A BIBLIOMETRICAL ANALYSIS OF DIFFERENT READINGS OF THE THORSTEIN VEBLEN’S WRITINGS AND IDEAS

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Resumo: Os estudos de Thorstein Veblen foram um grande marco na ciência econômica norte-americana durante o final do século XIX e início do século XX. Veblen é geralmente caracterizado como um fundador do institucionalismo americano, escola de pensamento econômico que competiu com a economia neoclássica pelo mainstream da ciência econômica norte-americana durante a primeira metade do século XX. No entanto, o impacto de Veblen na ciência econômica não se limita ao institucionalismo americano. É possível encontrar artigos científicos associados ao mainstream que mencionam a contribuição de Veblen. O objetivo do nosso estudo é investigar como os artigos publicados por periódicos heterodoxos e tradicionais lidam com os escritos de Veblen. Nossa investigação é baseada em uma análise bibliométrica para identificar as ideias econômicas de Veblen, conforme referenciado em artigos publicados pelos principais periódicos heterodoxos e tradicionais. A bibliometria também é aplicada, em nosso artigo, para criar indicadores e analisar padrões.

Palavras-chave: Thorstein Veblen, revistas mainstream, revistas ortodoxas, revistas heterodoxas

Classificação JEL: B15; B25

Abstract: Thorstein Veblen’s studies was a cornerstone in American economics during the late 19th and early 20th century. Veblen is usually characterized as a founding father of American Institutionalism, which competed with Neoclassical Economics in the mainstreaming process of American economics during the first half of the 20th century. However, Veblen’s impact on economics did not stop with American Institutionalism’s boundaries. It is possible to find mainstream economics papers that mention Veblen’s contribution. The goal of our study is to investigate how papers published by heterodox and mainstream journals deal with Veblen’s writings. Our investigation is based on a bibliometric analysis to identify Veblen’s economics ideas as referenced in papers published by top heterodox and mainstream journals. Bibliometry is also applied in our paper to build indicators and analyze patterns.

Keywords: Thorstein Veblen, mainstream journals, orthodox journals, heterodox journals

JEL Classification Codes: B15; B25

1-INTRODUCTION

Thorstein Veblen (1857-1929) is often characterized as a founding father of Institutional Economics – also known as Original or Old Institutional Economics and American Institutionalism – by institutionalists. This placement is controversial from a historiographic perspective. For example, Bruce Kaufman recently argued that the institutional tradition was launched by Walton Hamilton in 1918 at the American Economic Association (AEA) Annual Meeting (Kaufman 2017).1 Malcolm Rutherford provides a different perspective and affirms that Institutional Economics became a self-identified movement only in 1918 (Rutherford 1997). Rutherford (1997) stresses not only Hamilton’s (1919) importance for this self-identification, but also that of the other papers presented at the “Economic Theory” session at the AEA Conference 1918, including Clark (1919), Ogburn (1919), and Stewart (1919). Such a perspective would consider Veblen closer to an inspiring

1 Hamilton’s paper was published by the American Economic Review (Hamilton 1919). Kaufman (2017) points out that borrowed Hodgson’s (2001) affirmation that Hamilton (1919) inaugurated or launched Original Institutional Economics.
figure than a founding father of Institutional Economics (see also Rutherford 2011). Following such logic, Veblen could be understood as a thinker from an economic academia that was predominantly pluralistic and eclectic – not dominated by any one school of thought in the United States at the beginning of the 20th century – as shown by Morgan and Rutherford (1998).

Despite the fact that Institutional Economics did not at first dissent from Neoclassical approach, it became known as dissenting wing of economics. Another, perhaps better classification for Institutional Economics would be as a heterodox approach. The same is not true for Veblen during his time. His work was a cornerstone of American economics during the late 19th century and early 20th century and he was far from being a dissenting figure. Veblen held positions at great universities including the University of Chicago, Stanford University, and The New School for Social Research (which Veblen helped found), and was editor of the Journal of Political Economy (1895-1906). Clearly, those were not a dissenter’s achievements. Our study analyzes whether Veblen’s economics ideas have an impact just on heterodox/dissenting economics – in this case, Veblen’s economics ideas would be strongly associated with Institutional Economics – or on mainstream economics as well, in which case, Veblen’s economics ideas would be more encompassing than Original Institutional Economics.

In this study, we analyze how mainstream and heterodox economics deals with Veblen’s economics ideas by examining papers published by journals considered mainstream and heterodox. To distinguish mainstream and heterodox journals, we rely on the distinctions made by Fred Lee and Bruce Cronin’s rankings of economic journals (Lee and Cronin 2010). Our investigation is based on a bibliometric analysis to identify papers that use Veblen’s economics ideas as a reference by top journals. Bibliometry is also applied to build indicators and analyze patterns. The next section introduces how our sample was built. Section 3 analyses the most relevant papers published by mainstream and heterodox journals that has the word “Veblen” in them. Section 4 highlights a co-citation cluster map of papers in mainstream and heterodox journals that contain the word “Veblen,” to study the analytical structure of the papers. Section 5 analyses how papers carrying the word “Veblen” self-identity themselves by words chosen to be used in their titles. Some final comments in Section 6 conclude our paper.

2-SAMPLING CRITERIA

Clearly, it is beyond our scope – as it would be beyond that of any single paper – to provide inferences on every study or debate that included Thorstein Veblen’s writings or ideas. Therefore, we chose top economics journals as a proxy for studies regarding Veblen’s contribution to economics. To ensure that the top economics journals were considered, we chose Lee and Cronin’s (2010) ranking, due to its clear distinction between mainstream and heterodox journals. We chose the top 20 mainstream and heterodox journals to build a representative sample that would allow us to make relatively reasonable inferences while relying on papers about Veblen’s economics approach. The metadata was obtained from the Journal Storage (JSTOR) digital library. JSTOR’s research platform provides access to bibliometric information (authors, source, title, abstract, bibliographic references, footnote, and others) from a significant set of scholarly journal articles, books, and others. Two additional issues justified our choice of JSTOR: (1) historical range, as JSTOR provides access to the first volumes of the selected journals; and (2) allowing searches by words from the entire selected text.2

Given that we chose JSTOR to provide the metadata for our study, we selected articles from Lee and Cronin’s (2010) top 20 mainstream and heterodox journals that contain the word “Veblen” in any section3. We assume that mentioning “Veblen” once in the body of the text indicates that the paper deals with ideas developed by Veblen, therefore the article should be part of our sample. Our bibliometric analysis takes the 20th century as the time period since Veblen’s main contribution was published at the end of the 19th and the beginning of the 20th centuries4. We applied those criteria to the selected journal and the papers published

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2 Other popular digital libraries for bibliometric proposes are Web of Science and Scopus. Disadvantages associated with using those digital libraries are: (1) they do not provide searching by words through the full text – hence, just title, keywords, abstract, and references are available for search; and (2) the historical range of Web of Science and Scopus is more limited than JSTOR’s, as they rely on just the second half of the twentieth century.

3 Occasionally, different types of texts – such as Book Reviews – were bibliometrically identified as part of our sample, even using the JSTOR-provided filter for research articles. Those texts were removed from the sample manually.

4 Someone may argue that fixing mainstream journal would be problematic as the economics mainstream changes over time, as pointed out by Colander, Holt, and Rosser (2004) and Dequech (2007). We agree with this point; however, the same is not
therein, and arrived at a sample comprising 11 mainstream journals with a total of 422 articles, and seven heterodox journals, with a total of 980 articles, as can be seen in Table 1\textsuperscript{5}. As Table 1 shows, not all of the top 20 mainstream and heterodox journals are part of our sample because not all of them were available on JSTOR when we conducted our bibliometric study.

<table>
<thead>
<tr>
<th>Mainstream Journals</th>
<th>Heterodox Journals</th>
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<tbody>
<tr>
<td>Brookings Papers of Economic Activity</td>
<td>Cambridge Journal of Economics</td>
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<tr>
<td>Econometrica</td>
<td>Feminist Economics</td>
</tr>
<tr>
<td>Economic Geography</td>
<td>Journal of Economic Issues</td>
</tr>
<tr>
<td>Economic Policy</td>
<td>Journal of Post Keynesian Economics</td>
</tr>
<tr>
<td>Journal of Economic Geography</td>
<td>Review of International Political Economy</td>
</tr>
<tr>
<td>Journal of Economic Growth</td>
<td>Review of Social Economy</td>
</tr>
<tr>
<td>Journal of Economic Literature</td>
<td>Science &amp; Society</td>
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<tr>
<td>Journal of Political Economy</td>
<td>-</td>
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<tr>
<td>The American Economic Review</td>
<td>-</td>
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<tr>
<td>The Economic Journal</td>
<td>-</td>
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<tr>
<td>The Journal of Economic Perspectives</td>
<td>-</td>
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<tr>
<td>The Quarterly Journal of Economics</td>
<td>-</td>
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<tr>
<td>The Review of Economic Studies</td>
<td>-</td>
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<tr>
<td>The Review of Economics and Statistics</td>
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<table>
<thead>
<tr>
<th>Total</th>
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<tr>
<td>422</td>
<td>980</td>
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Source: Authors relying on JSTOR as digital library

A great number of mainstream economics papers in our sample are from the American Economic Review (AER). Among heterodox journals, the majority of papers was published by the Journal of Economic Issues (JEI). These facts are related to the history of the associations that sponsor the journals, the American Economic Association (AEA), and the Association for Evolutionary Economics (AFEE), respectively. The AEA was founded in 1885, in no small part due to Richard T. Ely, a predecessor of the institutional movement in the United States, and professor of John R. Commons, another founding father of the American Institutionalism (Coats 1985). Hence, the AER welcomed institutional studies. According to institutionalists, this situation changed in the middle of the 20th century (Cavalieri and Almeida 2015). Because of the mainstreming process of economics in the United States, the institutionalists felt outcast from AEA and, consequently, from the AER. As a result, institutionalists founded the AFEE in 1965, and its journal JEI in 1967 (Rutherford 2015; Cavalieri and Almeida 2017).

Regarding the journals that were not available on JSTOR, we did the same search considering the Web of Science and Scopus digital library. The result of that research can be seen in Table 2. Seven more papers were found in mainstream journals and 72 more papers were found in heterodox journals. Since that new search culminated in a small addition of papers for our sample and followed a different search criterion than the one used on the JSTOR digital library, we chose to exclude these new data from subsequent bibliometric analyses.

\textsuperscript{5}The files obtained through the JSTOR digital library were organized by the R statistical program. The bibliometric analyses of words in the titles and references of papers was conducted with the VOS Viewer software; for technical information about VOS Viewer and its mapping and clustering techniques, see Aria and Cuccurullo (2017), Van Eck and Waltman (2010, 2014), and Waltman, Van Eck and Noyons (2010).
Table 2: Research-articles by journal

<table>
<thead>
<tr>
<th>Mainstream Journals</th>
<th>Heterodox Journals</th>
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<tr>
<td>Journal of Accounting and Economics</td>
<td>Capital and Class</td>
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<tr>
<td>Journal of Health Economics</td>
<td>Economy and Society</td>
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<tr>
<td>Journal of Monetary Economics</td>
<td>International Labour Review</td>
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<td></td>
<td>Journal of Economic Behavior and Organization</td>
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<td></td>
<td>Journal of Evolutionary Economics</td>
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<td></td>
<td>Metroeconomica</td>
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<td></td>
<td>Rethinking Marxism</td>
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<td></td>
<td>Review of Political Economy</td>
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<td></td>
<td>Review of Radical Political Economics</td>
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<td></td>
<td>The European Journal of the History of Economic Thought</td>
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Total 7                   Total 72

Source: Authors relying on Web of Science and Scopus

The bibliometrically generated data from the top journals allows us to analyze the most representative papers that contain the word “Veblen” in any part of the text. We then ranked the top 10 most relevant papers and analyzed them, as shown in the next section.

3-MOST RELEVANT PAPERS

Researchers working with the JSTOR platform can build a ranking of the most relevant papers. Hence, after establishing our sample through JSTOR, we identified a ranking of relevance for the papers in the sample. It is not just a ranking of citations per article, as it takes into account a set of other factors, such as a weight for the most recently published ones and the relevance of the journal and the article to the public in a scientific field. Such papers’ relevance is given by the JSTOR itself.6

Table 3: Most Relevant Papers

<table>
<thead>
<tr>
<th>Mainstream Papers</th>
<th>Mainstream Papers Post-1967</th>
<th>Heterodox Papers</th>
</tr>
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<tr>
<td>10 Anderson (1933)</td>
<td>Hayakawa and Venieris (1977)</td>
<td>Vatter (1964)</td>
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</table>

Source: Authors relying on JSTOR as digital library

Considering the ranking of the most relevant papers published by mainstream journals (called mainstream papers in Table 3), there is a common issue with the top three. Gruchy (1958), Dorfman (1958), and Sweezy (1958) are papers that comprised the “Veblen Centenary Round Table,” introduced at the AEA Annual Meeting 1957.7 Gruchy (1958) introduces a study on the evolution of Veblen’s ideas by his followers.

6 For more details about relevance see JSTOR Website <https://www.jstor.org/>.
7 Besides Gruchy (1958), Dorfman (1958), and Sweezy (1958), Vukasin and Zinke (1958) introduces the comments on the round table.
Dorfman (1958) relies on Veblen’s professional path and Sweezy (1958) analyses how Veblen dealt with technology in his writings. Clearly, those three papers cannot be characterized as mainstream papers in their time, when neoclassical economics was at the core of the mainstream. Further, Allan Gruchy, Joseph Dorfman, and Paul Sweezy were not mainstreamers. Gruchy was a Veblenian institutionalist, Dorfman was a historian of economics, and Sweezy was a radical economist. Surprisingly, Gruchy (1958), Dorfman (1958), and Sweezy (1958) are not exceptions among the most relevant mainstream papers. 8 When we build the ranking of the most relevant mainstream papers, we hypothesized that a mainstream paper would follow the mainstream methodology and/or a mainstream reading of Veblen’s writings or ideas that prevailed at its time of publication. However, our hypothesis was refuted by the analysis of the most relevant papers.

Among the other most relevant mainstream papers, Scott (1933) relies on Homan (1932), approves of the classification of Veblen as an institutional economist but refutes Institutional Economics as a school of thought. Scott (1933) stresses that there is an intellectual movement called Institutional Economics but simultaneously raised doubt on classifying Veblen as an institutionalist. Harris (1951) classifies Veblen as a thinker focused on understanding capitalism, and compares his work with that of Marx, Sombart, and Weber. Harris thus sought to understand Veblen’s reading of the capitalist system. Coats (1954) is a paper on Veblen’s methodology. According to Coats (1954), the literature on Veblen had neglected his contribution to the methodology of American economics. Davis (1945) also deals with Veblen’s methodology and focuses on Veblen’s criticism of classical and neoclassical economics, his notion of economics, and the place of sociological elements and ethics in Veblen’s writings. Anderson (1933) advocates that Veblen’s contribution to economics could be understood as a general theory standing apart from neoclassical economics – as a Marshallian version of neoclassical economics.

Among mainstream papers, only Basmann, Molina, and Slottje (1988) and Bagwell and Bernheim (1996) follow what can be understood as a mainstream analysis of their time. Basmann, Molina, and Slottje (1988) offers a test of Veblen’s conspicuous consumption approach. Despite the fact that Basmann, Molina, and Slottje (1988) recognizes, in a footnote, that Veblen did not deal with a mathematical form for a utility function, the paper observes that Veblen “[…] put forward an explanatory theory of the utility of commodities that attempts to account for the formation and change of consumer preferences over time” (Basmann, Molina, and Slottje 1988: 531). Hence, we can assume that Basmann, Molina, and Slottje (1988) offers a mainstream reading of Veblen’s ideas, focusing on utility maximization and marginal analysis. Bagwell and Bernheim’s (1996) reading of Veblen’s writings relies on the mainstream approach common to them: the Veblen effect. It was introduced by Leibenstein (1950) and offered a possible incorporation of Veblenian conspicuous consumption in a 1950s mainstream theory of demand.

Summing up, the mainstream papers ranking strongly refutes the assumption that the highly ranked papers would follow a mainstream methodology and/or a mainstream reading of Veblen’s writings that was prevalent at their time. This may be because American economics, from the beginning of the 20th century, was pluralistic and eclectic (Morgan and Rutherford 1998). However, it could only be a partial explanation, as half of the papers identified as mainstream papers in Table 3 are from the 1950s. Among the mainstream papers from the 1950s, only Coats (1954) was not published by the AER and the two paper that would reinforce our hypothesis are from the 1980s and 1990s. We thus formulate a second hypothesis: During the first decades of its existence, the AER was a main vehicle for the Institutionalists’ papers and studies on Institutional Economics. Because of the mainstreaming of American economics, focused on the neoclassical approach, and, mainly, the foundation of the AFEE and its JEI, a segmentation per journal took place. Hence, it was just after 1967 (JEI’s foundation), and not after the mainstreaming of American economics around the neoclassical approach – in the second quarter of the 20th century – that we can perceive clearer mainstream and heterodox ways to deal with Veblen’s writings in journals. Therefore, we built a second list of most relevant papers relying on mainstream journals regarding papers published after 1967. Our second hypothesis is that papers published after 1967 in mainstream journals would follow a mainstream reading of Veblen’s ideas because the heterodox perspective would be part of JEI and other heterodox journals founded after 1967. 9 We called this second list mainstream papers post-1967.

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8 By mainstream papers we mean papers published by top mainstream journals.
9 The JEI was the first heterodox journal, a little time latter others were founded. For instance, Review of Radical Political Economics – the Union for Radical Political Economics’ journal – was founded in 1969, the Cambridge Journal of Economics in 1977, and the Journal of Post Keynesian Economics in 1978.
Clearly, Basmann, Molina, and Slottje (1988) and Bagwell and Bernheim (1996) were the top two relevant papers of the Mainstream Papers Post-1967 type. The bottom three of the mainstream papers post-1967 – Karni and Schmeidler (1990), Findlay (1978), and Hayakawa and Venieris (1977) – follow the same logic as the top two. Karni and Schmeidler (1990) introduces a possible accommodation of fashion in a mainstream consumer theory. Despite relying on a mainstream approach, Karni and Schmeidler (1990) also considers other schools, such as the Austrian School, in the model. This paper is part of our sample because its conclusive remarks rely on “the Veblen effect.” Hence, Karni and Schmeidler’s (1990) reading of Veblen is associated with Leibenstein’s (1950) interpretation. Further, Findlay (1978) offers a dynamic model that looks to capture different forms of technological transference. It refers to Veblen’s writings for the relationship between the gap in the development levels of countries and the velocity of the catching up of the developing country, which, according to Findlay (1978), it is an argument from Veblen (1915). Hayakawa and Venieris (1977) addresses insights from Behavioral Economics looking to relax the neoclassical assumptions of exogenous tastes and independent preference relations. It makes use of Veblen’s notion of emulation to associate consumption patterns with groups with which consumers want to be identified.

The middle part of the mainstream papers post-1967 – Bronfenbrenner (1985), Samuelson (1974), Persky (2000), Hodgson (1998a), and Fusfeld (1973) – is heterogeneous and does not rely on a mainstream reading of Veblen’s ideas, which refutes our second hypothesis. Bronfenbrenner (1985) is a paper on the founding fathers of American economics, from the AEA’s foundation to World War I and focusing on Institutional Economics and the American neoclassical approach. Hence, Veblen and other institutionalists, such as John Commons and Wesley Mitchell, were included in the analysis. Next, those familiar with the history of economics or Paul Samuelson’s works may assume that Samuelson (1974) would reinforce the mainstream reading of Veblen’s writings. However, that is not the case. Samuelson (1974), for instance, is based on Paul Samuelson’s participation in a colloquium about Marx. Samuelson (1974) quotes Veblen just to characterize him as a leader of the American Left and a passage from when he was the editor of the Journal of Political Economy.

Persky’s (2000) is a paper on the evolution of the neoclassical approach in the United States, primarily the contribution of John Bates Clark. Veblen is quoted in relation to his criticism of Clark and the neoclassical approach. Geoffrey Hodgson is a British institutionalist who studies the methodology and theory of Institutional Economics. Hodgson (1998a) relies on introducing a difference between Institutional Economics and New Institutional Economics. A paper by Daniel Fusfeld, a radical economist, is also classified under the mainstream papers post-1967 ranking. Fusfeld (1973) is his contribution in a session on “Radical economics and the history of economic thought” at the AEA Conference 1972. Fusfeld (1973) addresses thinkers not commonly associated with radical economics, but who could contribute to the radical debate, and Veblen is among them. Summing up, considering the most relevant papers, even after the foundation of heterodox journals the mainstream papers do not strictly follow a mainstream methodology and/or a mainstream reading of Veblen’s writings. However, we can assume – regarding the most relevant papers – that mainstream journals became more inclined to follow a mainstream methodology and/or a mainstream reading of Veblen’s ideas after 1967.

Regarding heterodox articles in the most relevant papers, the history of Veblen’s writings has a prominent place. The most relevant paper, Rutherford (1998), analyzes Veblen’s project to build an evolutionary economics. For Rutherford (1998), Veblen failed and the reasons for this failure are addressed and analyzed in the study. Walker (1978) is a paper on Veblen’s “Essays, Reviews, and Reports: Previously Uncollected Writings” edited by Joseph Dorfman (Veblen 1973). According to Walker (1978), Dorfman’s introduction to Veblen (1973), “New light on Veblen,” is an autonomous study. Hence, Walker (1978) analyzes Veblen’s reviews and essays and Dorfman’s “New light on Veblen” distinctly. Walker’s point is to understand how Veblen’s reviews and essays expressed how he would like to build an evolutionary science through his reviews and essays and Dorfman’s reading of Veblen’s reviews and essays.

In addition to being part of the most relevant mainstream papers post-1967, Geoffrey Hodgson figures twice in heterodox ranking: Hodgson (1992) and Hodgson (1998b). Both papers rely on an analysis of Veblen’s evolutionary perspective. Rick Tilman is another economist who figures twice in the most relevant heterodox papers. Tilman and Fontana (1985) introduces the Italian authors’ reaction to Veblen’s writings and Edgell
and Tilman (1989) addresses the influences on Veblen’s thought.10 Weed (1981) is a theoretical debate around Veblen’s concept of institutions. It discusses key concepts for Veblen: instinct, habits, institutions, and the evolution of the latter. According to Weed (1981), Veblen’s evolutionary economics does not give room for prediction; however, despite the fact that Veblen relies on hypothetical historical reconstructions, his writings could be empirically analyzed. Gilman (1999) stresses the key place of gender equality in Veblen’s writings. Stabile (1987) highlights that Veblen understood the American business as divided in the social stability provided by institutions and technology, culminating in pecuniary and industrial forces. Stabile (1987) emphasizes that Veblen not only studies a technocracy but also the social elements of an economy. Vatter (1964) stressed that Veblen understood the power structure of society. However, it is added that Veblen’s perspective on power had several interpretations and changed since Veblen’s writings.

It is clear that the most relevant heterodox papers consider Veblen’s background, methodology, and theoretical contributions. However, we cannot assume that papers published by mainstream journals ignore the subjects analyzed by heterodox papers, particularly when the 20th century is considered in a general sense. This is because of the pluralistic academic environment from the beginning of that century and the fact that the AER had been a vehicle of studies on Institutional Economics. We use the foundation year of the first heterodox journal as a landmark for building a new ranking of most relevant mainstream papers associated with the mainstream itself. Thereafter, we perceive a decrease in a more plural reading of Veblen’s ideas; however, the papers of the second mainstream ranking do not rely strictly on a mainstream reading of Veblen’s ideas. Based on the top ten most relevant papers, it is not possible to address a great difference between mainstream and heterodox treatment of Veblen’s economics. To offer more elements to our analysis, the next section examines the analytical framework of mainstream, mainstream post-1967, and heterodox papers.

4-REFERENCES: CO-CITATION NETWORKS

We also bibliometrically analyzed the references of the papers in our sample. The bibliometric analysis of the references relies on the study of co-citation networks. Co-citation is defined “as the frequency with which two documents are cited together” (Small 1973: 295). Two references were considered to be co-cited when both were referenced by at least one paper in our sample. Therefore, the references addressed by the cluster maps, in this item, represent the most relevant references for a particular discussion. In our study, the co-citation network points out the common analytical framework of papers quoting Veblen in our grouping of journals – mainstream, mainstream post-1967, and heterodox. This common analytical framework makes it possible to introduce an understanding of the papers that the cluster of co-citation relies on. We build cluster maps of the co-citation network to conduct such an analysis.11

Figure 1 below is the co-citation cluster map for papers published by mainstream journals.

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10 Unconventionally, Edgell and Tilman (1989) stresses twelve influences on Veblen’s writings: (1) German influencers (Immanuel Kant and Gustav Von Schmoller); (2) David Hume; (3) Pragmatist Philosophers (Charles Peirce and John Dewey); (4) European Socialists (Marx and his followers); (5) Evolutionists (Charles Darwin and Hebert Spencer); (6) American Socialists; (7) British Socialists; (8) French utopian socialists; (9) Scottish Political Economists; (10) Norwegian Lutheranism; (11) Phycologists (such as William James); and (12) Anthropologists (such as Franz Boas).

11 Distance-based visualizations of bibliometric networks are presented here, where distance between nodes – i.e., references, in this section, and words in the titles, in the next section – indicates its relatedness (Van Eck and Waltman, 2014). We illustrated just the most relevant nodes to offer a more useful visualization of the bibliometric networks and clusters maps – the structure of the figures would not change substantially. Furthermore, following those choices, we focused the analysis on the labels of the figures.
Near the top of Figure 1, there is a cluster composed by Dorfman (1949), Jevons (1871), Marshall (1891), Samuelson (1946), Schumpeter (1954), and Smith (1776). We named this Cluster 1.1 and we find that it was built on papers on the history of economic ideas, as these have cornerstone writings in economics as references – Jevons (1871), Marshall (1891), and Smith (1776). Another reference of Cluster 1.1 is Dorfman (1949), the third volume of Dorfman’s books on American contribution to economics. This volume analyses contributions from 1865 to 1918, which encompasses the period when several of Veblen’s writings were published. Schumpeter (1954) is the Austrian analysis of the evolution of economics ideas and Samuelson (1946) is the celebrated American textbook that summarizes the mainstream economics of its time. Hence, we can affirm that one kind of analytical structure of mainstream papers that refer to Veblen is the history of economics analyses.

At the bottom of Figure 1, there are four clusters from left to right, which we named clusters 1.2, 1.3, 1.4, and 1.5. Cluster 1.2 is built on Veblen (1915), Gerschenkron (1962), Denison (1967), and Lange (1938) – the last is actually Lange and Taylor (1938), but the software only considers the name of the first author in building the cluster map. Veblen (1915) is the author’s study on German industrialization, Imperial Germany and the Industrial Revolution. Gerschenkron (1962) contains fourteen studies from the 1950s by Alexander Gerschenkron, a great Russian-American economic historian and a Harvard professor interested in the industrialization of Europe. Denison (1962) is a study on economic growth of Belgium, Denmark, France, Germany, Italy, the Netherlands, Norway, the United Kingdom, and the United States. Lange and Taylor (1938) is a classic book that contains Oskar Lange’s application of economics theory to socialism. Accordingly, we can affirm that Cluster 1.2 comprises papers whose analytical framework is related to industrialization and growth of the United States and Western European countries. These papers take both historical findings – as Veblen (1915) and Gerschenkron (1962) – and economic models regarding the organization of economic system – as Denison (1962) and Lange and Taylor (1938) – into account.

Cluster 1.3 is associated with Schumpeter (1934 and 1942), Rosenberg (1986) – which is actually Rosenberg and Birdzell (1986) – Williamson (1985), and Piore (1984) - which is Piore and Sable (1984). The link of homogeneity among these works can be understood as the unconventional approaches to the firm and industrial organization. Veblen offered this kind of approach himself, in Veblen (1904) and, mainly, Veblen (1915). Therefore, we can assume that Cluster 1.3 was built on papers whose analytical background is non-mainstream approaches of the firm and industrial organization. Cluster 1.4 and 1.5 comprise fewer studies than

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12 Samuelson (1946) quotes Veblen twice. On page 119, there is a mention of a Veblenesque effect in order to address its non-impact on preference and, on page 224, Veblen is mentioned to address conspicuous expenditure. Both mentions can be understood as an association of Veblen’s ideas to a mainstream approach. However, it does not relate Cluster 1.1 to our hypothesis of a mainstream reading of Veblen’s ideas. As Samuelson (1946) should be understood as part of an analytical framework composed by the studies of Cluster 1.1, it should not be interpreted in isolation.

13 For more about Alexander Gerschenkron, please see McCloskey (2000).

14 We affirmed that Cluster 1.2 relies on economic models regarding the organization of economic system because Denison (1962) is about models of economic growth concerning Western Europe and USA. Plus, Lange and Taylor (1938) discusses the organization of economic system in the socialism perspective taking price models into consideration.
the others, at three studies each, which suggests that the analytical framework is not well-defined as the ones addressed by Cluster 1.1, 1.2, and 1.3, because they have less data for understanding those clusters. Additionally, having fewer studies means the analytical framework of these mainstream papers that quote Veblen is less representative.

Cluster 1.4 is composed by Boyd (1985) (i.e., Boyd and Richerson, 1985) Gintis (1971), and Sen (1977). Boyd and Richerson (1985) applies methods of biological evolution to cultural progress, and may therefore be somehow related with Gintis (1971), as Hebert Gintis is well-known for his evolutionary studies. However, despite the path of evolutionary economics taken by Gintis in recent years, Gintis (1971) relates to his years as a radical economist with a solid training in mainstream economics. Gintis (1971) relies on mainstream techniques in order to refute a common mainstream assumption regarding the relationship between the workers’ level of schooling and their earnings. Sen (1977) is the famous Amartya Sen’s criticism to rationality as advocated by the mainstream. Hence, it is difficult to suppose the connection of the paper which compose Cluster 1.4. Of course, we can assume that Boyd and Richerson (1985), Gintis (1971), and Sen (1977) offer alternatives to the mainstream; however this is too broad a characterization of a cluster. Therefore, we assume that it is not possible to address a strong characterization of Cluster 1.4. Cluster 1.5 is built on Veblen (1899), Leibenstein (1950), and Comlisk (1980). We can understand Cluster 1.5 as a cluster associated with papers that have an analytical structure related to the mainstream approach of the conspicuous consumer. Veblen (1899) is an evolutionary approach to consumption that carries a critical reading of the capitalism of Veblen’s time. Leibenstein (1950) introduces the most common mainstream reading of Veblen’s conspicuous consumer: the Veblen effect. Comlisk (1980) is in line with Leibenstein (1950) by addressing a mainstream approach to the emulative/imitative consumer.

As previously highlighted, we had a hypothesis that mainstream papers would follow the mainstream methodology and/or a mainstream, prevalent in their time, reading of Veblen’s writings – it was refuted by the analysis of the most relevant papers. Hence, to reinforce our hypothesis, we expected that clusters of co-cited references from mainstream papers would point to a framework associated with mainstream studies and studies about the mainstream reading of Veblen’s writings. We find this in just one cluster, Cluster 1.5, and it is not a well-defined analytical framework. Consequently, we can affirm that the co-citation network of mainstream papers reinforce the refutation of our hypothesis. Additionally, the co-cited references demonstrate that the analytical frameworks of mainstream papers are heterogeneous and pluralistic. Those analytical frameworks are grouped as history of economics (Cluster 1.1), historical findings and economic growth models (Cluster 1.2), non-mainstream approach of the firm and industrial organization (Cluster 1.3), a broad characterization of alternatives to the mainstream (Cluster 1.4) and, of course, a mainstream reading of Veblen’s conspicuous consumer (Cluster 1.5) – the latter two analytical frameworks are not as well-defined as the former three. As in the case of most relevant papers, we also provided metrics regarding mainstream papers post-1967. Figure 2 illustrates a co-citation cluster map for mainstream papers post 1967.

FIGURE 2: Cluster map of the co-citation network - papers published by mainstream journals after 1967

There are five clusters in Figure 2. We named them Clusters 2.1, 2.2, 2.3, 2.4, and 2.5, from the left to the right. Just two of those clusters are composed by more than two studies, Clusters 2.1 and 2.5. Consequently, the analytical frameworks of mainstream papers quoting Veblen are loose and not well defined after 1967. Clusters built on less co-cited studies means fewer connections made between the analytical frameworks of the papers published by mainstream journals after 1967. It indicates a lack of analytical unity of papers that quote Veblen’s ideas. Such a lack of definition and looseness of the analytical framework becomes more intense when
we consider that we cannot assume a synergy among studies that comprise one of the clusters built on more than two papers, Cluster 2.1.

Cluster 2.1 is composed of five papers – Duesenberry (1949), Sen (1977), Marshall (1891), Smith (1776), and Veblen (1899). There is a great heterogeneity among those studies. A comparison between Figures 1 and 2 illustrate such heterogeneity. Cluster 2.1 comprises studies that are also part of Cluster 1.1 – Smith (1776) and Marshall (1890) – Cluster 1.4 – Sen (1977) – and Cluster 1.5 – Veblen (1899). Duesenberry (1949) is not part of Figure 1, but is related to a mainstream reading of the conspicuous consumer. Hence, Duesenberry (1949) would be associated with the kind of analytical background addressed by Cluster 1.5. Accordingly, what we previously classified as clusters on history of economic ideas, a too broad characterization of alternatives to mainstream, and mainstream approaches of the conspicuous consumer are the same post 1967. Therefore, the studies of Cluster 2.1 are too heterogeneous, which suggests a lack of unity associated with the analytical framework of mainstream papers post 1967 quoting Veblen.

Cluster 2.5 is the only one in Figure 2 that we were able to identify as an analytical framework. It is composed by Veblen (1915), Denison (1967), Solow (1956), and Nelson (1982) – the latter is Nelson and Winter (1982). Cluster 2.5 can be read as a post-1967 version of Cluster 1.2 as both clusters are associated with Veblen (1915) and Denison (1967). Solow (1956) is in line with the latter, as it regards a model of economic growth. The same applies to Nelson and Winter (1982) as it offers a Neo-Schumpeterian perspective on economic growth. Cluster 1.2 was previously classified as having an analytical framework on both historical findings on economic progress and economic models regarding the organization of the economic system. If we consider Cluster 2.5 as the post-1967 version of Cluster 1.2, we can assume that the debate on models of economic growth are more representative – because of the presence of Solow (1956) and Nelson and Winter (1982) – after 1967. If we accept that Cluster 2.5 reflects Cluster 1.2 post-1967, a convergence upon models of economic growth means that such a cluster is closer to the mainstream perspective.15 It would reinforce a finding of the analysis of the most relevant papers – mainstream papers more inclined to follow a mainstream methodology and/or a mainstream reading of Veblen’s writings after 1967. However, we must stress that just one cluster reinforced the findings of most relevant papers.

In summary, there is a change when we consider co-citation references of papers published by mainstream journal and papers published by mainstream journals after the institutionalization of heterodox journals. In the former case, there are clusters composed by several co-cited studies that suggests an analytical framework related to papers that mention Veblen, which indicates that Veblen’s writings or ideas were part of the debates of mainstream papers. In this case, just two clusters are composed by a few studies, three studies each, and we were not able to classify just one cluster because of the heterogeneity of the co-cited studies. Once we considered papers published by mainstream journals after the institutionalization of heterodox journals, we found just one cluster carrying several co-cited studies whose analytical framework we were able to identify – and this cluster is inclined to a mainstream kind of analysis not clearly associated with Veblen’s ideas, models of economic growth. There is another cluster that is also composed of several co-cited studies, however we

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15 It is difficult to distinguish the features of Clusters 2.2, 2.3, and 2.4, as each cluster is composed of just two studies; however, we make some observations about the clusters. Cluster 2.2 is composed of Boyd (1985), which is Boyd and Richerson (1985), and Granovetter (1985). As previously mentioned, the former analyzes cultural progress based on methods of biological evolution. Granovetter (1985) deal with decision-making regarding a socially embedded individual and the consequences of embeddedness. The connection between these two studies would be that they rely on other sciences than economics to deal with economics subjects. It is a weak connection that could be considered less weak if we consider the Boyd and Richerson (1985) cluster in Figure 1. Boyd and Richerson (1985) was part of Cluster 1.4 that was characterized as a cluster related to studies that offer alternatives to mainstream – a too broad characterization. In fact, Granovetter (1985) is an alternative to mainstream decision-making that would reinforce the association between Clusters 2.2 and 1.4. Nevertheless, Sen (1977) is also part of Cluster 1.4 but it composes Cluster 2.1. Therefore, we do not feel comfortable to suppose a feature of Cluster 2.2. Characterizing Cluster 2.3 has another kind of difficulty. Friedman (1953a) and Friedman (1953b) compose Cluster 2.3. Friedman (1953b) is a collection of Milton Friedman’s papers including his famous and controversial methodological essay, Friedman (1953a). These studies are closely related – Friedman (1953a) is Part I of Friedman (1953b), but they are divided here because in some occasions just Part I is quoted and, in others, the book is quoted. Relying on Friedman’s contributions is clearly the connection between the papers that co-cited Friedman (1953a and 1953b), and the connection with Veblen’s ideas is not suggested. Cluster 2.4 is composed by Williamson (1985) and Schumpeter (1942). Hence, it has an association with Cluster 1.3, which is also composed by the same studies plus Rosenberg and Birdzell (1986) and Piore and Sable (1984). We cannot be as assertive as in the case of Cluster 1.3 in affirming that Cluster 2.4 is related to studies on non-mainstream approaches of the firm and industrial organization, as we have less data – studies associated with the cluster. However, we can timidly suggest that Cluster 2.4 is a post-1967 version of Cluster 1.3.
identified a lack of unity and three other clusters are associated with just two co-cited studies each. Hence, when we analyze papers published by mainstream journals after the institutionalization of heterodox journals, Veblen’s writings and/or ideas seems to be less important to economics debate than papers published by mainstream journals in a general sense.

FIGURE 3: Cluster map of the co-citation network – papers published by heterodox journals

Figure 3 shows a cluster map of co-cited studies by papers published by heterodox journals. There are four clusters in Figure 3. From the left to the right, at the top of the figure, there are clusters 3.1 and 3.2, and at the bottom, there are clusters 3.3 and 3.4. Those clusters are composed of several co-cited studies, and the cluster associated with fewer studies, 3.2, contains six studies. In comparison with papers published by mainstream journals, when Veblen is mentioned by a paper from a heterodox journal, there is a stronger association with the co-cited studies those papers rely on. This indicates that papers from heterodox journals show greater analytical structure regarding Veblen’s writings. Cluster 3.1 can be understood as an analytical framework of papers that have Veblen’s writings as object of study or an analytical framework deeply that is connected to Veblen’s economics. Cluster 3.1 is composed by Dorfman (1934) and Veblen (1904, 1908, 1914, 1919, 1921, and 1934). The former is the first biography of Veblen and the latter are six of Veblen’s studies plus a collection of his essays (Veblen 1934). It addresses the importance of Veblen’s writings and ideas for heterodox papers. Mainstream papers do not seem to place such great importance on the analytical background of Veblenian economics as seen in the heterodox papers of Cluster 3.1. Next to Cluster 3.1, we find Cluster 3.2, which we can characterize as an Ayresian institutionalism analytical structure. This is because it is composed by studies from Clarence Ayres – Ayres (1944, 1952, and 1961) – and from other Texan Institutionalists – Bush (1987), Tool (1979), and Waller (1982). Ayres was a main representative of American institutionalism from the period between the World Wars to the 1970s. Ayres carried the Veblenian legacy and founded a wing of American institutionalism called Texan Institutionalism or the Cactus Branch. Ayres was the charismatic leader of that segment of Institutional Economics and greatly influenced the institutional perspective of the group. Hence, we can assume that papers published by heterodox journals also took the evolution of Veblenian institutionalism by Ayersians into account as analytical structure.

We can affirm that Cluster 3.3 is the only cluster of the co-citation network of papers published by heterodox journals that has a relation with a cluster from papers published by mainstream journals. Cluster 3.3 is composed by Smith (1776), Veblen (1898), Polanyi (1944), Keynes (1936), Marshal (1890), Kuhn (1961), Schumpeter (1942), Hodgson (1993), Nelson (1982) – which is Nelson and Winter (1982) – and Williamson

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16 We can perceive a stronger association with the co-cited studies by heterodox journals than with mainstream papers and, mainly, mainstream papers post-1967. The reason for this is the previously highlighted less-defined and more loose analytical structure of the latter.
We can affirm that Cluster 3.3 was built on papers that have as analytical background studies on the history of economic ideas with a great inclination for analysis of the capitalist system – Smith (1776), Veblen (1898), Polanyi (1944), Keynes (1936), Marshal (1890), and Schumpeter (1942). Other studies that compose Cluster 3.3 seem to be instrumental to discuss the history of economic ideas, as Kuhn’s (1961) approach to scientific paradigms and Hodgson’s (1993) exploration of how economics borrows evolutionary analysis from biology. The latter is an unusual reference of studies of the history of ideas in a general sense, but usual for studies focused on the history of evolutionary economics. We can also find as part of Cluster 3.3 studies in other evolutionary or institutional perspective than Veblen’s – Nelson and Winter (1982) and Williamson (1985).

Cluster 3.4 is composed by Commons (1924, 1934, and 1950), Galbraith (1967 and 1973), and Gruchy (1947 and 1972), and Berle (1932) – the celebrated book, Berle and Means (1932). John Commons is, alongside Veblen, usually considered a founding father of Institutional Economics. Commons (1924, 1934, and 1950) can be understood as the core of the Commonsian institutionalism. Galbraith (1967) is John Kenneth Galbraith’s institutional reading of the contemporaneous corporation and industrial system of his time. Galbraith (1972) is his reading of a new form of economic association in a different fashion to what can be public and private. Gruchy (1947) is a seminal book on Institutional Economics, and offers an in-depth reading of the diverse intellectual movement called American institutionalism as a unit based on studies from Veblen, Commons, Wesley Mitchell, John Maurice Clark, Rexford Tugwell, and Gardiner Means. Gruchy (1972) can be understood as a sequel of Gruchy (1947), as the former introduces the institutionalism of Ayres, Galbraith, Gunnar Myrdal, and Gerhard Colm. Berle and Means (1932) is an approach to corporation by the structure of corporate law – hence being next to the Commonsian wing of Institutional Economics. As a consequence, we can understand Cluster 3.4 as a cluster built on studies that deal with Veblen’s writings or ideas alongside other contributors of American institutionalism. Hence, the analytical structure of Cluster 3.4 relies on Institutional Economics in a broader sense – not only Veblenian Institutionalism.

If we consider our understanding of co-citation network of papers published by mainstream journals and heterodox journals that mention Veblen, we find a great difference in analytical backgrounds. The analytical frameworks of mainstream papers deal with Veblen’s writings or ideas to study some economic issues – such as conspicuous consumption or economic progress – or Veblen is analyzed alongside others great economic thinkers, such as Adam Smith or Alfred Marshall. In the heterodox case, the analytical structures rely on Veblen’s studies, Ayresian institutionalism, and Institutionalism in a broader sense. Those structures are more well-defined than in the case of mainstream papers. We can affirm that, in the mainstream perspective, Veblen’s writings and/or ideas are instrumental to studying an economic issue and, in the heterodox, Veblen’s writings and/or ideas constitute the analytical base. Despite their differences, there is a common analytical structure between mainstream and heterodox papers: the history of ideas. After the foundation of heterodox journals, the analytical frameworks of papers published by mainstream journals suggest a less accurate use of Veblen’s writing and/or ideas. The common analytical framework between mainstream and heterodox papers, the history of economics ideas, is looser and it is difficult to identify the history of ideas as background.

5-SELF-IDENTIFICATION: TITLE WORDS

Another important bibliometrical analysis is self-identification. Self-identification considers how the authors build the way they would like readers to identify their papers. Currently, JEL classification codes and

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17 We can identify some co-cited studies that suggest approaches similar to findings from papers published by mainstream journals. We also identified the history of economic ideas as a characterization of Cluster 1.1. If we consider that Cluster 3.3 is composed by Schumpeter (1942), Nelson and Winter (1982), and Williamson (1985), and those studies together mean an association with an unconventional approach of the firm and industrial organization, it would be closer to the characterization of Cluster 1.3. The same extrapolation can be applied to a closeness between Clusters 3.3 and 2.4 as both are composed by Schumpeter (1942) and Williamson (1985) – a possible association between Cluster 1.3 and 2.4 was previously suggested. Despite the fact of being composed by the same studies, we understand the connection between Clusters 3.3 and 1.3 or 2.4 as being weak. Cluster 3.3 is composed by ten studies, it means heterodox papers usually mention such studies in close connection, as an analytical framework. Hence, we hold that the core feature of Cluster 3.3 is history of ideas. Of course, in the analysis of the history of ideas, approaches of the firm and industrial organization can evolve. But it would be different than a cluster of approaches with the firm and industrial organization as its core. In the case of a connection between Clusters 3.3 and 2.4, we must take into account that the latter is composed by just two studies, which means a less representative analytical structure – that is the reason that, previously, we introduced some comments on Cluster 2.4 but we did not feel comfortable to introduce a characterization.
keywords are the proxies commonly used for self-identification of papers. However, our sample encompasses papers without JEL codes or keywords. Therefore, we rely on words used in the title of the papers to determine self-identification. An author seeks to convey a message to readers through the title, and consequently the words chosen for a title carry a lot of meaning regarding the analysis provided by the paper. We build cluster maps again, this time relying on word co-occurrence in the titles to construct the clusters. Hence, words in the same cluster means that those words are usually part of the same titles in the papers in our sample. As before, we build three clusters, one for mainstream papers, another for mainstream papers but published after 1967, and the third one concerning heterodox papers. The figure below shows the first.

**FIGURE 4:** Cluster map of co-occurrence of title words – papers published by mainstream journals

In Figure 4, we find five clusters. At the top of Figure 4, there is a cluster associated with the words “market,” “demand,” “preference,” “consumer,” “cost,” “concept,” “function,” “price,” “rate,” and “interest,” and we named it Cluster 4.1. Those words and their association point out papers with a relationship with mainstream approaches, since some of them next to each other are in the mainstream’s core – such as consumer, demand, function, price, and market. Hence, we can assume that Cluster 4.1 indicates, by the papers’ titles, that there were papers published by mainstream journals that associated Veblen’s writings with more mainstream-inclined analysis. This association can indicate a mainstream reading of Veblen’s studies or a comparison between mainstream and Veblen’s writings. Based on the words from the cluster, we can suppose that such reading or comparison of Veblen’s conspicuous consumption approach, as the words point out studies on consumer behavior. Hence, Cluster 4.1 would reinforce our hypothesis that a mainstream paper would follow the mainstream methodology and/or a mainstream reading of Veblen’s writings that were prevalent in its time. In the co-citation network of mainstream papers, there is a similar finding, that is, Cluster 1.5 – however, it is a not well-defined cluster. Although the hypothesis that mainstream papers would associate Veblen’s writings with more mainstream-inclined analysis was confirmed by Cluster 4.1, the cluster map of co-occurrence of title words in mainstream papers refutes the hypothesis. The other clusters of Figure 4 do not suggest the same comparison between mainstream and Veblen’s writings as well, as they do not suggest well-defined kinds of studies.

There are five more clusters in Figure 4. First, from left to right, there is a cluster composed by “good,” “government,” “public,” “value,” and “competition” – Cluster 4.2. It can be understood as a cluster built on papers about debates regarding public and private provision of goods. Next to Cluster 4.2, there is a cluster composed by “industrial,” “model,” “economist,” “American,” “Commons,” and “Veblen”. We named it Cluster 4.3 and it can be understood as a cluster associated with American economists on industrialization or American industrialization. In the central part of Figure 4 is Cluster 4.4, composed of “policy,” “growth,” and “problem.” It could be understood as a cluster on policy and growth; however Cluster 4.4 carries few words for such an assumption. There are another two clusters on the right side of Figure 4, Cluster 4.5, composed by the...
very few and heterogeneous words “system,” “income,” “USA,” and “consumption,” which we suppose are the common element that connect the papers which this cluster was built on. Next to Cluster 4.5, there is Cluster 4.6, carrying the words “theory,” “economic,” “development,” “welfare,” “capital,” “thought,” “sociological,” “view,” “business,” and “human”. Those words suggest a cluster build on papers about development in a broader sense. Clusters 4.2, 4.3, 4.4, 4.5, and 4.6 do not suggest a mainstream reading of Veblen’s writings or ideas.

As in the case of most relevant papers and co-citations of references, we build a cluster map of co-occurrence of the title words of mainstream papers post-1967 – Figure 5. It is less informative than FIGURE 4 – which, in its turn, does not provide much information. For instance, we cannot suppose a cluster built on a mainstream reading of Veblen’s studies or a comparison between mainstream and Veblen’s writings with the same emphasis we did in Figure 4. It may indicate that mainstreamers became less interested in a mainstream reading of Veblen’s studies or a comparison between mainstream and Veblen’s writings after 1967. Actually, co-occurrence of title’s words in papers published by mainstream journals post-1967 do not offer well-defined clusters. In Figure 5, there is one cluster composed by the words “relative,” “foreign,” and “simple,” another composed by “value,” “government” and “good”. In both cases, the connection among the words does not indicate a specific characterization because suppositions would be too broad and loose. The same holds for the cluster composed by “economic,” “consumer,” “social,” “system,” and “one”. Another cluster carries the words “transformation,” “critical,” “institutional,” “taking,” “behavior,” and “utility.” Even though the last two words can have an association with decision-making, the connection of the other words do not suggest a classification for a unified analysis of the papers the cluster is built on. It is the same situation of the cluster composed by “policy,” “growth,” “preference,” and “habit,” as in the previous situation – the last two word could suggest decision-making. But once we consider the former words, there is no suggestion about the common ground shared by papers that relied on such title words. There is just one cluster that can suggest a classification, the one composed by “status” and “wealth” – such words can point to Veblen’s conspicuous consumer approach. However, two words is too little on which to base a characterization.

Comparing clusters based on title words, we can perceive that, when we fixed papers post 1967, the clusters are less defined and the cluster associated with a mainstream reading of Veblen’s studies or a comparison between mainstream and Veblen’s writings disappears. A possible interpretation is that mainstream papers became less interested in Veblen’s writings as they can be seen as more loosely defined, as previously mentioned.

FIGURE 5: Cluster map of co-occurrence of title words - papers published by mainstream journals post-1967

The analysis of the co-occurrence of title words could be considered not as insightful as most relevant papers or co-cited references for mainstream papers and mainstream papers post-1967. The co-occurrence of title words just suggest the refutation of our hypothesis that mainstream papers would follow the mainstream methodology and/or a mainstream reading of Veblen’s writings prevalent in its time. No other information is given by the co-occurrence of title words concerning the analysis of mainstream papers and mainstream papers post 1967. The same does not apply to heterodox papers. Figure 6 is the cluster map of the co-occurrence of title words of heterodox papers and we can identify the themes of the papers that the clusters rely on. Additionally, the clusters do not indicate a debate on Veblen’s conspicuous consumption approach as in the case of
mainstream papers. Hence, we can affirm that the co-occurrence of title words and the self-identification of mainstream papers and heterodox papers have no common element.

The cluster in the top of the figure – Cluster 6.1 – is composed by “property,” “Commons,” “state,” “neoclassical,” “new,” “institutionalism,” “policy,” “public,” and “corporate”. Accordingly, we can assume that such cluster is based on papers about debates among different theoretical perspectives. “Commons” means John Commons. “Neoclassical” is associated with the school of thought. The words “new” and “institutionalism” are possibly related to New Institutional Economics (NEI), another school of economics thought that arose during the 1970s. As the Neoclassical School and American Institutionalism disputed the mainstream in US, comparisons between them is a usual analytical issue. The NEI is an economic approach that arose during the 1970s and, as American institutionalism, institutions are in the core of economic analysis. Despite being largely different approaches, the focus on institutions generate comparisons between NEI and American institutionalism. Therefore, we suggest that this cluster is built on papers that quote Veblen relying on different theoretical perspectives than Veblenian Institutionalism – Commonsian Institutionalism, Neoclassical approach, and NEI – to analyze property, State, public policy, and corporate issues.

In the Figure 6, we can find another cluster associated with the words “value,” “concept,” “critique,” “social,” “theory,” “business,” “Veblen,” “evolution,” “system,” and “implications” – Cluster 6.2. The words in the title suggest suggests papers about theoretical – such as “concept”, “value”, and “theory” – or methodological – such as “evolution” and “system” – aspects of Veblen’s writings. Additionally, the word “business” points out papers on Veblen’s approach to the business enterprise. Cluster 6.3 seems to be associated with the history of science and/or history of economics, a hypothesis based on the title words “economic,” “thought,” “science,” “history,” “sociology,” “human,” “development,” “toward,” and “progress.” Cluster 6.4 is composed of the words “American,” “modern,” “model,” “growth,” “technology,” “change,” “capital,” “financial,” “labor,” and “market.” We understand these words to suggest a cluster of papers related to economic development. Clusters 6.1, 6.2, 6.3 and 6.4 are the major clusters of Figure 6. From the words in that figure we were able to suppose what the papers that the clusters were built on were about – the main difference between co-occurrence of title words of heterodox and mainstream (in general and post-1967) papers. Figure 6 shows two minor clusters composed of fewer title words.

FIGURE 6: Cluster map of co-occurrence of title words – papers published by heterodox journals

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18 We can hypothesize the themes of the papers that those minor clusters are based on. However, because of the fewer words, those suppositions are weaker than the ones associated to Clusters 6.1, 6.2, 6.3, and 6.4. One of the minor clusters is composed by “capitalism” and “contemporaries” and another by “institutionalism,” “political,” “radical,” and “vs.” It is difficult to address something about the former beyond the obvious – that it is a cluster on contemporary features of capitalism. The latter seems to be constructed on papers associated with radical institutionalism, a wing of American institutionalism that arose during the 1980s seeking to recover Veblen’s social criticism.
As Veblen can be considered to be a great thinker of American economics from the beginning of the 20th century, we assumed that his writings would have an impact on economics in a general sense and not only on Institutional Economics, an approach that reclaims Veblen as a founding father of American Institutionalism. After Veblen’s time, American economics mainstreamed around the neoclassical approach and Institutional Economics became a dissenting or heterodox perspective. In this study, we investigated how mainstream and heterodox economics dealt with Veblen’s writings during the 20th century. Our point was to study whether there were different readings of Veblen’s ideas – a mainstream one and a heterodox one. We started our investigation on the hypothesis that we would find a mainstream reading of Veblen’s writings or ideas on mainstream studies. To analyze the different readings of Veblen’s ideas, we studied papers published by the top twenty mainstream and heterodox journals. We built a sample of papers that quote Veblen from those journals and analyzed the papers bibliometrically.

Initially, we built rankings of the most relevant papers quoting Veblen – as classified by JSTOR – published by mainstream and heterodox journals. The main ranking disproved our hypothesis of there being a mainsteam comprehension of Veblen’s contribution. We could not identify a mainstream methodology and/or a mainstream reading of Veblen’s writings in the most relevant papers published by mainstream journals. As the papers that would reinforce our hypothesis are from the 1980s and 1990s, we formulated a second hypothesis. It was just after the institutionalization of heterodox journals that we could more clearly perceive a way of dealing with Veblen’s writings in mainstream journals. Therefore, we built a second list of the most relevant papers relying on mainstream journals regarding papers published after 1967 – as the first heterodox journal, the Journal of Economic Issues, was founded that year. However, our second hypothesis was also disproved, considering that the most relevant mainstream papers do not strictly follow a mainstream methodology and/or a mainstream reading of Veblen’s writings even after heterodox journals had been established. Nevertheless, we can assume – in relation to the most relevant papers – that mainstream journals became less pluralistic after 1967. Regarding the ranking of the most relevant papers published by heterodox journals, they are focused on Veblen’s background, theoretical proposal, and legacy. However, we cannot assume that papers published by mainstream journals ignore the subjects analyzed by heterodox papers.

We also bibliometrically analyzed the references of the papers in our sample. In this analysis, we relied on building a cluster map of co-citation networks. They introduce the common analytical structure of the papers in our sample. Regarding papers published by mainstream journals, we found five clusters of co-citation networks. Just one of them confirmed our hypothesis as it was an analytical framework related to a mainstream reading of Veblen’s conspicuous consumer. The others were associated with: (1) the history of economics, (2) historical findings and economic growth models, (3) non-mainstream approaches to the firm and industrial organization, and (4) a broad characterization of alternatives to the mainstream. Hence, there is no monopoly of mainstream methodology and/or a mainstream reading of Veblen’s writings in papers published by mainstream journals. As in the case of the most relevant papers, we also provided co-citation metrics regarding mainstream papers post 1967.

Once again, we found five clusters, but just two of those clusters comprised of more than two studies. Accordingly, we concluded that the analytical frameworks of mainstream papers quoting Veblen are less defined and looser after 1967. The analytical structures of mainstream papers post 1967 lack definition, and looseness became more intense when we considered that we cannot suppose a synergy among studies that composed one of the clusters built on several co-cited studies. The other was an analytical structure inclined to a mainstream kind of analysis, models of economic growth. Hence, after 1967, there is a lack of analytical unity among mainstream papers that quote Veblen’s ideas. When we analyzed papers published by mainstream journals after the institutionalization of heterodox journals, Veblen’s writings and/or ideas seemed to be less important to economics debate when compared with paper published by mainstream journals in a general sense.

The analytical structures of papers published by mainstream and heterodox journals that mention Veblen show a great difference. The former deal with Veblen’s writings or ideas to instrumentally study an economic issue, such as the conspicuous consumer or economic progress, or Veblen is analyzed alongside other great economic thinkers, such as Adam Smith or Alfred Marshall. The latter are more well-defined and robust and rely on Veblen’s studies, Ayresian institutionalism, and Institutionalism in a broader sense. Despite their differences, there is a common analytical structure between mainstream and heterodox papers: the history of economics ideas. However, as the analytical frameworks of papers published by mainstream journals after the
foundation of heterodox journals suggest a less accurate use of Veblen’s writing and/or ideas, the history of ideas is looser and it is difficult to identify their background.

Alongside studying the papers’ analytical structures, we also dealt with how the authors self-identified the papers by the words chosen for their titles. We built a cluster map of the co-occurrence of title words bibliometrically. In the case of mainstream papers, there was one cluster that reinforced our hypothesis, a cluster of co-occurrence of title words composed by “consumer,” “demand,” “function,” “price,” and “market”. It is important to note that this finding was the same for the cluster map of co-citation networks. When mainstream papers were considered, just one cluster reinforced our hypothesis. Consequently, we concluded that the hypothesis was not preposterous, but it only reflected a portion of the mainstream papers. Concerning the co-occurrence of title words and mainstream papers published after 1967, the findings are similar to the case of analytical structures (co-citation networks): the metrics are not insightful and information is loose. Hence, we can assume our second hypothesis is also disproved. After 1967, interest in Veblen’s writings or ideas decreased in mainstream papers. Finally, regarding the co-occurrence of title words in heterodox papers, we can identify the subject of the papers that the clusters relies on. However, a debate on Veblen’s conspicuous consumption was not part of heterodox self-identification is open. This means that there is no common element between mainstream and heterodox papers in relation to self-identification as there was in analytical structure.

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