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# Meta-theory as a uniting framework for economics and global political economy

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#### ABSTRACT

This paper discusses the differences between orthodox and heterodox economics as well as between American and British Global Political Economy (GPE). It is found that the main differences within both disciplines are related to meta-theoretical premises. However, meta-theory turns out to be also a uniting factor between disciplines. Orthodox economics and American GPE mostly share positivist meta-theory, while heterodox economics and British GPE are largely based on critical realist meta-theory. Instead of building bridges within disciplines, it is suggested that it would be more feasible to combine some parts of orthodox economics with American GPE and some parts of heterodox economics with British GPE. This paper also discusses the role of mathematics in economics, critically assessing Tony Lawson's claim that there is no place for mathematical modelling in heterodox economics.

#### **KEYWORDS**

Critical realism; positivism; orthodox economics: heterodox economics: American GPE; British GPE

#### 1. Introduction

According to Cohen (2007a, 2008), Global Political Economy (GPE; also known as International Political Economy, IPE) emerged in the 1960s as a synthesis of international economics and International Relations (IR). Since then the discipline has split into American and British GPE. Within economics there is a similar division and the discipline has been separated into orthodox economics (i.e. neoclassical economics or mainstream economics) and heterodox economics. Since the 1970s, orthodox economics has consolidated its position as the dominant tradition within economics, while the heterodox traditions, such as post-Keynesian, Marxian or Austrian economics, have become increasingly marginalized. The dominant position of orthodox economics has remained unchallenged even in the aftermath of the global financial crisis of 2007-2008, which lead to questions about the validity of many of its claims.

In this paper, I compare the meta-theoretical commitments of economics and GPE. Specifically, I show that:

(a) American GPE is largely compatible with orthodox economics, and both can be mostly rooted in positivism.

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(b) British GPE is largely compatible with heterodox economics, and both can be mostly rooted in critical realism.

Based on these characteristics of economics and GPE, I argue that combining some parts of orthodox economics with American GPE may prove to be more feasible than building bridges between orthodox and heterodox economics. Similarly, combining some parts of heterodox economics with British GPE may be more fruitful than trying to merge American and British GPE.

The structure of this paper is as follows. Section 2 introduces positivist and critical realist meta-theory. Section 3 explores the differences between orthodox and heterodox economics. Section 4 discusses the role of mathematics in economics, critically assessing the claim of Lawson (1997, 2013) that economics should entirely eschew mathematics and arguing that – when the meta-theoretical assumptions of two positions are incommensurable – it is challenging, if not impossible, to combine them. Section 5 clarifies the differences between American and British GPE. Section 6 tries to reconcile orthodox economics with American GPE as well as heterodox economics with British GPE. I provide a conclusion to the paper in Section 7.

### 2. Positivist and critical realist meta-theory

This section describes the philosophical meta-theories of positivism and critical realism. Positivism holds that all valid knowledge is derived knowledge. That is, knowledge can be derived from sensory experience through reason and logic. Positivism is based on empiricism; it requires that researchers must test derived assertions against empirical evidence. Logical positivism is a variant of positivism; it combines empiricism and rationalism. In addition to maintaining that observational evidence is necessary for knowledge, logical positivism admits that knowledge includes a component that is not derived from observation. When I refer to positivism, I refer to this variant of positivism.

One implication of positivist meta-theory is that the social world – in addition to the natural world - operates according to general laws. These laws take the form of causally related constant conjunctions. The role of the researcher is to discover these constant conjunctions, usually reported as statistical correlations. The great contribution of Bhaskar (1979) was to see causality in a broader sense. According to Bhaskar (1979), causality is not related to events and their conjunctions (the actual) but rather to structures and mechanisms (the real) which are not necessarily directly observable. Thus, regularities are neither sufficient nor necessary conditions for causes even when observed in social sciences; and regularities of events should only be seen as tendencies. Furthermore, it is only in closed systems - as one might achieve when studying a natural system in a laboratory – that one is able to manipulate the situation to bring about a constant conjunction of events. According to Bhaskar (1979), the social world can only be subject to local closures that are temporally and spatially contingent. Therefore, while positivism's focus on constant conjunctions allows it to be relevant to the natural sciences, in which closed systems can be constructed, it cannot be applied to the social sciences. Bhaskar (1979) therefore offered critical realism - with its broader conception of causality – as the most appropriate meta-theory for social sciences. Critical realism avoids closed system explanations based on constant conjunctions and,

instead, advocates open system analysis in which outcomes are assumed to be geo-historically contingent.

Unlike positivists, Bhaskar (1979) also made a difference between explanation and prediction. He argued that a social event can be explained but it could not have been predicted due to the openness of the social system. To illustrate his point – as an example of unpredictable explanation – Bhaskar (1979) gave evolution, which cannot predict what forms of life will develop in the future, but which can explain how any existing form of life developed.

Another difference between positivism and critical realism is that the latter maintains that there is a sharp distinction between facts and values; while the former maintains that facts and values are related. Consequently, critical realists, contra positivists, assert that we can use facts to influence values. Therefore, although critical realism is similar to positivism in that neither make substantive claims nor advance policy implications, it is nevertheless unlike positivism in that it assumes that the substantive claims achieved through research can lead to policy implications – because facts can lead to values. Nevertheless, in practice, positivist research is used to influence policy decisions, but this contradicts its basic assumptions.

# 3. Orthodox and heterodox economics

Orthodox economics is also known as neoclassical economics or mainstream economics (in this paper I will use the term orthodox economics). Heterodox economics, then, refers to all other approaches. Although these concepts are regularly used in the literature, their definitions are varied, and range from a focus on substance to a focus on metatheory. I will argue that it is more feasible to use substantive rather than meta-theoretical criteria to separate heterodox economics from orthodox economics.

In contrast to my position, Lawson (2013) prefers the use of meta-theoretical criteria. Following Veblen, Lawson (2013) defines orthodox economics as an enduring reliance upon formal mathematical modelling, particularly mathematical deductivism. Deductivism presupposes that correlations or event regularities exist and they can and should be spotted. Lawson (2013) argues that some parts of heterodox economics share this same deductivistic approach and, thus, could instead be classified as orthodox economics. To the contrary, I argue that Lawson's definition is too simplistic. If orthodox economics is defined along these lines, for instance, some Marxists economists would be counted as orthodox. I assume that this would be unacceptable both for most orthodox and heterodox economists.

In other words, if Lawson's definition is accepted, the whole term becomes meaningless. It suggests that the label 'orthodox economics' could be dropped altogether, perhaps replaced by the terms 'mathematical' or 'quantitative' economics. Quantitative economics could then include both orthodox economics and the mathematical parts of heterodox economics; and the remaining parts of heterodox economics could then be called non-mathematical or qualitative economics. While Lawson's (2013) critique of mathematical economics has its merits, his conclusion that we should define all mathematical economics as orthodox economics results in obscuring important differences.

Therefore, I defend the position that orthodox and heterodox economics should be defined according to their substance, not their meta-theoretical commitments. In the

beginning of the nineteenth century, Simonde de Sismondi introduced the distinction between orthodox and heterodox economic theories using confidence in laissez faire policies as the basis of his classification. More recently, methodological features have been used to distinguish orthodox economics from heterodox economics. For instance, Eliassen, Hauge, and Rajic (2015) argue that disagreements between orthodox and heterodox economists are mainly methodological – not ideological or political – and that therefore orthodox economics is not necessarily inherently orientated towards the free-market. I agree with Eliassen et al. (2015) that orthodox economics can tolerate a wide range of different conclusions, but that it does not tolerate methodological deviations. Becker (1976) argued that the defining features of orthodox economics are maximizing behaviour, market equilibrium and stable preferences. Milonakis and Fine (2009) define orthodox economics by its technical apparatus (utility and production functions) and technical architecture (optimization, efficiency and equilibrium); and that it is in this way that orthodox economics has become ahistorical and asocial.

In my view, the best definition is given by Arnsperger and Varoufakis (2006). Following similar lines as above, Arnsperger and Varoufakis (2006) define orthodox economics according to methodology (which they call meta-axioms): methodological individualism, methodological instrumentalism and methodological equilibration. Methodological individualism maintains that all explanations should be built on the behaviour of the individual agent. Methodological instrumentalism insists that all behaviour should be understood as preference-satisfaction maximization. Methodological equilibration builds on analytically discovered equilibrium and stability analysis to study whether the discovered equilibrium can be attained. I believe that the definition given by Arnsperger and Varoufakis is the most appropriate because it avoids the pitfall of defining orthodox economics in terms of outdated conceptions. According to Arnsperger and Varoufakis (2006), for instance, perfect rationality and market clearing are features often present in orthodox economics but they are not necessarily a defining feature of it. They argue that, as long as critics of orthodox economics define their subject of critique incorrectly, then their criticism is bound to fail or at least to be unheard. Keen (2015) is slightly more cautious. He argues that orthodox economists can, in some rare cases, drop one or more of the meta-axioms of Arnsperger and Varoufakis, but never all. However, those studies are never integrated into the core of orthodox economics.

Even if orthodox economics is not uniquely defined as being based on mathematical methods, it seems fairly uncontroversial to assert that, nevertheless, such methods are an essential feature of it. Rational choice and game theory are the methodological workhorses of practically all orthodox economists. Although I do not agree with Lawson's (2013) mathematically based distinction between orthodox and heterodox economics, I completely share his view that especially orthodox economics has become fixated on mathematical analysis.

Critical realists are generally cautious of the use of mathematics in social sciences – including economics and GPE. Arestis, Brown, and Sawyer (2002), however, argue that the notion that critical realism should be anti-mathematical, rather than simply cautious towards mathematics, has arisen only through Lawson (1997). They point out that critical realism is, after all, based on epistemological relativism and, thus, no method should be precluded beforehand.

Lawson seems to be too eager to rush into epistemological questions. Even though Lawson (2013) argues, in line with Veblen, that economics should first and foremost concentrate on the ontological nature of society and only then on appropriate methods, he seems to assume that certain orthodox economists – but also certain heterodox economists – have skipped the former and moved directly to the latter. He assumes that the ontological nature of *any* economic research subject must always preclude mathematical methods. Such a bold claim seems to question the epistemological relativism associated to critical realism. In fact, Lawson seems to be an epistemological absolutist at least when it comes to mathematics in economics.

Furthermore, Keen (2015) points out that Lawson seems to neglect the possibility that mathematical methods would indeed prove to be an appropriate way to acquire knowledge after ontological inquiry. In my view, mathematics has a certain but limited place in economics. For instance, stock-flow consistent modelling, which is popular nowadays within post-Keynesian economics, begins from the ontological premise that, by definition, all financial assets must have a liability as their counterpart. Similarly, all financial flows must come from and go to somewhere. From these starting points, one can build mathematical identities and make conjunctions. Nevertheless, it must be stated that, although the financial system is a closed system, it does not automatically follow that it exhibits event regularities or law-like patterns.

Additionally, there seems to be some ambivalence in Lawson's work. While he was one of the first to comprehensively discuss the relationship between critical realism and economics and was of the opinion that economics should abandon mathematical methods (Lawson 1997); he later (Lawson 1999) admitted that accepting critical realism as an underlying meta-theory does not preclude formalistic methods. Specifically, he (1999) argued that post-Keynesian economists admit that the world is generally open but that it can be subject to local closures; and that local closures can warrant the use of mathematical methods. The problem is, according to Lawson (1999), *a priori* commitment to closed systems which is typical of orthodox economics but not of post-Keynesian economics. Recently, however, Lawson (2013) changed again his mind and argued that economics – whether orthodox or otherwise – should get rid of all mathematical methods. Thus, Lawson has not been perfectly consistent with his demand that economics should abandon mathematical methods.

Fine (2015) criticizes Lawson's (2013) suggestion that by overemphasizing mathematical deductivism one can render substantive content arbitrary or amenable to other purposes. Fine (2015) also claims that Lawson intentionally misrepresents heterodox economics in order to promote his social ontology. Keen (2015) challenges Lawson's (2013) position by arguing that orthodox economics is, in fact, not truly mathematical. Keen (2011) argues that whenever mathematical logic conflicts with orthodox metaaxioms, mathematics is abandoned in favour to preserve the core of orthodox economics. Fine (2015) shares the same view. It could be asked that – should orthodox economists be able to make the same points without mathematics – would this be acceptable to Lawson?

According to Weintraub (2002), it is not straightforward to declare economics as mathematical since what is meant by 'mathematical analysis' has changed over time. According to Weintraub (2002), orthodox economics became mathematical in a particular way when Debreu imported the concepts of 'rigor' and 'proof' from mathematics into orthodox economics in the middle of the twentieth century. Weintraub (2002) argued that since then

orthodox theory has built on internal validity (logical consistency) instead of external validity (empirical consistency), but nonetheless manages to fail even by its own standards.

Davidson (2003) argued that ignoring external validity is the reason orthodox economics has lost its connection with the real world. According to Davidson (2003), the economic reality is non-ergodic and, thus, requires different tools than orthodox economists apply. Also, Dow (2003) advocated plurality of methodological tools which include but are not limited to mathematics.

In addition, Keen (2015) questions Lawson's (1997, 2013) view that mathematical economics is inevitably based on atomistic and closed social reality. According to Keen (2015), any non-linear system is, by definition, not atomistic as it cannot be reduced to its constituent parts. In fact, Keen (2015) argues that non-linear systems are normally open and nonergodic and, thus, consistent with critical realism. Therefore, Keen (2015) argues that Lawson's critique applies only to linear mathematical models. Keen (2015) suggests that particularly orthodox economics should not abandon mathematics but instead to catch up with the progress in mathematics by applying non-linear models more widely.

Eliassen, Hauge, and Rajic (2015) do not suggest that economists should avoid mathematics but that they should also include a range of other tools. According to Eliassen, Hauge, and Rajic (2015), relying solely on the mathematical methods of orthodox economics increases the chance of making mistakes. For instance, instead of efficient market hypothesis had economists paid attention to Fisher's (1932, 1933) debt-deflation theory and Minsky's (1986) financial instability hypothesis, they would have probably had a better understanding of the global financial crash. Based on this Eliassen, Hauge, and Rajic (2015) argue for more pluralistic teaching of economics. In sum, I share Lawson's view that orthodox economics in particular has become fixated on (a certain type of) mathematical analysis. However, I disagree with Lawson that mathematical modelling should be completely abandoned. Depending on the context and the research objective, sometimes – although not always – mathematics is the appropriate approach to understand economic reality.

Up to this point, in this section, I have discussed the different role played by mathematics in the orthodox and heterodox approaches to economics. I now turn to attempts to reconcile the two approaches. Despite their differences, there have been attempts to build bridges between them. In fact, some post-Keynesian ideas have already been incorporated into, and reformulated for, orthodox economics. Perhaps the best-known case is Hicks's (1937) reinterpretation of Keynes's (1936) General Theory. More recently, endogenous money has been incorporated into dynamic-stochastic general equilibrium models (e.g. Woodford 2003). The importance of monetary sovereignty has been emphasized by De Grauwe (2012). Furthermore, the possibility of a prolonged recession due to insufficient aggregate demand has been recognized by Summers (2014). Interestingly, orthodox economists rarely acknowledge the precedence of post-Keynesian work and simply present the ideas as novel and their own. Farmer (2017) is an exception. He explicitly considers how to combine orthodox economics with post-Keynesian economics (although it should be noted that the list of references hardly contains any post-Keynesian names). Farmer (2017) proposes a 'post-Keynesian general equilibrium' framework to facilitate collaboration between orthodox and post-Keynesian economists.

As well as attempts to reconcile orthodox and heterodox economics, we also have examples of some orthodox economists who have had the courage to abandon the orthodox framework and adopt a heterodox approach (at least occasionally). For instance, distinguished orthodox economist Joseph Stiglitz (in Caiani et al. 2016) has been willing to do research from a post-Keynesian starting point.

I have more sympathy with these latter economists who have abandoned attempts to reconcile orthodox and heterodox economics. I think that such reconciliatory ambitions are bound to fail because, despite some genuine convergence, significant differences remain. In particular, the meta-theoretical assumptions of orthodox and heterodox economics are incommensurable. While orthodox economics builds mostly on positivism, heterodox economics is largely consistent with critical realism (see e.g. Lawson 1999; Lavoie 2015, 12–13). As a result, without significant concessions, building bridges between the traditions seems challenging if not impossible.

#### 4. American and British GPE

According to Cohen (2007a, 2008), GPE emerged as a new discipline in the 1960s as an attempt to integrate international economics and IR; while Patomäki (2009) argues that the history of GPE can be traced back to the marginalist revolution in economics in the late nineteenth century. Regardless of when GPE emerged, since then GPE has evolved to two different paths which Cohen (2007a, 2008) labels as American and British GPE. This dichotomy is analogous to the dichotomy of orthodox and heterodox economics. The description of American and British GPE below follows Cohen (2007a, 2008).

The ontology of the American school is state-centric. Thus, its adherents label the field of study as IPE; they see it as a subfield of IR. Its epistemology is based on positivism and empiricism and consequently, it is associated with formal deductive methods of analysis.

Contrastively, the ontology of the British school is more pluralistic. Instead of concentrating on states, its proponents emphasize the importance of various actors and, therefore, label the field as *GPE*. Their version of GPE is multidisciplinary and they see it as an independent discipline from IR (they also prefer the term World Politics over IR). Their epistemology is normative and they build on qualitative methods.

Cohen's dichotomic classification has been criticized for being inaccurate and insufficient. The geographical basis of Cohen's classification has perhaps been the most common criticism. For instance, Higgott and Watson (2007), Ravenhill (2007), Patomäki (2009) and Leander (2009) argue that the geographical dichotomy is not accurate as many scholars in the UK use American GPE and vice versa. Furthermore, Cohen's classification excludes the rest of the world even though GPE was never limited to the US and UK. Cohen has defended his classification, saying that in his original works (Cohen 2007a, 2007b, 2008, 2009) he emphasized that the dichotomy is not based on geography, but rather on method. He decided to label the opposing sides of the dichotomy as 'American' and 'British' because most main adherents are located in those areas (although exceptions can always be found). In my opinion, Cohen could have used different labels, which may have been a better reflection of the ontology and methodology of the two approaches, but now that these labels have been established, changing them will only add to the confusion.

More importantly, Cohen's classification has been criticized by Leander (2009) who argues that Cohen's (2007a, 2008) intellectual history is insufficient as it sidesteps important theoretical approaches such as constructivism and feminism. Both Leander (2009) and

Patomäki (2009) argue for multiple intellectual histories which can account for various contemporary research agendas. Cohen, however, is not saying that his version should be accepted as the only intellectual history. Equally well Cohen's (2007a, 2008) version can be one intellectual history among many others.

Despite the shortcomings of his dichotomous classification, Cohen (2007a, 2008) suggests consolidating GPE by building bridges between American and British GPE. He argues that American GPE could provide methodological rigour while British GPE could have much to offer in terms of research agenda. Many, however, have questioned the idea that American and British GPE can be synthesized. Higgott and Watson (2007) and Ravenhill (2007) accused Cohen of favouring American GPE over British GPE. Cohen (2007b) replied that, although he is inclined towards formal methods, he does not favour American school over British school as there is much more to GPE than epistemology. Cohen (2007b) argued that the British school is stronger in other areas. Patomäki (2009), on the other hand, points out that Cohen is not practicing what he preaches. According to Patomäki (2009), Cohen (2007a, 2008) is arguing for American formal methods but uses British historical and interpretative methods himself.

According to Higgott and Watson (2007) and Ravenhill (2007), Cohen makes things worse with the transatlantic dichotomy as, instead of reconciliation, it will lead to polarization. Cohen (2007b) points out that the dichotomy does not invoke Kuhn's (1962) notion of competing paradigms and that there are already many attempts to bridge the gap between the two schools. Thus, according to Cohen (2007b), simply acknowledging the differences between the American and British school does not necessarily lead to their polarization and competition instead of reconciliation.

Most importantly, as Patomäki (2009) explains, American and British GPE are based on different meta-theoretical premises, and therefore it seems doubtful that the two schools could be synthesized. Leander (2009) supports dialogue between American and British GPE but argues that this does not necessarily lead to a synthesis. According to Leander (2009), the main obstacle to dialogue is not meta-theoretical but rather the willingness to recognize the other as an equal partner; he suggests that mutual recognition might be one solution. Nevertheless, by accepting that the dialogue does not necessarily to lead to synthesis, Leander does not dismiss the idea that American and British GPE are fundamentally incompatible due to meta-theoretical differences.

Just as it is likely to be difficult to integrate orthodox and heterodox economics – since they are based on different meta-theoretical premises – so it might prove to be difficult to integrate American and British GPE. Reliance on positivism seems to be the shared factor of American GPE and orthodox economics; while critical realism seems to be the uniting force of British GPE and heterodox economics. Thus, it might prove to be more fruitful to combine American GPE with orthodox economics and British GPE with heterodox economics. These possibilities are examined next.

#### 5. Combining economics and GPE?

Having argued against the possibility of combining disciplines based on incommensurable meta-theoretical assumptions, the logical next step is to consider how to combine two disciplines that have related content and commensurable meta-theoretical assumptions. Specifically, we might ask how to build bridges between American GPE and orthodox

economics, who largely share positivism as their underlying meta-theory; and British GPE and heterodox economics, who largely share critical realism as their underlying meta-theory.

On the one hand, it seems that American GPE and orthodox economics are easily compatible. In fact, there is already a subfield called political economy, which applies the tools of economics to public policy, and which can therefore be conceived as a combination of American GPE and orthodox economics. Furthermore, American GPE already draws significantly from orthodox economics. For instance, neo-liberal institutionalist GPE accepts, and regularly builds on, the Mundell–Fleming trilemma (an economy cannot simultaneously maintain a fixed exchange rate, free capital movement and an independent monetary policy) and international trade theories of orthodox economics. American GPE scholars are therefore willing to build on positivist methods and reductionist theories of orthodox economists do not study power relations or countries' economic policies which are of great interest for American GPE scholars. Instead of how institutions emerge and endure, orthodox economists might explain the reasons why institutions exist. Thus, although limited by positivism, orthodox economics combined with American GPE may be able to offer useful interdisciplinary perspectives.

On the other hand, previous interdisciplinary co-operation between American GPE and orthodox economics could be characterized as economic imperialism rather than true collaboration. The analysis of geo-political power is typically reduced to an analysis of the state as a rational agent maximizing an objective function. Based on this, cross-fertilization between American GPE and orthodox economics may be regressive rather than progressive.

In terms of combining British GPE and heterodox economics, we have already established that critical realism is largely consistent with both. Therefore, critical realism could provide the framework for integrating British GPE and heterodox economics. While British GPE has been successful in analysing power relations, it lacks proper economic theory and its main method is to tell a historical story with no causal hypotheses and no systematic use of empirical evidence (Patomäki 2003). This suggests that it could benefit from joining with heterodox economics. The latter could provide it with causal explanations and systematic empirical findings of various economic phenomena. In addition, Patomäki (2003) suggests that both British GPE and heterodox economics could introduce a number of concepts from critical realism – such as the concept of judgmental rationality – which would give them better grounds for avoiding relativism and preferring certain explanations over others.

It could, however, be asked whether it is viable to build bridges between heterodox economics and British GPE as there exists significant differences even within these traditions. For example, post-Keynesian and Austrian economics are based on quite different foundations. Moreover, especially British GPE is not completely united in terms of its meta-theoretical commitments. In particular, hermeneutical meta-theory has a strong foothold. Thus, it would be an exaggeration to call British GPE as fully consistent with critical realist meta-theory. Similarly, some heterodox economics schools of thought can include hermeneutical or positivist elements although to a lesser extent.

However, the point is not to combine the whole heterodox economics edifice with British GPE. Rather, as suggested above, some heterodox economics schools of thought could be combined with some British GPE schools of thought. Similarly, orthodox economics, which includes only a single school of thought, could be combined with some American GPE schools of thought. Indeed, there are several interdisciplinary attempts to build both on British GPE and heterodox economics. For instance, Patomäki (2003) seems to use critical realism to combine neo-Gramscian GPE with post-Keynesian economics in his analysis of global financial markets. Neo-Gramscian GPE is combined with post-Keynesian economics also in Patomäki (2008) which discusses the political economy of global security. Kirshner (2014), on the other hand, combines realist GPE with post-Keynesian economics to analyse the hegemonic role of the US.

Critical realism could also provide the means for other interesting interdisciplinary combinations. For instance, Marxist GPE could be combined with Marxist economics. Constructivist GPE and behavioural economics might also prove out to be a fruitful mix. Unfortunately, I am not aware of any attempts to find common ground on this basis. Whether collaboration should lead only to interdisciplinary experiments or to full-scale synthesis is an open question. In the former case, all schools of thought would continue to exist separately, while in the latter case at least some of them would ultimately merge.

# **6.** Conclusions

In this paper, I discussed the meta-theoretical premises of economics and GPE. I found that orthodox economics and American GPE are mostly based on positivism, while heterodox economics and British GPE are built largely on critical realism. Instead of building bridges within economics or GPE, I suggested that it might prove to be more feasible to combine some parts of orthodox economics with American GPE and some parts of heterodox economics with British GPE. Whether this collaboration – based on meta-theory – will lead simply to interdisciplinary collaboration or to a more profound synthesis is a question for debate.

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# Notes on contributor

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