

Three routes to Stuart Mill's political economy: Reflections on the method, the economic man and the social order

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<https://dx.doi.org/10.5209/ijhe.103309>

Recibido: 31/01/2025 • Revisado: 25/02/2025 • Aceptado: 10/03/2025

EN Abstract. John Stuart Mill's methodological approach to Political Economy represents a pluralistic and evolutionary perspective that transcends strictly empirical, positivist, or abstract theoretical frameworks. This paper identifies three key intellectual paths derived from Mill's thought. The first two align with neoclassical economics: abstraction and mathematical formalization, and the concept of *homo economicus*. Mill separated abstract economic science from its practical application, going beyond the need to integrate auxiliary hypotheses and disturbances. He also viewed economic agents as shaped by social and cultural contexts, in contrast to the rational individual seeking to maximize utility. The third path, methodological pluralism, and historical-institutional analysis, reflects Mill's broader social philosophy. Rejecting excessive formalism, he emphasized the evolutionary nature of economic phenomena. His critique of the "Ricardian vice" influenced economists such as Marshall, Keynes, and Schumpeter, advocating for an approach that integrates historical and institutional perspectives into economic theory.

Keywords. individualism, economic rationality, applied economics, pluralism, institutionalism.

JEL Code: B12; B40; B52.

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ES Resumen. El enfoque metodológico de John Stuart Mill en la Economía Política representa una perspectiva pluralista y evolucionista que trasciende los marcos estrictamente empíricos, positivistas o teóricos abstractos. Este trabajo identifica tres caminos intelectuales clave derivados del pensamiento de Mill. Los dos primeros se alinean con la economía neoclásica: la abstracción y formalización matemática, y el concepto de *homo economicus*. Mill separó la ciencia económica abstracta de su aplicación práctica, yendo más allá de la necesidad de integrar hipótesis auxiliares y perturbaciones. También consideró que los agentes económicos están moldeados por contextos sociales y culturales, en contraste con el individuo racional que busca maximizar su utilidad. El tercer camino, el pluralismo metodológico y el análisis histórico-institucional, refleja la filosofía social más amplia de Mill. Rechazando el formalismo excesivo, enfatizó la naturaleza evolutiva de los fenómenos económicos. Su crítica al "vicio ricardiano" influyó en economistas como Marshall, Keynes y Schumpeter, abogando por un enfoque que integre perspectivas históricas e institucionales en la teoría económica.

Palabras clave. individualismo, racionalidad económica, economía aplicada, pluralismo, institucionalismo.

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utilidade. O terceiro caminho, o pluralismo metodológico e a análise histórico-institucional, reflete a filosofia social mais ampla de Mill. Rejeitando o formalismo excessivo, enfatizou a natureza evolutiva dos fenômenos econômicos. Sua crítica ao “vício ricardiano” influenciou economistas como Marshall, Keynes e Schumpeter, defendendo uma abordagem que integre perspectivas históricas e institucionais na teoria econômica.

Palavras-chave: individualismo, racionalidade econômica, economia aplicada, pluralismo, institucionalismo.

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Acknowledgements: I would like to express my gratitude to the editors for their valuable suggestions and feedback.

Sumario: 1. Introduction; 2. The Scope of the Method Before and Now; 3. Does Homo Economicus Dream of Rational Man?; 4. Creatures and Creators of the (Historical) Social Order; 5. Conclusions.

Cómo citar: Cruz Hidalgo, E. (2025): Three routes to Stuart Mill's political economy: Reflections on the method, the economic man and the social order. *Iberian Journal of the History of Economic Thought*, 12(1), 29-39. <https://dx.doi.org/10.5209/ijhe.103309>

1. Introduction

According to Schumpeter (1954 [2006], p. 427), the extension of the methods of physical sciences to the social sciences in Mill was so watered down that it was practically harmless. Social phenomena prevailed in Mill's work, limiting the suitability of the mathematical or geometric method to the narrow scope left to abstract economics. His axiomatic method was complemented by all kinds of historical, institutional, and organic observations that drove an emergent dynamic, in the sense of fostering behaviours and outcomes that were neither planned nor subject to some predetermined role or horizon. The psychological aspects brought to the forefront by Mill—an approach later adopted by marginalist economists—did not have a naturalistic, universal, and abstract character (de Mattos, 2005), so the results derived from such behaviour could not be considered in this way either. As Schumpeter (2012 [1954 [2006], pp. 512-513]) warns, we cannot look for any “law” or “natural law” in Mill's work.

Mill's political economy is relativistic, historical, and above all, social, plural, and cautious. It has nothing to do with the arrogant absolutism characteristic of our times, which is based on hyper-specialization in a few assumptions that lend themselves to mathematical treatment. As Mill points out, “the more accurate our deductions and the more certain our conclusions in the abstract, [...] the less we are likely to suspect that we are in error” (Mill, 1844 [1967], p. 332). But the allure of mathematics, with its sense of control over possibilities and certainties derived from a few hypotheses, implied an acceptance of the truths thus achieved that could blur our awareness of the complexity, interdependencies, and uncertainties of the real world. Its logical coherence also created resistance to the interdisciplinary research required (Scott, 2018, p. 534). Even those like Alfred Marshall, who took Mill's warnings and considerations into account and promoted a space of tolerance and plurality that accommodated history and institutions, were not immune to getting lost in

them (Hodgson, 2005, p. 335). However, economists have found a shortcut in mathematics and, regardless of where it leads us or whether we are dealing merely with intellectual puzzles, they have embraced it (Boulding, 1971; Blaug, 2002). On the other hand, Mill's separation between theory and practice also faded over time. By 1970, it had been completely replaced by an approach that merged models with policy prescriptions (Colander, 2011, pp. 177-178). Being aware of where we come from and how we got here is essential to correcting this situation. In this regard, Mill represents a turning point but not because he represented a “break” with classical economics or was a precursor to neoclassical economics.

The various paths taken after Mill can be attributed largely to sociological reasons, particularly the characteristics of the professionalization of economists as a group that shares an identity seeking self-reinforcement. This creates specific dynamics within the academic career that function as incentives. The ontology or worldview becomes fixed with the imposition of the mathematical method, whereas in Mill, this was not the case. Problems in modern economics result from the conflict between the applied methodology and the elements or characteristics of the subject of study (Lawson, 2013, pp. 954-955).

Although the starting point regarding social matrix in which individuals are embedded may be like that of neoclassical economics, Mill's individuals were not passive agents whose destiny was to reproduce the system in which they were placed. The objective of this work is to expose and discuss how Mill's method does not lead to a single path but can be divided into at least three different routes. This goes beyond merely interpreting the author's intentions, personal preferences, and apparent contradictions. A key aspect of this analysis is examining Mill's economic man, who, as we argue below, cannot be seen as a precursor to the marginalist-neoclassical *homo economicus* unless we succumb to what Zouboulakis (1997, p. 7) calls the “precursor virus”.¹

¹ Mill never used this term. Persky (1995, p. 222) identifies the Irish historicist economist John Kells Ingram as the first author to use it, in a pejorative manner, to describe Mill's axiomatic individual.

Mill was neither an empirical economist, nor a positivist, nor an abstract thinker, but neither was he a “psychologist” (Popper, 1945 [2011], pp. 304-305). A political economist required a plurality of knowledge for their analyses and practical proposals (Mill, 1865 [1969], pp. 335-336). Those who based their conclusions on the results of a few axioms, on expanding them, or on the constant search for verification would not be good political economists. Mill’s attitude against the “Ricardian vice” (Oakley, 1993, p. 32) is evident in Marshall, but also in other economists like Keynes and Schumpeter. The historical approach and institutions were considered central aspects of high-level analysis, while facts alone had little to say, and pure theory and excessive formalism had insurmountable limitations (Schumpeter, 1954 [2006], pp. 10-11). From this perspective, Mill represented the character of the next generation of economists.

We have structured this work as follows. The introduction contextualizes and justifies the relevance of analysing Mill’s methodology for modern economists. Sections 2 and 3 discuss two parallel paths in neoclassical economics that stem from Mill. Section 4 examines Mill’s reasons for offering a political economy with such a narrow scope, the subsequent divergence from his objectives, and how a third and last path considers Mill’s methodological approach more broadly. This is discussed in relation to the separation between economics as an abstract science and an art, the distance between *homo economicus* and his social philosophy, and the dynamic components of his thought. Finally, in Section 5, we present our conclusions, arguing that Mill should stand alongside Marshall and Keynes in the defence of methodological pluralism in economics.

2. The Scope of the Method Before and Now

Mill defines the Science of Political Economy as an abstract science based on a few *a priori* hypotheses, from which reasoning must proceed:

“It does not treat of the whole of man’s nature as modified by the social state, nor of the whole conduct of man in society. It is concerned with him solely as a being who desires to possess wealth, and who is capable of judging of the comparative efficacy of means for obtaining that end.” (Mill, 1844 [1967], p. 321)

Just as geometry assumes an arbitrary definition of a line, Political Economy likewise presupposes an arbitrary definition of the individual, as a being who always and invariably acts in a way that maximizes the “necessaries, conveniences, and luxuries, with the smallest quantity of labour and physical self-denial with which they can be obtained in the existing state of knowledge” (Mill, 1844 [1967], p. 326). It can be demonstrated that by acting in a specific way, capitalists, workers, or landowners can obtain higher profits, wages, and rents. This would be an irrefutable truth, but it does not imply that they actually act in such a manner. The Science of Political Economy deals with decisions taken in the abstract under certain assumptions, ignoring a whole series of elements that operate in real-world individual decision-making. It would be wrong to draw practical

conclusions from these artificial assumptions, which require the use of the *ceteris paribus* clause (Mill, 1844 [1967], p. 326). Such hypothetical propositions, Mill says, “affirm tendencies, not facts”. They do not suggest that something will happen with absolute certainty, but rather that “such and such will be the effect of a given cause, so far as it operates uncounteracted”. And as tendencies, they “are not the less universally true because the tendencies may be frustrated” (Mill, 1843 [1974], p. 870).

But this statement about tendencies should not be seen merely as a counterfactual concerning facts, subject to the logical necessity of establishing *ceteris paribus*-type restrictions, long-term results, or averages. As Lawson (1994, p. 117) points out, “it is a transfactual statement about a structure or thing and its activity” which exerts a power that operates independently of the events that occur. This implies presupposing not only a specific character of individuals but also the institutions within which they act. Mill sought to study the distribution resulting from industrial or productive activities, “in so far as not effected by force, or modified by voluntary gift”, based on reasoning about a hypothetical law of human nature and the external circumstances that operate through it (Mill, 1843 [1974], p. 901). He did not have in mind the production and distribution of wealth in all states of humanity but only in what he called the “state of society” which presupposes private property, perfect competition, and money (Mill, 1844 [1967], p. 322; 1843 [1974], pp. 901-903).

Despite the isolation and caution with which Mill designed his Science of Political Economy (Mill, 1843 [1974], pp. 846-847), several researchers associate Mill’s method with neoclassical economics, considering him a precursor of it to some degree (Hollander, 1985; De Marchi, 1988; Hausman, 1992; Peart, 1995; Persky, 1995; Hollander and Peart, 1999; Hirsch, 2000; Hands, 2001; Viskovatoff, 2003). From these perspectives, analysing facts to provide auxiliary theoretical hypotheses subject to verification—by confronting them with empirical data from various sources—is seen as a bridge between abstract science and art. In this way, empirical data would provide additional hypotheses that would modify the tendency of the “central” hypothesis, thus extending abstract results to real case studies. This can be assimilated to what Mill denotes as “disturbing causes”, conceptualized similarly to the rigidities or frictions of neoclassical economics, which add “a supplementary chapter or appendix, or at least a supplementary theorem, to the abstract science” (Mill, 1844 [1967], p. 331). Certainly, if we adhere to certain fragments of Mill’s work and ignore the global character of his writings, this is one of the paths opened by the English economist and philosopher (Mill, 1843 [1974], pp. 899-900).

However, the issue is not about accumulating data to test or extract those auxiliary hypotheses that would allow the abstract Science of Political Economy to transition into an art. It is not a quantitative problem, nor one of how we process the accumulated data but, rather, a qualitative one (Hollander, 1986 [2000], p. 199; Schabas, 1990, pp. 103-105). In a comparative discussion between astronomy and political economy, Mill points out:

"The difference of certainty is not in the laws themselves, it is in the data to which these laws are to be applied. [...] The circumstances, on the contrary, which influence the condition and progress of society, are innumerable, and perpetually changing; and though they all change in obedience to causes, and therefore to laws, the multitude of the causes is so great as to defy our limited powers of calculation. Not to say that the impossibility of applying precise numbers to facts of such a description, would set an impassable limit to the possibility of calculating them beforehand, even if the powers of the human intellect were otherwise adequate to the task." (Mill, 1843 [1974], pp. 877-878)

Moreover, many causes are inaccessible to our observation or do not adequately fit into a quantifiable treatment, even assuming they are known. To ignore this aspect in pursuit of mathematical precision means doing so "at the cost of the reality of the investigation" (Mill, 1843 [1974], pp. 620-621). No matter how many propositions we can make regarding tendencies by adding auxiliary hypotheses, it is a mistake to believe that by accumulating such hypotheses, mathematics would be appropriate (Mill, 1843 [1974] p. 866). Such an assumption is:

"inconsistent with the eminently modifiable nature of the social phenomena, and the multitude and variety of the circumstances by which they are modified; circumstances never the same, or even nearly the same, in two different societies, or in two different periods of the same society. [...] Whatever affects, in an appreciable degree, any one element of the social state, affects through it all the other elements. The mode of production of all social phenomena is one great case of Intermixture of Laws." (Mill, 1843 [1974], pp. 898-899)

Even when Mill speaks about how anyone who can determine profits, rents, or wages in one state of society will be able to do so in any other—regardless of how land ownership, technology, or the state of agriculture is distributed—he establishes a strong anchor that must be in place to find the laws that regulate the distribution of wealth: free competition (Mill, 1843 [1974], p. 904; 1834 [1967], p. 226). It should be noted that Mill criticized his contemporaries for using terms such as free trade, freedom of contract, or competition as if they were universally applicable, essential principles that required no further reflection (Hutchinson, 1978, pp. 63-64). For Mill: "general maxims should be helps to thought, not substitutes for it" (Mill, 1870 [1967], p. 672). If we follow Mill in this statement, there is not just one route to his thought, as other paths can be traced—ones linked to richer visions of human action, institutions, and social relations that are more consistent with his utilitarian, reformist, and liberty-focused positions. These perspectives contradict other elements and aspects

postulated by the English philosopher and economist in his treatment of Political Economy—specifically, the conceptualization of economic man and perfect competition.² When combined in this way, Mill's methodological practice emerges as more flexible and plural than his own declarations reveal. Mill seems to confirm this in a letter sent to the German political economist Karl Heinrich Rau (Mill, 1852 [1972] p. 87); and later, when mentioning the success of his *Principles of Political Economy* (1848) in his *Autobiography* (Mill, 1873 [1981], p. 243).

3. Does *Homo Economicus* Dream of Rational Man?

Mill does not embrace a naïve empiricism that is never theoretical; rather, he employs a "pre-analytic cognitive act" that contains a particular worldview, serving as the starting point for analysis and conceptualization of economic man (Schumpeter, 1954 [2006], pp. 38-39). Certain rules of the game or assumptions are always established in advance, constituting an ontological issue that underpins the analysis, even if it often goes unnoticed:

"Knowing therefore accurately the properties of the substances concerned, we may reason with as much certainty as in the most demonstrative parts of physics from any assumed set of circumstances. This will be mere trifling if the assumed circumstances bear no sort of resemblance to any real ones; but if the assumption is correct as far as it goes, and differs from the truth no otherwise than as a part differs from the whole, then the conclusions which are correctly deduced from the assumption constitute abstract truth; and when completed by adding or subtracting the effect of the non-calculated circumstances, they are true in the concrete, and may be applied to practice." (Mill, 1844 [1967], p. 329)

Mill's characterization of economic man can be understood as an ontological and instrumental device, nuanced in many ways from the outset and revealing itself at a second level of analysis when transitioning from abstract science to art. If we consider only the first level, it will not seem incorrect to associate him with the emergence of *homo economicus*, which plays a central role in neoclassical economics. To make such a claim, however, we would have to detach Mill's individual from the rest of his social and philosophical thought—both in relation to the social aspects of individual behaviour and the institutions and social agreements in which individuals are embedded. Regarding his utilitarian approach, his refusal to reduce different types of pleasures and pains to a single unidimensional magnitude was already contained in his critique of Jeremy Bentham and his father, James Mill. Of Bentham, he stated that the latter had only achieved meaningful results in this calculation because it allowed for greater precision in assessing how an external circumstance

² The hypothesis of the existence of perfect competition conceals other assumptions that must be postulated. As Granovetter (1985, p. 484) points out, social atomization is a prerequisite for it to be effective. Similarly, Hutchinson (1998, pp. 49-50) highlights the necessity of assuming complete information, which in turn excludes three aspects that would be central to modern macroeconomics: ignorance, error, and uncertainty.

influenced the simplest and most vulgar aspects of our nature, not because he truly understood its complexity (Mill, 1833 [1981], pp. 590-591). In this way, Mill broke with the neoclassical principle of substitution, central to the maximization criterion. He also did so by proposing an asymmetry or difference in intensity between pleasures and sufferings (Mill, 1861 [1969], p. 251).³ Further, the inseparable relationship between utility and justice—whose understanding varies among individuals and across different periods, and can even be considered through different rules and principles by the same person—invalidates its reduction to a single scale (Mill, 1861 [1969], pp. 251-252). As O'Connor (1997, p. 488) expresses it, for Mill, preferences are shaped through a complex process of mutual interaction and socialization. The significance of this for science warrants, however, a warning from Mill himself:

"If all the resources of science are not sufficient to enable us to calculate a priori, with complete precision, the mutual action of three bodies gravitating towards one another; it may be judged with what prospect of success we should endeavour to calculate the result of the conflicting tendencies which are acting in a thousand different directions and promoting a thousand different changes at a given instant in a given society." (Mill, 1843 [1974], p. 896)

From the multiplicity of interacting disturbing causes, Mill's implicit holism emerges. These disturbances cannot be viewed as rigidities or frictions in the neoclassical sense. It was not a matter of positing auxiliary hypotheses that would relax or create a weak version of certain assumptions so that reality would fit the designed model. Mill's individual was neither deterministic nor atomistic. He sought to begin the study with individuals, but this did not mean that they were disconnected entities placed at an equal starting point, in an initial state of nature. It is true that he presupposes this initial state, which characterizes a barter economy that expands with labour specialization and the introduction of money, sharing an ontology or worldview with other classical and neoclassical economists (Mill, 1844 [1967], pp. 242, 276; 1848 [1965], p. 6). However, although Mill's methodological individualism presupposes individuals who conform to a specific ontology, at a second level of analysis, he includes the relationships between individuals and institutions. Evolutionary elements appear in the analysis, implying an active rather than passive role for individuals, allowing them to modify the superstructure and structure—thus opening what was initially a static closed system into a dynamic one.

These disturbances cannot be seen in the neoclassical sense of an approximation to the "most desirable" or "efficient" institutions. This dialectical interaction serves as a catalyst for emergent properties that cannot simply be imported from other circumstances or given examples, forming temporary phases of civilization rather than universal truths (Mill, 1843 [1974], p. 942; 1848 [1965], p. 455; 1865

[1967], p. 306; 1873 [1971], p. 257). Modern versions of methodological individualism based on the universality of economic man are a caricature of Mill's work, subsumed into a much broader caricature created by the Marginalist Revolution. Mill's *homo economicus* was, in England, reformulated by Jevons to become a timeless calculating automaton whose only point of contact with humanity is the market—where the price system is the sole language of all communication and social interaction—thus reverting to Bentham's earlier utilitarianism and assuming the independence of individual preferences (Maas, 2005; Morgan, 2006; Rosen, 2007; Bee and Desmarais-Tremblay, 2023). Discussing Comte, Mill argues that selfish tendencies based on individual pleasures are not opposed to affections, provided that the desire to share them with others is cultivated. This concept of reciprocity carries a deeper connotation than the notion of reciprocity established in the context of exchange. Against this conception of human life, Mill identifies a single incompatible passion: the love of domination or superiority for its own sake (Mill, 1865 [1969], p. 339). However, it is also necessary to be disciplined and exercise self-control for one's own benefit—that is, to renounce an immediate desire in favour of a distant goal or general purpose essential for a person's actions to align with their idea of individual well-being. For Mill, this tendency is often underdeveloped in those born to power, in so-called "savage" peoples, and among the poorest classes (Mill, 1874 [1967], pp. 404-405).

Yet actions are more complex than either of these two aspects, and both are attainable through education or experience. However, they cannot be seen as driven solely by a perfectly ordered system of preferences, dependent on a single motive without any other influence (Mill, 1843 [1974], p. 837). They are not always determined by the pursuit of pleasure or the minimization of pain—whether directly or as means to such ends through associations formed from past experiences. Although we may initially desire certain actions or behaviours because of the pleasure they bring, as these actions become habits over time, we continue to desire them even without associating them with that pleasure. Even if changes in ourselves or our circumstances cause us to stop experiencing pleasure in these actions, or if we no longer expect to obtain it, we still desire and perform them. Thus, harmful excessive habits persist even when they no longer provide satisfaction—just as the moral hero maintains their desire to persevere on a chosen path, regardless of the reward (Mill, 1843 [1974], p. 842).

Habits can become character, establishing a consistent and stable pattern of behaviour, which is why their role must be recognized alongside preferences and aversions (Mill, 1843 [1974], pp. 842-843). However, alongside this individual character, there exists a character that belongs to a people or an era, shaping historically formed institutions and social arrangements that cannot be overlooked (Mill, 1843 [1974], pp. 904-905). This is what Mill calls Political Ethology or the science of national character.

³ These two conditions that distance Mill from Neoclassical Economics are analyzed in Sotiropoulos (2009). See also Cohen Kaminitz (2014).

This collective character emerges from past circumstances, operates in historical time, and—most importantly— ‘it is also a fact which enters largely into the production of all the other phenomena. And above all, the [individual] character [...]’ (Mill, 1843 [1974], p. 905). The opinions, feelings, and habits of society collectively shape the artificial aspects of social life, such as laws and customs (Mill, 1843 [1974], p. 905). In Mill’s view, individuals are socially and historically contextualized (Zouboulakis, 2002). Furthermore, his liberalism rejects absolute subjugation to the roles, groups, or classes to which individuals belong (Smits, 2004, p. 313). In his own words: ‘who does anything because it is the custom, makes no choice’ (Mill, 1859 [1977], p. 262).

As Oakley (1994, pp. 178–179) suggests, Mill’s proposal for a science of ethology—which would study the formation of different characters observed in individuals across various places and times—implies taking certain a priori assumptions that, given the interaction of individuals, could be transformed by them in the long run. Due to the diversity of circumstances and characters, there could never be identical outcomes in two different cases (Mill, 1843 [1973], pp. 846–847). The long term is uncertain, as introducing interactive relationships between individuals means that individual actions may not have the intended social consequences. The long term emerges and evolves from what happens in the short term in historical time—not in logical time—without following a centralized plan, ‘entirely governed by psychological and ethological laws’ (Mill, 1843 [1973], p. 896; Hodgson, 2007, pp. 219–220; Zouboulakis, 2001, pp. 31–32).

Ultimately, Mill emphasizes that human behaviour occurs within a pre-existing social context where institutions influence the former and intentional behaviour generates unintended social consequences. The dialectical relationship between individuals and institutions means that individuals change, but they also change institutions. This is what Agassi (1975) calls “institutional individualism” which aligns much better with Mill’s individual, as developed in his utilitarian theory. As we have seen, this perspective provides the individual with social and moral elements alongside purely hedonistic ones (Milonakis and Fine, 2009, pp. 28–29). Utilitarian theory also reflects Mill’s commitment to freedom of opinion and choice, resisting narrow, predetermined roles. We do not recognize in Mill the portrait of the marginalist-neoclassical *homo economicus*.

4. Creatures and Creators of the (Historical) Social Order

Numerous works show that Mill saw the need to go beyond the narrow science he had initially outlined. In addition to his continuous warnings about the method itself, his writings on liberty, socialism, and the Irish Famine also serve as clear examples of this (Claeys, 1987; Kurer, 1999; Trincado, 2008; de Mattos, 2020; Manioudis, 2021; McCabe, 2021). When looking at the entirety of Mill’s work, there appears to be no contradiction or inconsistency in his thinking.

For some reason, although abstract science was limited to a special case, Mill insisted that it be the

starting point. When comparing the general acceptance of findings in physical sciences with those in Political Economy, he observed a disadvantage for the latter and found the explanation in certainty. It was certainty that could provide acceptance for such investigations and unify political economists amid the prevailing dissent of the time, thereby unlocking reforms in society and institutions by gaining adherents to the cause (De Marchi, 2002, pp. 315–316). As Gioia (2020, pp. 58–59) points out, Mill’s vision of economic man was strongly associated with the goal of stabilizing the discipline of Political Economy, seeking in certainty the stability necessary for its acceptance. Mill’s later disinterest in abstract economics, given his commitment to reforms through the transformation and malleability of a human nature that was not invariable (de Mattos, 2005, pp. 35–36), can coherently provide an instrumental view of why he was interested in developing Political Economy as an abstract science and in the specific terms he did. In this endeavour, Mill achieved immediate and resounding success (De Marchi, 1974 [1991], p. 156). However, the limitations imposed by adopting this ontology and its associated initial hypotheses were partly dissolved when introducing the elements abstracted at a first level of analysis, which had already occupied Mill’s thoughts and concerns from the outset. This opens the door to a plurality of methods for economic analysis, which carries different connotations from the term “practical eclecticism” as proposed by De Marchi (1974 [1991], pp. 121–122), who viewed it as merely a strategy to ensure his views were heard.

According to some authors (De Marchi, 1974 [1991], pp. 121–122; Hands, 2001, pp. 24–25; Bee and Desmarais-Tremblay, 2023, p. 7), this practical eclecticism had a short-term objective that it seemed to achieve: protecting Ricardian economics, which considered the distribution of wealth among profits, wages, and rents as governed by immutable laws within the world of perfect competition, while simultaneously opening the door to various observations, such as the role of institutions and social arrangements in scenarios where pure competition did not operate (Schabas, 2005, pp. 131–132). Further, Mill’s greater commitment to human deliberation pushed the boundaries of Ricardo’s deterministic system (Schabas, 2017, p. 154), allowing him to reconcile progress with overcoming the Malthusian trap and the stationary state (Kern, 2001, pp. 359–361; Kawana, 2018, pp. 168–169; Hollander, 2019, pp. 310–311) thus granting Ricardo’s Political Economy a complementary historical and evolutionary dimension (Hutchison, 1998, pp. 50–51).

However, Mill’s *Principles of Political Economy* quickly became outdated. As Hutchison (1978, p. 58) states, by the early 1870s, confidence in Ricardian economics as presented by Mill in England had collapsed. This was made evident during a dinner held in 1876 at the Political Economy Club of London to commemorate the centenary of the publication of *The Wealth of Nations*. Coats (1954, pp. 143–144) identifies several reasons for this within Political Economy itself: concerns about the doctrine of free trade due to worsening economic conditions, Mill’s retraction regarding the wage fund doctrine, the historicist economists’ criticism of Ricardo’s ab-

stract-deductive method and the dogmatic application of its conclusions, and Jevons' attack on Ricardian value theory.

As Schabas (2005, p. 133), Milonakis and Fine (2009, p. 29), and Bee and Desmarais-Tremblay (2023, pp. 20-21) argue, Mill's emphasis on economic man and his subjective desire for wealth opened the door to the Marginalist Revolution, which ultimately undermined not only the Ricardian foundations but also the classical, historicist, and social dimensions of his analysis. While marginalist economics and historicist investigations coexisted for some time—an approach explicitly acknowledged in the first volume of the *Economic Journal* (Hodgson, 2005, p. 343)—the mathematical expertise associated with the institutionalization of the economics profession eventually prevailed (Milonakis and Fine, 2009, pp. 115-116). The consolidation that Mill had envisioned did not occur as expected. The realm of abstraction and mathematics, which had initially operated within limits, crossed over into economic practice, occupying every corner of the new economic science, promoting consensus within the discipline (Schabas, 1985, pp. 70-71), and serving as a barrier to entry. Economic history was effectively expelled from economics departments, keeping economists who followed a historical approach away from theoretical economics (Moore, 2003, p. 34; Hodgson, 2001, p. 111).

Mill's legacy survived as long as Marshall was able to maintain a certain degree of tolerance and plurality in Cambridge. As Milonakis and Fine (2009, p. 125) explain, Marshall differed significantly from the first three marginalists in several key aspects.⁴ His approach to economic agents was more comprehensive than Jevons'. Unlike Walras, Marshall prioritized partial equilibrium analysis over general equilibrium. Similarly, in contrast to Menger, he adopted a more balanced stance regarding the historical approach, always aiming to connect theoretical principles with real economic problems. Most importantly, he issued strong warnings about the role of mathematics in economic analysis. Mathematics could be a useful shorthand in certain cases, but it should never drive research. It could distort economic inquiry by causing economists to neglect factors that are not mathematically tractable, leading to the creation of intellectual toys (Hodgson, 2013, pp. 961-962). Keynes, in summarizing Marshall's analytical legacy, highlighted an essential point in this regard: Marshall's historical approach "led him to attach great importance to the historical background as a corrective to the idea that the axioms of today are permanent" (Keynes, 1924, p. 354). Moreover, Marshall preserved Mill's organic approach following his vision of economic man as a social being (Zouboulakis, 2015, pp. 791-793).

However, some authors point to Marshall's own actions that weakened the long-term position of the historical and dynamic approach (Van't Klooste, 2022, pp. 71-73). De Mattos (2019, pp. 659-660) highlights his emphasis on mathematical training for economists; Hodgson (2001, p. 110) criticizes his decision not to prioritize Foxwell over Pigou for suc-

cession in the Chair of Political Economy; Mirowski (1984, pp. 375-376) notes his promotion of the mathematical method in his *Principles*; and Schabas (1985, pp. 70-73; 1990, pp. 133-134) points out his high intellectual regard for mathematically skilled students and his use of diagrams in class, which discouraged those who were less mathematically skilled. Although Mill's pluralist character persisted in the immediate generations that followed, it was mortally wounded. Mill's method, viewed broadly, consists of overlapping layers. Keynes explains it as follows. For Keynes, the conclusions reached by isolating certain axioms through formalization are only provisional. Once this is done, we must retrace our steps and allow, in the best way possible, for the probable interactions of the involved factors. Therefore, from the very beginning of the analysis, we must keep "at the back of our heads" the reservations and adjustments that will need to be made later (Keynes 1936 [1973] p. 297). As Chick and Dow (2001, p. 715) point out, Keynes completed the technique of using short chains of reasoning from Marshall to deal with historical time from an organic and open-system understanding, then we must see Keynes as part of a tradition that traces back to Mill, as we saw in section 3. Mill's individuals are passive agents in atomistic events that only reproduce the starting institutions at an initial moment. This knowledge presupposes a few specific hypotheses that define Political Economy as an abstract science. However, always Mill had in mind that this analysis should be expanded by including a whole series of observations for application to a world with uncertainty, organic, and evolving. It was a temporal and partial analysis, not a universal and ahistorical theory. His rejection of mathematical formalism and its scope did not stem from a lack of statistics or the capabilities of data analysis and computing techniques, but from the characteristics of the object of study. A social reality that operates as an open system and is structured by emergent phenomena produced by the interaction of individuals and institutions, which mutually influence each other in their evolution.

As we argued above, rather than aligning with Neoclassical Economics, Mill's broad methodological approach is much more in line with pluralist perspectives such as post-Keynesian Economics and Critical Realism (Lawson, 1994, p. 111; 2013, pp. 954-955; Chick and Dow, 2005, p. 377). If Mill's framework implies that as institutions change, theory can also change (Chick and Dow, 2001, pp. 708-809), then even though his starting point—an ontology of a pure exchange economy—may contradict the ontology of a monetary production economy, this clearly offers a third path that should rightfully be traced back to Mill. The leading figures of this tradition are Marshall and Keynes (Carabelli and Cedrini, 2014, 2015; Hodgson, 2005, 2013).

5. Conclusions

In this paper, we identified three key paths or routes that emerge from the thought of John Stuart Mill, which have influenced the development of eco-

⁴ The simultaneous emergence of marginalism in three different countries is due, according to Mirowski (1984, p. 365), to the availability and adoption in economics of the 19th-century physics framework at that particular historical moment.

conomic and social analysis. Two of these paths run parallel and are the ones followed by neoclassical economists. The first path is that of abstraction and mathematical formalization. Despite compartmentalizing economics into, on the one hand, science or abstract economics and, on the other hand, art or practical applications, we discussed the scope of abstract science. We also discussed the role of verification in Mill, which includes disturbances and expands the number of hypotheses or axioms with which to work. These hypotheses may influence the initial conclusions, but without contradicting the central hypotheses. As we argue above, this was a way for empirical economists to use data as a driver for research in formulating auxiliary hypotheses which are then tested.

The second path was *homo economicus*. Although Mill introduced economic man as a useful concept for abstract analysis, he also recognized its limitations as a representation of the complexity of human action. His distinction between pleasures and pains and his multidimensional approach to utility sets him apart from the simplified vision of the representative agent in neoclassical economics. Mill conceived preferences because of social and cultural interaction processes and rejected the notion of purely instrumental rationality based on utility maximization. This points to an economy connected to social realities and a vision of individuals as complex and interrelated agents. However, Mill also opened the door to the marginalist revolution by bringing mental and individual aspects to the centre of economic analysis. What this would later lead to cannot be blamed on him, as his figure fits better as its first critic than as its precursor.

Taking Mill's methodological approach from a broad perspective, presenting it coherently with his dynamic view of society and his social philosophy, there lies a latent third path within the narrow abstract science to which Political Economy is reduced: the path of methodological pluralism and historical-institutional analysis. Mill conceived Political Economy as a temporal and partial science aimed at the study of phenomena in constant evolution. He rejected excessive formalism not due to technical shortcomings and data but because of the open and dynamic nature of social systems. In this sense, his methodology aligns with pluralistic approaches such as post-Keynesian Economics, the Institutional Economics of Veblen, Mitchell, and Commons, and Critical Realism. Mill anticipated the need for an economic science that recognizes the interdependence between individuals and institutions, allowing theories to evolve as social and economic conditions change.

Last, Mill was not an empirical economist nor a purely theoretical one. For him, Political Economy required a plurality of knowledge and observations. He criticized those who based their conclusions on a few axioms and the obsessive search for verification, warning that this exaggerated the universality of frameworks based on reductionist analysis. His rejection of the "Ricardian vice" influenced later economists like Marshall, Keynes, and Schumpeter, who shared his view that a solid economic analysis should include historical context and institutions, recognizing the limitations of pure theory and excessive formalism. Mill anticipated a generation of economists who saw models as aids to judgment, not as absolute guides for economic policy.

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