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Strife over Method 2.0: The Battle for the Soul of Economics Between Neoclassical and Heterodox Economists*

Spór o metodę 2.0: Bitwa o duszę ekonomii między
ekonomistami neoklasycznymi i heterodoksyjnymi

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Abstract

The contemporary debate between heterodox and neoclassical economics (NE) is unproductive. This paper aims to foster a more constructive discussion by analysing the historical perspective. The current discussion resembles the *Methodenstreit*, in which Schmoller and Menger proposed two different visions of economics. Now, as then, the question remains: Should economics be more like a natural or a humanistic science? Should it be a deductive, value-free approach based on methodological individualism and homo economicus (NE) or a value-laden open-system approach based on methodological holism and homo sapiens (heterodoxy)? I treat the *Methodenstreit* as a starting point for the subsequent battles over method. I analyse them to show the unchanging bone of contention between heterodoxy and NE. I do so by analysing four methodological assumptions that define these two visions of economics. Moreover, I show how NE prevailed in the strife over method. Lastly, I propose a normative conception, “strife over method 2.0”, aimed at improving the current discussion between heterodoxy and NE.

Streszczenie

Obecna dyskusja pomiędzy ekonomistami heterodoksyjnymi a ekonomistami neoklasycznymi ma w dużej mierze niekonstruktywny charakter. Celem artykułu jest uczynienie jej bardziej twórczą poprzez analizę historycznych sporów metodologicznych. Współczesna dyskusja stanowi kontynuację *Methodenstreit* pomiędzy Schmollerem a Mengerem, którzy przedstawili dwie konkurencyjne wizje ekonomii. Zasadnicze pytania pozostają niezmiennie: Czy ekonomia powinna rozwijać się na wzór nauk przyrodniczych, czy raczej nauk humanistycznych? Czy powinna opierać się na dedukcyjnym, wolnym od wartości podejściu, zakorzenionym w indywidualizmie metodologicznym i modelu *homo economicus*, czy też na otwartym systemie uwzględniającym rolę wartości, holizm metodologiczny oraz koncepcję *homo sapiens*? Traktuję *Methodenstreit* jako punkt wyjścia do analizy kolejnych

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sporów metodologicznych w ekonomii, aby wykazać trwałość podstawowych osi konfliktu między ekonomią heterodoksyjną a neoklasyczną. Pokazuję, że spór ten koncentruje się wokół czterech fundamentalnych założeń metodologicznych, które definiują obie tradycje badawcze. Następnie wyjaśniam, w jaki sposób ekonomia neoklasyczna uzyskała dominującą pozycję w sporze o metodę. W zakończeniu przedstawiam normatywną koncepcję „sporu o metodę 2.0”, która ma służyć jako propozycja bardziej produktywnego dialogu między ekonomią heterodoksyjną a ekonomią neoklasyczną.

Introduction

This paper results from my dissatisfaction with the current debate between NE (neoclassical economics) and HE (heterodox economics), which resembles a shouting match more than a constructive dialogue. On the one hand, HE criticises NE and argues that it should be dismissed entirely. NE is criticised for being a deductive approach based on simplifications, value-freeness, methodological individualism, and homo economicus. On the other hand, neoclassical economists dismiss the validity of HE, which is perceived as an ideological movement that relies on unscientific methods. Moreover, heterodoxy's criticism is perceived as obsolete because NE has evolved from an orthodoxy into a broad mainstream [Colander, 2000, 2010; Colander et al., 2004].

This fight between NE and HE is often unconstructive and does not move economics forward. Many economists are fed up with the seemingly unresolvable struggle between the two paradigms and propose pluralism [Hodgson et al., 1992; Dow, 2004; Dobusch, Kapeller, 2012; Larue, 2022]. The problem is not with pluralism itself (most authors argue that we should critically engage with others) but that it often amounts only to toleration [Ostapiuk, 2026b]. Thus, HE and NE stick to their positions without engaging in genuine dialogue. The aim of this paper is also to end the shouting match between HE and NE. Yet, my solution differs from most accounts of pluralism. I do not propose toleration but confrontation between the two paradigms. However, not in its current form, but rather as a constructive methodological debate involving genuine engagement with one's opponent. To make this discussion more constructive, I reanalyse history.

Analysing history can improve the current discussion between NE and HE because it resembles the *Methodenstreit* between Schmoller and Menger, who proposed two different visions of economics. Now, as then, the question remains: Should economics be like a natural or a humanistic science? Should it be a deductive, value-free approach based on methodological individualism and homo economicus (NE), or a value-laden open system based on methodological holism and homo sapiens (HE)? The paper aims to recontextualise past strife over method in order to understand and improve the current debate between HE and NE. First, by analysing the past, we can understand why strife over method persists over time and what the positions of both sides are. Second, history can help us avoid repeating the same mistakes and re-enacting the strife over method.

My framework is not widespread in the literature. Although many scholars analyse the *Methodenstreit*, they do so from a historical perspective and do not connect it directly with the current debate between HE and NE. There are two main reasons why economists do not believe that analysing the *Methodenstreit* can help with the current discussion. First, the *Methodenstreit* is perceived as a waste of time that did not lead to any solutions because it concerns two incommensurable visions of economics. Second, much has changed over 150 years, and therefore we should not frame the current discussion in the context of an old methodological debate. By contrast, I believe that analysing past methodological debates can improve the current discussion between NE and HE. First, I agree that the *Methodenstreit* produces more heat than light. However, the reason is not that methodological debates are unconstructive, but rather that poorly conducted methodological debates are unconstructive. Although strife over method is unresolvable, this does not mean it is worthless. My paper aims to improve the current discussion by recontextualising past debates. Second, I agree that much has changed over 150 years. However, NE's current vision of economics is similar to Menger's, while HE's vision of

economics is similar to Schmoller's. The paper analyses the past in order to understand and improve the current unconstructive discussion between NE and HE. Exactly how will I do this? The first feature of this paper is its time frame. A great deal has happened over the past 150 years, and I focus on key debates between NE and HE. I treat the *Methodenstreit* as a starting point of repeated discussions over the years. Thus, I also analyse the debate between institutionalists and NE in the twentieth century, as well as the growing criticism of NE since the 1980s. I demonstrate that although arguments change over time, the two visions of economics proposed by Menger and Schmoller remain largely unchanged. The paper's second feature is a framework of four methodological assumptions that I use to reanalyse various battles over method: (1) closed system vs open system, (2) value-freeness vs value-ladenness, (3) methodological individualism vs methodological holism, and (4) homo economicus vs homo sapiens. This framework allows us to better understand the positions of Schmoller, Menger, institutionalism, HE and NE. Moreover, I use this framework to demonstrate NE's methodological flexibility in dealing with criticism that has led to its dominance. The paper's third feature is the normative concept of "Strife over Method 2.0", which I propose to make the current discussion between HE and NE more constructive.

The paper's structure is as follows. In the first section, I analyse the *Methodenstreit* between Schmoller and Menger (1870). I reanalyse this debate using the framework of the four methodological assumptions introduced earlier. I show how Menger responded to Schmoller's criticism and why he is perceived as a winner of the *Methodenstreit*. This section aims to indicate two broad visions of economics that have prevailed till now. In the second section, I reanalyse the debate between institutionalism and NE (1900–1940) as a continuation of the *Methodenstreit*. I illustrate how neoclassical economists responded to institutionalists' criticism, leading to NE domination after WWII. In the third section, I analyse criticism of NE within the mainstream (1980 – present). I show how NE's methodological assumptions enable it to deal with the criticism from behavioural economics and new institutional economics. The aim is to demonstrate NE's unchanging methodology and prove that strife over method has not ended. In the fourth section, I analyse the current strife over method between HE and NE and propose the normative concept of "Strife over Method 2.0" to improve the current debate.

In the end, I shall underline the limitations of my analysis. Since I analyse debates spanning more than 150 years, it is impossible to examine them thoroughly. Thus, I have had to simplify many issues and omit others. First, I analyse diverse schools of thought, such as NE, HE, institutionalism and historicism, as homogenous approaches. Such unification is necessary not only to enable comparison but also because each school shares a common vision of economics despite internal differences.

Second, I identify HE with humanistic science and NE with natural science. I use humanistic and natural science as epistemic ideals, not as an ontological distinction in which NE studies objects and HE studies humans. By epistemic ideal, I mean two different visions of how reality should be understood and explained. I define NE (natural science) as a deductive, value-free approach based on methodological individualism with homo economicus, and HE (humanistic science) as a value-laden open system based on methodological holism and homo sapiens. Ultimately, NE employs an epistemic ideal derived from natural science, whereas HE employs an ideal derived from human science. My claim is not that this sharp distinction exists but that this dichotomy depicts two broad visions of economics supported by neoclassical and heterodox economists. While this does not mean that all representatives of both approaches fall ideally within these lines, at a general level it depicts the difference. I use four methodological assumptions to define the visions of economics associated with NE and HE. Although I propose my perspective, it falls within the lines of how NE and HE are perceived by other scholars [Lawson, 1997, 2003; Hodgson, 2001; Dow, 2012]. Throughout the paper, NE is associated with natural and HE with humanistic science. I use these additional terms to underline the competitive general visions of economics represented by NE and HE, rather than a new way of defining them.

Third, my analysis is not historical but methodological. My aim is not to conduct a historical reconstruction of the battle between NE and HE. I simplify both schools by focusing on their methodological assumptions,

in order to elicit the bone of contention between NE and HE over time. However, the reader should be aware that my analysis contains many simplifications and subjective choices of themes and actors; e.g. I focus on Menger rather than Walras and Jevons in the context of NE. Similarly, I focus on Schmoller rather than Marx in the context of HE. There is no single way to define NE and HE; in this paper I propose a broad interpretation that is neither universal nor beyond contestation.

Fourth, my focus on methodology means that I present the debate between NE and HE from a relatively narrow perspective. I focus on the methodological assumptions that shape the paradigms of NE and HE. My paper does not focus on the sociological sphere. I do not analyse power relations, which can help explain the dynamic between NE and HE. I do not focus on sociology of scientific knowledge (SSK), not because it is not important (it is) but because my paper focuses on methodology. My methodological explanation should therefore be perceived as complementary to SSK.

The final important limitation results from the normative goal I set for this paper. My aim is to make the discussion between NE and HE more constructive. For many years, both sides have engaged in a hostile struggle and dismissed each other's paradigms. This is why I search for a middle ground. I present methodological arguments from both sides without taking a stance. This does not mean that the "truth" lies somewhere between NE and HE. However, I leave it to the readers to decide which side in the debate is more convincing.

Methodenstreit

The paper aims to recontextualise and improve the unconstructive discussion between NE and heterodoxy. To achieve this, we need to understand both positions. The *Methodenstreit* is a natural place to start because the two visions of economics have crystallised then (natural vs humanistic science). Moreover, the *Methodenstreit* resembles the current discussion between NE and HE because the debate was hostile and both positions were misrepresented. To understand both positions, I frame the discussion in terms of attack and defence. I present Schmoller's criticism and Menger's response. This order is not historically accurate because Menger started the debate by criticising historicism. However, it helps to better understand the positions of both Menger and Schmoller and illustrates NE's flexibility in dealing with criticism.

I compare two visions of economics (natural vs humanistic) using four methodological assumptions: (1) closed vs open system, (2) methodological individualism vs methodological holism, (3) value-freeness vs value-ladenness, (4) homo economicus vs homo sapiens. In each case, I analyse Schmoller's criticism and Menger's response. Schmoller and Menger did not use terms such as methodological individualism/holism, open/closed system, or value-freeness/value-ladenness. However, I interpret their positions through these lenses in order to connect them with the prevailing discussion in economics. Moreover, my analysis is not historical. Thus, I do not aim to represent the full complexity of the *Methodenstreit* [Yonay, 1998; Hodgson, 2001; Shionoya, 2001]. My analysis simplifies many issues, but this is done to crystallise the methodological bone of contention between NE and HE that emerged in the *Methodenstreit*. I also do not wish to give the impression that Menger and Schmoller were the fathers of NE and HE, respectively. Menger is the father of Austrian economics, while Schmoller is a leading figure in the Historical School. My identification of Menger with NE can be especially controversial. As an Austrian economist, he adopted an anti-mathematical stance. He was a realist rather than an instrumentalist and did not propose any equilibrium models. My identification of NE with Menger stems from a broad understanding of NE. I interpret NE similarly to Lawson, as a closed system based on deduction with isolated atoms [Lawson, 1997, 2003, 2013]. In general, NE uses the epistemic ideal of natural science (e.g. searching for laws and value-freeness). This broad perspective does not imply that the main feature of NE is mathematical formalisation. In this context, I interpret Menger, who, on the methodological level, supports a closed system, and NE.

Ultimately, Menger and Schmoller proposed two visions of economics (naturalistic vs humanistic) that share many similarities with the long-lasting debate between NE and HE.

Closed vs open system

Schmoller criticised the closed system proposed by Menger, which was based on abstractions, idealisations, and deduction [Schmoller, 1883]. Schmoller's main argument was that reality is complex. If economists do not consider this complexity, their predictions and explanations will be flawed. First, Schmoller accused Menger of apriorism, whereby abstractions are based on arbitrary assumptions that have no connection to reality, e.g. *homo economicus*. Second, Schmoller criticised Menger's reliance on deduction, through which some universal laws are established. As a representative of the Historical School, Schmoller employed a historical method according to which there are no universal laws, but rather everything is relative and depends on a specific socio-historical context. Schmoller [1883] proposed a completely different vision of economics to Menger, espousing a realistic, inductive and empiricist approach. Schmoller was not entirely opposed to theory. For him, deduction and induction should work together. However, theories must be built on rich empirical material [Schmoller, 1904: 277]. Moreover, we cannot establish universal laws in economics, but only context-specific regularities. In general, Schmoller viewed economics as a broad interdisciplinary social science (what I call "humanistic economics"). Psychology, politics and sociology influence economics, and therefore we should analyse them.

Schmoller's criticism of Menger was not entirely accurate. Menger did not deny that reality is complex, but that the best way to analyse this complex reality was through what Schmoller criticised: deductive science. Menger dismissed Schmoller's criticism by justifying his approach on a methodological level [Menger, 1985]. The first move was to distinguish between historical and theoretical sciences. Menger did not dismiss historicism *en bloc*, but argued that economics should be a theoretical science because its goal is to identify universal types and laws, whereas historical sciences analyse specific phenomena and cannot establish such laws. The second move was similar to the first. Menger did not dismiss empiricism as a valuable method, but argued that economics should be a "theoretical science". This methodological approach is evident when Menger divides "theoretical economics science" into two orientations [Menger, 1985]. The first, the "realistic-empirical orientation", contains "real types" and "empirical laws". Real types mean that scientists try to understand the full empirical reality of some phenomena. They then look for regularities among phenomena and formulate empirical laws. Menger did not dismiss "realistic-empirical orientation", but argued that economics should be constrained to the "exact orientation" based on "exact types" and "exact laws". An exact type¹ results from scientists' process of isolating certain complex phenomena in order to establish their essence. Scientists can then identify connections among these essences, which take the form of exact laws that admit no exceptions because they are formulated subject to *ceteris paribus* conditions. Menger's terminology of "realistic-empirical" and "exact" orientations later became obsolete due to Schmoller, who called the first the "empirical-inductive method" and the second the "abstract-deductive method" [Schmoller, 1883]. However, I do not wish to give the impression that Menger treated "empirical-realistic" and "exact orientation" equally. He argued that economics should be an "exact science".

For Menger, economics should be an "exact science" because science's goal is to explain and understand reality, and only an exact science based on exact types and exact laws can achieve that. Before explaining what Menger meant, we need to understand why empirical orientation is insufficient [Menger, 1985]. First, "real types" cannot provide scientists with an explanation because reality is too complex. Let us focus on human motivations. Menger understood that people are motivated by more than purely egoistic motivations. However, scientists can only observe people's actions, not their motivations. Thus, if we do not assume self-interest *a priori*, we cannot explain why people behave in a particular way. Moreover, scientists cannot create exact laws, such as the law of demand, if they seek real types that take the complexity of human motivations into consideration. To understand Menger's point, we can refer to Schmoller, who analysed reality and showed that

¹ In Menger [1985], the term used is "strict type." I instead follow Mäki's usage of "exact type," which is more consistent with the terms "exact laws" and "exact orientation" used by Menger [1985].

in nineteenth-century Germany the demand for sugar would not rise even if the price dropped, because the consumption of sweets was perceived as a form of depravity under protestant moral norms [Schmoller, 1874: 258]. Schmoller's empiricism and analysis of complex human motivations become a weakness from Menger's perspective, because they prevent the formulation of exact laws. Second, Menger argued that economic phenomena do not repeat themselves in the same way. Again, we can refer to Schmoller to better understand Menger's point. For example, within the Historical School, lower interest rates can lead to inflation in some countries but not in others. Once again, Schmoller's context-specificity is perceived as a weakness by Menger because real types differ so greatly that they cannot be used to identify laws and provide explanations [Menger, 1985: 36–37].

Menger did not dismiss empirical knowledge but argued that at some point economists need to isolate particular phenomena to find explanations and laws. Thus, economics should be an exact science. First, we look for exact types. We isolate an essence from a real type that we observe in reality. The best-known example is money. A real type can be coins, banknotes, or cigarettes in prison. An exact type is the pure phenomenon of money that embodies universal features or essences. In the case of money, these universal features are its ability to store value and to function as a medium of exchange. Money is Menger's typical example, but I want to focus on human motivations, which I discussed earlier as part of the dispute between Menger and Schmoller. For Menger, identifying a real type of human is impossible because there are too many motivations. Due to the variety of motivations, it is impossible to identify an exact type in the same way as with money. To find an exact type of human behaviour, Menger limits human motivation to the economic realm. In this isolated realm, the exact type is the self-interested homo economicus, who seeks to satisfy material needs. Menger was well aware that this exact type is a simplification, and it "cannot provide understanding of human phenomena in their totality or of a concrete portion thereof, but it can provide understanding of *one of the most important sides of human life [...], the economic*" [Menger, 1985: 87]. Menger merely argued that self-interest captures the essence of economic action. This does not mean that it is the only motivation that people possess. However, this simplification can be used to find exact laws, such as the law of demand. If we assume the exact type of the self-interested homo economicus and add *ceteris paribus* clauses, we can state that, for example, when the price of sugar falls in nineteenth-century Germany, demand will rise.

Menger's response was ingenious. He did not dismiss Schmoller's descriptive arguments that people have different motivations and that reality is complex. Instead, he outflanked Schmoller on the methodological level by arguing that we need to isolate exact types in order to find explanations. To achieve this, we need to limit the scope of economics to economic action. By this move, Menger created a boundary between economics and other sciences, such as psychology and sociology, and consequently dismissed Schmoller's vision of a humanistic economics. In contrast, Menger argued that economics should resemble natural science and found justification in the powerful ally. Like physics, economics needs to use abstraction and isolation to explain and identify exact laws. The obvious example is the law of gravitation. To establish it, physicists need to isolate and abstract by assuming a vacuum. Through this example, Menger showed that without some non-empirical assumptions there can be no science, and therefore Schmoller's criticism is groundless [Menger, 1985: 85–86]. The key message is that Menger and Schmoller proposed two visions of economics (natural vs humanistic science) that have shaped the debate for more than 150 years. Menger's economics was a closed system based on deduction, abstraction and isolation, whereas Schmoller proposed an empirical, inductive and realistic open system.

Methodological individualism vs methodological holism

Schmoller criticised Menger's methodological individualism. He opposed atomistic, Robinson Crusoe economics. As in the case of the closed system, Schmoller argued that the world is complex and that social norms influence individuals. Every society is different; thus, we cannot formulate universal laws. Nor can we assume universal homo economicus, because in different cultures people behave differently. Instead of methodologi-

cal individualism, Schmoller proposed methodological holism. We should begin our analysis with society and then move to individuals, thereby explaining their behaviour. In this respect, Schmoller argued that economics should be more like sociology [Schmoller, 1874, 1883].

Menger's response to this criticism is similar to his response concerning the closed system. He did not deny that society influences individuals, but argued that we should analyse it by methodological individualism rather than methodological holism. Why? Menger argued that social phenomena have a complex nature. We cannot explain them or identify universal laws if we analyse individual decisions from a collective perspective; e.g. we may observe several people who do not buy sugar even when prices fall. This fact cannot be explained by a collective pursuing an economic aim, because we would have to assume a homogeneity of human preferences. By the same reasoning, we cannot analyse the state as an individual. Social phenomena are too complex to be analysed from a collectivist perspective [Menger, 1985].

To explain complex social phenomena, we need to focus on the simplest element. For Menger, this element is the individual who seeks to satisfy their needs. Thus, he supports methodological individualism rather than methodological holism. However, Menger did not deny the existence of social norms, but simply provided a different account of their nature. In methodological individualism, social phenomena are explained by individual preferences. From this perspective, social norms are not independent entities with causal power over individuals. Instead, individuals choose the social norms they want to follow. Ultimately, people choose norms that are advantageous and serve their self-interest. For Menger, complex social phenomena result from human actions, as reflected in the conception of spontaneous order. Ultimately, Menger established economics as a science of individual choice [Menger, 1985]. As with the closed system, the superiority of methodological individualism in Menger's view stems from its methodology.

Value-freeness vs value-ladenness

In ethics, Schmoller criticised Menger on two crucial grounds. First, the criticism concerns the self-interest of *homo economicus*. Schmoller argued that this depiction is incorrect, as ethical considerations influence economic decisions. Let us return to the example of the lower price of sugar in German society. A lower price will not necessarily lead to higher consumption, because Protestants considered eating sweets as immoral [Schmoller, 1874: 258]. Thus, ethical considerations influence economic choices. To improve its empirical foundations, economics should be integrated with ethics. The second criticism considers subjectivism. Schmoller was opposed to the view of economics as a means-ends analysis whereby we only observe individuals trying to achieve their ends, and argued that we can identify ends perceived as ethical values, such as justice. This can be done at the level of society (methodological holism). Schmoller defined "moral content" as "something that is recognised as justified within the system of human ends" [Schmoller, 1874: 254–255]. For Schmoller, moral ends such as justice emerge from social instinct [Schmoller, 1894: 701], which provides a mechanism by which we can find them. Schmoller wanted economics to be integrated with ethics and argued that the proper method of analysing economic phenomena was the "ethical orientation" [Schmoller, 1874, 1883, 1894]. This view also has implications for politics. Schmoller argued that the state should improve people's welfare and uphold justice [Schmoller, 1894: 734–735].

Menger's response was similar to his previous accusations. He admitted that ethical motivations influence human choices and that people are not solely self-interested. However, economics should be distinguished from ethics. Once again, Menger argued that reality is too complex and that we cannot explain human behaviour by analysing every motivation influencing it (e.g. ethical motivation). For him, the behavioural mechanisms in economics and ethics differ [Menger, 1985: 235–237]. This does not mean that ethics is worthless, but to explain human behaviour in economics we should focus only on the economic realm, where the only relevant motivation is self-interest [Menger, 1985: 87]. Menger understood that this is a simplification, but argued that we need to isolate human behaviour in order to understand complex phenomena. Within the economic realm, where individuals try to satisfy their preferences, such isolation is justified because it captures

how people behave. Menger was also opposed to establishing people's ends and supported subjectivism, which is connected to his methodological individualism. In the context of values, the reasoning is similar. We can only analyse individuals, and we cannot establish universal values. Thus, the state cannot impose values such as justice on individuals. Like other Austrian economists, Menger preferred the free market because it respects individual subjectivism. To conclude, Menger argued against incorporating ethics and values into economics on methodological grounds. Economics and ethics must remain separate because they analyse different realms in which different motivations are central [Menger, 1985].

Homo economicus vs homo sapiens

The analysis of the last methodological assumptions is the shortest because homo economicus results from previous methodological assumptions. Schmoller dismissed homo economicus, as he opposed a closed system based on abstractions and rejected homo economicus as it does not reflect how people actually behave. We cannot simplify reality in this way as it is complex and many factors influence human behaviour. At an ethical level, Schmoller argued that people are not as self-interested as assumed in homo economicus. Instead, he urged us to consider ethical norms. At the analytical level, Schmoller supported methodological holism as a way to analyse social influences on individuals. Schmoller was against methodological individualism, which was embedded in the concept of homo economicus.

By contrast, Menger supported homo economicus, which stems from his vision of economics as a closed system that is deductive and based on abstractions. Menger knew that homo economicus is not a real human. However, we need to simplify to explain human behaviour in the economic realm. Thus, rather than dealing with ethics, we assume that the only relevant motivation is self-interest, which is incorporated into homo economicus. This is also why Menger supported methodological individualism. This does not mean that we should not analyse social influences, but that this should be done from an individualistic perspective.

Conclusions

My paper claims that we can learn from the *Methodenstreit* and improve the current discussion between NE and HE. This claim runs contrary to the common perception of the *Methodenstreit*. It is generally perceived as a heated debate that did not lead to any meaningful conclusions [Keynes, 1891: 5–31; Schumpeter, 1972: 814–815]. I agree; the discussion was hostile and overexaggerated. In my analysis, I focus on methodological assumptions and identify general points to understand both positions more clearly. However, this is not how the debate was conducted in 1870. Both Menger and Schmoller attacked each other. Menger accused Historical School economists like Schmoller of failing to provide any theory and compared them to a porter who dumps bricks and sand at a building site but imagines himself to be an architect [Hutchison, 1973: 34]. Conversely, Schmoller described theoretical economists like Menger as “completely drab abstract arm-chair scholars,” whose theories were irrelevant to understanding the real world [Schmoller, 1964: 224].

Nonetheless, despite its hostility, the *Methodenstreit* was not a futile debate. It appeared futile because each side failed to understand the opponent's position. In this section, I show that Schmoller's and Menger's positions were not as opposed to each other as is commonly thought. The hostility of the debate resulted from a misunderstanding. Menger and Schmoller believed that the other dogmatically chose one position while dismissing the other [Hodgson, 2001]. Indeed, Schmoller and Menger proposed two different visions of economics; however, choosing one did not mean dismissing the other. The greatest value of the *Methodenstreit* was that both camps had to clarify their methodological positions [Louzek, 2011]. Menger wanted economics to use natural science methodology, in which economics is a closed system based on methodological individualism, value-freeness, and homo economicus. Schmoller wanted economics to be more like a humanistic science. In this vision, economics should be an open system based on methodological holism, value-ladenness, and homo sapiens. Menger and Schmoller established two visions of economics that have structured the discussion ever since.

My paper also aims to show how NE prevailed over HE over time. By prevailing, I do not mean that NE is objectively superior to HE, but that NE has gained dominance over HE in economics. It must be emphasised that paradigm choice is not based solely on the inherent values of theories, but it is a subjective social process. From this perspective, Menger won the first battle, the *Methodenstreit*. Schmoller was regarded as the loser, and consequently the entire German Historical School was forgotten [Hodgson, 2001]. By analysing the four methodological assumptions, I demonstrate why Menger could be perceived as the winner. First, Menger convinced economists that we need to use abstractions, as in natural sciences, to find explanations in a complex world. Second, Menger restricted economics to the economic realm in order to explain human behaviour. In doing so, Menger dismissed Schmoller's vision of economics as an interdisciplinary social science (humanistic economics). Menger's establishment of the boundaries and scope of economics was essential because in 1870, economics lacked a clearly defined paradigm. Thanks to Menger's methodology, economics came to be perceived as independent from other social sciences. Consequently, historical economists were relegated to non-economic departments. This dividing line between HE and NE remained more or less constant over the following 150 years.

Institutionalism vs NE

I showed that the *Methodenstreit* had created a dividing line between the two visions of economics: natural science (Menger) and humanistic economics (Schmoller). The debate and hostility between the two different camps did not fade with time. In this section, I analyse the paradigm clash between NE and Institutionalism. Through this analysis, I aim to achieve two goals. First, I show the ongoing bone of contention between natural science, i.e. naturalistic economics (NE), and humanistic economics (HE). Despite the new arguments advanced by institutionalists and neoclassical economists in the twentieth century, the disagreement is the same as between Menger and Schmoller during the *Methodenstreit* and concerns four methodological assumptions: (1) closed vs open system, (2) methodological individualism vs holism, (3) value-freeness vs value-ladenness, (4) homo economicus vs homo sapiens. Second, I demonstrate how NE's methodology enabled it to prevail over institutionalism after the Second World War.

I use the same framework as in the previous section. I compare institutionalism and NE through four methodological assumptions and analyse NE's response to institutionalists' criticism. Once again, my analysis is not historical, and I simplify many issues in order to compare both schools; for a comprehensive account, see Yonay [1998]; Hodgson [2004]; Rutherford [2011]. My simplification is even greater than in the previous section because the *Methodenstreit* concerned predominately two economists, while the debate between institutionalists and neoclassical economists engaged many participants. I unify the positions of both schools through a framework of four methodological assumptions that delineate the two visions of economics.

Closed vs open system

Institutionalists, like Schmoller, criticised NE for being a closed system based on deduction and abstractions. Their argument was essentially the same as Schmoller's: reality is too complex, and we need to take this into account. Institutionalists criticise the abstract concept of homo economicus and the notion of universal laws. Wolfe captured the spirit of institutionalism when he criticised NE as "static and taxonomic, *a priori* and deductive, unrealistic, scholastically over-refined, and based on antiquated and unscientific psychology" [Wolfe, 1924: 445]. Veblen was the most vehement critic of NE and criticised it for being a taxonomic, static and teleological system in which equilibrium is assumed [Veblen, 1961: 69]. Lawson [2002] interpreted Veblen through an ontological lens as a staunch opponent of the closed system employed by NE. Veblen proposed a different evolutionary paradigm in contrast to NE [Veblen, 1898]. As in evolution, there is no ultimate goal in reality. Thus, there is no equilibrium and no universal laws. Moreover, evolution implies constant change, and therefore NE's static, closed system is inappropriate. Veblen argued that, as in evolution, economics should

focus on explaining people's behaviour and searching for causal relations between the environment and people. However, causality here does not mean the predetermined pattern used in NE to establish universal laws. Veblen, like other institutionalists, argued that to explain human behaviour we need to focus on institutions and analyse their interconnectedness with people. By analysing these interactions, we explain economic changes [Veblen, 1961: 70]. The notion of change is essential because the adaptation process constantly transforms both individuals and society [Veblen, 1961: 74–75].

Veblen's position is in line with that of Schmoller and other institutionalists when it comes to criticism of NE's closed system. All were against relying on abstractions and deduction. Despite their differences, Veblen's evolutionary approach aligns with the realistic approach proposed by Schmoller and other institutionalists, such as Mitchell and Commons. Veblen distinguished himself from the Historical School because, in his view, it only describes phenomena but does not explain them [Veblen, 1961: 72]. However, as I showed previously, this was a misinterpretation of the Historical School. Schmoller did not dismiss explanation and theory altogether, but argued that empirical investigation must come first. The same applies to the more empirically inclined institutionalists, such as Mitchell and Commons, who emphasised induction while recognising that theory is necessary [Mitchell, 1925]. This interpretation is in line with Veblen, who was a theoretical thinker and believed that empirical data would improve economics, just as it happened in biology [Veblen, 1898]. Moreover, what unites Veblen, other institutionalists and Schmoller was that they dismissed the perception of economics as physics. Even if Veblen wanted economics to resemble biology, he had in mind a very general account of explaining phenomena by evolution, in which different factors (e.g. habits and institutions) influence human behaviour. Economics must become an interdisciplinary science because we cannot separate individuals from their environment, nor economic factors from non-economic ones. This vision of economics unites Veblen, other institutionalists, and Schmoller.

Neoclassical economists responded to institutionalists similarly to Menger. They agreed with the criticism and admitted that their abstractions were not literally true. However, economics must rely on such abstractions because the world is too complex and the phenomena cannot be analysed in their full empirical capacity [Mills, 1928]. Like Menger, neoclassical economists justified their position by referring to physics. Knight wrote that "there is a close analogy between theoretical economics and theoretical physics" [Knight, 1924: 259]. Some, such as Bye, went even further and argued that in the absence of laboratory experimentation, economics was justified in being even more deductive than physics [Bye, 1924: 285]. However, justifying theoretical economics does not mean that neoclassical economists rejected realism or the empirical method. Like Menger [1985: 78], they argued that, for now, economics must remain deductive because it is impossible to explain complex social phenomena. Nonetheless, in the future economics may be able to use the inductive method. "As our knowledge of allied sciences grows [and] as the tools of observation and measurement available to the economist become more perfected, our generalisations are becoming more accurate and useful" [Bye, 1924: 272].

Nevertheless, neoclassical economists did not follow the empirical route and instead adopted the more deductive approach espoused by Robbins. He dismissed empiricism and wanted economics to be a self-contained logical system [Robbins, 1932]. Even though Robbins toned down his claims in the second edition [1935] and added auxiliary assumptions of an empirical nature, he continued to defend the dichotomy between pure economic theory based on an axiomatic-deductive method and empirical research. Within this division of labour, he favoured the pure economic theory. Robbins was also influential because he established the definition of economics that holds until today. For Robbins, the subject matter of economics was not money or wealth, but the tension between scarcity and wants. In this respect, he followed in Menger's footsteps by defining economic action in terms of individuals attempting to satisfy their wants. However, unlike Menger, Robbins did not restrict economic actions to the economic realm, which led to the rise of economic imperialism after the Second World War.

Methodological individualism vs methodological holism

Institutionalists' criticism of NE's methodological individualism was similar to Schmoller's. Because society and individuals are interconnected, we cannot explain individuals' behaviour without taking social norms into account. Like Schmoller, institutionalists proposed a sociological perspective to analyse individuals. This methodological holism implies that we find explanations at the level of institutions rather than individuals. Thus, institutions possess causal power over individuals. [Hodgson \[2000\]](#) argued that methodological holism, which he defined as "downward causation", was a unifying feature of institutionalism. Different institutionalists offered different understandings of methodological holism (Veblen was less radical than Ayers), but all sought to explain individual action at the level of institutions.

Because the institutionalist position (methodological holism) did not differ from Schmoller's, the neoclassical economists' response (methodological individualism) did not differ from Menger's. They agree that society influences individuals. However, economics is a science of individual choice and is therefore based on methodological individualism [[Robbins, 1932](#)]. For neoclassical economists, methodological holism does not allow us to identify causality and analyse society. Instead, this is achieved through an expanded version of methodological individualism.

Value-freeness vs value-ladenness

The debate between institutionalists and neoclassical economists changed more noticeably with regard to values. This was because the discussion did not only concern the influence of ethical motivation on individuals, as it did in 1870, but focused increasingly on methodology. However, this does not mean that ethical motivations were unimportant for institutionalists. Like Schmoller, they argued that people are only motivated by self-interest. Veblen contraposed pecuniary with workmanship instincts, which give rise to different institutions [[Veblen, 2017a](#)]. Institutionalists not only showed that people have different motivations, but also criticised the concept of the invisible hand. Institutionalists such as Veblen demonstrated that consumers' self-interest can result in conspicuous consumption. The self-interest of firms is even worse and can lead to monopolies and oligopolies [[Veblen, 2017b](#)]. At the methodological level, institutionalists, like Schmoller, argued that economics should not only be about means but also ends. The nature of the debate changed because John Neville [Keynes \[1891\]](#) established a dichotomy between positive and normative economics. Institutionalists opposed the view of economics as a positive and value-free science. Their criticism focused on the concept of efficiency, which neoclassical economists perceived as value-free. Like Clark, institutionalists argued that separating economics from ethics "cannot be done without introducing a bias". Ultimately, efficiency must be evaluated in relation to society's goals, which "are supposed to have something ethical about them" [[Clark, 1924: 73](#)]. They contended that we cannot escape from ethics and that efficiency has a moral dimension regardless of whether we define efficiency in terms of material standards or utility [[Clark, 1924](#)]. Institutionalists focused their criticism on hedonistic principles used by NE. For them, efficiency is not a value-free concept because it is based on the normative notion of utility. However, the criticism of NE's value-ladenness does not mean that institutionalists were against values. Like Schmoller, institutionalists believed that values such as welfare can be studied and that empirical research can identify what society values [[Copeland, 1924](#)]. For institutionalists, economics cannot be a value-free science because it deals with people and ethics is an inherent part of social life [[Knight, 1925](#)]. Economists should therefore play an active role in supporting policies that improve general welfare. The best example of institutionalists' entanglement with policy was the New Deal, in which they were actively engaged.

Neoclassical economists' response to this criticism was similar to Menger's response to Schmoller. They did not dismiss the fact that ethical values exist, but they argued that economics should not deal with them directly. We should confine economic action to the economic realm, thereby separating economics from ethics. John Neville Keynes's dichotomy between positive and normative economics was embraced by neoclassical

economists, who wanted economics to be a positive science. This is why NE relies on subjectivism, whereby individuals choose their own goals, and the state should not interfere. NE's belief in value-freeness became even more transparent in the 1930s. Neoclassical economists found an ally in logical positivism. It influenced Robbins, who argued that economics must be value-free in order to be scientific [Robbins, 1932]. Thus, economics should focus on the means rather than the ends that people have. Logical positivism was a game changer for economics. Keynes's dichotomy between positive and normative economics was not intended to dismiss ethics, but rather to establish a division of labour [Keynes, 1891]. Economists deal with facts, whereas ethicists deal with ethics. Under the influence of logical positivism, ethics came to be regarded as a non-scientific domain that economists should avoid. At the beginning of the twentieth century, we observed the process of separation of economics from values. Neoclassical economists moved away from the previous hedonistic and utilitarian foundations. To be more scientific, which was equated with being value-free, neoclassical economists shifted from cardinal to ordinal utility.

Homo economicus vs homo sapiens

Like Schmoller, institutionalists criticised the abstract conception of homo economicus. Veblen wrote that "The hedonistic conception of man is that of a lightning calculator of pleasures and pains, who oscillates like a homogeneous globule of desire of happiness under the impulse of stimuli that shift him about the area, but leave him intact" [Veblen, 1961: 73]. Institutionalists argued that homo economicus does not depict how people behave. The criticism was aimed primarily at two assumptions. First, the hedonistic assumptions of homo economicus being self-interested. Second, the rationality of homo economicus. Moreover, institutionalists who rely on methodological holism argued that self-interest was not a universal trait of individuals but resulted from institutions that shaped American society at the beginning of the twentieth century. Institutionalists also did not believe in autonomous individuals making the best choices. Thus, in contrast to neoclassical economists, they argued that the state should intervene and help people improve their lives, even if it meant dealing with values. Institutionalists not only rejected homo economicus, but also presented an alternative conception in which maximisation is replaced by habits and instincts [Yonay, 1998; Hodgson, 2004].

Neoclassical economists responded to the criticism in the same way as Menger. They did not deny that homo economicus was an abstraction, but argued on methodological grounds that it was a useful abstraction that facilitated explanation. For the same reason, homo economicus was grounded in methodological individualism and subjectivism (value-freeness). Neoclassical economists' defence was similar to Menger's, although its implications went further. Neoclassical economists had to eliminate any psychological foundations rooted in utilitarianism in response to institutionalists' criticism. Bye wrote that "Few, if any, economists of repute now hold the marginal utility theory in its original form" [Bye, 1924: 276]. Neoclassical economists did not need hedonistic assumptions because "Whether human beings are rational or irrational... they make their purchases in accordance with the law of demand" [Bye, 1924: 276]. Referring to the law of demand means that people buy less if prices rise. Thanks to this universal framework, neoclassical economists no longer needed to presuppose any psychological assumptions or explain how people perform complex calculations. This dismissal of psychological assumptions resulted in a tautological conception of homo economicus, who always maximises utility and behaves rationally. It is tautological because we neither define utility nor rationality.

Why NE won and institutionalism lost

I have shown that the debate between institutionalism and NE resembled the earlier debate between Schmoller and Menger. As previously, NE was able to respond to institutionalist criticism. What changed was that neoclassical economists became increasingly committed to their methodology. In the remainder of this section, I explain why most economists chose NE's paradigm after the Second World War rather than

institutionalism. I do so by analysing two strategies. First, NE narrowed its methodology and became more deductive. Second, NE broadened its scope through economic imperialism.

The process of narrowing economics' methodology after the Second World War is often referred to as the formalist revolution. The use of mathematics, models and theorems became a way to achieve prestige among economists. Economists such as Samuelson, Arrow, Friedman, Stigler, Alchian, Hicks and Robbins contributed to the transformation of economics into a more mathematical discipline. It was mathematics that gave neoclassical economists a prominent position. Mathematics was a powerful tool that enabled neoclassical economists to solve complex problems. Moreover, they started to be perceived as objective scientists, comparable to natural scientists [Mirowski, 1989; Yonay, 1998]. I agree that mathematics contributed to the dominance of NE after the Second World War. However, I also concur with Lawson [1997, 2003], who argues that mathematics was only a tool that followed from NE's methodology. Mathematics fits within a vision of economics as a natural science based on deduction, methodological individualism, and value-freeness. I emphasise that mathematics follows from economics' methodology because it explains why NE prevailed over institutionalism, which also employs mathematics. I analyse two examples to illustrate the flexibility of NE's methodology.

The first example is the Keynesian revolution. At first glance, Keynes's position should support institutionalism. Keynes criticised NE's equilibrium, wrote about animal spirits, and distinguished different institutions with conflicting interests. Moreover, his support for government interventions is in line with institutionalism. However, Keynes was incorporated into the neoclassical synthesis. This occurred because the Keynesian revolution was not a revolution at the methodological level. By not dismissing the notion of equilibrium entirely, Keynes gave neoclassical economists a chance to sustain long-term equilibrium while acknowledging the existence of short-term disequilibrium. Moreover, the demand-driven side of Keynesian economics was incorporated within NE's equilibrium framework by Hicks [1937]. It must be noted that Keynes was misinterpreted by NE. However, it demonstrates the flexibility of NE's axiomatic methodology, which was able to incorporate criticism within its own framework.

The second example is econometrics. As with Keynes, econometrics should support institutionalism because institutionalists used statistical data to develop theories. Instead, econometrics became an ally of NE. The epitome of this was the Cowles Commission. In "Measurement Without Theory", Koopmans [1947] criticised the approach employed by institutionalists such as Mitchell. The example of the Cowles Commission demonstrates that NE can accept empirical data but on its own ground. Econometrics became an instrument used to choose among competing neoclassical economists rather than a means of challenging deductive theories [Yonay, 1998]. Ultimately, the Cowles Commission supports the methodology of NE, which was based on axioms, rather than institutionalism's emphasis on empirical data.

These two examples illustrate the flexibility of NE's methodology. It can incorporate criticism (Keynes) and empirical data (econometrics) within its axiomatic-deductive framework. This flexibility, rather than mathematics itself, was the reason why NE prevailed over institutionalism after the Second World War. We now turn to the second strategy, economic imperialism, which gave prominence to NE after the Second World War.

The example that best epitomises economic imperialism is Becker's economic approach, in which he used NE's methodology to colonise other social sciences. His methodology reflects all four methodological assumptions that I use to describe NE. First, Becker supports a closed system based on deduction derived from axiomatic assumptions. The economic approach is based on "the combined assumptions of maximising behaviour, market equilibrium, and stable preferences" [Becker, 1976: 5]. The goal of the economic approach is not to represent reality directly but to generate explanations and predictions [Becker, 1993]. Second, Becker's approach is based on an extended version of methodological individualism. The term "extended" means that Becker's consideration for social norms is grounded in the perspective of the individual, whose preferences are taken as given [Hodgson, 2000]. Third, Becker argues that economics should be value-free. Fourth, the economic approach is based on a rational and self-interested homo economicus.

Becker used this methodology to explain all human behaviour. He wrote that “the economic approach provides a valuable unified framework for understanding all human behaviour” [Becker, 1976: 14]. This universalisation of economics’ methodology was possible due to Robbins’ definition of economics as the logic of choice. Since time is scarce, people always need to make choices. In this way, economic action not only concerns the selection of consumer goods but all types of decision. This is why economics imperialism – in which economists analyse religion, love and childbearing – is not only possible, but also a logical extension of Robbins’ definition of economics as the logic of choice.

By analysing NE just after the Second World War, I demonstrate that it was methodology that enabled NE to prevail over institutionalism. The methodology of natural science, combined with mathematics, created the perception of NE as an objective science. Thus, most economists embraced NE rather than institutionalism [Yonay, 1998; Mirowski, 1989]. As with the *Methodenstreit*, victory does not mean that NE proposed a methodology objectively superior to institutionalism. Rather, it means that NE’s methodology was regarded as superior by most economists.

Criticism of NE within the mainstream

I have analysed two historical battles over method. However, my paper also concerns the contemporary situation, as I argue that we are currently experiencing a paradigm clash between humanistic (HE) and naturalistic economics (NE). This claim may be disputed by many mainstream economists who no longer perceive the current situation as strife over method due to the changes within NE since the 1980s [Colander, 2000; Colander et al., 2004; Rodrik, 2015]. As Colander stated, “neoclassical economics is dead” [Colander, 2000]. Two main arguments are put forward to prove that NE has changed. First, reverse imperialism. It is believed that due to the incorporation of insights from other social sciences, such as psychology and sociology, economics transformed into an interdisciplinary science. Second, the empirical turn. The argument here is that economics is no longer as deductive and theoretical as it once was, and is instead based on empirical data [Backhouse, Cherrier, 2017]. Both arguments are used to demonstrate that NE has changed. From this perspective, HE is portrayed as a radical group that attacks a scapegoat version of NE [Colander, 2010].

This section aims to show that despite the changes, NE remains grounded in a natural-science methodology based on four methodological assumptions, and that HE’s claim regarding the current strife over method is justified. I analyse two examples to demonstrate NE’s unchanging methodology: (1) new behavioural economics (NBE), and (2) new institutional economics (NIE). I focus on these two examples to illustrate how NE was able to incorporate criticism while maintaining its dominant position. However, this does not mean that NE can incorporate all forms of criticism. Approaches that dismiss NE’s methodological assumptions entirely cannot be incorporated and are relegated to the heterodox camp. The goal of this section is to demonstrate NE’s ability to handle criticism. Consequently, I focus on new behavioural economics and new institutional economics rather than heterodox approaches such as post-Keynesian or evolutionary economics, which cannot be easily incorporated within NE’s methodological framework. This section has a different structure than the previous ones. Instead of analysing the four methodological assumptions separately, I analyse two schools of thought (NBE, NIE). The framework is different because the discussion from the 1980s was not a full-blown strife over method.

Criticism of the orthodoxy

New behavioural economics (NBE) criticises all four of NE’s methodological assumptions. First, NBE criticises NE’s closed-system methodology based on abstractions and a priori assumptions about human behaviour. Instead, NBE relies on psychological experiments investigating how people behave. Moreover, NBE shows that there are no universal laws of human behaviour, as preferences are context-dependent. Second, NBE challenges methodological individualism by demonstrating that consumers are not sovereign and are influenced

by the context in which decisions are made. Third, NBE challenges NE's value-freeness. At the motivational level, NBE shows that people do not only behave egoistically but also display other-regarding preferences [Kahneman et al., 1986; Thaler, 2015]. Moreover, many behavioural economists argue that we can help people achieve well-being [Thaler, Sunstein, 2008]. NBE's criticism of NE is focused on the fourth assumption: homo economicus. NBE suggests that people exhibit bounded rationality, bounded self-interest, and bounded willpower [Thaler, 2015]. To conclude, NBE views economics as an interdisciplinary science connected with psychology. Economics should become a more inductive science in which the theory of human behaviour is based on empirical data.

The second school, new institutional economics (NIE), differs from NBE. Whereas the latter originated outside mainstream economics, initially presented as a competitor to NE, NIE emerged from within the mainstream as a neoclassical response to institutional criticism. Despite this difference, NIE also indicates the limits of NE's assumptions and tries to improve upon them. The first issue concerns NE's closed system. NIE shows that there are no universal laws of development and that institutions and historical context shape growth. Moreover, NIE criticises aprioristic homo economicus and the representative firm. Instead, it examines how people and firms behave in reality. The second assumption, methodological individualism, is also criticised. NIE demonstrates that institutions influence individuals. Regarding values, NIE shows that different institutions such as social norms and religion influence human behaviour. Lastly, for NIE, homo economicus is not an accurate depiction of how people behave. Finally, NIE perceives economics as an interdisciplinary science connected with psychology, law and sociology [Williamson, 2000; Hodgson, 2007].

Both NBE and NIE sought to move economics closer to the vision of economics proposed by Schmoller. From this perspective, economics should become a more inductive and realistic science, free from NE's aprioristic assumptions. Economics is also presented as an interdisciplinary science that analyses human behaviour from multiple perspectives, including psychological and sociological. The question therefore arises: Why, despite their promises, have NBE and NIE not transformed economics?

NE's response

NE's lack of change is crucial from the perspective of NBE (new behavioural economics), which was presented in the 1980s as a competitor to NE (neoclassical economics). However, with time, NBE became less of a revolution and more a preservation of the status quo. Today, NBE is perceived as a part of the mainstream [Sent, 2004; Earl, 2010; Berg, Gigerenzer, 2010; Dow, 2013; Angner, 2019]. I explain this situation by referring to the four methodological assumptions. NBE focuses its criticism on NE's first assumption: the closed system. NBE argues that people do not behave according to rational choice theory. Its main criticism concerns bounded rationality and bounded self-interest [Thaler, 2015]. Neoclassical economists admit that their assumptions are not literally true and that people are neither fully rational nor egoistic. Nonetheless, admitting this does not mean that neoclassical economists abandon their closed system based on axioms.

The first criticism concerns NE's assumption of perfect rationality and maximisation. NE employs two evasion strategies to deal with this criticism. First, neoclassical economists argue that individuals do not maximise but optimise due to various constraints. This means that people would make perfectly rational choices if it were not for various constraints such as limited time, information, or cognitive abilities. We can refer to two examples that underline the role of constraint in NE. The first concerns heuristics. Within NE, they are not necessarily perceived as irrational. Although people make mistakes by relying on heuristics, they save time. The second example is "bounded rationality" [Simon, 1957]. Bounded rationality arises because individuals have insufficient time to process all available information and possess limited cognitive capacities. Although the concept of bounded rationality criticises perfect rationality (maximisation), it does not dismiss the optimisation axiom because, within NE, rationality is always constrained by the world's complexity. The second evasion strategy involves a change in the understanding of rationality [Hodgson, 2012]. Neoclassical economists do not evaluate goals because it is impossible to determine what people should rationally desire

[Stigler, Becker, 1977]. Rationality is perceived instrumentally. Thus, even drug addicts are seen as rational because they follow their preferences.

The second major criticism of NE concerns the self-interest of *homo economicus*. Behavioural economists present numerous examples of other-regarding preferences [Kahneman et al., 1986; Thaler, 2015]. NE's evasion strategy was to change the understanding of utility and perceive it *ad libitum*. This means that utility maximisation is no longer identified with narrow self-interest, but can also be achieved through altruism. This tautological perception of utility enables NE to explain seemingly altruistic behaviour and thereby evade criticism, e.g. giving money in the dictator game does not dismiss utility maximisation because people may derive utility from altruism. Ultimately, this tautological understanding of utility allows NE to interpret any action as utility-maximising [Hodgson, 2012].

NE's evasion strategies mean that the axiomatic framework of the closed system is sustained because its core axioms are unfalsifiable and individuals always optimise and maximise their utility [Hodgson, 2012; Dow, 2013; Kapeller, 2013]. These evasion strategies mean that NE has relaxed the assumptions by admitting the existence of other-regarding preferences, biases and heuristics, but within the axioms of rationality and utility. The tautological understanding enables NE to incorporate empirical research from NBE while continuing to use a closed system based on axioms [Berg, Gigerenzer, 2010; Dow, 2013; Osmani, 2019; Ostapiuk, 2024].

The first methodological assumption, the closed system, was where NE had to use evasion strategies to answer NBE's criticism. The remainder of NBE's criticism could be easily incorporated because it did not threaten NE's methodological assumptions. With respect to methodological individualism, NBE does not pose a challenge to NE because the individualistic perspective is sustained. Even if NBE underlines the influence of the context of choice on individual decision-making, this is analysed from the perspective of the individual. Regarding value-ladenness, most behavioural economists dismiss the assumption that people make the best choices. Even if normative behavioural economics, such as libertarian paternalism, search for purified preferences, they ultimately accept subjectivism. Individuals remain free to choose chips over apples if that is what they genuinely want [Thaler, Sunstein, 2008]. The fourth assumption, *homo economicus*, is also criticised by NBE. However, this criticism is descriptive, focusing on how people behave. Ultimately, *homo economicus* is treated as a normative benchmark that indicates how people should behave [Berg, Gigerenzer, 2010; Infante et al., 2016].

To conclude, NBE's criticism did not lead to a strife over method. The most substantial criticism, concerning bounded self-interest or bounded rationality, was incorporated within NE's closed system based on axioms. NE relaxed its assumptions to incorporate empirical data concerning human behaviour, while the remaining criticism did not discard NE's methodological assumptions. NBE never dismissed individualism, value-freeness and *homo economicus* at the methodological level. Ultimately, after four decades, little of the original revolutionary zeal remained within NBE. It became part of the mainstream and operates within NE's methodological framework [Sent, 2004; Ostapiuk, 2024; Earl, Peng, 2012].

The second example is new institutional economics (NIE). After the Second World War, orthodox economics was criticised as an atomistic approach that neglected institutions and social norms. In the 1970s and 1980s, NIE emerged as a response to this criticism, with the goal to explain the existence of legal, social and political institutions [Hodgson, 2007]. The story of NIE is different from that of NBE. NIE emerged from within NE. Like NE, NIE is based on the axiom of methodological individualism and presupposes that individuals behave in accordance with rational choice theory [Kjosavik, 2003]. In this way, the axioms of methodological individualism and optimisation are interconnected. NIE's goal was to relax NE's axioms to incorporate institutions within its analytical framework. To achieve this, NIE had to expand the notions of optimisation and methodological individualism.

First, NIE rejected the assumption of perfect rationality in orthodox economics, according to which individuals maximise. Due to the world's complexity, uncertainty and transaction costs, it is impossible to maximise. Thus, NIE adopts bounded rationality and thereby evades the criticism. Williamson writes that individuals are "intendedly rational but only limitedly so" [Williamson, 1985: 45]. However, bounded rationality is still perceived through the lens of NE. Because of various external constraints, people do not maximise but

optimise. Moreover, they use institutions as heuristics to deal with a complex and uncertain world [Williamson, 1985]. Second, NIE acknowledges that institutions influence individuals, in contrast to orthodox economics. North argues that institutions such as culture and social norms guide human behaviour. Although it should draw him closer to old institutionalism, North works within the framework of NE. He writes: “Defining institutions as the constraints that human beings impose on themselves makes the definition complementary to the choice theoretic approach of neoclassical economic theory” [North, 1990: 5]. Here, NIE employs an evasion strategy and perceives institutions as environmental constraints within which individuals optimise. In different cultures people may adopt different strategies, but they always optimise. Moreover, NIE views institutions as the results of the optimising behaviour of rational individuals. Institutions such as firms, money and property rights are effective and emerge to limit transaction costs.

The second crucial axiom of NE is methodological individualism. In general, methodological individualism reduces all social explanations to individuals. In this light, in NE any change in tastes of the individual results only from the individual [Hodgson, 2000]. Thus, the individual constitutes the foundation of NE. However, methodological individualism does not imply social atomism. It is a flexible approach that considers all social phenomena, but explains them in terms of individuals. Becker’s economic approach provides the best example of the extensiveness of methodological individualism. He demonstrates how cultural and social factors alter people’s choices by adding these factors to the individual’s utility function [Becker, 1996]. Despite its broadness, Becker’s approach reduces social phenomena to the individual. To explain social influences, the preference function must be immutable, and the individual with given preferences is treated as the starting point of analysis [Hodgson, 2000]. Ultimately, institutions do not transform individuals because they are treated as exogenous constraints to which individuals react, and that reaction is always optimal.

To conclude, NIE is based on the same closed system of axioms as NE. Like NBE, NIE relaxed some of NE’s assumptions by adding institutions and various motivations influencing human behaviour. However, these are still analysed within the axiomatic framework based on optimisation. Moreover, even though NIE analyses institutions, it remains based on methodological individualism, as institutions are examined from the perspective of the individual and treated as constraints. NIE also relies on value-freeness. Despite adding transaction costs, the effectiveness of institutions is generally assumed. NIE also relies on *homo economicus*. Although it is an agent with bounded rationality and complex motivations, self-interest and optimisation are sustained.

Conclusion

I have sought to show that NE’s methodology has not changed. Therefore, like HE, it is justified to speak of an ongoing strife over method. Mainstream economists dismiss this claim, positing that NE is dead because of reverse imperialism and the empirical turn. However, I have argued that economics has not become a humanistic science. Despite changes, NE has retained its methodology based on a closed system of axioms [Lawson, 1997, 2003, 2013; Dow, 1997, 2000; Ostapiuk, 2021, 2026a]. The examples of NBE and NIE demonstrate how NE has incorporated criticism without changing its methodology. Many authors have made similar observations [Berg, Gigerenzer, 2010; Dobusch, Kapeller, 2012; Dow, 2012; Hodgson, 2012; Gräbner, Strunk, 2020]. This section also illustrates the flexibility of NE. After the Second World War, neoclassical economists moved towards a more deductive approach. Neoclassical economists now present economics as a realistic and interdisciplinary science. Despite these changing strategies, NE’s methodology, based on four methodological assumptions, has not changed.

Strife over method 2.0. HE vs NE

In the final section, I analyse the current debate between HE and NE. The first goal is to present this debate as a contemporary strife over method. I argue that NE and HE represent two different visions of economics (naturalistic vs humanistic) based on different methodological assumptions. The second goal is

to explore how the unconstructive and often hostile conflict between NE and HE might be improved. My normative proposition is “strife over method 2.0”. Drawing on the framework of four methodological assumptions and conclusions from previous battles over method, I propose a more constructive contextualisation of debate for HE and NE.

My proposal is formulated in the context of these four methodological assumptions. My paper does not propose a strategy to resolve the power imbalance and structural issues in the economics discourse. In this sense, my proposition is idealistic. There must be willingness on both sides to listen to each other.

Heterodox economics

In the previous section, I examined the claim that NE has changed and that, consequently, there is no longer a strife over method. HE rejects this view and presents itself as a competing paradigm. To demonstrate that HE and NE differ fundamentally, I use the framework of four methodological assumptions, which defines HE as an approach based on an open system, methodological holism, value-ladenness, and homo sapiens. Before presenting my tentative taxonomy, I briefly discuss alternative accounts of heterodoxy. I refer to other attempts at defining heterodoxy in order to show that labelling HE is problematic and that my own account shared many of the same difficulties.

Some authors define HE by referring to the philosophy of science. [Lavoie \[2022\]](#) defines HE as a Lakatosian methodological research programme, while [Garnett \[2006\]](#) refers to Kuhn’s paradigm. Others define HE in ontological terms, positing that it is an open system [[Lawson, 2003, 2006](#); [Dow, 2000, 2004](#)]. Yet others focus on heuristics and argue that HE differs from NE because it does not rely on formal models and mathematics [[Colander, 2010](#); [Dobusch, Kapeller, 2012](#); [Dow, 2013](#)]. For some, HE is simply what heterodox economists do [[Kvangraven, Alves, 2019](#); [Mearman et al., 2023](#)]. Despite these differences, one thing unites all of these accounts. HE is predominately perceived as being in opposition to NE [[Colander et al., 2004](#); [Dequech, 2007](#)]. Critics sometimes use this to argue that HE is theoretically weak and merely a negative endeavour [[Colander, 2010](#)]. However, this is not the case. Although HE is united against NE, it proposes a different vision of economics [[Kvangraven, Alves, 2019](#); [Mearman et al., 2023](#)].

I define HE through four methodological assumptions that contrast with those of NE. My definition of HE is tentative. I do not believe that such a diverse amalgam of approaches can be defined satisfactorily. However, my taxonomy may be useful in recontextualising the current strife over method between HE and NE. I bring together various heterodox approaches, e.g. complexity economics, post-Keynesian economics, institutionalism, evolutionary economics, feminist economics [[Chester, Jo, 2022](#)], through four methodological assumptions. These assumptions are broad and contain a wide range of positions. Not all heterodox approaches perceive them in the same way. Undoubtedly, there are substantial differences between heterodox schools (e.g. evolutionary and feminist economics). My unification framework, based on four methodological assumptions, is proposed in the context of strife over method between HE and NE. Therefore, it should not be perceived as a universal definition of heterodoxy. Nevertheless, it is possible to capture the bone of contention between HE and NE thanks to this simplification. My framework broadly encompasses most heterodoxy approaches, with the exception of Austrian economics. The relationship between heterodoxy and the Austrian school is complex [[Lavoie, 2022](#)]. At first sight, Austrian economists appear to fit within HE because they position themselves in opposition to NE’s mathematical formalism. However, they share several methodological assumptions with NE, including methodological individualism and value-freeness. Moreover, they reject empiricism and historical relativism by focusing on axioms. Ultimately, the Austrians proposed their own vision of economics that cannot be easily accommodated within the NE vs HE debate. The second absentee in my analysis is Marxist economics. In contrast to Austrian economics, it is commonly perceived as a strand within heterodox economics. I choose to focus on other heterodox schools than Marxist economics, as they directly participate in the debate with NE. Marxist economics can be perceived as an independent paradigm that goes beyond the methodological disputes between NE

and HE. Marx challenged the foundations of economics as a discipline rather than merely its neoclassical strand. Although Marx's framework is broader, my four methodological assumptions do not appear to be in opposition to it.

Heterodox economics. Methodological assumptions

Being against NE's closed system unites a wide range of heterodox approaches, including institutionalism, post-Keynesian economics, feminist economics, evolutionary economics, complexity economics, and ecological economics. HE rejects a closed system based on deduction, a priori assumptions, and universal laws. All heterodox schools emphasise that the world is complex and should be studied empirically. HE relies on uncertainty, disequilibrium, path dependency, emergence, and interdisciplinarity. Opposition to the closed system does not imply that HE is homogeneous. Each heterodox school emphasises particular issues (e.g. feminist economists focus on women, institutionalism on social context, post-Keynesians on macroeconomics). However, despite these different emphases, all heterodoxy is against a closed system based on deduction and abstractions. This does not mean that HE is only opposed to NE. All heterodox schools support realism as a means of understanding the complexity of the open system [Lavoie, 2022; Mearman et al., 2023]. HE's criticism of NE's closed system is sometimes equated with being against mathematics [Lawson, 2006]. This is not the case. Although HE relies less heavily on mathematics than NE, post-Keynesians, complexity economists, and ecological economics also employ mathematics and models. I stress this point because it is easy to portray HE as being opposed to mathematics, which happened previously with Schmoller or Veblen. HE is opposed to the closed system as the only appropriate methodology for economics, not to mathematics itself.

The second methodological assumption concerns methodological individualism. Opposition to methodological individualism unites all heterodox approaches, including institutionalism, post-Keynesian economics, feminist economics, evolutionary economics, complexity economics, and ecological economics. All of these approaches demonstrate the shortcomings of analysing society from an individualistic perspective. This does not mean that heterodoxy is homogeneous. Each school focuses on different aspects (e.g. feminist economics focuses on social roles, post Keynesians on composition failures, complexity economics on framework analysis). Despite these differences, HE is united against methodological individualism. As in the previous case, opposition to NE's methodological individualism does not mean that HE is merely negative. HE proposes an alternative methodology based on methodological holism, with a different causal explanation than in NE, from the social to individual level.

The third methodological assumption, value-freeness, is more complex than the previous two. All heterodox approaches (institutionalism, post-Keynesian economics, feminist economics, evolutionary economics, complexity economics, and ecological economics) are against perceiving economics as a value-free science. They all agree that values influence human choices and therefore should be analysed. From this perspective, economics concerns not only the means but also the goals people pursue. HE is not homogeneous, and the context of analysis comes from a level of different engagement with the philosophy of science. Feminist economists explicitly argue that science is a value-laden endeavour, a position that is in line with postmodernism. Post-Keynesian economists and institutionalism rely less on the philosophy of science. However, complexity and evolutionary economists do not frame their analysis in terms of value-ladenness. Despite these different levels of involvement with the philosophy of science, all heterodox schools emphasise that economics is not a value-free science and that we need to analyse values.

The final methodological assumption, homo economicus, is dismissed by all major heterodox schools, including institutionalism, post-Keynesian economics, feminist economics, evolutionary economics, complexity economics, and ecological economics. HE dismisses the depiction of individuals as rational and self-interested homo economicus. Since homo economicus is not true, economists make incorrect predictions regarding human behaviour and, consequently, how economy works. The differences between heterodox schools concern the extent to which homo economicus is rejected. Some approaches, e.g. feminist economics, institutionalism,

and post-Keynesian economics, reject homo economicus entirely. Others, such as evolutionary economics, try to adjust it to reality by adding bounded rationality and habits. However, the differences are cosmetic, and all HE approaches discard homo economicus. Instead, they propose a more realistic picture of human beings influenced by society, emotions and ethical norms. In short, they replace homo economicus with homo sapiens.

Above, I defined HE through four methodological assumptions. This picture is a simplification because the schools within HE are highly diverse. Nevertheless, my analysis helps us identify the central bone of contention between NE and HE and understand why we still observe a strife over method. Moreover, the four methodological assumptions reveal the positive core of HE and demonstrate why HE should not be defined solely through its criticism of NE.

In my interpretation, the different methodological assumptions in NE and HE lead to two different visions of economics (naturalistic vs humanistic). NE and HE propose different paradigms, which leads to a strife over method. The current conflict between NE and HE is perceived as an unconstructive debate in which neoclassical and heterodox economists talk past one another and no middle ground can be found.

NE's strategy has been to dismiss HE rather than engage with it. First, for neoclassical economists, heterodox economists are radicals lacking a coherent methodology. HE is often depicted as an ideological or political movement [Hodgson, 2019]. Conversely, neoclassical economists perceive NE as a real science, and therefore superior to HE. Second, neoclassical economists argue that HE criticises the scapegoat version of orthodox economics from 70 years ago [Colander, 2010]. In this view, NE has evolved into a broad mainstream that is realistic and empirical. Through reverse imperialism, NE has transformed from a caterpillar into a colourful butterfly.

HE is also reluctant to engage with NE. Or, to be precise, previous attempts at engagement have often proven unsuccessful for HE. Neoclassical economists either dismissed most of HE's insights or incorporated some of them within their framework. Thus, many heterodox economists have become disillusioned with the possibility of genuine dialogue with NE and argue that HE needs to focus on their theories [Davidson, 2004; King, 2012; Lee, 2012; Lavoie, 2022; Hein, 2023: 305–306]. However, because of the asymmetry of power between the two approaches, they cannot ignore NE in the same way that NE ignores them. HE continually refers to NE, but their predominant strategy is to dismiss NE as a mistaken paradigm; see “paradigmism” [Garnett, 2006]. Ultimately, the relationship between NE and HE remains hostile. In this respect, it resembles earlier episodes of strife over method. The most important question is how to establish a fruitful dialogue between these two visions of economics.

Strife over method 2.0.

Before presenting “strife over method 2.0”, I first explain how the strife over method should not be conducted. Drawing on the lessons of previous methodological disputes, I propose several practices that both NE and HE should avoid.

Neoclassical economists should not dismiss HE as a group of radicals attacking the scapegoat version of economics. First, heterodox economists are not radicals without a programme. Nor are they barbarians at the gate of scientific civilisation embodied in NE's vision of economics as a natural science. To label them as barbarians is inaccurate, since they propose an alternative vision of economics based on different methodological assumptions. Moreover, NE does not have an objectively superior methodology to HE. Even if NE has been the dominant paradigm for the past 150 years, this does not mean it has a superior scientific method. There is no definite way to determine which vision of economics is ultimately better. Second, neoclassical economists should not dismiss the validity of HE and their criticism on the grounds that NE is dead. In the previous section, I argued that NE's methodology has not changed, and therefore HE's criticism remains justified.

Heterodox economists should not focus exclusively on criticism and dismissal of NE. First, if HE focuses only on criticism and avoids engagement in methodological dialogue with NE, it will be portrayed as an antithetical group of radicals [Colander, 2010]. As should be clear from this paper, I do not perceive HE as

a radical and ideological movement. However, the problem is that HE can be viewed in this way. Second, HE should not focus its criticism on realism without understanding NE's methodological position. NE's simplified abstractions (e.g. *homo economicus*) are not a flaw but a deliberate feature. Simplifications are employed to generate explanations, even at the expense of realism.² Moreover, HE should not misinterpret NE's methodology for reality. Most neoclassical economists regard *homo economicus* as a simplified conception rather than an accurate depiction of human behaviour (although these assumptions are still used in many models with important real-life implications, e.g. DSGE models). Finally, HE should recognise the changes that have taken place within economics and avoid attacking orthodoxy from the 1950s, when mathematics with aprioristic assumptions was at its peak. Such criticism is often dismissed because NE has evolved due to reverse imperialism and the empirical turn.

I have discussed the practices that should be avoided by both NE and HE, and I now turn to those that could make the strife over method more constructive. I am not the only scholar to identify problems with the current debate between HE and NE. The most widely supported solution is pluralism. However, my concept of "strife over method 2.0" differs from pluralism. Therefore, I must explain why I do not regard pluralism as a solution to the current strife over method. Despite the various propositions of rules supporting pluralism, e.g. Dow [2004], Dobusch, Kapeller [2012], Larue [2022], the core concept of pluralism can be described as let a hundred flowers bloom [Hodgson et al., 1992; Ostapiuk, 2026b]. The underlying assumption is that we should be open to various ideas, which will ultimately improve economics. Although the idea of pluralism seems commonsensical, it encounters several difficulties in the context of economics. First, due to path dependency, a marketplace of ideas leads to the dominance of NE [Dobusch, Kapeller, 2012; Gräbner, Strunk, 2020]. Second, within such a marketplace, NE can pick and choose ideas from others and incorporate them into its own framework (e.g. new behavioural economics). Faced with these dangers, HE radicalises and rejects a peaceful coexistence with NE, instead choosing strife over method. Even though HE often defines itself by pluralism [Mearman et al., 2023], this pluralism is frequently directed towards diversity within heterodoxy rather than engagement with NE. Pluralism can be seen as HE's strategy to gain importance, as reflected in "strategic pluralism" [Giere, 2006] or "selfish pluralism" [Dobusch, Kapeller, 2012]. I make this point not to criticise HE but to show that pluralism is not the best strategy for heterodoxy. Due to the imbalance of power and path dependency, pluralism sustains the status quo with NE dominance.

My conception of "strife over method 2.0" emerges from the limitations of pluralism in the context of HE. Due to path dependency, pluralism can lead to even greater marginalisation of HE. To distinguish itself, HE should employ the language of strife over method. However, "strife over method 2.0" differs from earlier episodes of methodological conflict. I do not propose a strife over method in which both sides adopt extreme positions and engage in mutual dismissal. Nor does "Strife over method 2.0" seek to determine which paradigm is superior, since such a framework is unconstructive. Kuhn's [1970] vision of paradigm revolutions is spectacular, but the question is whether we really want to perceive science as a struggle between competing intellectual tribes. Thus, "strife over method 2.0" refers to a methodological dialogue between HE and NE. Learning from each other can benefit both sides, and economics in general. "Strife over method 2.0" refers to searching for a middle ground and accepting methodological differences while understanding your opponent's position. To this end, "strife over method 2.0" is similar to pluralism. The difference is that HE should explicitly distinguish itself from NE and defend its vision of economics.

"Strife over method 2.0" makes a deliberately modest claim. The goal is to better contextualise the current strife over method between HE and NE, not to end the debate. Moreover, its scope is limited. I make my argument only in the context of previous battles over method and the four methodological assumptions.

² I presented here a simplified version of heterodoxy's criticism of NE; see e.g., Earle et al. [2016], Fisher et al. [2017]. Some heterodox economists, however, distinguish between "unrealistic" assumptions (mere simplifications) and "unreal" assumptions – assumptions that introduce elements with no empirical counterpart that cannot exist in reality (e.g., perfectly rational or omniscient agents). This methodologically sophisticated criticism targets these unreal assumptions, not abstraction per se, which raises doubts about the usefulness of such models; see e.g., Mirowski [1989], Lawson [1997, 2003].

Through this framework I seek to demonstrate three points: first, the impracticality of holding extreme positions by both NE and HE; second, the concessions made by NE over time in response to criticism; and third, the choice available to HE in responding to changes within NE.

My advice is directed primarily towards HE. This is not because I believe that heterodox economists bear greater responsibility for the unconstructive nature of the current debate. On the contrary, their voices are often ignored or dismissed. I focus on what heterodox economists can do within the constraints of the current debate. Neoclassical economists operate within the dominant paradigm, and their position is sustained by path-dependency in economics [Dobusch, Kapeller, 2012; Gräbner, Strunk, 2020]. They do not need to convince other economists of the legitimacy of their approach. Conversely, as the underdogs, heterodox economists are forced to convince non-heterodox economists that their perspective deserves consideration. Ultimately, my advice should be treated with caution. I do not write from a position of philosophical authority, nor do I seek to instruct heterodox economists on how they ought to act. The goal of the paper – limiting hostility within the debate – may not be shared by heterodox economists struggling for recognition in economics. Moreover, my proposal may even fail, because it is based on the willingness of NE to listen to what HE has to say.

Let us begin with the first methodological assumption (closed vs open systems). Neither extreme position is tenable. Economics cannot be based solely on deduction, where theories are aprioristic and without any connection to reality. Conversely, a purely inductive approach without any theoretical framework is equally untenable. In practice, very few economists hold each of these extreme positions. Most heterodox and neoclassical economists recognise the need for relying on both induction and deduction. The difference between HE and NE comes from the importance assigned to either induction or deduction. HE privileges induction, whereas NE favours deduction. However, NE and HE share the same epistemic goal: explanation. Neoclassical economists believe that explanation requires deductive theorising, whereas HE emphasises realism as the foundation of explanation. Second, it should be recognised that NE has changed over the years and has become less deductive. Although it remains a modelling-oriented science, it employs empirical data to refine its theories; see the empirical turn [Backhouse, Cherrier, 2017]. In general, NE has become more realistic and interdisciplinary. HE should acknowledge these developments within NE. It should also concede that certain abstractions are necessary in science. However, this does not imply that HE should incorporate the deductive system proposed by NE. Criticising NE does not mean that HE must be in total opposition to NE as in the previous battles over method. The most promising response seems to be a “compartmentalisation strategy”, whereby HE could analyse particular examples and point to the advantages of open-system methodology over closed-system methodology. Moreover, HE could refer to the shared epistemic value of explanation and demonstrate how an open-system approach can contribute to that common goal.

The second methodological assumption (individualism vs holism) also distinguishes HE from NE. However, the extreme versions of both positions are untenable. We cannot focus exclusively on individuals without taking social influences into consideration. Conversely, holism is also untenable because we cannot explain everything by reference to society [Hodgson, 2004]. In practice, such extreme positions are held only by a minority of economists. Although most economists favour either methodological holism or methodological individualism, it does not mean that heterodox and neoclassical economists do not understand that individuals and society are mutually intertwined. Ultimately, both NE and HE share the same need for explanation. The difference is that neoclassical economists believe that explanation can be achieved by methodological individualism, whereas HE emphasises methodological holism. As with the previous methodological assumption, NE has changed over time and taken more social influences into account. Even if these influences are analysed from the perspective of methodological individualism, contemporary NE can no longer be described as a purely atomistic approach. HE should acknowledge the changes in NE. However, this does not mean that HE should adopt methodological individualism. Instead, heterodoxy could focus on particular examples to demonstrate the advantages of methodological holism as regards explaining behaviours, e.g. the advantage of endogenous vs given preferences. Again, the most promising response seems to be the “compartmentalisation strategy”.

Methodological individualism and methodological holism create a delineation line between economics and sociology. Despite interdisciplinarity, there seems to be a need for a division of labour in science. For this reason, a shift towards methodological holism would not convince most economists. Ultimately, HE could underline that individuals are simultaneously social and individual beings, thereby limiting the risk of atomism resulting from methodological individualism.

The third methodological assumption (value-freeness vs value-ladenness) also distinguishes HE from NE. Both positions are untenable in their extreme forms. Economics is not value-free and cannot escape from values. Conversely, value-ladenness in its extreme form is untenable because some distinction between normative and positive analysis should be sustained. This methodological assumption differs from others because many neoclassical economists continue to defend the extreme position of economics being value-free. Moreover, despite the influence of the philosophy of science [Kuhn, 1970; Feyerabend, 1975; Lakatos, 1980], many neoclassical economists still perceive economics as a value-free science [Earle et al., 2016; Hausman et al., 2016]. The lack of change in the perception of neoclassical economists helps define a potential agenda for HE. First, HE should convince neoclassical economists that they use value-laden theories, e.g. efficiency, instrumental rationality, and GDP. This does not mean that NE should abandon these concepts, but the values embedded within them should be made transparent and openly discussed. However, demonstrating that theories are value-laden is not sufficient. Many neoclassical economists are already aware of value-ladenness but continue to favour seemingly value-free theories because they are easier to operationalise (e.g. NE uses behavioural welfare analysis, not Sen's capabilities approach). Consequently, HE should convince neoclassical economists that a debate on values is possible and that they can be rigorously analysed. In this respect, HE could continue what Schmoller and institutionalists tried to achieve. The essential issue here is well-being, since improving human lives remains one of the most important goals of science. It must also be emphasised here that NE's neutrality is not accidental, and was proposed after the Second World War to distance the discipline from political ideologies [Mirowski, 1989; Yonay, 1998]. Nevertheless, HE could analyse values and human goals without imposing a particular vision on others. Moreover, HE could seek common ground with NE. Some distinction between positive and normative economics should be sustained due to its usefulness. HE could focus on the interconnectedness between positive and normative analysis [Mongin, 2006; Hausman et al., 2016; Colander, Su, 2018]. HE should also recognise that economics is unlikely to become an ethical science. The image of value-freeness contributes to economics' authority within the social sciences, and economists are unlikely to relinquish this power. However, the fact that economics is not an ethical science does not mean that economists should ignore ethics and values. This is precisely the point that is underlined by HE.

The final methodological assumption concerns homo economicus vs homo sapiens. Fully rational and egoistical homo economicus is untenable because it provides insufficient explanations. Conversely, rejecting simplified homo economicus and attempting to present real individuals in their full complexity is equally untenable because it undermines explanatory power. However, very few heterodox and neoclassical economists hold either of these extreme positions. Neoclassical economists are well aware that people are not homo economicus. From the beginning, this conception was intended as a simplification rather than reality [Mill, 1836]. Heterodoxy dismissed homo economicus by empirically demonstrating that it does not depict human behaviour. Nevertheless, this does not mean that HE does not propose any theory of human behaviour at all, but for them it should be based on empirical data. What unites both NE and HE is the desire to explain human behaviour. The difference is that neoclassical economists believe it can be achieved through a simplified homo economicus model, whereas heterodox economists argue that explanation is possible thanks to realism. However, in recent years, NE has changed and relaxed its assumptions concerning homo economicus (e.g. bounded rationality and bounded self-interest). HE should acknowledge these changes and avoid portraying homo economicus as completely unrealistic. Instead, HE could focus on two strategies. First, it could criticise the tautologicality of homo economicus. Even if NE relaxes its assumptions, this often occurs in the context of a closed system where utility and rationality can explain almost any behaviour. Second, HE should avoid

proposing a single overarching theory of human behaviour as a direct replacement for homo economicus, e.g. homo moralis, homo sapiens, or homo sociologicus. Such overarching theories cannot fully explain every human behaviour, which was visible in the context of economics imperialism. HE could demonstrate the limits of such universal models and emphasise that people behave differently in different contexts (family vs market), which Schmoller and institutionalists also underlined. To limit NE's claims HE could refer to Menger, who warned against using homo economicus to explain every human action [Menger, 1985: 87]. Ultimately, self-interest clearly explains motivations in markets but not in families.

Conclusions

The goal of this paper has been to improve the current unconstructive conflict between neoclassical economics (NE) and heterodox economics (HE). To achieve this, I analysed past methodological debates in order to learn how to avoid making the same mistakes. I argued that the *Methodenstreit* (Schmoller vs Menger) closely resembles the contemporary debate between NE and HE. In 1870, two visions of economics (natural and humanistic science) were crystallised. By analysing four methodological assumptions, I have shown that despite significant changes within economics, the strife over method has not ended. Moreover, my paper underlines the flexibility of NE's methodology. Over time, neoclassical economists have both constrained and relaxed their methodological assumptions in response to criticism, which is one of the reasons for their dominance.

Past methodological debates were reanalysed in order to clarify the central bone of contention between the two visions of economics that have persisted over time and continue to distinguish NE from HE. Such clarification is necessary because now NE and HE talk past one another and misinterpret each other's positions. My historical analysis was intended to show that the unproductive nature of the strife over method stems, at least to some degree, from misunderstanding and attributing extreme positions to one's opponent. For this reason, I proposed "strife over method 2.0" as a way to reduce the hostility in the current debate between NE and HE. By learning from past mistakes, I have shown that the current debate can be framed more constructively and that some common ground between NE and HE can be identified, creating the possibility for meaningful dialogue.

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