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Abstract

Purpose. This article highlights the notion that methodological normativism of the neoclassical school has consolidated its monopoly position within economics, and significantly reduces our social reality by understanding the economic system as a closed system. The author aims to show that such a misleading picture of the world leads to one single best epistemology, theory, methodology and educational system within economics.

Design/Methodology/Approach. The author explains complaints against such an approach in terms of five different kinds of interrelated and interdependent pluralisms. The comparative and documentary methods ensure maximum openness with regard to the collection of theoretical and empirical papers. The qualitative analysis of "pro et contra" debate is based on a questionnaire completed by students.

Findings. The author believes that understanding different types of pluralism and their interconnectedness is the most appropriate approach to inquiry and teaching in economics. Epistemological pluralism logically follows from ontological by allowing a relatively separate system of paradigms to co-exist as a necessary counterpart to the plurality of the social world. In debates, the author strives for a limited range of complementary theoretical approaches with meaningful methodological standards in order for students to obtain a more anthropocentric and less dogmatic view of the world.

Originality. There have been few attempts to show deeper interdependence among various types of pluralism. The current study addresses this gap in the literature. The testimonials of students show the usefulness of "pro et contra" debate in introducing and promoting more pluralism into the educational process.

Keywords: methodological normativism, pluralism, debate

JEL: A11, A20, B10, B40, B50.





1. Introduction

Consider the sequence of courses taken by a student who intends to become an economist. First come micro and macroeconomics, then econometrics and statistics, with at best a few other courses on real world topics (labour, finance, international). Master's and PhD courses are often exactly the same, with a more rigorous approach to the topics. Goodwin (2007) asks whether any other disciplines teach in the same way. Going through the same material for the third time – the same trajectory and similar content, only using fancier methods to prove the same thing in a more abstract way with less real-world application – is a unique and bizarre pedagogical method.

Thus, many authors argue that mainstream (neoclassical) economics falls short in its efforts to respond to modern challenges and in delivering proper policy advice (Blaug, 1992; Mayhew, 2008) due to the uncritical use of mathematical formulations and models, which causes it to neglect reality (Goodwin, 2007; Lawson, 2017; Leontief, 1971). The mainstream school focuses only on internal consistency rather than external consistency, i.e., on theory rather than reality. Many authors have pointed out that the economic crisis of 2008 additionally intensified the controversy regarding the position of the mainstream school (Blinder, 2010; Cassidy, 2009; Kowalski & Shachmurove, 2011; Gunn, 2011; Maas, 2014; Hodgson, 2019; Wright, 2018; Cismas & Dumitru, 2020; Dow, 2021).

I shall argue in this article that the neoclassical school has consolidated its position within economics by using strict methodological rules (1). The second goal is to point out that the mainstream school in economics uses a reductionist picture of the world, viewing it as a closed and singular system, which leads us to a single (positivistic) epistemology, a single (monist) methodology and a single (bizarre) pedagogical method (2). I am convinced that we need more pluralism in the education of today's economists, and that different pluralisms (ontological, epistemological, theoretical, methodological) are interrelated and interdependent (3). I am confident that "pro et contra" debate can be an enormous help to us in relation to introducing more pluralism in education (4).

The question of the extent to which mainstream economics should be open to pluralism is a question that has already been well addressed in the literature, where authors mainly focus on the particular kinds of pluralism. Misunderstandings in the discussion about pluralism stem from the fact that authors are not clear about the dimension and degree of plurality that is being considered. For example, Mearman et al. (2018b) distinguished between ontological, epistemological, theoretical and educational pluralism. Mäki (2002) presented a list of pluralisms, including ontological, theoretical, methodological, axiological, linguistic, epistemological, veristic, and intentional. Garnett (2007) pointed out the importance of theoretical and methodological pluralism in the forming of an alternative to the current orthodoxy. Clearly there is no consensus on the form of pluralism required.

While there exists a large body of literature on the particular issue of pluralism, to my knowledge there have only been few attempts to show deeper interdependence among some of them (Heise, 2017; Dow, 2007; Kešeljević, 2020). Dow (2007) argued for pluralism

in ontology, theory and methodology by considering the implications for policy makers and economics in education. Heise (2017) distinguished between ontological, epistemological, theoretical, methodological and paradigmatic pluralism. Kešeljević (2020) pointed out interconnectedness between ontological, methodological pluralism and pluralism in education.

The intension of this article is to fill this gap by showing the interrelation between different kinds of pluralism due to their interconnectedness. Thus, the article presents a complementary view of pluralism (ontology-epistemology-theory-methodology-education) and "pro et contra" debate as a useful social framework for introducing such pluralism into the education of economists.

The article is structured as follows. The methodological normativism/monism of the neoclassical school is presented in the second section. The third section presents the pluralism of grievances against mainstream economics. The fourth section explains ontological pluralism, which rejects the idea of the one world one truth principle and accepts reality as an open system without a priori assumptions. This enables economics to analyse the world by not making often false predictions. The next section shows why multi-paradigmatic pluralism can serve as an appropriate model of inquiry in economics. In the sixth section, the importance of theoretical pluralism is explained through openness to different theories. The seventh section then proceeds with the explanation of the importance of methodological pluralism by allowing for a variety of different methodologies. The eighth section highlights the importance of pluralism in the education of the economists of today. In the ninth section, the usefulness of "pro et contra" debate for promoting pluralism in the education of economists is presented. Section 10 concludes.

2. Methodological Normativism and Monism in Economics

Economic theory has a polemical history of conflicting theoretical and policy orientations. In addition to periods of strong agreement and unity, there have also been periods when the flow of thought was not so consistent. Due to disagreements on theory, economists turned to methodology at the turn of the 19th century in search of a solution that would make economics a more objective and value-free science (Kešeljević, 2004). In terms of methodology, marginalism introduced the use of mathematics to enable consistency and reduce disagreements between economists. Computers further encouraged the evolution of economics into a "toolbox", with more emphasis on mathematical methods and statistical econometric tools (Groenewegen, 2007).

The actual practices of economists changed over time to such an extent that economists began to refer to themselves as simply "economists", rather than "political economists" (Kešeljević, 2020). A political economist focuses on the institutional, philosophical and historical context, believing that reality is too complex for empirical investigation. With the marginalist revolution, the economist became an expert in mathematics and statistics,

writing articles for important but modestly read journals. The focus of political economists on growth, value, distribution and classes was replaced by marginalist calculation, rationality, the price mechanism and equilibrium.

The purpose of marginalist methodology has been to establish standards and criteria by which achievements in economics are judged (methodological normativism). McCloskey (1983) defined the dominant methodological approach in economics as a combination of (logical) positivism, the deductive method and empirical testing (instrumentalism). Microeconomics is essentially deductive from a methodological point of view, whereas macroeconomics tends to be inductive (Pheby, 1988). Deductivism is based on the axiom of rational behaviour, and logical analysis ensures internal consistency. Inductivism emphasises observation, empirical work and hypothesis testing. The integration of economic theory with logic, mathematics and statistical procedures has been a way to show and prove its scientific character (Kešeljević, 2020): on the one hand, mathematisation (microeconomics); on the other, instrumentalism with sophisticated econometric models (macroeconomics). Such an approach is a result of the inconsistency between Marshall's microeconomics and Keynes's macroeconomics. Paul Samuelson integrated both aspects into the "neoclassical synthesis". However, this is not fully consistent, as it actually combines Marshall's ideas of equilibrium with Keynes's ideas of disequilibrium (Kovač, 2001).

With mathematical formalism and statistics, economics accepted the methodology of the natural sciences (methodological monism) (Blaug, 1992; Caldwell, 1984; Hassard, 1993). Rodrick (2015) and Pheby (1988) claimed that economics had become indiscernible from mathematics, a discipline that represents scientific purity. Such an approach has become an ideal for many economists. It may be viewed as a paradox that ideas unacceptable to many in terms of theoretical and ideological content were appropriate from a methodological point of view (McCloskey, 1983). For example, Samuelson's Foundations of Economic Analysis is a key text in the unification of modern economics. However, unification was not done at the theoretical (causal and explanatory) level by allowing different theories to co-exist (Keynes, Walras), but rather at the methodological, mathematical derivational level (Hands, 2021). Similarly, Lange (1936–1937) and other authors showed (Wright, 1994; Elster, 1982), in the so-called "socialist calculation debate", that mainstream methodology can be used to defend the central planning system. Clearly, a false assumption exists that mainstream economic theory automatically implies a promarket stance.

Many authors (Eichner, 1983; Fukuyama, 1995; Stigler, 1984) have recognised economics as a universal science because of its high degree of methodological uniformity, which leads to the idea that rationality can be applied to all of the areas where resources are scarce and problems of choice appear. The economic imperialism of the neoclassical school is evident within the economics community and in its determination to conquer the other social sciences (Johnson, 1983; Lazear, 2000; Mäki, 2008; Stigler, 1984). It seems that such methodological normativism and monism generates a pluralism of grievances against the mainstream.

3. The Pluralism of Grievances against Mainstream Economics

Criticism of mainstream economics can be divided into several types of pluralism. Calls for pluralism are not uniform, as they have come in a variety of forms. Can pluralism help us to identify problems in our scientific community? I strongly believe that a clearer concept of pluralism is needed to understand and define what underlies this call for different kinds of pluralism, since opponents and defenders might have different kinds and degrees of pluralism in mind. I will therefore start by outlining the various types of pluralism that critics have offered in order to categorise them and to show their interconnectedness.

Lawson (1997, 2017) rejected the idea that all researchers in economics are confronted with one social reality (one world) and with a single truth related to this reality. Pluralism at the ontological level means that the social world contains more than one reality. Ontological pluralism rejects the idea of the one world one truth principle, and accepts reality as an open system. Depending on the sense in which the system is considered open, we can have a number of parallel worlds (Lawson 1997; Wright, 2018; Dow, 2019; Mearman et al., 2018a).

Epistemological pluralism, as a necessary counterpart to the plurality of the social world as posited by ontological pluralism, allows for the coexistence of relatively separate systems of paradigms in economics. The dominance of the neoclassical school has often been claimed in the economic community. Several authors have argued that the main problem with the neoclassical (orthodox) paradigm is that it crowds out the alternative (heterodox) one (Simonetti, 2007; Heise, 2017; Hodgson, 2019; Wright, 2018; Grimm et al., 2018).

Theoretical pluralism represents openness towards different theories that can coexist in a discipline about a certain phenomenon (Dalen, 2007; Negru, 2017; Gräbner & Strunk, 2020). Theoretical pluralism allows diverse analyses of problems and provides different solutions by using theories with different assumptions about the real world. A particular theory necessarily involves abstraction and therefore cannot capture the complexity of the economic system. No single theory is good at explaining all economic problems.

Many authors have argued for the need for more methodological pluralism in economics by including a number of different methods derived from particular understandings of the world and problems being considered (Rodrick, 2015; Dow, 2007; Lewis, 2003). Caldwell (1984) and Ovsenik (1999) rejected a single universal method and argued that no methodology, including neoclassical, should monopolize the science with its normativism and monism. Consensus on a universal methodology in economics is not only unnecessary, it is detrimental.

The commitment to pluralism in education has been highlighted not only by students (Post-Autistic Movement, Rethinking Economics, Cambridge Society for Pluralism, Harvard petition, ISIPE) but also by academia (Dow, 2019; Varufakis, 2010; Komlos, 2019; Goodwin, 2007; Negru, 2017; Raveaud, 2010; Jolink, 2007; Dow, 2007; Dalen, 2007; Rodrick 2021; Moran et al., 2017; Fullbrook, 2003, 2004; Adams, 2019; Mearman et al., 2018a; Decker et al, 2019; Pühringer & Bäuerle, 2019; Dow, 2021). The education of economists today has been monopolized by the neoclassical approach, which fosters the exclusion of other perspectives within economics and beyond. Such dominance leads to partial analyses and localised worlds. Consequently, economic theory has lost its holistic view of the world, which has resulted in its increasing social irrelevance.

It seems that pluralism is the lowest common denominator against mainstream economics. I believe that different types of pluralism are interrelated and interdependent. For example, a misleading view of the world as a single social reality leads to a single epistemology, theory and methodology within economics. On the other hand, epistemological pluralism follows logically from ontological pluralism by allowing for relatively separate systems of paradigms that serve as necessary counterparts to the plurality of the social world. Theoretical/methodological pluralism includes a set of theories/methods derived from a specific understanding of the world and problems being studied. I strongly believe that a complementarity view of different pluralisms (ontologyepistemologytheorymethodology-education) is needed in order to better understand the complexity of the grievances against mainstream economics.

4. Ontological Pluralism

Modern economics strives to acquire objective knowledge as a value-free science. In order to do so, it must assume that such a truth exists in the first place. This means that there is only one correct explanation of the world and a single best way of constructing knowledge. In ontological monism, all researchers are confronted with a single social reality and a single explanatory truth about that reality, which can be arrived at using internal logic or empirical testing. Without ontological (a priori) assumptions, it would be impossible to analyse the system and make predictions (Mäki, 1997; Lawson, 1997, 2017; Heise, 2017, 2020; Dow, 2007, 2019).

If our social reality is singular, then the economic system can only be regarded as a closed system, because only as such is it fully analysable. Modern (mainstream) economic theory has developed a straightforward system based on rationality, general equilibrium and methodological individualism. In a closed system, boundaries and variables are identifiable and the relationships between them are unchangeable; all elements are interrelated in an exclusive and knowable way.

On the other hand, ontological pluralism rejects the idea of the one world, one truth principle and accepts reality as an open system. The distinction between open and closed systems became prominent with the rise of systems theory (Bertalanffy, 1950; Bunge, 1979). Depending on the sense in which the system is considered open, we can have a number of parallel worlds (Lawson 1997; Dow, 2007, 2019). Relations within the system are complex, indeterminate and without regularities. The external boundaries of the system are not identifiable; the system is not fully analysable and deterministic. "Ceteris paribus" does not embrace the complexity of the real world. Ontological pluralism rejects the idea

that "somewhere out there is an economist, who sees the truth". The pluralist must reject the idea that our social reality is a closed system, but this can be understood as only one of many versions of our reality.

An economic system is an open system; it extracts resources and energy from the environment, processes these resources into final products and disposes of large amounts of resources (waste) back into the environment (Turner et al., 1993). The material balance principle implies that energy has to either accumulate in the economic system or return into the environment as waste. The law of entropy means that there is no completely efficient conversion from one form of energy to another and that energy consumption is an irreversible process. The economy, as an open system, can only function through the support of its environment, which means that there is no one best way to build up knowledge about the world.

5. Paradigmatic (Epistemological) Pluralism

Epistemological pluralism logically follows from ontological pluralism (Heise, 2017, 2020; Dow, 2019; Gräbner & Strunk, 2020). Diversity of paradigms is a necessary complement to the plurality of the social world. A paradigm is understood as a set of generally adopted scientific achievements that a scientist can employ without having to clarify basic assumptions, theoretical concepts, and methodological issues (Kuhn, 1998). A paradigm involves a set of commonly adopted a priori assumptions acquired through the educational process. Relationships between the different constituent elements can be clearly defined and specified within the paradigm.

We can define four such paradigmatic periods in the history of economic thought (Kešeljević, 2014, 2020): Classical political economy (1776–1890), Marshallian economics (1890–1936), Keynesian economics (1936–1970s) and neoclassical economics (1970s onwards). These revolutionary periods are often identified with the publications of the founders of each approach: *The Wealth of Nations* by Adam Smith (1976), *Principles of Economics* by Alfred Marshall (1890), *The General Theory* by John Maynard Keynes (1936) and the collection of papers by Thomas Sargent and Robert Lucas published as *Rational Expectations and Econometric Practise* (1981).

The neoclassical paradigm crowds out alternatives (Dalen, 2007; Heise, 2017; Lee, 2011; Simonetti, 2007; Garnett, 2007; Kešeljevič, 2014; Wright, 2018; Grimm et al., 2018). Rather than focusing on ontological issues, these authors focused on a variety of schools of thought as relatively separate systems of paradigms. In addition to the neoclassical school, there are also heterodox schools such as the Austrian, Institutional, Evolutionary, Feminist and Post-Keynesian schools, and Radical political economy. Paradigmatic pluralism provides alternatives to the prevailing orthodoxy by opening different windows into economic reality and rejecting the idea that any school could hold the final solution.

I strongly believe that epistemological pluralism, with a number of competing

paradigms (schools) on equal footing, can serve as an appropriate model of inquiry in economics as a counterpart to the plurality of the social world. Economists have been able to choose from a variety of schools in different contexts. Why should we not switch from the neoclassical to the institutional paradigm to better explain the financial crisis, for example? For this to work, we need to maintain a variety of schools of thought in economics and have them readily available for use. This condition is not met in many economic departments.

There are additional reasons for epistemological pluralism in economics. First, paradigms cannot be compared with each other due to their incommensurability. Paradigms rely on different assumptions, methods and concepts; they are therefore in a state of "paradigmatic war" (Reed, 1994; Kuhn, 1998; Dow, 2019). Thus, a neoclassical paradigm cannot be a tool for evaluating an institutional paradigm, as there is no neutral theoretical ground for their comparison.

Second, as consensus within orthodox economics today is based on power, dogmatism, intolerance and other such restrictions of academic freedom have become a source of subordination within the economic community (Kešeljević, 2014; Heise 2017; Freeman, 2009; Lee, 2009). The inability to pluralistically express dissent leads to intellectual imbecility (McCloskey, 1983), intellectual slavery (Eichner, 1983; Kristensen, 2001), ideological conduct (Calas & Smircich, 1999) and reduced creative thinking (Dutt, 2011). At the epistemological level, Feyerabend's pluralism (1999) allows for a high degree of intellectual openness, and a more democratic debate within the discipline. Epistemological pluralism contributes meaningfully to a better understanding of the economy, as it would allow for economists to have at their disposal a variety of incommensurable economic schools with a plurality of theories and methods to be used to solve the problems of today.

Third, it is a paradox that orthodox economics has failed to integrate the market, as the main coordination mechanism, within its own discipline in the market of ideas. All possible representations of the world can and must be in competition with one another (Heise, 2017, 2020; Wright 2018; Dalen, 2017; Dow, 2019). Gräbner and Strunk (2020) argued that the market for economic ideas can serve as a selection machine only when we do not have structural obstacles that hinder alternative approaches. Kešeljević (2014) argued that no theoretical platform can persist in the long run without sufficient demand (e.g., from academics or policy makers) for its findings in the science market. The legitimacy of economics does not lie within monism and the exclusion of others, but in the struggle between paradigms competing for customers in the science market, solving the actual problems of our time.

6. Theoretical Pluralism

Epistemological pluralism allows for a better understanding of the economy since incommensurable economic schools provide a plurality of theories for solving the problems of today. As early as May 1992, a petition in the *American Economic Review* by Nobel laureates and prominent economists supported the need to recognise that different theoretical approaches should coexist within economics.

However, more pluralism should not come at the expense of less rigorous approaches in economics. There are several arguments in favour of theoretical pluralism in economics. First, understanding the economy as an open system leads to parallel worlds and a plurality of theories (Mäki, 2002; Dow, 2007; Negru, 2017). A plurality of theories provides diverse analyses of contemporary economic problems and the economy. Second, no theory is good at explaining everything, as every theory involves a certain degree of reduction and abstraction. The real world and the nature of its problems coupled with the context of change over time brings us to the conclusion that a single theoretical approach may be seriously inadequate (Dow, 2007; Dalen 2007; Rodrick, 2021; Jolink, 2007). Economics teaches us that there is a time for fiscal expansion and a time for a restrictive fiscal policy. In certain situations, taxes should be high, and sometimes they should be low.

Some economists argue that there is no need for more pluralism since orthodox economics is already pluralistic enough (Davis, 2006; Smith 2018; Cedrini & Fontana 2018). The neoclassical paradigm also acts as a unifying nexus for newer theoretical approaches, such as game theory, new institutional economics, new behavioural economics, and experimental economics. Only such internal pluralism is perceived as legitimate by orthodox economists (Cedrini & Fontana, 2018). Some authors (Davis, 2019; Dobusch & Kappeler, 2012) believe that the fact that the term *neoclassical* has now largely been replaced by the much looser term *mainstream* suggests that neoclassical orthodoxy is no longer such a strong and unifying force. However, despite greater diversity, the latter is still a continuation of the same neoclassical research programme. Simply pointing to a horde of theories does not automatically confirm the existence of pluralism in economics, since these theories only complement and supplement each other. As such, they do not make conflicting claims about the world.

Theoretical pluralism based on ontological pluralism differs from paradigmatic monism, which only allows intra-paradigmatic theoretical pluralism. The latter excludes theories from heterodox paradigms such as post-Keynesianism, neo-Ricardianism and Marxism (Heise, 2017). Heise (2017, 2020), Gräbner and Strunk (2020), Lari (2021) and Mäki (2002) all argued that theoretical pluralism must include more than one theory with an oppositional stance due to the incommensurability of their elements. The degree of pluralism is higher in the case of substitutive theories than in the case of complementary ones.

Theoretical pluralism has a natural place in economics based on a number of different theories. It is, however, difficult to defend the idea that the higher the degree of pluralism, the better. We need an optimal level of pluralism or theoretical pluralism in the correct way (Mäki, 2002; Kešeljevič, 2014; Dow, 2019). In this respect, I believe that three arguments should be pointed out as limitations. First, pluralism is vital; however, some degree of consensus is required within economics to allow for cumulative progress, to avoid endless repetitive discussions on everything, and to ensure quality control to limit low-quality research (Hodgson, 2019). Second, we should seek theoretical substitutes from different

paradigms with conflicting claims about the world (Dow, 2019). For example, the Keynesian, Marxist and Schumpeterian understandings of business cycles mean that each school has an alternative set of premises that lead to a unique explanation of a cycle by using different methodologies. Third, our goal should not be to consider all theories, but to consider a limited number of them in order to gain knowledge on how to conduct policies in changing contexts.

7. Methodological Pluralism

Economic methodology examines the nature of the assumptions, explanations and criteria by which we can evaluate economic theories (Boumans & Davis, 2010; Pheby, 1988). Economics adopted positivism to free itself from dogma and everyday experience. By using mathematical formalism and the model approach, mainstream economics rules out any possibility of the "exceedingly free" formation of methodological approaches due to a single correct description of the social world and a single best methodology (Kešeljević, 2020). The singularity and closure assumed by orthodox economics are seen in the construction of the general equilibrium theory in order to meet the methodological requirements of positivist model construction.

Methodological pluralism is the counterpart to the plurality of the social world (Burell & Morgan, 1979; Dow, 2007, 2019; Lewis, 2003; Kešeljević, 2020). Different economic schools of thought, such as the Neoclassical, Institutional, or Radical Political Economics, use different methodologies to comprehend reality. Methodological pluralism provides a range of tools that help us comprehend the idea that no methodology could be said to be the most appropriate for a particular problem being studied. For example, an institutionalist could use a model as a tool if it is reasonable to do so with regard to the subject of study. This is in stark contrast to methodological monism defined by universal regularities and singularity.

However, a plurality of approaches poses problems for policy makers, who do not have the time, knowledge or energy to consider them all. With different methodologies, there might also be more than one set of policy solutions. For example, Lange (1936–1937) and others (Wright, 1994; Elster, 1982) showed, in the so-called socialist calculation debate, that the mainstream methodology can also be used to defend the central planning system. Obviously, the false assumption exists that the mainstream approach automatically leads to the legitimisation of markets. The neoclassical approach is obviously adaptable to both free-market policies as well as socialism. Clearly, there is no close mapping between the chosen methodology and policy (Hodgson, 2019). Thus, the policy-driven demarcation between mainstream and heterodox schools in policymaking should be rejected.

Many authors criticise methodological pluralism, especially if it is equated with relativism. Parker (1994) maintained that the "anything goes" principle may lead to intellectual nihilism. Heise (2017), Calas and Smircich (1999), and McKinley et al. (1999) argued that it is impossible to have all the answers, as monism claims, but this also does not require a poorly defined pluralism. Dow (2008) argued for a middle ground between monism and pure pluralism as a structured plurality with a finite range of approaches. Hodgson (2019) and Heise (2020) argued that we should strive for structured pluralism based on quality assurance (standards). Gräbner and Strunk (2020) similarly argued that "anything goes" is neither the practice nor agenda of the pluralists, since diminishing quality standards may put the success of the discipline as a whole at risk. Understanding complex problems requires a broad theoretical background based on diverse methodological approaches with rigorous methodological standards to ensure a rigorous type of analysis. Structural pluralism, between pure pluralism and monism, means that there is a limited range of approaches with different understandings of the nature of the economy.

McCloskey (1983) argued that methodological pluralism involves not only different scientific methods, but also the communication through which economists engage with each other in their everyday lives, at conferences and in public debates. In this context, Gräbner and Strunk (2020), Dow (2019), Cismas and Dumitru (2020) and Dalen (2007) argued for the design of institutions and spaces that stimulate debate among adherents of different economic schools. Methodological pluralism as a rhetorical practise (debate) encourages the proliferation of mutually competing approaches. The rhetorical approach is a social context in which we produce and disseminate new ideas by being exposed to direct criticism and the persuasion of others. In my opinion, this aspect is particularly important in the education of economists.

8. Pluralism in Education

Within the dominant neoclassical paradigm, members share the same system of education and the same answers to major challenges. Postgraduate students all around the world receive the usual diet of microeconomics, macroeconomics, statistics and econometrics, with the application of the marginal principle to everything. The majority of students are not familiar with heterodox perspectives, which go beyond the neoclassical school. As a result, economics education is accused of being narrow, based on unrealistic assumptions, dogmatic and increasingly socially irrelevant. By the end of their education, most economists are technically superb, but ignorant of the important issues. The mainstream environment dominates education by controlling top schools, economic journals and institutions. Many economists faced with the desire to publish (or perish) accept the neoclassical school; however, this further reproduces the rigid structure of the neoclassical paradigm.

Scholars and students are explicitly calling for more pluralism in order to have a less dogmatic view of the world, better coverage and a balanced spectrum of views. Pluralism in education first gained momentum in 1992, when 44 leading economists, including nine Nobel laureates, published a petition in the American Economic Review calling for a more pluralistic approach to economics. The call for a change in curriculums has been

echoed by many authors. Varufakis (2010) suggested that students should be introduced to key thinkers and principles in political philosophy, sociology, economic history, political economy and the history of economic thought. McGoldrick (2010) argued that a well-designed curriculum encourages students to question the single perspective. Dalen (2007) similarly advised students to cross disciplinary boundaries to avoid economic imperialism. Rodrick (2021) observed that a pluralistic approach to teaching and doing economics will produce a better understanding of social outcomes, as all our policy paradigms have exhibited important blind spots because they were designed as universal programs that could be applied anywhere and at any time. Wright (2018) argued that students are calling for the teaching of economics to be more applicable and interdisciplinary, with a variety of schools of thought. Pühringer and Bäuerle (2019) argued that students should be familiar with a variety of economic theories and methods, and especially important are courses in economic history and the philosophy of science.

I believe that a radical restructuring of the economic curriculum is needed today. However, change will not be easy and will bring its own problems. There seems to be a "lock-in" situation in relation to the paradigm – not only intellectually, but also organisationally and socially. The teaching staff of today have mostly come out of the mathematical formalist programme, so it is unlikely that they will be committed to more pluralistic teaching of economics for the next generation (Simonetti, 2007; Dalen, 2007). Moreover, the status of the profession is largely dependent on research rather than teaching, so it is possible to see why it is more difficult to justify teaching a pluralistic curriculum (Simonetti, 2007; Weehuizen, 2007). As teachers, we are also afraid of puzzling our students and of admitting that we do not have all the answers. Economists have an interest in keeping things as they are.

The order of courses is also important. Should we be teaching heterodox and orthodox economics in parallel? Should we start with neoclassical economics? Should we focus solely on heterodox schools? In the majority of economics departments, the neoclassical school occupies the vast majority of time, so drastic change is not possible. A pluralist curriculum should start with the neoclassical school and later include successful heterodox approaches to prevent the mainstream from dominating the program (Varufakis, 2010; Raveaud, 2010; Simonetti, 2007; Dow, 2019; Mearman, 2007). I strongly believe that "pro et contra" debate could be immensely useful in achieving this goal.

9. "Pro et contra" debate as a tool for the introduction of more pluralism in education

"Pro et contra" debate1 was introduced in various (post)graduate courses at the Faculty

¹ The article "Debate pro et contra as an efficient method for building plural communities of teachers and PhD students in a mutual cooperative learning process" was preliminarily presented at the International Conference on Information Communication Technologies in Education, Chania, Greece (Kešeljević, 2019).

of Economics in the University of Ljubljana between 2013 and 2021. I decided to practise the format with two opposite teams. Each week I gave students reading assignments for the following week in order to prepare for a public debate on the chosen topic (e.g., inequality, the financial crisis). The students followed a pre-determined protocol, and cross-examination allowed teams to challenge their opponents and demand an explanation. After the debate, students voted on the winning team by a show of hands and the main points were summarised.

The qualitative analysis of the debate was based on a questionnaire completed by the students before the final exam. The questionnaire was divided into two parts (the evaluation of the course content and the evaluation of the lecturer). The respondents chose from a five-level rating scale to express the degree of agreement with each particular statement. A combination of open- and closed-ended questions was used to enable students to assess the quality of each particular debate.

The testimonials below show the usefulness of debate in promoting and introducing more pluralism. Students were introduced to different schools of economic thought (paradigms) to see a diversity of perspectives. The reading materials came from different traditions to highlight the antagonisms between them (e.g., was Europe's rush to austerity in 2008/2009 part of the problem or part of the solution?). Many students commented on the benefits of such a pluralistic approach:

- Student No.1: "It was interesting to see that we can use different economic schools."
- Student No.2: "Students have to look at the problem from different points of view."
- Student No.3: "Economics is not only mainstream!"
- Student No.4: "I was able to see two sides of the same topic."

Holism promotes cooperation between different scientific communities in order to look at the same problem from different points of view. Students articulated the benefits of such an approach, which enabled them to become familiar with other scientific disciplines (e.g., philosophy, sociology):

- Student No.1: "Ideas from different scientific disciplines were included."
- Student No.2: "Topics were analysed from their social and political aspects as well."
- Student No.3: "Different disciplines allow us to have different views."
- Student No.4: "We should think about problems in a broader sense."

Pluralism encourages students to think more critically. Different schools of economics and scientific communities helped students to practice critical thinking. Several students pointed out this advantage by saying:

- Student No.1: "A debate encourages students in their critical assessment."
- Student No.2: "I believe that debate encourages critical thinking."
- Student No.3: "It helps us to argue our own case."
- Student No.4: "A debate stimulates fruitful discussion."

The pluralistic approach also made it possible for students to better understand realworld problems. Topics such as the causes of economic crises and the problems of the capitalist system were often debated (e.g., do we need a global financial tax? Is there an alternative to capitalism?). Many students argue that the debate enabled them to better understand real-world problems:

- Student No.1: "A debate helps us improve our understanding of the world problems."
- Student No.2: "Different schools of economics enable us to understand problems and potential solutions better."
- Student No.3: "Learning through pro et contra debate helps us to better understand real problems."

The possible disadvantage of a debate is that it can cause some confusion among students. Therefore, I decided to enrich the standard orthodox module with different heterodox perspectives only for specific topics (e.g., inequality). I believe that teaching heterodox and mainstream economics in parallel would require much more time and would run the risk of pushing (undergraduate) students too far too quickly. Students highlighted these risks by saying:

- Student No.1: "Many times I was confused about the correct explanation since so many schools were presented."
- Student No.2: "The conclusion should be made more obvious to be less confused."
- Student No.3: "I did not like it when the debates were confusing."

A number of different findings emerged from the survey. The students recognised the importance and usefulness of debate for promoting greater pluralism in the education of the economists of today. They expressed a preference for a holistic view of problems and for being able to think about them more critically and originally. I strongly believe that such a pedagogical practice can help us introduce a more pluralistic approach to education. Although a debate might cause some confusion among the students, it can also increase student engagement in the classroom more than the one-way transmission of knowledge from teachers to students.

10. Conclusion

The crisis that erupted in 2007 has intensified controversy about the status of (mainstream) economics and how this should be reflected in our approach to inquiry and teaching. I strongly believe that the only appropriate approach involves understanding the different types of pluralism (ontology-epistemology-theory-methodology-education) and their interconnectedness. Pluralism is not uniform, as it has emerged in a variety of ways.

"Pro et contra" debate as an educational method can help us greatly in introducing

more pluralism into education. I have confidence in this method, and practical experience shows that such an interactive process helps students to explore new theoretical ideas and methodological approaches. The rhetorical approach is a useful social framework – not only in terms of greater student engagement, but also in terms of how we can expose students within this structure to direct criticism of others and to alternatives.

Understanding different perspectives, paradigms, theories and methodologies within economics is an important part of "pro et contra" debate. At the moment, economists generally portray the economy as a closed system, as it would be impossible to analyse it otherwise. Viewing the world as a single social reality precludes mainstream economics from a deeper understanding of the more complex truth. Debate with two opposite teams from two different perspectives (e.g., scientific communities) helps students to understand that there is no single best way of theorising about the world, since reality is too multi-faceted to understand.

Through debate, a variety of incommensurable economic schools can be presented in order to open different windows into economic reality by rejecting the idea that any school could possess the final solution. Such epistemological pluralism follows logically from ontological pluralism by allowing a relatively separate system of paradigms (schools) in economics to co-exist on an equal basis as necessary counterparts to the plurality of the social world.

We should strive for a limited and finite range of theoretical approaches with meaningful methodological standards to ensure quality control. However, the existence of a plethora of theories does not automatically prove the presence of pluralism if we merely offer complementary perspectives. Through debate we can enrich orthodox modules with successful heterodox approaches regarding particular topics to prevent the mainstream from completely dominating the program.

Such an approach will enable students to better comprehend the economic reality and to develop multiple bases of knowledge when solving complex global problems. The more plurality we have in debates, the more difficult it will be to communicate with one another and to control for quality. Thus, a certain degree of consensus is required before we start with debates to avoid endless repetitive discussions on everything. Voting on the winning team by raising hands at the end of the debate helps students to understand that the legitimacy of each individual theory does not lie in dogmatism and subordination within economics, but in the constant struggle for customers between theories on the market of science.

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