Heterodoxa; Economia Mainstream.

ABSTRACT: The 2008 global financial crisis led to greater discussion about the importance of pluralism in economics, with public calls for a greater diversity of perspectives. However, even after 15 years, economics is still not very open to new methodological and epistemological approaches, while pluralist perspectives are the target of intense contestation. This article confronts the recurrent criticisms of pluralism in economics by mainstream economists with possible heterodox responses to each point. We defend the importance of pluralism as fundamental to the integrity, responsiveness and credibility of the discipline of economics in the face of the real world and all its complexities. To this end, this essay is divided into three sections, in addition to a brief introduction and final considerations: in the first, we present a typology of pluralist practices, the different domains of pluralism in economics, and define important adjacent concepts; in the second section, we synthesize the main criticisms of pluralism in the economy and confront them with possible heterodox responses; finally, the third section presents a normative defense of pluralism in economics.

Keywords: Diversity of perspectives; Appeal to pluralism; Heterodox Economics; Mainstream Economics

JEL: A14; B40; B50

¹ Master's student in Economics at IE/Unicamp and PhD student in Economic Development at PPGDE/UFPR, Scholarship recipient from the Programa de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), Brazil. Email: theosposito@gmail.com.

Introduction

Pluralism is a normative concept: it requires specific references and motivations for a certain degree of plurality (Grabner & Strunk, 2020)². These motivations may involve ethical, epistemological, ontological, or even pragmatic issues (Ibid.). As Sheila Dow (2008) noted, understanding pluralism in economics means addressing a central set of principles that should guide economic practice. Dobusch & Kapeller (2012) take this point as a starting point and emphasize the need for greater theoretical integration and institutional collaboration among different economic traditions. They suggest that such principles should be guided by fostering an academic environment in which the coexistence of different approaches to economics is not only encouraged but "practiced in a supportive, cordial environment" (DOBUSCH & KAPELLER, 2012, p. 1053).

Incentives of this nature involve incorporating a variety of pedagogical strategies that extend to both how economics is taught and what is taught (Dow, 2018). In this sense, a pluralistic curriculum must accommodate different approaches to economics and signal that no one approach can claim truth, as it assumes that all economic theories are contestable (Dow, 2009). This, according to the author, helps to develop in students the necessary skills for policy decision making (Ibidem)³.

The call for more pluralism has much ballast in the history of economics (GARNETT et al., 2010). The most recent and significant wave of pluralist appeals was triggered by the 2008 financial crisis. Prior to this event, criticism of the conventional approach to economics was limited to fringe groups of heterodox economists and publications in heterodox journals with small circulations. However, the crisis brought to light the shortcomings of the prevailing approach and became a matter of public interest. Since then, the economics profession and traditional academic economics have been heavily criticized both within and outside the heterodoxy (BERTOCCO, 2017; CHUN, 2017; PAYSON, 2017).

15 years after the crisis, however, calls for pluralism in economics are often sharply criticised by most mainstream economists. According to Claudius Grabner & Birte Strunk (2020), the four most common types are: (i) the existence of a trade-off between diversity and consensus; (ii) the claim that the economics is already pluralistic; (iii) the assertion that if there were a need for more plurality, it would arise spontaneously; (iv) the claim that pluralism stands for "anything goes", i.e., for the absence of rigor.

This essay counters mainstream criticism with possible heterodox responses. Therefore, the argumentative structure in this paper is divided into four sections, in addition to the introduction and

² For a discussion of the concepts of pluralism and plurality, see: Maki (1997).

³ For a more detailed discussion of the benefits of a pluralistic approach to teaching, see: Groenewegen (2007) and Jack Reardon (2009).

concluding remarks. In section 1, we discuss pluralism in economics in its epistemological, methodological, and ontological domains; in section 2, we briefly review the history of plea of pluralism in economics and its motivations; in section 3, we discuss mainstream economists' objections to pluralism and their main arguments and contrast them with the responses found in the heterodox literature; finally, in section 4, we present a normative defense of pluralism in economics.

1. Typology of pluralistic practices, domains of pluralism and important concepts

1.1 Typology of pluralistic practices and domains of pluralism

The literature highlights three common types of pluralistic practices (Dobusch & Kapeller, 2012), which are shown in Table 01.

Table 01: The most common pluralistic practices in economics

Pluralistic Practice	Description
Selfish	It can occur in several ways, all of which point to an opportunistic sense. Dobusch & Kapeller (2012) give two examples: (i) when pluralism has an ephemeral character, i.e., it is acceptable for a certain period of time but not indefinitely because it is understood to be inferior to another(s) particular approach; or (ii) when pluralism is an exemplar of rhetorical support whose function is to ensure the survival of a particular paradigm, "but not to achieve ecumenical discourse or any kind of theoretical integration" (Ibidem, p.1043).
Disinterested	mode of peaceful coexistence between different theoretical traditions, methodological approaches and doctrines
Interested	Set of the incorporations and efforts to constructively interact between different theoretical traditions to present an improved and expanded set of relevant explanations.

Source: Adapted based on Dobusch & Kapeller (2012, p.1044).

Common to all perspectives: the understanding that plurality is "not about all or nothing" (Grabner & Strunk, 2020, p.02), meaning that the degree of plurality is relevant. Because approaches and methods in economics can be complementary or substitutive (Maki, 1997), the literature has emphasized that tolerance for rival (or substitutive) claims to the dominant paradigm is significantly lower than tolerance for complementary claims. Ultimately, this means that a

pluralistic environment requires a higher degree of pluralism for substitutive approaches than it does for complementary approaches (GRABNER & STRUNK, 2020).⁴

As Grabner & Strunk (2020) argue, approaches that contribute only to alternative topics do not affect the degree of overall plurality of the discipline, because their contributions basically express complementary perspectives. Following the same logic, considering approaches that essentially use substitutive methodologies located in different epistemologies has a significant impact when they are considered, while they require a high degree of general plurality to be accepted. It should be made clear at this point that an unlimited increase in the degree of general plurality is not desired by most (if not all) pluralists (Caldwell, 1988, 1997; Maki, 1997; Marqués & Weisman, 2008), as there is a trade-off between diversity and consensus that has serious implications for quality control in science and communication (GRABNER & STRUNK, 2020).

Regardless of the typology of pluralistic practice being defended, there are three main lines of argument in the literature that guide efforts to rationalize pluralistic appeal:

Epistemological pluralism

Its tenet is the notion that science aims to provide reliable knowledge. As such, they assign scientists the task of distinguishing between better and worse explanations, recognizing that all explanations are primarily falsifiable. Because the latter view implicitly involves the rejection of dogmatism (Dobusch & Kapeller, 2012), an epistemologically pluralistic academic environment requires that competing explanations be represented relatively uniformly in academic discourse (Popper, 2005 [1935]; Hans, 1985; Mearman, 2011). The contemporary debate around the concept, systematized by Claudius Grabner & Birte Strunk (2020), focuses on issues of epistemological trade-off between diversity and consensus, the main implications of which lie in debates about quality control in research and communication in economics. In this regard, Geoffrey Hodgson's controversial book stands out as placing the heterodox movement in economics in these categories (HODGSON, 2019).

⁴ An illustrative example of this is the field of behavioral economics. The strand, which emerged in opposition to neoclassical presuppositions in the field of choice theory, currently shows two faces: on the one hand, part of the research field has been accepted and mainstreamed, with some representatives among the most prominent in the field (including Ernst Fehr, Klaus M. Schmidt, and the 2017 Nobel Laureate in Economics, Richard Thaler). On the other hand, the other side (with Gerd Gigerenzer and Kumaraswamy Velupillai among its adherents) has not found the same place in mainstream economics, despite its high reputation in other sciences such as psychology, statistics, and computer science. Why has this happened? There are several possible and potentially correct explanations. One of them is certainly the fact that the first group develops an approach that is able to reconcile the new behavioral assumptions with traditional models of utility maximization (see: Benartzi & Thaler, 2007; Fehr & Schmidt, 1999; Fehr & Schmidt, 2010), while the other group claims that the concept of optimization is wrong (see: Gigerenzer & Berg, 2010; Gigerenzer & Gaissmaier, 2011; Gigerenzer & Selten, 2002). In summary, the complementary approach to the dominant paradigm was more readily accepted than the substitutive approach.

Ontological pluralism

It emphasizes the implications of researchers' preconceptions about the nature of the discipline and the process of cognition, as well as about reality itself, about how the profession perceives and describes objects. In this sense, science needs to foster an understanding that social reality is multifaceted and therefore requires a variety of perspectives to capture (Norgaard 1989; Samuels 1998) . Among recent advances in this area, the emergence of complexity theory stands out in the discussion. In this context, the recent contributions of Petter Tornberg (2018), who unites critical realism (in the author's words, the "common denominator of heterodox approaches" [Tornberg, 2018, p.03]) and complexity theory under the umbrella of complex realism (see: Andersson et al., 2014), are noteworthy. On this basis, he proposes an ontological foundation for the deliberate design of the pluralist framework: what the author calls "Complex Realist Economics" or "consistent ontological foundation for an interested pluralism" (TONBERG, 2018, p.01).

Methodological Pluralism

Its fundamental concept is the understanding that each research problem is unique and requires an appropriate form of study approach. In light of this, it highlights potential gains from the diversification of research strategies, after all, the problem should generally determine the method and not the other way around (Bigo 2010; Dow 2008; Lawson 2004; Norgaard 1988; Samueels 1998). This is the most extensive line of argument and whose contemporary debate is more heated. In the scope of ecological economics, Goddard et al., (2019) draw attention to the need to maintain multiple methodological perspectives in the current context of uncertainty and intense climate change on the planet. "Ecological economists", they argue, "must support guiding beliefs centered on biosphere, equity and care while practicing structured pluralism" (Ibidem, p.01). In the field of urban economics, citing another recent example, Van-Heur & Bassens (2021) discuss a set of distinct methodologies that are used in mapping urban elites and highlight the benefits of methodological pluralism in the countryside.

1.2 Important Concepts

As Hodgson (2021), taxonomic definitions are "crucial to the formation of epistemic communities of inquiry because "without a definition, how can we create lists of journals or departments. Therefore, at the less general level of discussion, the debate of pluralism in economics inevitably collides with the concepts of (a) neoclassical economics, (b) orthodox economics, (c) mainstream economics, and (d) heterodox economics, regardless of the pluralism typology considered. For this reason, various attempts at definition, conceptualization, and application can be found throughout the literature (Boland, 2005 [1997]; Davis, 2006; Dow, 2018; Beckenbach, 2018).

Although some of the work treats the categories "a," "b," and "c" as equivalent (Boland, 2005 [1997], Chapter 5; Lawson, 2006) or even synonyms (Williamson, 2000; Beckenbach, 2018), the definitions that emphasize differences between them are better accepted.

This is largely due to the influence exerted by the work of David Colander (Colander, 1996, 2000, 2003, 2009a and 2009b) and in collaboration with Richard Hold and John Rosser (Colander et al., 2004 and 2007), as well as the contributions of David Dequech (2007, 2018), which, judging by the number of references, seem to be the definitive positions on the subject. According to Dequech (2007), the root of the confusion around the terms "a," "b," and "c" lies in the difficulties encountered in the literature in distinguishing more general categories from more specific ones, which is at least to some extent related to the frequent lack of clarity about the temporal scope of the terms (DEQUECH, 2007, p. 280)⁵.

The category "d," in turn, can be defined in a variety of ways. The bulk of the literature defines it negatively, in intellectual contrast to "b" or sociologically in contrast to "c," also influenced by David Colander and David Dequech. The smaller portion of the literature defines heterodoxy positively, as an intellectual alternative to orthodox economics and/or a sociological alternative to mainstream economics (Dutt, 2003; Lavoie, 2006; Lawson, 2006; O'Hara, 2007; Stockhammer & Ramskogler, 2009; ; Lee, 2008, 2009 and 2011). This topic will address these issues.

Neoclassical and orthodox economics

For most of the literature the category 'orthodox economics' it is a temporary intellectual category because "it refers to the most recent dominant school of thought" (Colander et al., 2004, p. 490). The temporal aspect is made clear by the same authors, who add that the designation and specification of what is orthodox usually comes decades after the time when orthodoxy should have existed (ibid). When a new orthodoxy emerges, they conclude, "true orthodoxy usually has no name" (ibid). As such, orthodox specifications are inevitably backward-looking and not current or forward-looking. For this reason neoclassical economics and orthodox economics mean strictly the same thing during actual period (SCARPANTI & ZAMAGNI, 1995).

Historically, the position of the dominant paradigm has been held by the neoclassical school from the 1900s to the present day. The pioneers of Neoclassicism were responsible for establishing an economics discipline that differed from classical economics (the orthodox approach of the time) and defined it as theoretical and - in this sense - universal and general. The "Pure" economics, as

⁵ When William Gouge (1833) uses the terms "orthodox economics" and "orthodox economists" when examining the history of paper money in the United States up to 1833, the author is certainly not referring to neoclassical economics, which did not exist at that time, but to classical economics, which was still hegemonic at that time. Although the time horizon used makes the example absurd, the fact that neoclassical economics changes over time (Dequech, 2007) can be placed in the same framework.

Walras (1926 [1874]) called it, was an exemplar of "Newtonian social physics", which aimed to use mathematical procedures to arrive at laws⁶. However, it should be clarified, as Dobusch & Kapeller (2009) point out, that in the first 50 years it was probably not justified to speak of complete dominance, given the great influence that alternative paradigms, particularly institutionalism, had in the United States at the beginning of the century, and the brief Keynesian period in the middle of the century. With the exception of these periods, the neoclassical paradigm prevailed.

On this basis there is a literature which, in addition to the intellectual definition, also represents a sociological definition of orthodox economics. For these authors (Boland, 1997; Lee & Kee, 2004; Lawson, 2006; Bogenhold, 2010), orthodox neoclassical economics is synonymous with mainstream economics. Three arguments support this interpretation: (i) almost all undergraduate and graduate curriculum is written from a neoclassical perspective (Lee & Kee, 2004); (ii) neoclassical economists, conferences and journals dominate most of the scientific field (Dobusch & Kapeller, 2009); and (iii) there is a high rejection of new ideas (AKERLOF, 2020).

Heterodox Economics

Heterodox economics is more heterogeneous and fragmented than orthodox economics, with at least 14 different approaches that differ in terms of their knowledge production process, references, and citations (Lavoie, 2014). Moreover, the various schools of thought that make up heterodoxy are neither fully consistent nor easily defined (DOBUSCH & KAPELLER, 2012).

Thus, heterodox economics is generally defined negatively, i.e., in contrast to orthodox/neoclassical economics (when defined intellectually) and in contrast to mainstream economics (when defined sociologically). In its intellectual definition, it represents an opposition to Max U and its derivative ideas (Colander et al., 2004; Dequech, 2007; Hodgson, 2021). The negative sociological definition of heterodoxy signals a "common enemy" and a common marginalization in the mainstream. Both negative definitions give great importance to what one wants to fight or criticize. Against this background, various attempts have been made to positively define heterodox economics.

The struggle to integrate the broad spectrum of heterodox schools under a common pluralist umbrella has taken place on two main fronts, identifying (i) ontological similarities (Bigo and Negru 2008; Caldwell 2004; Lawson 2006) and (ii) methodological similarities (Dow 2004, 2008). Regardless of which side is invoked, reference is always made to the seminal contributions of Tony Lawson (2006, 2008) and/or Frederic S. Lee (2008, 2009, and 2010), suggesting that they are among the two main proponents of this effort.

⁶ In Jevons (1871, Introduction) one reads: "It is clear that economic science, if it is to be a science, must be a mathematical science".

In short, while Tony Lawson's contributions point to a kind of division of labor among the various schools of thought that constitute heterodoxy, Frederic S. Lee's contributions focus on identifying ecumenical or common contributions among the various approaches, thus providing the starting point for constructing a definition of heterodox economics that takes common aspects into account. In Frederic S. Lee's own words:

As I have noted in several papers, heterodox economics is a specific term, like classical political economy or neoclassical economics, that refers to a particular set of contemporary theories explaining the process of social provision, to economic policy recommendations based on those theories, and to a community of economists engaged in this theoretical and applied scientific activity. Heterodox economics is thus defined (at least in the last two decades) not negatively, as an opposition or duality to conventional economics, but as a positive alternative to it (LEE, 2012, p.106).

Both perspectives have made important efforts: Bigo and Negru (2008), O'Hara (2008), and Tonberg (2018) along the ontological line of Lawson; and Lavoie (2006) and Stockhammer & Ramskogler (2009) along the line of Frederic Lee are good examples. None of the directions, however, is unanimous. While the division proposed by Lawson encounters serious problems related to conflicts of interest: Which heterodox school will care about currency? Post-Keynesians? Austrians? And in the context of power relations, to whom will these issues fall? With the old institutionalists or with the Marxists?... These are recurring questions to which there are no good answers. The Union defended by Frederic S. Lee is also the target of several objections, for example: How can post-Keynesian full employment be reconciled with the limited growth defended by ecological economics? These are thorny issues that Lee would have to implement in his proposal. Even if such problems remain unresolved, it is possible for us to point out common points shared by all heterodox currents in economics (Beckenback, 2018). Table 02 provides a summary of these points.

Table 02: Common ideas for heterodox approaches

Idea	Description
Heterodox Economics is necessary	The establishment of a competing paradigm to the prevailing paradigm is a common goal of the various heterodox schools of thought;
Less individualism and more methodological holism	The understanding that the economics is made up of a set of more complex and multifaceted social phenomena than the individualist perspective present in the mainstream suggests is consensual to all heterodox perspectives, as well as the understanding that holistic approaches to these phenomena produce a better analytical result;

Relate different state spaces to the selection of appropriate decision procedures	According to Bekenbach's (2018) interpretation, the main topic of the heterodox approach is to relate different state spaces with the selection of appropriate decision procedures. Neither “difficult” (large, complex or even uncertain) state spaces nor subconscious ways of deciding and acting (e.g. routines) are excluded (BEKENBACH, 2018);
Opposition to the neoclassical notion of rationality	The representative homo economicus is consensually rejected by heterodox approaches, which understand the behavior of individuals and decision-making from fundamentally uncertain conditions
Explain bottom-up economic outcome characteristics	This means, according to Bekenbach (2018) that both “plausible” agents and “plausible” modes of interaction determine the order of economic activities as a whole without superimposing restrictions that guarantee a desired structure of this result
Historical sensibility	The emphasis on historical aspects and the influence of history on the current state of the economy is shared by all heterodox approaches
Central role of money in analytics	Money plays an essential role in heterodox analysis, representing one of its most important themes. According to Bekenbach (2018), in the heterodox scope, money does not simply represent a veil in the articulation of mutual preferences, but an essential mechanism to make them comparable. For this reason, explaining money supply and demand (in its different forms) endogenously should play a prominent role in heterodox analysis, both in microeconomics and macroeconomics.

Source: Outlined by the author based on Bekenbach (2018)

Mainstream Economics

Since the early work of David Colander (1996, 2000, 2003), there has been widespread agreement in the literature that mainstream economics is a sociologically conditioned category. According to Colander et al. (2004), mainstream ideas consist of those held by influential individuals in key institutions, organizations, and academic journals at a given point in time, particularly in key postgraduate research institutions. In this sense, the author refers to mainstream economics as that considered acceptable by the elite of the profession, formed essentially by the most important economists in the best graduate schools. Thus, mainstream is "not a term that describes a historically conditioned school but describes the beliefs that are considered intellectually sound and worthy of work by the best schools and institutions in the profession" (COLANDER et al, 2004, p. .490).

David Dequech (2007) complements Colander et al's (2004) definition by making it less restrictive, deemphasizing the importance of elite economists. For him, the mainstream of economics is determined by four levels of prestige: Teaching at prestigious universities, publication in prestigious journals, access to major sources of research funding, and prestigious academic awards. (Dequech, 2007). Moreover, Dequech adds that in addition to the temporal character

highlighted by Colander and his co-authors (2004), there is also a spatial character that constrains the concept of mainstream, i.e., mainstream economics can vary by location (DEQUECH, 2007, 2018).

From the perspective of economists who are part of the dominant economics, the mainstream has three basic characteristics. First, the common understanding among researchers that only in the mainstream is economics actually scientific, often equated with the natural sciences because, like the latter, these approaches use the "scientific method" to develop theories based on simplifying assumptions and their verification (Dow, 2018). Second, the sense of constant improvement and progress, based on the belief that the best of economic thinking is condensed into the mainstream (ibidem). Nothing seems to us to better illustrate these points than Edward P. Lazear's comments:

Economics is not only a social science, it is a genuine science. Like the physical sciences, economics uses a methodology that produces refutable implications and tests these implications using solid statistical techniques. In particular, economics stresses three factors that distinguish it from other social sciences. Economists use the construct of rational individuals who engage in maximizing behavior. Economic models adhere strictly to the importance of equilibrium as part of any theory. Finally, a focus on efficiency leads economists to ask questions that other social sciences ignore. These ingredients have allowed economics to invade intellectual territory that was previously deemed to be outside the discipline's realm (LAZEAR 2000, p.99).

Finally, the desire for scientific legitimacy and respectability, which manifests itself in the form of mathematical formalization (KATZNER, 2003, p. 564-565 cited by DEQUECH, 2007).

2. BRIEF HISTORY FOR THE CALL FOR THE PLURALISM IN ECONOMICS

The call for greater pluralism has extensive backing in the history of the economics and can be organized into three main phases (Table 03).

Table 03: Three stages of the appeal to pluralism in the economics

Stage	Defining characteristics	Period
Post-McCarthyism	A scattered movement that took place in parallel within the framework of several heterodox schools of thought that shared little in common.	1970- 1980
Post-Kuhnian Uprisings	Intensified process of institutionalization of heterodox economics and the appeal of prominent economists for more pluralism in economics.	1980-2000
Post-2008	Demoralizing mainstream economics in public debate and calling for an economics that deals with the "real world"	From 2008 until today

Source: Outlined by the author.

According to Robert Garnett et al. (2010), the first phase of direct claims occurred between 1970 and 1980 and involved a variety of heterodox schools that showed little or no interest in each other. The second phase, the same authors argue, began with post-Kuhnian notions of pluralism, and Hodgson et al.'s (1992) ⁷petition to the American Economic Review was the turning point in discussions of pluralism in economics. The marginal character of the first pluralist wave is highlighted by Dieter Boegenhold (2010), who describes that the incipient pluralist vanguard of the 1970s in both the United States and Europe consisted of a small fraction of pioneering economists, while the majority of the profession continued to "work, research, and teach steadily on conventional topics in the traditional way, as they always had" (BOEGENHOLD, p.1570).

Between the late 1980s and early 1990s, however, the movement gained intensity, and an increasing set of premises of the dominant economy became the subject of vigorous critique (ibid.). In this context, Hodgson (1994) summarizes the main objectives as (i) the assumption of rational and maximizing behavior by agents with a stable preference function; (ii) movements toward equilibrium states; and (iii) the absence of chronic information problems⁸ (HODGSON, 1998, p.60).

Different from the first wave, the second wave of pluralist claims had greater integration and identification between heterodox schools of thought. In this period, "Post Keynesian, radical Marxist, institutional-evolutionist, social and feminist economists recognized that, in terms of methodology, theory and policy, they had much more in common than differences" (Lee, 2012, p.104). The formation of a heterodox identity was closely related to the construction of a community of heterodox economists that, between 1999 and 2004, would be institutionalized in the domains of the newly formed Association for Heterodox Economics, Society of Heterodox Economists and Heterodox Economics Newsletter (LEE, 2009).

The third and most intense "boom" of pluralist appeals in economics was caused by the 2008 crisis. If until 2008 objections to conventional economics were restricted to small critical circles of heterodox economists, the crisis made the shortcomings of the dominant approach a matter of public interest. Since then, intense criticism has been unleashed on the economist profession and on traditional academic economics itself (BERTOCCO, 2017; CHUN, 2017; PAYSON, 2017).

In the economic literature, several works by heterodox economists associated the economic crisis with a crisis of conventional economics (Davidson, 2009; Hodgson, 2009; Lawson, 2009; Bazemer, 2009 are among the most influential), while identifying in the crisis an opportunity for

⁷ Hodgson et al.'s (1992) manifesto was signed by 44 renowned economists and called for a new spirit of pluralism in economics, involving critical conversations and tolerant communication among different types of approaches.

⁸ Following Dieter Boegenhold (2010), the next step was to evaluate the standard approach or default approach as a moderate focus on probabilistic risk that excludes severe ignorance and radical uncertainty.

paradigm shift. Even outside of heterodoxy, influential mainstream authors admitted the "systematic bankruptcy of academic economics" (Colander, et al., 2009, title). In the public debate, Janice Peterson (2013) describes how observers outside the profession portray economists as unsympathetic and arrogant personalities and express their disdain for the profession "for failing to anticipate crises or provide useful advice to respond to them" (PETERSON, 2013, p.401).⁹

As a result, the idea that the teaching of economics should be broadened, reality-based, and historically grounded moved from the marginal appeals of dissident economists to the pages of major newspapers and to the screens of the main TV stations, which challenged the basic knowledge acquired by economics students. Against this background, the integration of different approaches within economics, the linking of economics with other disciplines, and especially the linking of economic theory with practice and "real life" were discussed in public and put pressure on the academic world (Peterson, 2013). According to the author, the first effects of the crisis (and thus the pressure on conventional academic economics) became apparent in the first months of 2010 (Ibidem).

For example, she reports that in January of that year, the American Economic Association hosted a symposium on "Teaching Macroeconomics after the Crisis," which directly echoed a variety of concerns and critiques of the profession that had become prevalent in public debate (Mcgoldrick & Peterson, 2011); in September, the prestigious newspaper *The Economist* sponsored an online discussion about the crisis and the teaching of economics. In addition to directly calling for greater pluralism in economics, the discussion also called for greater inclusion of economic history and economic thought in the undergraduate economics curriculum (PETERSON, 2013).

In general, the perception was shared that the economy was trapped in a conservative structure of thought (especially in the domains of neoclassical economics) and often mistaken, preventing the emergence of possible alternatives regardless of their qualities and strengths. In parallel, the understanding that economic reality is complex, fluid and subject to continuous changes for which solutions are inherently difficult has radiated into public debate and been at the heart of support for pluralism, whether in the context of pluralistic practices aimed at economic research (Fullbrook, 2009; Garnett et al. 2010) or in teaching and other practices (FREEMAN, 2010; GROENEWEGEN, 2007).

⁹ In "Past Their Prime (Rate)" (Newsweek 2009, cited by Peterson, 2013), Joseph Epstein wrote that the recession reveals a "decline in economic savy." In "Sweep Economists off Their Throne," Gideon Rachman argued that "the vanity of economists must be questioned. Above all, he argued, "their scientific pretensions and rigor - underpinned by models and equations - should be viewed with more skepticism" (Gideon Rachman, cited by Peterson, 2013). Even the Nobel laureate in the year of the crisis, Paul Krugman, wrote: "I see that the economics profession has gone astray because economists as a group have confused beauty, clothed in impressive-looking mathematics, with truth. He continued, predicting that in the future economists will have to "learn to live with chaos" by challenging cherished assumptions such as the rationality of human behavior and the perfection of markets (KRUGMAN 2009, p. 37).

Despite all this, the 2008 crisis did not cause profound changes in academic economics. Mainly because the institutional structure of the discipline allowed the dominant economics to perpetuate its paradigmatic dominance (Dobusch & Kapeller, 2013). Gregory Mankiw's words to The New York Times illustrate the situation well: "Despite the enormity of recent events, the principles of economics remain largely unchanged" (Mankiw, 2009). Even so, the growing interest in pluralism in economics identified by John E. King (2013) has proven itself, given the large number of books (this chapter refers to several) and academic articles that have been published in recent years. Contributions by John B. Davis (2019), Carlo D'ippolitti (2020), Teemu Lari (2021) and Nina Eichacker (2022) are illustrative.

3. Mainstream economists' objections to pluralism and heterodox responses

Most criticism of pluralism in economics comes from representatives of the mainstream economics. This section systematizes the content of these criticisms as well as the responses to them.

Trade-off between diversity and consensus

The epistemological trade-off between diversity of approaches and consensus in science has ancient roots, dating back to Polanyi et al. (1962) and Kitcher (1993), and recently brought back into the spotlight by the controversial work of Geoffrey Hodgson (2019, 2021)¹⁰. According to him, the more pluralistic a science is, the more difficult it is to convey its core, as a variety of theoretical, methodological, epistemological, and even ontological approaches coexist, leading to serious quality control problems in the field of science. Three common coping strategies are highlighted in the literature (Table 04).

In view of these problems, Grabner & Strunk (2020) present a fourth approach that acts as a hybrid between the three approaches mentioned in Table 04 and additionally includes some contributions from the philosophy of interdisciplinarity. In this new approach, quality criteria must take into account both the process (which the authors refer to as the "knowledge system") by which an idea was generated and the idea itself. To this end, they suggest that the criteria resemble the "Standards of Critical Contextual Empiricism" proposed by Longino (2002), which aim to: (i) providing spaces for critique (this includes space at conferences and in journals); (ii) developing a culture of response to critique; (iii) providing some binding standards (which must be transparent to

¹⁰ Says the author, "I realized that the mainstream economics was unbalanced: there was too much consensus and authority and too little pluralism. On the other hand, while heterodox economists rightly emphasized pluralism (at least in terms of theories, but often less so in terms of ideologies), they generally failed to recognize the importance of consensus. Some consensus was necessary to build on past achievements, to filter out inferior contributions, to provide rewards and incentives, and to regain power and influence within academic institutions. Achieving some degree of unorthodox consensus requires organization and power within the academy. Both pluralism and consensus are essential." (HODGSON, 2021, P. 11).

the academic community and the public); (iv) promoting moderate equality in terms of intellectual authority, so that critiques are not evaluated in terms of the intellectual position of the critic before the epistemic community.

Table 04: Diversity vs. consensus - coping strategies and associated problems

Approach	Description	Associated Issues
Mutual criticism	It is supported by the work of Caldwell (1988, 1997), for whom communication and constant criticism can ensure a certain standard of quality in science.	Since the criticism is made from a particular point of view, it is not considered internal criticism. Moreover, if the critic operates in a dimension other than the one criticized, the criticism becomes opaque. In short, criticism alone would not prevent "anything goes."
Practical implications	Claims that there are no general criteria and proposes to study the practical conditions of the theories in order to distinguish them.	Such an attitude is only possible when it comes to empirical research. As show Grabner & Strunk (2020), the evaluation of empirical statements itself depends on several metatheoretical mediations, depending, for example, on the preferred type of explanation (e.g., functional versus causal versus predictive). Thus, is useful only in some specific situations. Therefore, does not provide an exhaustive treatment for the quality criteria challenge.
Innovative pattern set	It proposes a new set of standards that are more expansive than the current criteria, but without clearly delineating the types of research that are permissible (or "scientific").	Metacriteria such as precision, consistency, or transparency are generally desired by all because they are closely associated with scientific rigor. Nevertheless, it cannot be said with certainty whether such criteria are universally applicable or whether they are unambiguous in their formulation. According to Grabner & Strunk (2020), they consist at most of a set of qualities rather than strict standards that can be directly applied in evaluating a particular research problem. In this sense, they are similar to the scientific "values" (Kuhn, 1996 [1962]) identified in the history of the natural sciences.

Source: Outlined by the author based on Grabner & Strunk (2020).

At the most general level, the authors ensure that the scientific virtues of consistency, transparency, and precision should prevail, as supported by Longino (2002). At the applied level, she suggests quality assessments that use more rigorous and diverse criteria, selected according to the goal of the research in question-"is this research aimed at concrete predictions? Or a hermeneutic investigation aimed at better understanding the motivations of the actors?" Each of them must be confronted with different procedures - (GRABNER & STRUNK, 2020, p. 14).

The economics is already pluralistic

Part of the literature argues that economics is already pluralistic enough:

Economic science is plural! It is not only interested in the influence of monetary incentives on decisions of households and firms. It studies intrinsic incentives such as altruism and compassion, the effects of storytelling, and the importance of soft skills for careers; it is interested in both monetary policy and discrimination against minorities in the workplace, analyzing the effects of taxes on labor supply and asking under what circumstances information persuades people; it points out the danger that customers are sometimes too naive not to be taken advantage of. Plural economics deals with real estate prices as well as the role of emotions in politics; it uses neoclassical, Keynesian, and Austrian approaches (BECKER, et al., 2017, p. 835).

Becker et al. (2017) base the claim on alleged evidence of pluralism in the top 5 economics journals, which they claim published papers on each of the stated topics in 2017 (ibid., p.836). Bachmann (2017) echoes this idea and goes further, claiming that pluralist critiques of economics generally refer to a scarecrow. In both cases (and this is also true of the rest of the literature supporting these critiques), we find the claims of Diane Coyle (2010), who noted an intense pluralist shift in economics in the aftermath of the 2008 crisis. Coyle noted that the economics has achieved a more practical and humane status than ever before as a result of what he called "a remarkable creative renaissance in economics" (COYLE, 2010). However, qualifying this argument as empirically correct depends on considerations of the dimension under consideration and the degree of plurality of perspective (GRABNER & STRUNK, 2020).

George A. Akerlof (2020, p.415) points out that the Webster dictionary gives two different definitions of economics: (i) "a social science primarily concerned with the description and analysis of the production, distribution, and consumption of goods and services" ; (ii) "economic theory, principles, or practices". The second definition, according to the same author, corresponds primarily to the methodological tools taught in graduate programs in economics (Ibidem). It sheds light on a very particular aspect of economics, namely: in economics, the prevailing paradigm dictates not only the topics of the field (as any analysis based on Kuhn, 1996, would suggest), but also the appropriate methodology for addressing them (Akerlof, 2020). From this perspective, economics is not by definition methodologically pluralistic . The main question, then, is: Is the economics theoretically plural? There seems to be ample evidence that it is not. Akerlof (2020) makes three arguments.

I - The "curse" of the top journals

The work of James Heckman and his co-authors (2017) shows that the main determinant of an academic economist's success is the metrics of the top journals. This is because universities use these indicators to make decisions, with particular weight given to the number of publications in the most important journals (top 5). For this reason, argues Akerlof (2020, p.409), "assistant professors at research universities are unable to resist the dictates of journals." In this regard, the data presented by Card and DellaVigna (2013) are quite illustrative: between 2008 and 2010, acceptance rates for the top 5 journals were less than 6%, a decline of about 60% from the average acceptance rate of 15% in previous decades, with accepted papers becoming increasingly specialized.

II - Super-specialization of the profession

The demand for high rigor leads to a bias for complicated approaches to economic research (Akerlof, 2020). Generalists must meet accuracy standards for multiple domains, while specialists must meet standards for only one domain. Therefore, it is easier to be "hardness" scientist as a specialist than as a generalist. There are also institutional incentives for specialization, see the increasingly specific division of disciplines or the creation of more and more niche academic journals and conferences (Ibidem).

III - Prejudice against new ideas

This happens mostly for two reasons: (1) Old subjects/paradigms have a set of tools (methods, procedures, databases, established terminologies, developed conceptual foundations etc.) that help in research. Given the bias against difficult approaches noted by Akerlof (2020), researchers who "work within these accepted paradigms have an advantage because they can borrow these tools freely to present their ideas accurately" (Ibidem, p. 408). Therefore, anyone exploring a new idea or working in an unpaved field is at a disadvantage because they must develop their own tools. This greatly increases the likelihood that this work will be rejected for "lack of rigor" (Frey, 2003), which discourages researchers from pursuing topics of this nature; (2) Methodological rigidity impedes any attempt to challenge established paradigms. "Old ideas are discarded only when they are shown to be inferior to new ideas in tests" (Akerlof, 2020, p. 408).

Since Friedman (1953), the consensus in economics has required that ideas provide testable predictions, making life especially difficult for new paradigms. For all these reasons, "young academic economists facing the mandate clock have little choice. Even if they have different opinions about what is acceptable to editors and reviewers, they must comply" (Akerlof, 2020, p.410). The author contends that these features make the academic global economics highly competitive and leave little room for theoretical pluralism. The author claims that these features

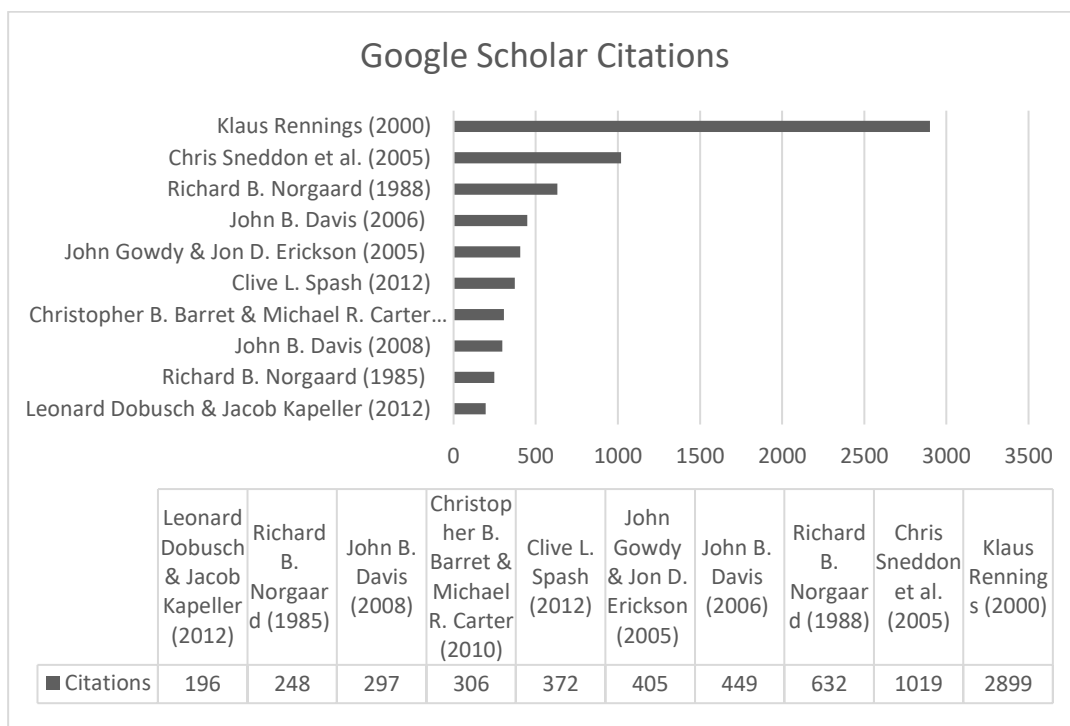
make academic global economics highly competitive and leave little room for theoretical pluralism¹¹.

The bibliometric study presented by Hodgson (2019) supports this argument. First, it shows the strong prevalence of the concepts of 'utility' and 'maximization' in the publications of the main economics journals; second, it shows that approaches inconsistent with this meaning (even those involving modeling and formalization, as in the case of dynamic systems theory or agent-based models) remain marginalized.

If more pluralism were necessary, it would arise by itself

Some critics of pluralism emphasize problems related to quality control in research. For them, pluralism is associated with a kind of academic anarchism for which any theoretical or methodological approach is valid (see: Backhouse, 1998). Figures such as David Colander (Colander, 2014) have already made (albeit veiled) criticisms of this kind. The author suggests that heterodox economics joins the other social sciences in taking advantage of the excessive pluralism that characterizes them.

Figure 01: Top 10 most cited calls for pluralism in the economics



Source: Outlined by the author.

From this perspective, what heterodox calls a lack of pluralism would actually be a reflection of the low prevalence of a degree of pluralism that is already beyond what is necessary. Therefore, if

¹¹ “In short, the economics profession, especially for younger researchers, is highly competitive and has rapidly tightened. The academic research market, i.e., economics journals, leaves researchers no choice but to bow to the dictates of editors and reviewers, starting with the conception of the paper” (AKERLOF, 2020, p. 411).

desired even more, would bring more problems than solutions (Colander, 2014). There is still a part of the literature that is more emphatic and associates pluralism with obstacles to the progress and development of economics itself as a science (GINTIS, 2009; GINTIS et al., 2015).

However, an examination of the most influential calls for pluralism in economics (Figure 01) reveals no theoretical-methodological "anarchism". Klaus Rennings (2000) is by far the most cited work. Has as its subject the innovations in the field of sustainable development. The author claims that the methodological pluralism characteristic of ecological economics extends to the field of "eco-innovations". As such, he positively characterizes pluralism while highlighting the potential gains of combining the contributions of neoclassical and (co)evolutionary approaches to environmental economics and innovations in the field.

In addition, 5 of the 9 remaining works in the top 10 are also in the green economics (ecological/environmentally friendly/sustainable) category. This is mainly explained by the fact that the field of ecological economics is a successful example of pluralism in economics (Norgaard, 1988). In this group of studies, some extol the benefits of methodological pluralism and endorse it (Norgaard, 1988) or extend it and add agent-based modeling to its scope (Gowdy & Erickson, 2005); one paper suggests a return to philosophical/epistemological pluralism (Norgaard, 1985); and another calls for greater epistemological pluralism (Sneddon et al., 2005). Finally, one of the essays is devoted to debunking the critique of pluralism in ecological economics, particularly the "anything goes" type critique (SPASH, 2012).

The other works are more heterogeneous: they identify and celebrate the emergent pluralism in academic economics since the 1980s (Davis, 2006); they appeal to methodological pluralism as a tool to counter the pitfalls of applying the models of RCT (Barret & Carter, 2010); they debate which is more likely: that economics converges to a new dominant paradigm or to pluralism (Davis, 2008). At no point in any of the aforementioned works do the authors convey the idea of a methodological anarchism or pluralism where "anything goes."

Finally, the contributions of Dobusch and Kapeller (2012), in addition to appealing to pluralism interested in heterodoxy, provide a brief review of the literature on the distinction between pluralism and relativism. First, the authors show how the literature has incessantly rejected the epistemological "anything goes" on the basis of three basic principles: (i) respecting the logic, consistency, and stability of meanings within arguments; (ii) adhering to the minimum rules of good argumentation (Marqués & Weismann, 2008, p. 117); and (iii) "systematically seeking knowledge, whether in the form of facts or regularities" (DOBUSCH & KAPELLER, 2012).

Regarding ontological awareness, the authors argue that this "does not mean accepting certain propositions uncritically, but rather that the conditions for understanding and evaluating works with different ontological foundations must be met" (ibid.). Finally, "tolerating alternative

hypotheses to the one you prefer does not require a relativistic view" (Ibid.). In light of this, they emphasize that at the most general level, the pluralist literature shares the general premise of fallibilism that recognizing the possibility that any proposition (including one's own) may be false must guarantee tolerant discourse (Ibid.). Bigo & Negru (2008) and Dow (2008) are important contributions that address this issue. Even the works that take a more radical stance towards the demand for more pluralism in the economics (Marqués & Weisman, 2008) do not reveal these intentions.

4. A normative defense of pluralism in economics

Promoting pluralism in economics is a normative issue because it involves a value judgment about the importance of diversity of ideas and perspectives for generating economic knowledge and understanding economic reality. This means, without qualification, recognizing that different theories and approaches can be useful for understanding different aspects of economics and that no theory or approach is capable of providing a complete and definitive explanation of how economics works.

Economic science deals with phenomena of a holistic nature. Therefore, the discipline must recognize that the different aspects of economic reality are interconnected and that, in this way, a fragmented or one-sided analysis can lead to a limited and inaccurate understanding (Da Gama Cerqueira, 2002). A holistic perspective in economics emphasizes the importance of considering the complexity of biological systems and the various factors that influence the decisions of psychological actors, such as institutions, social norms, power relations, reflexes, and expectations (Gyls, 2008). From this perspective, promoting pluralism in economics is not only a matter of diversity of ideas, but also a methodological approach that aims to integrate different perspectives to achieve a more comprehensive and accurate understanding of economic reality.

In other sciences, which are also complex, pluralism has successfully contributed to progress (Redding, 2001 and Teo, 2010 are examples for the field of psychology; and Della Porta, 2008 for the social sciences), where multiple theoretical approaches coexist and have contributed to the development of the field. For example, by considering a broad range of views and theories, economists have access to a wider range of information that allows them to more accurately assess the consequences of an economic decision. One way they do this is by highlighting the limitations of prevailing economic theories or models. By considering other theoretical perspectives, it is possible to challenge the assumptions and limitations of these models, making them more accurate and applicable to reality. In addition, the inclusion of multiple perspectives allows for the identification of different solutions to the same problems, allowing for critical evaluation and more informed choice, reducing the bias and limitations associated with each approach.

Another area where pluralism can improve decision making is in improving consensus. By incorporating different theoretical perspectives, pluralism allows different actors and groups to have a voice in economic discussions. This leads to better understanding and dialogue and can help build a broader consensus on appropriate economic policies than has been fostered by conventional economic theory. The pluralistic approach promotes the participation of diverse groups and sectors in economic decision-making and allows traditionally excluded groups-such as indigenous communities or grassroots organisations-to participate more meaningfully in the economic policies that affect them. Not only is this more equitable, but it can also lead to policies that are more effective and tailored to the needs of affected populations.

In this sense, the diversity of perspectives can play the role of an additional source of creativity that can contribute with different solutions to unsolved (or poorly solved) problems in economics, especially those related to complex economic phenomena. Moreover, different schools of thought can provide unique and innovative solutions to problems that standard economic theory has neglected. For example, behavioral economics has provided important insights into human behavior and its impact on economic decision making. Feminist economics has provided a new perspective on gender issues and economic inequality. All of these approaches can provide innovative solutions to traditionally unsolved problems.

The coexistence of different theoretical and methodological approaches therefore increases the discipline's ability to adapt to changes in the real world. This is because in a pluralistic environment, different schools of thought and approaches have the opportunity to offer different and complementary answers and solutions to new economic questions or familiar challenges. In this way, the greater adaptability that comes from pluralism can help economics to become more sensitive to different cultural and historical contexts. Finally, different approaches may come from different cultural traditions and be better suited to address specific questions in different contexts.

In short, epistemic diversity, i.e. the diversity of forms of knowledge and methods in economics, is essential for building a more robust and complete economics. Each approach and perspective brings its own insights, theories, methods and results, which enriches the understanding of the complexity of the economic world. Epistemic diversity has driven research in different directions and enables the exploration of topics that a single approach could not address.

Concluding Remarks

The call for more pluralism in economics has a long history, which has intensified in some moments. In this sense, the 2008 financial crisis represents the most recent and intense wave of calls for a more inclusive and pluralistic economics, but one that has yet to yield significant results. Given the profession's resistance to incorporating new methods and new epistemic perspectives into

its analytical domain, this paper presents a synthesis of the most common criticisms of pluralism in economics and contrasts them with responses from heterodox perspectives.

The exercise has provided evidence that mainstream economists' objections to pluralism in economics reflect, much more than concrete problems, mainstream economists' prejudices about the explanatory potential of alternative and dissident approaches. While the nature of the rejection is beyond the scope of this essay, it seems obvious that it is closely related to the rigidity of the academic and professional institutions that shape the economics profession, such as economics departments and professional associations. Academic inertia, i.e. the resistance of these academic institutions to adopt significant changes in theory and practise, may have been an important factor in keeping the habits of thought (see: Hodgson, 2004) of economists relatively unchanged. This can and should be explored in future work.

References

- AKERLOF, George A. Sins of Omission and the Practice of Economics. **Journal of Economic Literature**, v. 58, n. 2, p. 405-18, 2020.
- ANDERSSON, Claes; TÖRNBERG, Anton; TÖRNBERG, Petter. Societal systems—complex or worse?. **Futures**, v. 63, p. 145-157, 2014.
- BACHMANN, Rüdiger. Zur aktuellen Pluralismusdebatte in der Ökonomik: Ansichten eines wohlwollenden Pluralismuskritikers. **Wirtschaftsdienst**, v. 97, n. 12, p. 843-847, 2017.
- BACKHOUSE, Roger E. “Should economics embrace postmodernism?” (p.134-145) In: BACKHOUSE, Roger E (Ed) **Explorations in economic methodology: from Lakatos to empirical philosophy of science**. Routledge, 2006.
- BARRETT, Christopher B.; CARTER, Michael R. The power and pitfalls of experiments in development economics: Some non-random reflections. **Applied economic perspectives and policy**, v. 32, n. 4, p. 515-548, 2010.
- BECKENBACH, F. Monism in modern science: the case of economics. In: **Advancing Pluralism in Teaching Economics**. Routledge, p. 31-54, 2018.
- BECKER, Johannes et al. Wirtschaftswissenschaften: zu wenig Pluralität der Methoden und Forschungsrichtungen?. **Wirtschaftsdienst**, v. 97, n. 12, p. 835-853, 2017.
- BENARTZI, Shlomo; THALER, Richard. Heuristics and biases in retirement savings behavior. **Journal of Economic perspectives**, v. 21, n. 3, p. 81-104, 2007.
- BERTOCCO, Giancarlo. **Crisis and the failure of economic theory: The responsibility of economists for the Great Recession**. Edward Elgar Publishing, 2017.
- BIGO, Vinca; NEGRU, Ioana. From fragmentation to ontologically reflexive pluralism. **Journal of Philosophical Economics**, v. 1, n. 2, p. 127-150, 2008.
- BIGO, Vinca. “The Cambridge School and Pluralism.” In: **Economic Pluralism**, (Ed) Robert Garnett, (Ed) Erik K. Olsen e (Ed) Martha Starr, p. 114-135. London: Routledge, 2010.
- BÖGENHOLD, Dieter. From heterodoxy to orthodoxy and vice versa: Economics and social sciences in the division of academic work. **American Journal of Economics and Sociology**, v. 69, n. 5, p. 1566-1590, 2010.
- BOLAND, L. **Critical Economic Methodology: a personal odyssey**. Routledge, 2005 [1997].
- CALDWELL, Bruce. Some comments on Lawson’s reorienting economics: Same facts, different conclusions. In: **Ontology and Economics**. Routledge, 2008. p. 25-31.
- CALDWELL, Bruce. “The case for pluralism” (p.231-244) In: DE MARCHI, Neil (Ed). **The popperian legacy in economics**. Cambridge University Press, 1988.

CALDWELL, Bruce. "Varieties of pluralism: Commentes on Samuels and Dow" In: SALANTI, Andrea; SCREPANTI, Ernesto (Ed.). **Pluralism in economics: new perspectives in history and methodology**. Edward Elgar Publishing, 1997.

CARD, David; DELLAVIGNA, Stefano. Nine facts about top journals in economics. **Journal of Economic Literature**, v. 51, n. 1, p. 144-61, 2013.

CHUN, Christian W. **The discourses of capitalism: Everyday economists and the production of common sense**. Routledge, 2017.

COLANDER, D. "How did macroeconomic theory get so far off the track, and what can heterodox macroeconomists do to get in back on track?" In: HEIN, E; NIECHOJ, T; STOCKHAMMER, E. **Macroeconomic Policies on Shaky Foundations—Whither Mainstream Economics?** IMK at the Hans Boeckler Foundation, Macroeconomic Policy Institute, 2009a.

COLANDER, D; HOLT, Richard PF; ROSSER, J. B. Live and dead issues in the methodology of economics. **Journal of Post Keynesian Economics**, v. 30, n. 2, p. 303-312, 2007.

COLANDER, D. Moving Beyond the Rhetoric of Pluralism. **Economic pluralism**, v. 122, p. 36, 2009b.

COLANDER, D. Post Walrasian macroeconomics and heterodoxy: thinking outside the heterodox box. **International Journal of Political Economy**, v. 33, n. 2, p. 68-81, 2003.

COLANDER, D; VAN EES, H. **Post Walrasian macroeconomic policy**. Cambridge, UK: Cambridge University Press, 1996.

COLANDER, D. The death of neoclassical economics. **Journal of the history of Economic Thought**, v. 22, n. 2, p. 127-143, 2000.

COLANDER, D; HOLT, R; ROSSER JR, Barkley. The changing face of mainstream economics. **Review of Political Economy**, v. 16, n. 4, p. 485-499, 2004.

COLANDER, D et al. The financial crisis and the systemic failure of academic economics. Univ. of Copenhagen Dept. of Economics **Discussion Paper, n. 09-03**, 2009.

COLANDER, D. The wrong type of pluralism: toward a transdisciplinary social science. **Review of Political Economy**, v. 26, n. 4, p. 516-525, 2014.

COYLE, Diane. **The soulful science: What economists really do and why it matters**. Princeton University Press, 2010.

DA GAMA CERQUEIRA, Hugo EA. A Economia Evolucionista: Um capítulo sistêmico da teoria econômica?. **Análise econômica**, v. 20, n. 37, 2002.

DAVIDSON, Paul. **The Keynes solution: the path to global economic prosperity**. St. Martin's Press, 2009.

DAVIS, John B. Specialization, fragmentation, and pluralism in economics. **The European Journal of the History of Economic Thought**, v. 26, n. 2, p. 271-293, 2019.

DAVIS, John B. The turn in recent economics and return of orthodoxy. **Cambridge Journal of Economics**, v. 32, n. 3, p. 349-366, 2008.

DAVIS, J. B. The turn in economics: neoclassical dominance to mainstream pluralism?. **Journal of institutional economics**, v. 2, n. 1, p. 1-20, 2006.

DELLA PORTA, Donatella; KEATING, Michael (Ed.). **Approaches and methodologies in the social sciences: A pluralist perspective**. Cambridge University Press, 2008.

DEQUECH, David. Applying the Concept of Mainstream Economics outside the United States: General Remarks and the Case of Brazil as an Example of the Institutionalization of Pluralism. **Journal of Economic Issues**, v. 52, n. 4, p. 904-924, 2018.

DEQUECH, David. Neoclassical, mainstream, orthodox, and heterodox economics. **Journal of Post Keynesian Economics**, v. 30, n. 2, p. 279-302, 2007.

D'IPPOLITI, C. **Democratizing the Economics Debate: Pluralism and Research Evaluation**. Routledge, 2020.

DOBUSCH, L; KAPPELLER, J. Heterodox United vs. Mainstream City? Sketching a framework for interested pluralism in economics. **Journal of Economic Issues**, v. 46, n. 4, p. 1035-1058, 2012.

DOW, S. History of thought and methodology in pluralist economics education. **International Review of Economics Education**, v. 8, n. 2, p. 41-57, 2009.

DOW, S. Pluralist economics: is it scientific? (p.13-30). In: (Org) DECKER, Samuel; (Org) ELSNER, W.; (Org) FLECHTNER, S. **Advancing Pluralism in Teaching Economics**. Routledge, 2018.

DOW, Sheila C. Plurality in orthodox and heterodox economics. **Journal of Philosophical Economics**, v. 1, n. 2, p. 73-96, 2008.

DUTT, A.K. On Post Walrasian economics, macroeconomic policy, and heterodox economics. **International Journal of Political Economy**, v. 33, n. 2, p. 47-67, 2003.

FEHR, Ernst; SCHMIDT, Klaus M. A theory of fairness, competition, and cooperation. **The quarterly journal of economics**, v. 114, n. 3, p. 817-868, 1999.

FEHR, Ernst; SCHMIDT, Klaus M. On inequity aversion: A reply to Binmore and Shaked. **Journal of economic behavior & organization**, v. 73, n. 1, p. 101-108, 2010.

EICHACKER, Nina. Pluralist Economics as a Democratizing Force: A Review Essay. **Review of Political Economy**, p. 1-10, 2022.

FREEMAN, Alan. The economists of tomorrow: The case for assertive pluralism in economics education. **American Journal of Economics and Sociology**, v. 69, n. 5, p. 1591-1613, 2010.

FREY, Bruno S. Publishing as prostitution?—Choosing between one's own ideas and academic success. **Public choice**, v. 116, n. 1, p. 205-223, 2003.

FRIEDMAN, Milton. **Essays in positive economics**. University of Chicago press, 1953.

GIGERENZER, Gerd; BERG, Nathan. As-if behavioral economics: Neoclassical economics in disguise?. **As-If Behavioral Economics**, p. 1000-1033, 2010.

GIGERENZER, Gerd; GAISSMAIER, Wolfgang. Heuristic decision making. **Annual review of psychology**, v. 62, n. 1, p. 451-482, 2011.

GIGERENZER, Gerd; SELTEN, Reinhard (Ed.). **Bounded rationality: The adaptive toolbox**. MIT press, 2002.

GINTIS, Herbert. **The Bounds of Reason: Game Theory and the Unification of the Behavioral Sciences**-Revised Edition. Princeton University Press, 2014.

GINTIS, Herbert et al. Homo socialis: An analytical core for sociological theory. **Review of Behavioral Economics**, v. 2, n. 1-2, p. 1-59, 2015.

GODDARD, Jessica J.; KALLIS, Giorgos; NORGAARD, Richard B. Keeping multiple antennae up: Coevolutionary foundations for methodological pluralism. **Ecological Economics**, v. 165, p. 106420, 2019.

GOUGE, William M. **A Short History of Paper-money and Banking in the United States: Including an Account of Provincial and Continental Paper-money**. To which is Prefixed, An Inquiry Into the Principles of the System. Philadelphia, Printed by TW Ustick, 1833.

GOWDY, John; ERICKSON, Jon D. The approach of ecological economics. **Cambridge Journal of Economics**, v. 29, n. 2, p. 207-222, 2005.

GRÄBNER, C; STRUNK, B. Pluralism in economics: its critiques and their lessons. **Journal of Economic Methodology**, v. 27, n. 4, p. 311-329, 2020.

GROENEWEGEN, J (Ed.). **Teaching pluralism in economics**. Edward Elgar Publishing, 2007.

GYLYS, Povilas. On the scope of the science of economics: a holistic approach. **Transformations in Business & Economics**, v. 7, n. 3, 2008.

HANS, Albert. **Treatise on critical reason**. Trans. MV Rorty. Princeton: Princeton University Press, 1985.

HECKMAN, James J. et al. Publishing and promotion in economics: the curse of the top five. **AEA Roundtable Discussion at ASSA in Chicago**. <https://www.aeaweb.org/webcasts/2017/curse.Php>, 2017. Acessado em 10 de setembro de 2022.

HEISE, A. Pluralism in economics: inquiries into a daedalean concept. **Discussion Paper 51**, Zentrum für Ökonomische und Soziologische Studien, University of Hamburg, 2015.

HODGSON, Geoffrey; MÄKI, Uskali; MCCLOSKEY, Donald. A plea for a rigorous and pluralistic economics. **American Economic Review**, v. 82, n. 2, p. 1992, 1992.

HODGSON, Geoffrey M. Debating the Future of Heterodox Economics. **Journal of Economic Issues**, v. 55, n. 3, p. 603-614, 2021.

HODGSON, Geoffrey M. **Is There a Future for Heterodox Economics?: Institutions, Ideology and a Scientific Community.** Edward Elgar Publishing, 2019.

HODGSON, Geoffrey M. Reclaiming habit for institutional economics. **Journal of economic psychology**, v. 25, n. 5, p. 651-660, 2004.

HODGSON, Geoffrey M. The approach of institutional economics. **Journal of economic literature**, v. 36, n. 1, p. 166-192, 1998.

HODGSON, Geoffrey M. Will economists wake up in 2009?. **Revue du MAUSS**, v. 33, n. 1, p. 253-260, 2009

JEVONS, W.S. **The theory of political economy.** Macmillan and Company, 1871.

KING, John E. A case for pluralism in economics. **The Economic and Labour Relations Review**, v. 24, n. 1, p. 17-31, 2013.

KITCHER, Philip. **The advancement of science: Science without legend, objectivity without illusions.** Oxford University Press on Demand, 1993.

KUHN, Thomas S. **The Structure of Scientific Revolutions.** Chicago: University of Chicago Press, [1962] 1996.

LARI, Teemu. When does complementarity support pluralism about schools of economic thought?. **Journal of Economic Methodology**, v. 28, n. 3, p. 322-335, 2021.

LAVOIE, Marc. Do heterodox theories have anything in common? A post-Keynesian point of view. **European Journal of Economics and Economic Policies: Intervention**, v. 3, n. 1, p. 87-112, 2006.

LAVOIE, Marc. **Post-Keynesian Economics: New Foundations.** Edward Elgar Publishing, 2014.

LAWSON, Tony. Contemporary economics and the crisis. **real-world economics review**, v. 50, p. 122-131, 2009.

LAWSON, Tony. Heterodox economics and pluralism: reply to Davis. In: **Ontology and Economics.** Routledge, 2008. p. 105-141.

LAWSON, Tony. "Modern Economics: The Problem and a Solution." In: **A Guide to What's Wrong in Economics**, (Ed) Edward Fullbrook, p. 21-32. London: Anthem, 2004.

LAWSON, T. The nature of heterodox economics. **Cambridge Journal of Economics**, v. 30, n. 4, p. 483-505, 2006.

LAZEAR, Edward P. Economic imperialism. **Quarterly Journal of economics**, v. 115, n. 1, p. 99-146, 2000.

LEE, F. S. A case for ranking heterodox journals and departments. **On the Horizon**, 2008.

LEE, Frederic S.; ELSNER, Wolfram (Ed.). "Editors' Introduction" In: **Evaluating economic research in a contested discipline: rankings, pluralism, and the future of heterodox economics.** Wiley-Blackwell, 2010.

LEE, Frederic S. Heterodox economics and its critics 1. In: **In Defense of Post-Keynesian and Heterodox Economics.** Routledge, 2012. p. 104-132.

LEE, Frederic S. "Heterodox Economicx" In: Durlauf & Blume (Eds), **The New Palgrave Dictionary of Economics** Online, London: Palgrave Macmillan, 2008.

LEE, F. S. **A History of Heterodox Economics: Challenging the mainstream in the twentieth century.** Routledge, 2009.

LEE, Frederic S.; KEEN, Steve. The incoherent emperor: A heterodox critique of neoclassical microeconomic theory. **Review of Social Economy**, v. 62, n. 2, p. 169-199, 2004.

LEE, F. S. The pluralism debate in heterodox economics. **Review of Radical Political Economics**, v. 43, n. 4, p. 540-551, 2011.

LONGINO, H. E. **The Fate of Knowledge.** Princeton University Press. NJ and Oxford, UK, 2002.

MCGOLDRICK, KimMarie; PETERSON, Janice. Significant learning and civic education: shifting frameworks for teaching in light of learning about the financial crisis. **JSSE-Journal of Social Science Education**, vol. 10, n.3, p.16-25, 2009.

MAKI, U. "The one world and the many theories". In A. Salanti & E. Screpanti (Orgs) **Pluralism in Economics.** New Perspectives in History and Methodology, pp. 37-47. Cheltenham: Edward Elgar, 1997.

MANKIWI, N. Gregory. That freshman course won't be quite the same. **New York Times**, v. 23, 2009.

MARQUÉS, Gustavo; WEISMAN, Diego. Not anything goes: a case for a restricted pluralism. **Journal of Philosophical Economics**, v. 2, n. 1, p. 115-136, 2008.

MEARMAN, Andrew. Pluralism, heterodoxy, and the rhetoric of distinction. **Review of Radical Political Economics**, v. 43, n. 4, p. 552-561, 2011.

NORGAARD, Richard B. Environmental economics: an evolutionary critique and a plea for pluralism. **Journal of Environmental Economics and Management**, v. 12, n. 4, p. 382-394, 1985.

NORGAARD, Richard B. The case for methodological pluralism. **Ecological economics**, v. 1, n. 1, p. 37-57, 1988.

O'HARA, P.A. Principles of institutional-evolutionary political economy—Converging themes from the schools of heterodoxy. **Journal of Economic Issues**, v. 41, n. 1, p. 1-42, 2009.

PAYSON, Steven. **How Economics Professors Can Stop Failing Us: The Discipline at a Crossroads**. Lexington Books, 2017.

PETERSON, Janice. Economics education after the crisis: Pluralism, history, and institutions. **Journal of Economic Issues**, v. 47, n. 2, p. 401-410, 2013.

POLANYI, Michael; ZIMAN, John; FULLER, Steve. The republic of science: its political and economic theory *Minerva*, I (1)(1962), 54-73. **Minerva**, v. 38, n. 1, p. 1-32, 2000.

POPPER, Karl. **The logic of scientific discovery**. Routledge, 2005 [1935].

REARDON, J (Ed.). **The handbook of pluralist economics education**. London: Routledge, 2009.

REDDING, Richard E. Sociopolitical diversity in psychology: The case for pluralism. **American Psychologist**, v. 56, n. 3, p. 205, 2001.

RENNINGS, Klaus. Redefining innovation—eco-innovation research and the contribution from ecological economics. **Ecological economics**, v. 32, n. 2, p. 319-332, 2000.

SAMUELS, Warren J. "Methodological Pluralism." In: **Handbook of Economic Methodology**, (Ed) John B. Davis, (ED) D. Wade Hands e (Ed) Uskali Mäki, p. 300-303. Cheltenham (UK): Edward Elgar, 1998.

SCREPANTI, Ernesto; ZAMAGNI, Stefano. **An outline of the history of economic thought**. OUP Oxford, 2005.

SNEDDON, Chris; HOWARTH, Richard B.; NORGAARD, Richard B. Sustainable development in a post-Brundtland world. **Ecological Economics**, v. 57, n. 2, p. 253-268, 2006.

SPASH, Clive L. New foundations for ecological economics. **Ecological Economics**, v. 77, p. 36-47, 2012.

STOCKHAMMER, Engelbert; RAMSKOGLER, Paul. Post-Keynesian economics—how to move forward. **European Journal of Economics and Economic Policies: Intervention**, v. 6, n. 2, p. 227-246, 2009.

TEO, Thomas. Ontology and scientific explanation: Pluralism as an a priori condition of psychology. **New Ideas in Psychology**, v. 28, n. 2, p. 235-243, 2010.

TÖRNBERG, Petter. Complex realist economics: toward an ontology for an interested pluralism. **Review of Social Economy**, v. 76, n. 4, p. 509-534, 2018.

VAN-HEUR, Ban; BASSENS, David. An urban studies approach to elites: Nurturing conceptual rigor and methodological pluralism. In: **Disclosing Elite Ecologies**. Routledge, 2021. p. 1-13.

WALRAS, L. **Elements of Pure Economics**, 1926, rev ed. 1926, Engl transl, 1926 [1874].

WATANABE, Tsuneo. Metascientific foundations for pluralism in psychology. **New Ideas in Psychology**, v. 28, n. 2, p. 253-262, 2010.

WILLIAMSON, Oliver E. The new institutional economics: taking stock, looking ahead. **Journal of Economic Literature**, v. 38, n. 3, p. 595-613, 2000.