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When McCloskey meets Latour: changing the perspectives on the debates about Rhetoric in Economics

Quando McCloskey encontra Latour: mudando as perspectivas do debate sobre a Retórica em Economia

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RESUMO: Este artigo resgata as ideias de Deirdre McCloskey sobre a Retórica na Economia e algumas questões deixadas de lado nas discussões subsequentes. Existe um paralelo entre as ideias de McCloskey e Bruno Latour, e as complementaridades das suas perspectivas são muito relevantes para o desenvolvimento da Economia. São aqui oferecidas algumas reflexões para melhorar a prática da Economia, que estão relacionadas com as construções sociais dos fatos no campo, com a internalização dos aspectos políticos, e com a importância da alternância entre fato e ficção em uma dinâmica que não resulta em um jogo de soma zero, sublinhando a característica da Economia como sendo inerentemente retórica.
PALAVRAS-CHAVE: Retórica; McCloskey; Latour; metodologia da Economia.

ABSTRACT: This paper rescues Deirdre McCloskey's ideas about Rhetoric in Economics and some issues left out in subsequent discussions. There is a parallel between the ideas of McCloskey and Bruno Latour, and the complementarities of their perspectives are very relevant for the development of Economics. Some reflections are here offered to improve the practice of Economics, which are related to the social constructions of facts in the field, to the internalization of political aspects, and to the importance of alternating between fact and fiction in a dynamic that does not result in a zero-sum game, underlining the characteristic of Economics as being inherently rhetorical.
KEYWORDS: Rhetoric; McCloskey; Latour; Methodology of Economics.
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INTRODUCTION

In Economics, most of the relations among scholars occur by means of conversations, and some of the tools they use most frequently are some figures of speech and other language devices that make Economics easy to understand and reinterpret. Therefore, Rhetoric, the study of argumentation, is something fundamental to understand both the way the community of economists works as well as the science they produce. But this is not a particular feature of Economics. According to Alan Gross (2006), all science is rhetorical, and many types of Rhetoric exist. If the logic of science and of Rhetoric differ only in degree, it is understandable that a "Rhetoric of science" must exist as well.[1]

Rhetoric was born in a classical Greek cradle (McCloskey, 1998), initially through the works of Sophist philosophers such as Protagoras, Gorgias, and Isocrates, and later theorized by Aristotle. In the past century, Rhetoric gained ground through the legal dogmatics of Chaïm Perelman, through the works of the chemist Michael Polanyi on personal knowledge, and through the literary criticisms of Wayne Booth (McCloskey, 1983), which, together with Jürgen Habermas's and Richard Rorty's works in philosophy, represent the first generation of the "New Rhetoric" (Maki, 1995).[2]

Around 1980, the "conversation about conversation" developed by Deirdre McCloskey began in the field of Economics, both with her participation in the POROI (Project on Rhetoric of Inquiry) at the University of Iowa and with the publication of her pioneer article, "The Rhetoric of Economics" in 1983.[3] McCloskey's intellectual interests since the early 1960s encompassed different subjects[4] and she only began to walk on the path of Rhetoric when she was invited to deliver a conference about the topic in the program of Politics, Economics, Rhetoric, and Law at the University of Chicago (1979-1980); she recalls that "Wayne Booth

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[1] The idea that each science has its Rhetoric was introduced initially in the humanities, such as Literature, Sociology, Anthropology, and Economics; and later it was extended to other sciences, such as Physics and Biology. This movement led to a better appreciation of the role of the Rhetoric of the great scientists of the past. Darwin, for example, can be considered a master of Rhetoric even in his personal writings (Gross, 2006).

[2] As these transformations emerged, there occurred a break in the field of philosophy with the strong consensus around positivism and with the view that the philosophy of science should determine what the scientist's correct work was supposed to be-going in the opposite direction and in favor of the valorization of the effective activities of the scientists as a better criterion to evaluate what good science really is (Fernández and Pessali, 2012). Thomas Kuhn, Imre Lakatos, and Paul Feyerabend are some of the leading figures of these transformations.

[3] According to Leda Paulani (2006), there is an inaugural text on the subject, written by Willie Henderson (1982), where he addresses the uses of metaphors in Economics, but the popularization of the debate on the relations between Rhetoric and Economics only occurs from McCloskey's texts onwards.

[4] She worked on the British companies of the 19th century, on British foreign trade in the 18th and 19th centuries, on the history of international finance, on the open fields and the enclosure in England and on the Industrial Revolution, among others.

asked me to talk on 'The Rhetoric of Economics,' and I said, 'Sure. Glad to. Uh… What is it?'" (McCloskey, 1998, p. xv). In the same year in Brazil, another important work on the subject was issued as a discussion text, "The History of Economic Thought as Theory and Rhetoric", written by the economist Pérsio Arida, who, without getting to controversial extremes as McCloskey, aimed to balance the benefits and harms of what he named as the soft science and the hard science models in Economics, pointing to inconsistencies in the discussions on the history of economic thought. Shortly after, still in 1983, another author, the Dutch economist Arjo Klamer, also started his journey through the universe of Rhetoric with his book *Conversation with economists: new classical and opponents speak out the current controversy in macroeconomics* (Klamer, 1983), disclosing the political and subjective means employed by some contemporary macroeconomists to validate their theories.

Although McCloskey has popularized the discussion about Rhetoric in Economics for almost 40 years nowadays, some important points have been overlooked since her first text was released. This article aims to contribute to these debates about Rhetoric in Economics, looking back for some important issues somehow forgotten along this journey. To achieve this goal, this paper was divided into two main sections, besides this introduction and the conclusion. At the next topic, our second section, we discuss the contributions of McCloskey contrasting them with the rhetorical lens of the French intellectual Bruno Latour. As demonstrated here, Latour's ideas have many connections with McCloskey's ones, and his approaches offer the opportunity to develop some arguments that McCloskey did not fully explore. In other words, we believe that a combination of Latour's and McCloskey's ideas offers new tools for a different path of development for the Rhetoric of Economics.

At the following section, we propose the existence of complementarities between both authors, analyzing three points considered crucial for the development of the Rhetoric of Economics, both at academic and social levels. First, we discuss how facts are made from social issues and how they do differ from what is understood as fiction. Second, by adopting Pierre Bourdieu's approach alongside McCloskey's and Latour's ideas, we recall that Rhetoric also has the dimension of an instrument for instruction and for the politicization of science. Third, we emphasize that Rhetoric does not necessarily need to be like a zero-sum game relation: some ideas that today are considered facts may have been seen as fiction a few years ago, or even what today is considered a fact by a group can simultaneously be a fiction for others (and vice versa). Finally, in the conclusions we make some considerations about the importance of Rhetoric within Economics. This section emphasizes that Rhetoric is inherent to Economics, in other words, that it is not an anti-methodology or a mere instrument of domination, but that it is intrinsic to knowledge, something of which Economics (and all sciences, by the way) cannot escape. We highlight that, despite some differences regarding the objects of study and the way they see science (McCloskey, more normative and with a less radical interpretation of Rhetoric; Latour, more descriptive and more radical in his ideas), they share important complementary elements, all of them essential to the Rhetoric of Economics.

1. THE RHETORICAL PERSPECTIVES IN MCCLOSKEY'S AND LATOUR'S WORKS

Although decades have passed since her first contribution to the debates on the Rhetoric of Economics, a provocative article published in the *Journal of Economic Literature* in 1983, McCloskey's ideas still echo a quest to understand how the communication process occurs within Economics, inquiring why some conversations work while others do not (McCloskey, 1994, p. 37). McCloskey demonstrates that there is an incompatibility between the works that economists do and the methodological and epistemological claims they use as justifications.

For McCloskey, Rhetoric is a way of exposing the fragility of the dominant methodological perspective in Economics (what she named as modernism[5]), especially when relating her ideas to the idealized vision of the scientists provided by Aristotle. Her Rhetorical approach is based on the aim to improve and encourage good and honest scientific conversations, helping Economics to face the arguments employed instead of avoiding them. She seeks to debate about the split between scientific and humanistic reasoning, providing a way to help science to be more aware of the way it actually works. According to McCloskey (1994), rhetorically sophisticated sciences have the capacity to produce greater scientific advances.

According to McCloskey's view, Rhetoric expresses the study of argumentation; but this necessarily involves the whole argument from logic to evidence, the

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[5] McCloskey considers Modernism as the official methodology of Economics. Usually associated with the University of Chicago, Modernism, for McCloskey, is responsible for looking at science as an axiomatic and mathematical entity, which means that it is separate from values, forms, beauty, goodness, and other things seen as incommensurable (McCloskey, 1983, 1998). In this sense, modernists can postulate that the mind does not exists: "(…) a modernist who examines his mind when getting dressed in the morning and assumes the existence of other minds when driving to work claims to deny both as soon as he flicks on the lights at his laboratory. On the job he no longer believes he has a headache when his head hurts, or that his son is sad when he cries" (McCloskey, 1998, p. 27). In this sense, for McCloskey, the fact that economists do not always follow the methodologies they say they believe in makes it difficult for them to become more aware of their own Rhetoric and accept arguments that differ from their methodological bases. To McCloskey, besides being impossible, when claiming they provide knowledge free of questions and personal convictions (1998, p. 152), modernism does not work as a method for science because it promises to contribute with complete knowledge but all that this achieves is a methodological model that prevents the advance of science. According to McCloskey, despite its glorious days, there is much more to lose than to gain from maintaining modernism: "(...) [it] was worth trying. But it didn't work (...) is time to stop" (1998, p. 183), "(…) the literal application of modernist methodology cannot give a useful Economics [at all]" (1983, p. 488). However, it is important to note that McCloskey's critique of modernism is more general than it appears to be. In fact, any method for McCloskey carries arrogance and pretense. The primary objection to modernism is that it is a method, with few possibilities for change (McCloskey, 1998). She points out that the methodologist and the method can inhibit the growth and advancement of science and what is necessary for the economy is intellectual nutrition, not an epistemological pie in the sky (McCloskey, 1998, p. 158-159). McCloskey argues that the economists may be afraid to loosen the formality in the field, believing that Economics is too important to be left at the mercy of ideas that are not expressed through formulas. Economics can do much more than separate thought from emotion or sciences from humanities (McCloskey, 1994). Keynesianism is a proof of this.

art of syllogism, the metaphor, and mathematics (McCloskey, 1994, 1987). The authoress puts the conversation, and therefore the Rhetoric, in a central place of the scientific activity, emphasizing the richness and exposure of the complexity of the arguments, and understanding that dialogues and debates are fundamental to what economists effectively do. Rhetoric, for McCloskey, has the capacity to create its own truths through persuasion, as long as it has kind and honest purposes. For her, all sciences are made through conversations and, consequently, they are inherently rhetorical. Although not always recognized by them, all thinkers and researchers in Economics use rhetorical strategies, whether they are neoclassicals, institutionalists, Marxists, or Keynesians. For example, metaphors have positively disciplined the conversations among neoclassical economists over the years. The more austere the science and the subject, the more fanciful it tends to become and the more allegorical (like the Walrasian auctioneer, the invisible hand, or the golden rule of the market).

However, it is important to point out that in addition to her efforts to expose what is inherent in the economists' conversations and in the way they advance their science when speaking about Rhetoric, McCloskey also brings to light elements demonstrating that the methodological practice of these very same economists is different from what they preach through their theory. Although they might consider themselves modernists, this does not mean they actually are.

McCloskey demonstrates that there are two types of economic methodology: one economists claim they adopt (official Rhetoric) and one they do embrace in their daily activities (unofficial Rhetoric). The latter, sometimes obscured by a set of beliefs that determine which arguments are the strongest, is also the unofficial methodology of Economics.[6] Therefore, McCloskey proposes that the defense of the official methodology in Economics is controversial. The use of bad Rhetoric, such as positivism or conservatism, prevents free research and the free development of science (McCloskey, 2019). Furthermore, economists do not always do what they say they do; thus, it is necessary to explore how they actually argue through their unofficial Rhetoric.

Therefore, when it comes to Rhetoric, McCloskey's Rhetoric combines with anti-modernism; and although it is not a methodology, it is also not the anti-methodology of Economics, it is something in between.

McCloskey's rhetorical approach explores the details of both the economists'

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[6] The adherence to unofficial methodology does not imply abandoning data, mathematical precision, and the formality of the models. However, it implies the opening to other types of discourses, methodologies, and methods (McCloskey, 1998). For McCloskey, economists could do much more if they took time to look at their arguments or if they explain why they agreed or disagreed with a particular idea instead of relying on the notion that the theory is sufficient to explain their decisions. An example is what McCloskey calls cynicism of the statisticians, who support and approve only the publication of the results that they consider significant, as if they feared that outside that 5% window of significance something could be successful. McCloskey (1983) argues that there is no evidence that in the chosen interval there is confirmation or denial of the defined hypotheses; it is a subjective choice.

activities and Economics science; even when sometimes marginalized, her analyses possess a certain status and credibility in the field. On the contrary, Bruno Latour's ideas are less popular among academic economists. Latour is a French philosopher, sociologist, and anthropologist who, as a researcher, attracted attention with his descriptive analysis of the constructions of science. Formed in a rigorous Jesuit classicism, according to Graham Harman (2009, p. 11), his career is wide-ranging, covering the traditional fields of philosophy and metaphysical analyses. Latour can be primarily characterized as a hybrid – an anthropologist of modernity, sciences, and nature. This makes his contributions, despite their initial focus on technoscience, very fruitful for exploring the field of Economics. Latour, as a hybrid dedicated to the study of different objects, transits between different fields of knowledge, and when it comes to Rhetoric, especially in his book *Science in Action* (first published in 1987) he does not focus on Economics but on technoscience.

The intentions behind his activities, as a scientist and researcher, come from the desire to overcome the difficulties that separate exact knowledge and the exercise of power, sciences and politics, rationality and irrationality (Latour, 1994). Latour is motivated by the desire to bring light to the long-standing conflict between objective physical matters and subjective social forces (Harman, 2009, p. 5).[7] That is, science for him is not part of a mere philosophical analysis based on naïve principles, but it needs to be considered by means of the description and monitoring of the objects while in action – whether human or non-human, artificial or natural. All objects for Latour are actors and need to be placed on equal analytical bases, so monitoring scientific practice in detail allows a better understanding of reality (Latour, 2001).[8]

However, in doing so, Latour points out that his research reaches places where science is created and consequently, where controversies get bigger. According to Latour, a scientist who seeks answers does not move from passion to reason or from chaos to order but he finds himself coming out from controversies to find even more controversies. The noise does not quiet down but rather, gets louder, and this is where Latour introduces his rhetorical perspective.

According to Latour (2011), resolved controversies represent the black boxes of science, whose contents do not necessarily have to be re-unraveled or re-under-

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[7] Latour has been criticized from different points of view: "For mainstream defenders of science, he is just another soft French relativist who denies the reality of the external world. But for disciples of Bloor and Bourdieu, his commerce with non-humans makes him a sellout to fossilized classical realism" (Harman, 2009, p. 5).

[8] Latour shows that this attempt to add reality to scientific practice is sometimes seen as a threat to science itself, a way of reducing its strength, truth, or the validity of its premises. This is because what it is considered as reality depends largely on what the mass of society – which in this work is understood as a dominant or hegemonic majority and an opinion maker – considers correct at a given time (Latour, 2001). Hence, he shows that one of the limiting factors of science is the mass appeal or the fear that the government of the masses could hinder science and its scholars.

stood after first definition.[9] The traditional methodological resources of individual scientists are not always sufficient to face controversy and open or close a black box. The further the debates go, the more controversies come out of the initial ideas and the more the black boxes appear. The more such controversies intensify, the more researchers and scientists[10] are brought to technical debates to find new resources and tools (to open or keep closed the black boxes). In other words, Rhetoric is used to open or protect black boxes and deal with controversies around the debate. The greater the scientism and technicality are, the greater the rhetorical appeals that can transform certain ideas into fact or fiction (Latour, 2011).

Therefore, Rhetoric in Latour's (2011) work is a discipline dedicated to studying and understanding, as well as teaching and determining the way in which people are led to believe in something and to behave in a certain way. It teaches, through an apparently more radical speech, how scientists and researchers can persuade each other.

Unlike the positive and innocent (at first sight) motivations behind McCloskey's Rhetoric, Latour's Rhetoric seems to be slightly more malicious. For Latour, Rhetoric takes the form of an instrument useful to enlist people in favor of certain opinions, to validate power, and to gather more powerful armies as in a battlefield. So, anyone who wishes to start a scientific debate will feel alone and confronted by a rival reinforced by thousands of researchers, citations, and scientific articles; the dissenter may feel as free as a mouse trapped in a maze (Latour, 2011). Therefore, Latour's Rhetoric does not need to be limited to what is good and honest, but goodness and honesty are defined from it (Lynch and Rivers, 2015, p. 2).[11] The more technical the debate is, the more social it becomes.

When it comes to Rhetoric, McCloskey and Latour choose paths that seem very different at first sight. However, as we scrutinize their ideas and approaches, we see that they are more convergent and complementary than they appear to be.

2. COMPLEMENTARY POINTS BETWEEN THE TWO APPROACHES

In a first observation, the most superficial conclusion is that while Latour presents Rhetoric as an instrument for indiscriminate contention, even for intel-

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[9] According to Latour (2011, p. 4), the black box's expression is used within the field of technology, specifically, in cybernetics. When a solution, a set, or a machine is too complex, a small black box is drawn in its place, which means that it is not necessary to understand it, but only to know what goes into it and what comes out of it.

[10] Researchers, theorists, and scientists are used as perfect substitutes in this article.

[11] During Aristotle's time, Rhetoric was criticized because it employed passion, emotions, inappropriate styles, and tricks to influence allies. Reasonings were sometimes distorted by the Sophists in the name of passion and style. However, the difference between that type of Rhetoric and the one proposed here is not that the former regimented and used external allies while the latter does not do so, but that the former used just a few of them, while the latter uses many.

lectual warfare, for McCloskey, Rhetoric serves to encourage good and honest scientific debate. In McCloskey's view, good Rhetoric drives scientists to use art and literary argumentation properly, which allows greater communion and exchange of ideas. However, for Latour, good Rhetoric can be the exact opposite, leading to the disintegration of conversations in science in favor of the interests of groups that have more power and therefore, can transform their ideas into facts.[12] If Latour's Rhetoric can be compared to a bad-tempered teenager who needs the supervision of a more experienced adult, as Paul Lynch and Nathaniel Rivers (2015) point out, McCloskey's Rhetoric would be just a baby. However, these observations are not necessarily accurate, or even fair.

McCloskey can be as radical as Latour or even more. Being strongly influenced by the liberal school of Chicago University, although she no longer considers herself a "Chicago Girl", McCloskey still embodies liberal traditions[13] in that she believes that *laissez-faire* (which is also a form of persuasion) is good for the economy (McCloskey, 2019). For her, Rhetoric and freedom are directly related. A liberal society values rhetorical freedom. As Uskali Mäki (1995) pointed out, despite appearing naive, McCloskey is not naive: she tends to present a set of ideas that are often radical in an innocent way and, opposite to Latour, chooses not to discuss openly socio-political relations that involve power, knowledge, and science. However, she understands that the desire for knowledge can also be a desire for control. That is, McCloskey also recognizes that there are relations of power behind the Rhetoric – as is clear from some of her works (e.g., McCloskey, 1994, 1985) – she just does not care to put these issues at the center of her argumentation. This is also a rhetorical strategy in itself adopted by her.

Meanwhile, Latour is also not just a radical. Otherwise, the adoption of his ideas should be avoided or ignored, considering the risk that they may only be brief traps in a ruthless game for power (Amsterdamska, 1990). In fact, similar to McCloskey, Latour tries to understand what science is, including its motivations and how it actually works. His goal is not to win wars, establish his own domain, or prove that he is more powerful than other researchers. When exploring science, he places himself as a lay observer of scientific production, of academic articles, or of a laboratory environment and therefore, exempt from vice and malice. As in the case of McCloskey, this is also a rhetorical strategy adopted by Latour.

Their ideas are complementary. For example, the central motivation behind the McCloskey's approach is to demonstrate that Rhetoric is for the common good

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[12] According to Paul Lynch and Nathaniel Rivers (2015, p. 2), the rhetorical reading in Latour's work "(...) is like remembering something we thought we always knew, like a not-quite-repressed memory edging forward in our minds (…) Latour returns us to the barnyard, teeming with nonhumans, where mud and words are flung together."

[13] McCloskey does not approve the anti-Chicago movement. To her, the Chicago school is just one of the dogmatic examples existing in Economics, expressed in its methodological imperative. The rest would not be much better than the Chicago school (McCloskey, 1983).

when it is employed by someone who is also good,[14] while the Latour's approach demonstrates that such is not always the case, and that Rhetoric can be used for ideological and dogmatic purposes, and often it is. Latour explores the notion that people may be more interested in winning scientific disputes than in advancing knowledge; McCloskey shows how important it is to follow a path in favor of good ethics when discussing about Economics.

Because they complement each other, both approaches are necessary for the debates in Economics. Just as rhetorical debates are not peaceful and full of love per McCloskey, neither are they purely Machiavellian per Latour's perspective.

Therefore, to try to combine the two approaches is fundamental because it allows us to highlight three important functions of Rhetoric that have not always been explored in Economics. The first one is about the social construction of facts in Economics; the second one says about Rhetoric as a tool of instruction and politicization of this science; and the third one explores that Rhetoric is not necessarily a zero-sum game.

2.1 The relation between Rhetoric and the construction of the facts

Both Latour and McCloskey discuss what can be understood as subjectivity in the construction of facts. This means that ideas change during transmission (communication) and that researchers, individually or in groups, adapt facts according to the story they want to tell. Facts can be understood only when they are translated into some language, they result from that language, and in this sense, there always must have been an argument (Rhetoric) that created them by making them intelligible. Therefore, they only have the capacity to show something or to convince someone when they are driven by human motivations (McCloskey, 1987, 1990, 1994). Therefore, science itself changes and takes different forms from time to time according to what is understood as a fact by the majority of the scientific community and by the society as well.

According to Latour (2011), science can be compared to the Roman god Janus Bifrons: one side still under construction (right) and the other one already constructed (left).[15] These two sides are responsible for determining whether an idea or approach will be considered a fact or fiction within the scientific community. Facts are the set of ideas considered truths within the scientific community, and fiction is the opposite. Following this path, Latour demonstrates that all ideas go

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[14] The *vir bonus dicendi peritus* proposed by Quintilian *(*McCloskey, 1987, p. 254).

[15] According to Latour, the two sides of science are always in conflict. The left side is a science characterized by knowledge, constituting facts that are universally known and settled, and is associated with sentiments such as: "Follow the facts without arguing!", "Always keep the most efficient machine," or "What is true always prevails." Meanwhile, the right side is still seeking knowledge, and is associated with seemingly precarious sentiments, offering advice such as "Discard useless facts," "Decide what is efficient," "The machine will work when interested people are convinced," or "When things are sustained, they start to become true" (Latour, 2011, p. 12-19).

through a process of adding modalities, wherein they pass through a process of adding new ideas that qualify or modify the original idea. If the modality is positive, this initial idea can be strengthened (transformed into a fact), but if it is negative, it can be weakened (transformed into fiction).[16]

Naturally, becoming fact or fiction does not necessarily depend on how true or scientifically proven ideas initially are, but on its social construction (although the validity it is also not reduced to social aspects alone).[17] The non-neutrality of Rhetoric is inevitable, contrary to what Hugh Lacey's (2006) precautionary principle proposes. All ideas are initially just candidates to become fact and fiction depending on the new sentences (modalities) that are added to them. According to McCloskey, the conclusion achieved for one idea x can be both y and z, two even opposite propositions, depending on the way they are treated (Balak, 2006). Small changes in the added assumptions and sentences can change the conclusion. Therefore, as Gross (2006) mentioned, the facts are in the minds of researchers and scientists, although its greater or lesser relationship with the world must also be reminded, depending on each case. Scientists are responsible for the claims and construction of science. Naturally, the facts of science are the result of linguistic relations: if there is no language, there are no facts; and if there is no Rhetoric, there is no language.

Consider the following sentence as an example, which in itself is neither fact nor fiction:

a) Modernism is the official methodology of Economics.

For this sentence, to become fact or fiction it depends on the new assumptions and sentences that are added, which could be sentence (b).

b) Modernism is the official methodology of Economics, but it is dead in our days, so Economics no longer has a methodology.

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[16] Finished science is a black box because it is difficult to penetrate. In the scientific ethnography of Latour's studies, when ideas become facts, it becomes difficult to identify all the additions to the initial ideas – additions that were responsible for stabilizing such ideas and giving them the density of truth (Bachur, 2016). The path followed for science construction is not easy to understand and it not always results so evident. One highlight of Latour's perspective is that it is easier to observe science's creation before the black boxes are closed and so to follow the scientists' procedures step-by-step during the construction of the facts – such as in the case of Economics when building models.

[17] Let us imagine that in the beginning what exists is only one phrase (expressing an idea), unlinked and without any conclusion. At some point, someone starts to talk about that phrase, and it begins to be placed in quotation marks. The speaker then starts talking to another person about that same phrase. As the conversation heats up and becomes livelier, new people start to participate and discuss other subjects related to the phrase, such as ways to convince others to participate. As opposed to what is imagined, the more people participate in the conversation, the less the initial phrase is discussed and the more it becomes an indisputable truth among the participants. At a certain point, the ideas about the phrase get resolved and consolidated, becoming part of a finished science (fact) and written in the main scientific books. This example demonstrates the process of forming facts and consequently, the black boxes of science – the reason why there are so many controversies.

On the other hand, sentence (a) can be transformed into (c).

c) Modernism is the official methodology of Economics and, given the attitude of theorists and researchers, the way activities are formally conducted in the field, and its continuously influence, it is unlikely that Modernism is dead in our days, and that Economics no longer has a methodology.

If we imagine that a fictional character Jane facing sentence (a) needs to choose between (b) and (c), the option that she selects will be responsible for determining the direction of the original sentence (a). Therefore, if Jane chooses to believe what sentence (c) says, (a) gets reinforced and becomes a fact; but if Jane chooses to believe what sentence (b) says, (a) is weakened and becomes fiction.

This example shows that Rhetoric, as represented by McCloskey and Latour, has the capacity to construct, determine, transforming an idea into fact or fiction, defining what science is at a given time and in each field of knowledge. The distinction between the schools of thought in Economics demonstrates this. For example, through its Rhetoric, the mainstream adds modalities to the initial sentences that are considered as fact – representing the dominant position and history in the field – and that are therefore different from the modalities added by the heterodoxy – considered for them as fiction.

Each group within a scientific community – seeks to transform its truths into facts, but the process of becoming a fact is more complicated than representing just a purely scientific and social aspect, as it has turned into a political aspect. There is a search for dominance and politicization in science through Rhetoric.

2.2 Rhetoric as an instrument of instruction and politicization of Economics

The subjective and social aspects involved in the construction of facts through Rhetoric are influenced by how effectively Rhetoric becomes a tool for the instruction and politicization[18] of science, whereby the limits of a mere persuasive debate are exceeded, leading to the search for control and credibility.[19] Science as a whole can be guided by power relations, through which researchers acquire notoriety, prominence, and respect. All scientific fields can be an arena for power, domain, and disputes for conserving that power. For example, the rules that divide what is seen as mainstream and non-mainstream in any science and thus, what determines

[18] The concept of politicization is often used without reflection, as if its meaning could be transparent. Here we recover the conceptualization of Warren Samuels (1980) that shows that politicization can have two meanings: one is to introduce into politics, through activities or beliefs, something that was not ostensibly inserted previously in the political discussion; and the other means the recognition of a political element in something in which it had not been recognized before. In this paper, we are using politicization according to the second meaning.

[19] Instruction and politicization mean conducting and importing political models and practices into science, as an indication of the high heteronomy (little refractive power and autonomy) of the economic field.

the dominant tradition at a given time, reflects these power relations – regardless of the change in its composition.

As all the scientific field can be exposed to this these relationships, these ideas can also be found in other theorist's perspectives. For example, it can be connected to the idea of power of refraction[20] and the degree of autonomy of a science at a certain moment. According to Bourdieu (2003), both aspects are determined by the distribution of scientific capital among those who build the dominant community in the field.

Evidently, this capital does not refer to financial capital, but to a symbolic capital associated with non-scientific forces, such as recognition and credibility through, for example, the number of citations, articles published, the journal rating index, Nobel awards, and so on. The more heteronomous[21] (i.e., less autonomous) a scientific field is the more non-scientific forces promote clashes in areas that ideally should be purely scientific (if it is possible); and the more non-scientific forces engage, the more likely it is for the interests of the community to be subjected to the particular interests of certain groups of researchers and scientists that determine what is considered fact or fiction. In other words, sone agents can construct both the scientific facts and the science itself according to the position they occupy and the power they have, which demonstrates what can and cannot be done within the scientific community.

One way to achieve power and credibility, as McCloskey's and Latour's approaches reveal, is by employing successful rhetorical strategies. That is, these rhetorical tools allow researchers to turn their own approaches into the general and fundamental science of the field, helping them to maintain and preserve their influence within the structure. By highlighting the use of Rhetoric as a way of obtaining symbolic capital and dominance within the scientific field, it becomes clear why its use could be radical, authoritarian, and politicized: Rhetoric is also a tool for power – including the facts it constructs because they can restrict history.

One of the highlights of McCloskey's (1994) "conversation about conversation" is the idea that Economics is a dismal science, with its conversations motivated by complex socio-political issues and subject to different forms of handling.[22] Latour (2011) highlights that this can happen during a dispute between two sciences (or two lines of though) in which one struggles to maintain its current position as fact while

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[20] The power of refraction means an ability to refract external influence and imposition, and it is directly related to the autonomy level of a scientific field. The more autonomous is the scientific field, greater its power of refraction and, consequently, its power of reinterpretation and retranslation of content (Bourdieu, 2003).

[21] Contrasting with the power of refraction, heteronomy is inversely proportional to the autonomy of a scientific field; this means that external issues can be clearly identified in it. Politicization of a scientific field, for example, is an evidence of its high level of heteronomy and of its low level of autonomy (Bourdieu, 2003).

[22] According to Latour, these motives can be openly intentional or, according to McCloskey, more subtle and unintended.

the other one strives to get rid of the position of fiction. When the disputes among the groups become more intense, the participants begin to apply different rhetorical tools to strengthen their arguments. For example, they mention in their favor what other researchers have already written and produced through highly cited texts, prestigious coauthors, and theorists that are Nobel Prize winners. This strategy uses Rhetoric to build powerful alliances, and a fact is determined not because it is more truthful but because it is well supported.[23] In this way, being scientific becomes synonymous to being prestigious, influential, and dominant, which leads the scientific community to search constantly for ways to reach this level.

This structure, which can also be understood as the structure of objective relations, defines what can be determined as "science" within the scientific field. That is, Rhetoric is not just a tool for politicization or critical investigation that limits individuals to certain types of evidence, ideas, and logical appeals about what they can or should do to be able to retain an audience – like what the indiscriminate use of statistical and econometric tools demonstrates[24] – but it is, in itself, politicized and is responsible for disciplining and instructing agents on what they should do to remain within science. To acquire the status of economic theorists – in addition to achieving opportunities for financing, investments, fellowships, or even publications – agents need to follow ideas that are accepted as facts at a given time (Latour, 2011).

2.3 Rhetoric does not have to be a zero-sum game

As we saw above, Rhetoric, aside from being responsible for the construction of facts, is also a way of instruction and politicization of science driven by social aspects and particular interests. However, determining what is fact and fiction in Economics is not always a zero-sum game and it does not have to be. Ideas apparently opposing can coexist. In this regard, two important observations can be made.

First, theories that were once considered fiction can be widely accepted as scientific facts by reviving discussions of such theories (and vice versa). The debate around the work of Hyman Minsky (1919-1996) is a good example. Until the outbreak of the 2008 crisis, the mainstream considered Minsky's ideas about financial instability as only fiction. However, as the crisis started, the financial system's fragility and instability were exposed, and a race to find new ideas to understand

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[23] To exemplify, we can imagine that Jane did not have enough resources to support her argument alone and therefore, needed to rescue other external resources that have already been validated. Her individual opinion could be more easily overlooked than the strong opinions she collected. The debate is no longer just about Jane's ideas; it becomes about the ideas of all those she invoked: Ms. Alone becomes Ms. Not Alone Anymore. According to Latour (2011) this argument of authority intends to impress the opponent even if he is correct.

[24] "[He loosens his tie, sweat dripping from his nose] (…) there's nothing else to do. I want to use statistical procedures. What do you propose to substitute? How will I fill up my days? Fill them up with statistical calculations that are to the point. Find out what economic scientists consider to be a large coefficient and then see if your data show it (…) He is shaking uncontrollably and his palms are wet. This is an unhappy would-be scientist. (…) Well, to hell with you, then" (McCloskey, 1989, p. 63).

and solve the problem brought the author back to the debate within the same mainstream. Minsky became essential on the ongoing period, and the new Minskyites – epithet that the new adepts of Minsky's approaches received in 2016 by Paul Krugman – started to increase. Even prestigious publications who cited Minsky only once while he was still alive, as The Economist, started mentioning him more frequently, at least in 30 articles starting 2007, as published by *The Economist* on July 30th 2016 edition. His ideas returned to the debate as new modalities (in general, without too much emphasis; this also happened with the post-Keynesian approach as a whole). That is, the Rhetoric surrounding his approach heated up again, causing the "Minsky moment": his ideas were turned into facts within the field. The same point can also be observed in the reception of Daniel Kahneman and Amos Tversky's works. The Mainstream theory of expected utility, based on the maximization of utility and on unlimited rationality, were comprised in the set of prestigious ideas that were seen as fact, while everything different was regarded as mere fiction during a considerable part of the 20th century. When Daniel Kahneman was awarded the Nobel Prize in Economics in 2002, there was a small shift in the mainstream, which, until that moment, had privileged only the more orthodox neoclassical view. Upon Kahneman's reception of the prize, Herbert Simon's (Nobel Prize recipient in 1978) perspective, that had previously been questioned and considered fiction started to be considered as fact, increasing the prestige of a somehow new economic school, Behavioral Economics.

Furthermore, theories that are considered fiction by a group may simultaneously be considered fact by others (and vice versa). Within neoclassical thinking, there are ideas that can be accepted by one group of theorists but rejected by another. For example, the ideas of Milton Friedman that, around the 1960s, were considered as facts within the Chicago school were concurrently seen as fiction at Harvard. The cases of J. K. Galbraith or Joan Robinson also exemplifies the same issue but represent the exact opposite of the relation; their ideas were seen as facts at Harvard but fiction in Chicago between 1960s and 1970s (McCloskey, 1994).[25]

This means that controversies are not necessarily winner-takes-all situations, but they can be combinations of different perspectives. That is why Rhetoric does not have to be a zero-sum game, therefore giving space for Pluralism. Conceptually, Pluralism is a philosophical position that supports quantitative cases to adopt multiple approaches and qualitative aspects (Heise, 2017). Pluralism legitimizes the existence of plurality and pluralization within science and assumes the political commitment to defend them.[26]

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[25] "(…) The best way for a professor to raise a laugh at Harvard in the 1960s was to mention the name of Milton Friedman. The teacher didn't have to say anything about Milton; he just had to mention him. But it turned out that the way to raise a laugh at Chicago in the 1960s and 1970s was to mention J. K. Galbraith, or Joan Robinson; just mention" (McCloskey, 1994, p. 345).

[26] Pluralism is a normative term that defends that the existence of a plurality of entities is something good in itself; an ontological position that offers ways of seeing and understanding the state of affairs in science; an approach that goes beyond the limits of a simple defense to a multiplicity and infinity of

Therefore, Pluralism makes possible that theories once considered fiction can become fact without changing the status of others; and that theories can be considered at the same time as fact by some groups while fiction by others. Marxism, Keynesianism, and Minsky's theories, for example, can continuously and jointly be considered as fact. If that was not the case, and if Rhetoric was meant to be a zero-sum game, economic theorists would necessarily wage an infinite combat for the truth where only one theory would be considered as correct while others would be established as wrong. In this scenario, truth would vary greatly – being x, y or z at the same time. On the other hand, it could be considered that Rhetoric would have the capacity to raise monist approaches, denying the possibilities of y or z being facts, and Latour's perspectives could be read in this sense.

By approaching aspects found in monism, Latour complements McCloskey's ideas showing the eviler side of Rhetoric debates. Observing the objects in action and coming closer to the places where controversies get bigger, Latour observes the moment where science builds the resolved black boxes, whether to become fact or fiction. The idea in his approach is that only one theory at a time can be considered as fact – all others would necessarily be fiction. That would be the reason why different researchers gather powerful armies in a war field. They intend to validate power and win disputes by using Rhetoric that they typically consider scientific, although it can have ideological and even dogmatic purposes. Consequently, science becomes similar to a product in a marketplace whose owner's final intention would be to maximize gains. In this scenario, both knowledge and science suffer of "technization".[27]

These notions are defined by Latour as the structure of objective relations in a scientific field. According to Latour's perspective, resolved controversies can only change their status for fact to fiction (and vice versa) when opening black boxes and changing from one to another. Theories are either fact or fiction and cannot be both at the same time. That is why science would have black boxes – Latour's Rhetoric reflects monism, and monism creates and protects black boxes as well as what is determined as fact or fiction by more powerful researchers. In this perspective, Rhetoric would need to be a zero-sum game.

However, by indirectly approaching monism in Rhetoric, Latour helps Economics to see the contradictions in this type of perspective – and therefore, he helps Economics to see the importance of Pluralism. Powerful researchers cannot determine the existence of one unique truth, and they do not hold the keys to the gates of science (Caldwell, 1985; Fernández, 2011). Pluralism promotes understanding

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possibilities; a theory that justifies the existence of alternative approaches; an instrument that celebrates, accepts and encourages diversity within science (Mariyani-Squire and Moussa, 2015; Dow, 1997; Kellert et al., 2006; Dutt, 2014; Lawson, 2010).

[27] Technization can be described as the process by means of which Science becomes a salable product, reinforced by the logic of both market and imperialism (Guizzo et al., 2019).

regarding Economics' democratic relations as well as its heterogeneity, allowing institutional changes.

McCloskey, on the other side, also recognizes the presence of a constant search for truth in Rhetoric together with non-neutrality and disputes for power. However, for her, truth is changeable due to its social construction, which means that can be both x and y depending on the conclusion adopted – for instance, the definition of what is fact can depend on the moment when Jane needs to choose a sentence to believe in. What McCloskey is proposing through this variable reality, without properly naming, is Pluralism in Economics.

Naturally, the definition of truth from a free interpretation of McCloskean's or Latournian's Rhetoric may be inaccurate. Rhetoric in science is neither good nor bad, but rather more or less convincing, productive, or persuasive. Rhetoric is not a mere sum of personal tastes but the discovery of new arguments and the recovery of old ones – enriching the debate and resolving important issues. This is the greatness of Rhetoric. These divergences – namely, rhetorical disputes for the construction of facts and the politicization of science among different groups – stimulate the debate in Economics and serve as an engine for the development of Pluralism in the field.[28] These divergences and the changes between fact and fiction protect economists from the trap of believing that they are the only ones who know the truth and possess relevant knowledge, leading them to cooperate for the advancement and development of science in the field of economic.

The discussion above reveals that Rhetoric is essential to the aggregation of knowledge. Developing a science that prescinds Rhetoric is a chimera. Rhetoric is more than the methodology and the game of power within Economics; it is inherent to it. Just as it is not possible to make lemonade without lemons, it is not possible for Economics (actually, for any science either) to exist without Rhetoric.

FINAL CONSIDERATIONS

Rhetoric is not just an external tool or instrument applied to Economics; it is inherent to and inseparable from the same science. In fact, all sciences are rhetorical. According to Latour, "Rhetoric (…) has, for millennia, studied how people are made to believe and behave and taught people how to persuade others" (1987, p. 30).

Although McCloskey stated that she introduced the rhetorical debates in the field in 1983, this does not mean that the discussion about Rhetoric, and the Rhetoric itself, did not exist before her time – Willie Henderson's (1982) text evidences this – but this reminds that she was responsible for having cherished up the debate within the professional conversation circles, making economists conscious of some-

[28] In this paper, Pluralism is understood as a philosophical position naturally opposed to scientific monism, which defends the variety of approaches, ideas, and theories that consequently legitimizes and accepts the political commitment to defend the presence of plurality within science.

thing they mostly had no seen before.[29] For example, during the early 20th century, well before McCloskey's time, John Maynard Keynes considered persuasion as an essential element for shaping the ideas of society and economists according to his particular conception of Economics. The "meeting of the minds" mentioned by Keynes, according to Maria Cristina Marcuzzo (2019), took place among ministers, bankers, civil servants, politicians, and other opinion makers, and evidenced both the need and the fundamental importance of collective opinions and information that were different from each one's personal views. Similar to McCloskey and Latour, this was also a rhetorical strategy by Keynes and a discreet invitation to Pluralism.[30] Keynes, sometimes portrayed as a master of eloquence, demonstrated that he knew which strings to pull through Rhetoric by adopting a convincing speech that enhanced his credibility and his recognition in the post-war political and economic system. In defending the "British case," Keynes was unbeatable in his rhetorical persuasion, masterfully negotiating with the Treasury, the House of Lords, and the Parliament (Marcuzzo, 2019).

Similar to Keynes, all economists were and are rhetoricians as well, regardless of their area of activity and social function – being more technical as Latour or more social as McCloskey. Nearly a quarter of United States' national income is spent on persuasion, discussions, and small talk in both the market and the academy (McCloskey, 1996). Therefore, the way science works is similar to the way that the market works: through conversation, relationships between individuals, trust, and persuasion. When economists talk about the theories of economic thought, the types of research conducted and taught within universities, the levels of competition in the markets, the strategies for adopting more or less austere policies to control a crisis, the projects of income distribution, or even about the implementation of public policies, they are also talking about rhetorical issues.

Rhetoric represents an essential element of Economics, helping us to understand how relationships develop inside and outside the academic environment. For example, by comparing the figure of a Homo economicus to Madame Bovary, an imperfect economic individual, McCloskey (1994) also demonstrated that science and Rhetoric are not perfect. By highlighting the problems of Gustave Flaubert's construction of Mrs. Bovary, indicating that she sometimes has brown eyes while in others they are black or even blue, Philip Mirowski (1988) captured what he

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[29] In fact, McCloskey is the one who effectively turned on the spotlight so that economists could recognize the importance of Rhetoric in the field.

[30] Furthermore, when Keynes highlights the difficulty or failure when trying to influence or convince an audience, he attributes credibility to the weight of the opposite argument, which was greater or more desperately convincing. For example, according to Marcuzzo (2019, p. 58), "[i]n the preface to *Essays in Persuasion* (1931), Keynes attributed his failure in influencing 'the course of events in time' to the 'overwhelming weight of contemporary sentiment and opinion' (CWK IX: xvii). In the aftermath of the First World War, he compared the advice and unheeded premonitions contained in those essays to 'the croakings of a Cassandra', emitted by someone who is 'desperately anxious to convince his audience in time'(CWK IX: xviii)."

was not aiming at, which is the virtue of Rhetoric through McCloskey's comparison instead of its confusion. By introducing the narrative and scenes of different scientists at their laboratories, surrounded by uncertainty, competition, decisions and controversies, Latour (2011) showed the mutability of science. Latour demonstrated that Rhetoric is, at least, a two sides different picture as the two-faced Janus, representing the variable and lively side of science – being already a black box or an opened controversy.

In addition to the rationality of individuals, Rhetoric is variable, flexible, changeable, and not absolute. This apparent imperfection enriches the field of Economics and its debates, helping economists to become aware of their own Rhetoric, improving their conversations and market relations, and promote in openness and thus encouraging the rise of Pluralism in arguments and different approaches in Economics – either through the construction of the facts, the instruction and politicization of science, and the importance of being a zero-sum game.

Therefore, the attention and importance devoted to Rhetoric should not be limited to academics and universities. Keynes' case is just one example of how Rhetoric can help in the development of economic policies and models, crisis resolution, and economic negotiations.

This article noted some of the gaps left by McCloskey, perhaps purposely, demonstrating the importance of Latour's complementary ideas. The proposed conclusions, based on the three main points, also demonstrate that the radical aspects of Rhetoric and science can be equally important for the development of Economics. The debate does not need to be so peace-and-love or so purely radical because it is the balance between the two that makes Rhetoric inherently indispensable.

REFERENCES

Amsterdamska, O. (1990) Book review: "Surely you are joking, monsieur Latour!" *Science, Technology, & Human Values*, vol. 15, v. 4, p. 495-504.

Balak, B. (2006) "Narration: McCloskey's critiques of Economics". In: Balak, B. (ed.). *McCloskey's Rhetoric: Discourse Ethics in Economics*. New York: Routledge, p. 5-48.

Bourdieu, P. (2003 [1997] *Os usos sociais da ciência*. São Paulo: Editora da UNESP (FEU).

Caldwell, B. (1985) "The case for pluralism". In: De Marchi, N. (ed.). *The Popperian Legacy in Economics*. New York: Cambridge, p. 231-244.

Dow, S. (1997) "Methodological pluralism and pluralism of method". In: Salanti, A.; Screpanti, E. (eds.). *Pluralism in economics: New perspectives in history and methodology*. Brookfield, VT: Edward Elgar, p. 89-99.

Dutt, A. K. (2014) "Dimensions of pluralism in economics". *Review of Political Economy*. University of Notre Dame: Indiana, USA, v. 26, n. 4, p. 479-494.

Fernández, R. G. (2011) "A metodologia como argumento para uma economia pluralista". *Encontro Nacional de Economia Política*, p. 1-19.

Fernández, R. G.; Pessali, H. (2012) "Spreading the Word: Transaction Cost Economics in the Conversation of Economics". *American Journal of Economics and Sociology*, v. 71, n. 2, p. 229-253.

Gross, A. (2006) *Starring the text: The place of rhetoric in science studies*. SIU Press.

Guizzo, D. Mearman, A.; Berger, S. (2019) "'TAMA' Economics under siege in Brazil: The threats of curriculum governance reform." *Review of International Political Economy,* p. 1-24.

Harman, G. Harman, G. (2009) *Prince of Networks: Bruno Latour and Metaphysics*. Melbourne, Australia: re.press, p. 3-5.
Heise, A. (2017) "Defining economic pluralism: ethical norm or scientific imperative." *International Journal of Pluralism and Economics Education*, v. 8, n. 1, p. 18-41.
Kellert, S.; Longino, H., Waters, S.; Feigl, H. (2006) "Introduction: The Pluralist Science." In: Waters, C.; Feigl, H.; Kellert, S.; Longino, H. (eds.). *Scientific Pluralism*. Minneapolis: University of Minnesota Press, p. 7-28.
Klamer, A. (1983) *Conversation with economists: new classical and opponents speak out the current controversy in macroeconomics.* Totowa, New Jersey: Rowman & Allanhead.
Lacey, H. (2006) "O princípio de precaução e a autonomia da ciência". *Revista Scientiae Studia*, São Paulo, v. 4, n. 3, p. 373-392.
Latour, B. (1994 [1991]) *Jamais Fomos Modernos*. São Paulo: Editora 34.
Latour, B. (2001 [1999]) *A Esperança de Pandora*. Bauru: EDUSC.
Latour, B. (2011 [1987].) *Ciência em Ação*. São Paulo: Editora Unesp.
Lawson, T. (2010) "Ontology, modern economics, and pluralism". In: Garnett, E.; Olsen, E. K.; Starr, M. (eds.). *Economic Pluralism*. London: Routledge, p. 99-113.
Lynch, P.; Rivers, N. (2015) "Introduction: Do you believe in Rhetoric and composition?" In: Lynch, P.; Rivers, N. (eds.). *Thinking with Bruno Latour in Rhetoric and Composition*. Illinois: Southern Illinois University Press, p. 1-19.
Marcuzzo, M. C. (2019) "Keynes and persuasion". In: Marcuzzo, M. C. (ed.). *Essays in Keynesian Persuasion*. Cambridge: Cambridge Scholars Publishing, p. 56-73.
Mariyani-Squire, E.; Moussa, M. (2015) "Fallibilism, liberalism and Stilwell's advocacy for pluralism in economics". *Journal of Australian Political Economy*, n. 75, p. 194-210.
Mäki, U. (1995) "Diagnosing McCloskey". *Journal of Economic Literature*, v. 33, n. 3, p. 1300-1318.
McCloskey, D. N. (1983) "The Rhetoric of Economics". *Journal of Economic Literature*, v. 21, n. 2, p. 481-517.
McCloskey, D. N. (1985) "A conversation with Donald N. McCloskey about Rhetoric". *Eastern Economic Journal,* v. 11, n. 4, p. 293-296.
McCloskey, D. N. (1987) "The Rhetoric of economic development: Rethinking development Economics". *Cato Journal,* v. 7, p. 249-254.
McCloskey, D. N. (1989) "Formalism in Economics, rhetorically speaking". *Ricerche Economiche,* v. 43, n. 1-2, p. 57-75.
McCloskey, D. N. (1990) *If You're So Smart: The Narrative of Economic Expertise*. Chicago: University of Chicago Press.
McCloskey, D. N. (1994) *Knowledge and Persuasion in Economics.* Cambridge: Cambridge University Press.
McCloskey, D. N. (1996) *The Vices of Economists – The Virtues of the Bourgeoisie.* Amsterdam: Amsterdam University Press.
McCloskey, D. N. (1998) *The Rhetoric of Economics.* Wisconsin: The University of Wisconsin Press.
McCloskey, D. N. (2019) *Why liberalism works: How true liberal values produce a freer, more equal, prosperous world for all.* Yale University Press.
Mirowski, P. (1983) "Shall I compare thee to a Minkowski-Ricardo-Leontief-Metzler Matrix of the Mosak-Hicks type?: Or, Rhetoric, mathematics, and the nature of neoclassical economic theory". In: Klamer, A. (1983).
Mccloskey, D. N.; Solow, R. M. (eds.). (1988) *The Consequences of Economic Rhetoric.* Cambridge: Cambridge University Press, p. 117-145.
Paulani, L. (2006) "Economia e retórica: o capítulo brasileiro". *Revista de Economia Política*, v. 26, n. 1, p. 3-22.
Samuels, W. (1980) "Two concepts of 'politicization'". *Social Science*, v. 55, n. 2, p. 67-70.