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Abstract: Since the founding of the Journal of Economic Issues (JEI) in 1967, it has been the main publication vehicle for original institutionalist studies. In 1987, 20 years after JEI's establishment, Volumes 3 and 4 of the journal were dedicated to the reintroduction of key concepts and analytical frameworks of original institutionalism. In 1987, JEI's Volume 3, Walter Neale's "Institutions" was published. It is a seminal study on the meaning and identification of institutions, which introduced key issues from the original institutionalism analytical framework. As three decades have passed since the publication of Neale's "Institutions", there is significant motivation to analyze the evolution of the meaning and identification of institutionalist studies. The main sources of information for this analysis are related papers published by the JEI in the last 30 years.

Keywords: Institutions, Institutional Analysis, Pragmatism, Pragmatic Philosophy, Cognition, Institutional Change, Walter Neale

JEL Classification Codes: B25; B52

Walter Neale's "Institutions" (1987) is a classic among the original institutionalist literature. Certainly, a classic generates a wide range of possible paths that a revision can take and is a result of the richness of a classic. Hence, the present paper is merely one possibility of revisiting Neale's (1987) "Institutions." Neale (1987) was published by the Journal of Economic Issues (JEI) in a specific situation, the journal's 20th anniversary. In the present paper, I am analyzing the other 30 years of the journal, from 1987 to 2017. The very first sentence in "Institutions" state that "[t]he words *institution* and *institutional* are central to institutionalist theory. Not only does the root word give us our name, but also and importantly it and its cognates run through our writing" (Neale 1987: 1177–emphasis in the original). Hence, I may affirm that Walter Neale himself provided the parameters for this bibliometric study. The first step of producing this paper was to identify the papers published by the JEI that used the words *institution* and *institutional*. Once the present paper identified what institutionalists were producing since Neale (1987), the bibliometric study considered papers published from 1988 (Volume 1) to 2017 (Volume 2) by the JEI¹.

This bibliometric research considered a total of 1906 papers, among which 328 papers do not mention the terms *institution* or *institutional*. The second step of the research was to go through 768 papers, which used the word *institution* and *institutional*. Hence, I manually classified the paper as (1) institutionalist empirical studies and (2) theoretical or methodological papers on institutionalism. The next step was to classify the papers differently: (1.1) empirical institutionalism with new theoretical/analytical issues; (1.2) empirical institutionalism without new theoretical/analytical issues; (2.1) theoretical or methodological papers which rely on bringing new theoretical/analytical issues to institutional economics. The focus of this paper is on (1.1) and (2.2), which relates to a sample of 78 papers. However, one may find brief mentions of (2.1) in this study².

¹ The 2017 Volume 2 of the JEI was chosen as the cutoff as it was the current issue when the bibliometric study occurred.

 $^{^2}$ Identifying clusters of JEI's papers, allowed me to search for studies on institutionalist, which contribute with theoretical/analytical issues to build an institutional analysis that relies on the characterization or identification of institutions in others journals.

To provide clarity on the analysis of the present paper, the meaning of new theoretical/analytical issues is introduced, which also highlights my personal understanding of the great contribution of Neale (1987). Neale (1987) stresses dissatisfaction with the lack of clarity on the concept of "institution." Considering the term institutions, Neale (1987: 1177) includes that "[w]e have a term that we find important, but lacks clear meaning. Our founding fathers did not use the word regularly or in well-defined ways." Neale (1987) highlights the conceptual issues associated with the term "institution" by focusing on the writings from Thorstein Veblen and John Commons, and also includes brief mentions of Wesley Mitchell and J. Fagg Foster. Considering the sample of papers used in this paper, I could note that little has been developed in offering clarity to the concept of institution. It is possible to affirm that there are three concepts of institutions; (2) institutions as collective action mediated by working rules and implying in going concerns–Commonsian institution; (3) a mental construction, which can materialize and that offers a standard of judgment and correlates behaviors and thoughts–the neoinstitution.

As far as I understand, the key issue of Neale (1987) was not clarifying the concept of institution but addressing the central issues-how to characterize institutions included-in building an institutional analysis. According to Neale (1987), an institution can be considered a mental construction that can be identified and characterized but cannot be observed as a whole. In terms of the identification of institutions, Neale (1987) highlights that "[m]any problems in interpreting the terms arise because an institution is not 'something out there', like a cow or a Buddhist temple." Neale (1987) also stresses three key elements to characterize and identify an institution: (1) people doing; (2) rules (generating repetition, stability, and predicable order), and (3) folkviews (justifying or explaining the activities that are going on). Hence, in this paper, new theoretical/analytical issues means new contributions that build an institutional analysis rely on characterization or identification of institutions.

This paper stresses the evolution of elements which can be used to identify institutions in papers published by the JEI. My sample pointed out two main clusters of papers: (1) studies on decision-making and (2) studies on institutional change. The former is divided into (1.1) papers which consider pragmatic philosophy, as our founding fathers did, to better understand decision-making and (1.2) papers which intend to enrich the institutional approach with some contemporaneous findings in cognition. The content of (1.1) and (1.2) are introduced in the next section. The third section presents the content of institutional change cluster. In this topic, ceremonial-instrumental dichotomy is mentioned. However, my sample was more sensitive to papers which deal with institutional change in an alternative manner. Some final remarks closes this paper.

Pragmatism and Cognition

As emphasized by Neale (1987), it is possible to proceed with an institutional analysis in two ways: (1) breaking down the social structure into institutions and (2) building up institutions from microanalytical elements. My sample was sensitive to micro-analytical elements in two different perspectives. Contemporaneous studies in institutional economics analyze micro-analytical elements by (1) recovering writings of pragmatic thinkers who influenced our founding fathers and (2) offering analysis that connects institutional economics with modern cognitive psychological approaches. One may suppose that contemporaneous institutional studies follow what can be understood as "Neale's advice" on motives. The advice would be the institutional approach should not rely on the explanation of motives as motives vary from one decision maker to another and in many cases, we do not know the motives of a decision maker. Motives cannot be used to explain an institutional setting (Neale 1987). Contemporaneous institutionalists' studies do not rely on motives. Another "Neale's advice" would be that it is not possible or desirable to analyze the origins of institutions (Neale 1987). In addition, contemporaneous institutional studies do not rely on the origins of institutions. Taking into account the pragmatism rediscovery, it is important to emphasize that not all papers published by the JEI since 1988, which rely on pragmatism, offer a contribution to analyze the microanalytical elements that build institutions. As some papers, namely Griffin (1998), Hall and Whybrow (2008), Kilpinen (2003), and Liebhafsky (1993), deal with the influence of pragmatic philosophy on institutionalism methodology. Additionally, James Webb's papers consider pragmatism itself (see Webb 2002, 2005, 2007, 2012). The present study focuses on how pragmatism assisted institutionalist analysis, contemporaneous institutionalists not only discussed the concept of habit and its importance, but also the concept and importance of instincts³.

By discussing instincts, contemporaneous institutional studies reinforced "Neale's advice" of not relying on the explanation of motives. For instance, according to Almeida (2014), when a decision maker experiences an inner impulse to behave, it can be understood as a motive to behave. However, by behaving, a decision maker must interact with institutionalized practices of the external world. For instance, a consumer should deal with goods and their meaning given by the external world. By merely dealing with objects from the external world, a decision maker can stop the pressure of the inner impulses on her/him. Objects of the external world are the answer for internal demands, but they also generate demands themselves, as Veblen's *The Theory of the Leisure Class* showed (Veblen 1899, see also Almeida 2014). For James (1890), relationships between inner impulses and objects of the external world to inner impulses in order to break off the impulses. According to James (1890), appropriation has no relation to inner impulses. Appropriation is about how to connect inner impulses to the external world. Hence, appropriation assists how institutionalized facts are learned by decision makers in an institutional approach.

James's (1890) appropriation would culminate in decision makers' absorption of habits. Essentially, one can assume that in a pragmatic view, habits carrying an innate tendency are called instincts (Almeida 2014; Costa and Caldas 2011; see also James 1890). For Costa and Caldas (2011), habits deeply internalized working as instincts can be verified in a domesticated animal, such as a human being. Habits canalize inner impulses to "acts of reason" (Almeida 2014; Costa and Caldas 2011). A key issue in recovering pragmatic writings is the evolution of the concept of habit in science. During the first few decades of the 20th century, the concept of habit was encapsulated by behavioristic approaches (Costa and Caldas 2011)⁴. For Costa and Caldas (2011), a pragmatist notion of habit can be understood as extremely encompassing. It means common ways of thinking and doing things in a society–as results of education–and simultaneously, habits are put in practice by individuals⁵. According to Costa and Caldas (2011), for pragmatists, institutions are collective habits.

³ Following Almeida (2014), a key issue in Veblen's approach to instinct is the unusual perspective he adopted. In a Veblenian perspective, inner impulses to action can be understood as tropisms. Philosophers and psychologists generally use the term "instinct" for what Veblen called tropism. In order to avoid a conceptual misunderstanding, Almeida (2014) uses the term "inner impulse" for the philosophical or psychological perspective and "instinct" for the Veblenian perspective. Hence, in this paragraph, I follow Almeida's (2014) terminology.

⁴ In Costa and Caldas's (2011: 671) words: "[g]iven that habit had been captured by behaviorism, Dewey protested against the tendency in (behavioral) psychology to limit its meaning to repetition and to subsume habit in routine."

⁵ Taking into consideration the concept of habits for contemporary institutionalism, the British institutionalist Geoffrey Hodgson offers an enlightenment. Hodgson differentiated habits from repetition. For Hodgson (2001; 2006), a habit is not a simple repetition despite the fact that it is built from repetitive situations. A habit does not mean behavior either–for instance, a habit cannot generate a behavior for a long time, but that habit may exist even if they are not manifested in behavior–despite the fact that some habits may culminate in behavior. A habit is a tendency to behave in a particular manner in specific situations or triggered by an appropriate stimulus or context (Hodgson 2002; 2004a; 2006). As stated by Hodgson (2002; 2003; 2006), the institutionalist concept of habit characterizes it as a largely non-deliberative and self-actuating propensity to engage in a previously adopted pattern of thought or behavior.

Considering the recovery of pragmatism is one cluster of my sample associated with analyzing building institutions from micro-analytical elements. However, it is also related to another cluster, the association of modern cognitive psychological approaches to institutional economics. According to Costa and Caldas (2011) and Redmond (2004), it is possible to find insights of habit building through cognition in pragmatic philosophers. Redmond (2004) highlights that Dewey observed that imagining the results of a behavior is part of habit building (see also Dewey 1922). In addition, Dewey (1922) emphasized the role of institutions in controlling attention and cognition and Peirce (1958) emphasized that attention was central to produce a habit. According to Costa and Caldas (2011), it is a Peircenian principal, a new habit is not a production of intuition, an inner impulse, or any other element associated with an internal issue of the decision maker, but is a result of a cognitive interpretation of an object which would rely on previous cognitive interpretation of the same object. As stated by Cordes (2005), the psychological foundations of our founding fathers refer to the state of the cognitive sciences at that time. The advances in cognitive psychology provide a foundation of how human beings process information and learn (Redmond 2006; Stein 1997).

A cognitive approach also reinforces the importance of instincts, habits, and institutions for decision making. Cordes (2005) is more accurate in affirming that the structure of human cognitive dispositions is part of the process of acquiring instincts, habits, and institutions⁶. Essentially, a cognitive approach reinforces that habits and institutions are mental constructs (Almeida 2011; 2014; Cordes 2005; Stein 1997), which carry "practices, symbols, social activities, and discourse, and involve objective and material outcomes" (Todorova 2014: 667). Changes of those constructs imply learning that relies on what was previously institutionalized (Almeida 2011; Redmond 2006; Stein 1997).

Considering what was previously institutionalized, Dequech (2005) emphasizes that not only habits and institutions provide information–including indicating behaviors of others that are more likely to take place–to decision makers, but institutions also influence how decision makers select, organize, and interpret information. Dequech (2005) calls it the informational-cognitive role of institutions. Cordes (2005) complements by stating that habits and institutions act as the filters of experience, which can culminate in what people should pay attention to or which behavior should be emulated. As stated by Cordes (2005), incoming information is selectively processed and attended by a decision maker. In an institutional perspective, this process of gaining attention by the individuals set habits. As a consequence, human beings are biased in their perception of information. Thus, some information is more likely to be noticed, processed, and memorized. For Cordes (2005), taking cognitive processing into consideration, institutionally provided information is important when related to the corresponding preexisting psychological issues, such as habits. For example, one can emphasize on the meaning of some objects of the external world.

A key issue of modern approaches to cognition appears to be how people internalize institutional practices and habits. Almeida (2011; 2014) and Redmond (2006) offer an answer, compatible with institutional economics, that the transmission of habits and institutions is associated with learning from others. According to Almeida (2011; 2014), learning from others, demands people working as observers and others working as models. Observers, in their decision making, put themselves in the place of models without the necessity of physically living the same situation, which is central for an institutional approach. A key issue is models are institutionalized, hence there is a socially build evolutionary path of understanding what models are (Almeida 2011; 2014). In a non-institutionalized world, an observer

⁶ Taking the contribution of contemporaneously institutionalist to associate institutional economics with modern cognitive approaches, habits and institutions have significantly more analytical elements than instincts. Despite this fact, Cordes (2005: 11) highlights that in an institutionalist view, instincts can be understood as "[...] present cognitive mechanisms focusing an individual on particular perceptions and generating impulses or actions in response to stimuli." Cordes (2005) makes a reference to Hodgson (2004b) in this work. Cordes (2005) continues to highlight that instincts, as well as habits, are psychological mechanisms which have a role in generating and shaping institutions. Hence, institutions are specific from some instincts and such institutions can merely make sense in a society where it exists (Cordes 2005).

must pay attention to potential models; hence, observation and attention are central elements to the learning process. In an institutionalized world, observation and attention can be replaced by retention as the institutional content of a society is retained by the habits of thoughts of a decision-maker.

According to Redmond (2006), once an institutional content or a habit is internalized, they tend to culminate in thoughts and behaviors without significant cognitive efforts. Human beings internalize a large amount of institutionalized procedures, most of it from an early age. According to Cordes (2005), adaptable learned habits are a prerequisite to cope with cognitive complexity. As stated by Stein (1997), learning becomes habitual as actions proceed with little or no conscious attention and deliberation. Hence, learning can also be habitual. As highlighted by Dequech (2005), it is important to address the fact that individuals cannot be taken as given in relation to institutions. Individuals are active decision makers in a world of institutions. To have acquired habits of thoughts or to have learned the institutional content does not mean that the learning process is completed. People continue to learn new procedures on how to behave, but they continue to learn from models which are highlighted institutions and groups. The centrality of cognitive issues building up institutions from micro-analytical elements relies on the understanding of how institutions perpetuate from the perspective of decision makers.

Stein (1997) offers a possible understanding of what would be an institution in a cognitive sense. An institution would be "[...] a socially constructed belief system about the way things are and the way things should be that organizes human thought and action. An institution is not an objective physical phenomenon, but a human mental construct. Institutions are inter-subjectively shared by a collective of individuals either consciously or unconsciously" (Stein 1997: 730). Taking cognition into consideration implies an important issue of the institutional analysis that decision makers do not need to identify what is an institution in order to be influenced by it. Additionally, institutions are not organized social constructs. The individual building an institutional analysis should identify the institutions and build an analysis holding some level of social organization⁷.

Institutional Change

Neale concluded his "Institutions" with an item called "Institutions and Ceremony Versus Technology and Instrumentalism" (Neale, 1987: 1197) and another topic "Institutional Change" (Neale 1987: 1200). In the same context of Neale (1987), on the JEI's 20th anniversary, Paul Dale Bush published another classic on institutional economics, "The Theory of Institutional Change" (Bush 1987). These classic texts have a common structure as both begin with a discussion on the concept of institutions and end with institutional change issues. The difference is in their focus, where Neale (1987) discusses that institutional change is a way to understand institutional analysis, while Bush (1987) introduces the term institutions as a first step to introduce institution change. Neale (1987) and Bush (1987) are related by the nature of institutional economics. Hence, it is impossible to discuss the path taken by institutional change analysis since Neale (1987) without take Bush (1987) into consideration.

Considering institutional economics, generally the ceremonial-instrumental dichotomy is absolutely central to not only understanding how institutionalists analyze institutional chance, but also in understanding the evolution of institutional economics in a broader perspective⁸. In the sample used

⁷ One may argue that this item follows a Veblenian inclined institutionalism and I agree. The reason for this is that Commonsian inclined institutionalists papers on decision-making focus on clarifying decision-making issues from Commons' writings – see Albert and Ramstad (1997; 1998), Atkinson (2009), Atkinson and Oleson (1996), Atkinson and Reed (1992) and Ramstad (1995; 2001). Hence, these papers were not classified as part of my sample.

⁸ The ceremonial-instrumental dichotomy origin is Clarence Ayres's reading of Veblen's writings taking Dewey's notion of instrumentalism into consideration. A combination of Veblen's evolutionary approach to institutional chance with Dewey's instrumentalism was named "neoinstitutionalism" by Marc Tool in his Ph.D. dissertation (Bush 2009). Later, Allan Gruchy applied the term "neoinstitutionalism" in a more encompassing manner, taking original institutionalist studies in a general sense into consideration–despite the affinity with Veblen-Ayres-Dewey tradition (see Gruchy 1972).

in this paper, among the paper published by the JEI in the last 30 years, one can identify some studies on ceremonial-instrumental dichotomy. Considering more than the last 30 years, taking papers published by the JEI since 1967, Bush (1987) is the second most quoted paper published by the JEI–this data was obtained through the Web of Science. Despite more contemporaneous studies, Bush (1987) can be consider the current analytical structure of the ceremonial-instrumental dichotomy. As the papers highlighted by my sample that consider the ceremonial-instrumental dichotomy appear to focus on enlightening some concepts. Hence, they provide no change in the analytical structure. Additionally, Bush (1987) can be understood as one of the studies which took a more moderate perspective on ceremonial and instrumental values. Ayres (1944) points out, instrumental value was the key to the economic development breaking the ceremonial barriers of institutions. This issue was reinforced by some of Ayers's followers, such as J. Fagg Foster. Paul Dale Bush, who was part of Veblen-Ayres-Dewey's tradition of understanding institutional change, reclaimed a less instrumentally orientated theory of institutional chance. Bush (1987) emphasizes that an institutional chance can be conducted by both ceremonial and instrumental values. Furthermore, in a society, we can find behavior that is ceremonially or instrumentally warranted.

My sample was sensitive to two other papers of Bush: Bush (1994) and Bush (2009). The former considered Dewey's philosophy in order to provide a better understanding of the meaning and significance of institutional change, and related concepts. Bush (1994) provides a distinct place to enlighten Marc Tool's social value principal. Bush (2009), which is Bush's papers upon receiving the Veblen-Commons Award, addresses a methodological analysis on what can be understood as neoinstitutionalist approach (see footnote 8). In this methodological analysis, value plays a key role. Sheehan and Tilman (1992) introduces a philosophical inclined paper in an attempt to elucidate the concept of instrumental value to neoinstitutionalist. This paper is in line with Bush's (1994) goal. Hielscher, Pies, and Valentinov (2012) highlights an approach between ordonomics and institutional economics to understand progressive institutional change. This theoretical content is used to offer another view of the "European Miracle." Valentinov (2013) complements Hielscher, Pies, and Valentinov (2012) with an analysis of Veblen's notion of instrumental value from a contemporaneous system approach. Tilman (1990) goes through Ayres and Dewey correspondence in order to address a better understanding of Ayres's institutionalism. Elsner (2012) offers a bridge between institutional change, based on ceremonial-instrumental dichotomy, and an evolutionary interpretation of game theory. According to Elsner (2012: 2), taking the neoinstitutionalism into consideration, Bush (1987) "was one of the most important in the history of institutionalism." Knoedler (1997) clarifies Veblen's notion of technical efficiency and Edgren (1996) points out three problematic ideas in Bush (1987)-the concept of community, the idea of value, and the sources of change.

My sample was sensitive to papers on institutional change that is not related to ceremonialinstrumental dichotomy. Such papers are divided in two segments, which refer to the contribution of two European institutionalists: (1) Geoffrey Hodgson's upward and downward causation and (2) Wilfred Dolfsma's social value nexus. I am highlighting Hodgson's and Dolfsma's contribution as they were systematically introduced from 1988 to 2017. Institutional change is a major theme for institutional economics and one can find other papers on this theme published by the JEI from 1988 to 2017. However, analyzing my sample, it was possible to perceive that several researchers had one or two papers published by the JEI. There is another category of researchers—who I am more comfortable to name institutionalists—which have systematically published papers in the JEI. Individuals rarely publish three or four papers, or they have isolated contribution (one or two papers), or contribute systematically (several papers). Hodgson and Dolfsma was highlighted by my sample as the systematic contributors with institutional change discussion–without a relation to ceremonial-instrumental dichotomy⁹.

In relation to Hodgson's contribution, Hodgson (2000) focuses on a method to analyze institutional change that has no relation with instrumental and ceremonial values. Hodgson divided his perspective of institutional change into two different causations: upward causation and reconstitutive downward causation (Hodgson 2000; 2003; 2004a). According to Hodgson (2000), the context to offering this new perspective for institutional change is the most frequent criticism on the institutional notion that individual tastes and preferences are molded by institutions. This criticism relies on some type of structural or cultural determinism, which would characterize the individual as a "puppet of social or cultural circumstances" (Hodgson 2000: 326). According to Hodgson (2000; 2003; 2004a), there is a two-way road, individuals influence institutions and institutions influence individuals. The first was termed upward causation and the second was named reconstitutive downward causation by Hodgson (2000, 2003).

As stated by Hodgson (2000), if there is place for learning in a social theory, it endorses the notion of reconstitutive downward causation. According to Hodgson (2000), the nature of learning partly relies on reconstitutive downward causation, and in this process habits play a key role (Hodgson 2003). In addition, habits are the reconstitutive material of an institution. Habits persuade an individual's decision-making process. Institutions create, motivate, force, discourage, and prevent behavior through habits; individual's preferences, purposes, and dispositions change in this process. According to Hodgson (2000), conditioning individuals through habits has a place in the core of institutional economics. As introduced, the reconstitutive downward causation relies on a change of individuals, while upward causations rely on institutional chance (Hodgson 2000; 2003; 2004a). According to upward causation, human actions and individual's behaviors can change institutions (Hodgson 2003; 2004a; 2006). Hence, upward causation means that an individual's power is sufficiently strong to redesign, replace, or eliminate institutions.

Hodgson emphasized that reconstitutive downward causation and upward causation occur, but he did not introduce, at least elaborately, how they occur. Essentially, habits are highlighted as the reconstitute element, but how and why individuals acquire such habits are not introduced. Additionally, there is a concept limitedly addresseded by Hodgson, but absolutely central for other institutionalists, such as radical institutionalists, which would play a key role in reconstitutive causation and upward causation, this concept is power. In Hodgson's (2000: 326) words: "[t]he great merit of the institutionalist idea that institutions shape individual behavior is that it admits an enhanced concept of power into economic analysis. Power is not simply coercion."

Taking Dolfsma's contribution to institutional change into account, a theory of institutional change demands adequate concepts of individuals and institutions, but studies are generally unbalanced, focusing more on institutions than individuals (Dolfsma and Verburg 2008). Additionally, Dolfsma and Verburg (2008) highlights that defining institutions based on behavior–behaviors as a reproduction of institutions–predefines the nature of institutional change–which is driven by autonomous or exogenous processes, such as population growth or technological progress. Dolfsma and Verburg (2008) also rejects institutions defined as mental constructs, as it would imply an institutional change relying on changing preferences or changing of expectations of individuals (Dolfsma and Verburg 2008). According to Dolfsma and Verburg (2008), a definition of institutions should follow an agency-structure logic, which allows institutions and molding individuals' behavior (see also Dolfsma, Finch, and McMaster 2011).

In the same perspective and in order to highlight an agency-structure logic, Dolfsma (2002, 2004) and Dolfsma and Verburg (2008) differentiates between two concepts of values: socio-cultural values

⁹ This metric to investigate isolated and systematic contributions was suggested by the young institutionalist Ivan Gambus. In another bibliometric study of JEI which I co-authored with Gambus, taking the same period into consideration, Gambus informed me about the metric. I tested if this metric would be valid for this paper and it was found to be valid.

and valuations. Socio-cultural values are the values which live in a society or community and are expressed in institutions and assist the building of institutional furniture. Socio-cultural values can reflect strong underlying convictions that many people hold (Dolfsma 2002; 2004). Most of the socio-cultural values are considered to be of an ethical, cultural, or philosophical nature–such as matters of justice, beauty, love, and autonomy. Socio-cultural values do not strictly determine what institutions will be build, as well as institutions do not strictly determine an individual's behavior. In the same manner that institutions influence behavior, socio-cultural values influence institutions. Valuations are the values that individuals carry with themselves and imply in preferences that, by their turn would imply in some type of behavior. Valuations include people's aspirations and preferences (Dolfsma 2002; 2004).

To introduce his perspective of institutional change, Dolfsma (2002; 2004) and Dolfsma and Verburg (2008) address one more additional concept: tension. According to Dolfsma and Verburg (2008), these tensions are possible owing to the discrepancies between what is prescribed by institutions and what an individual understands as institutional furniture and how to behave. According to Dolfsma (2002; 2004), there are three types of tensions: (1) value tensions, (2) institution tensions, and (3) value-institution tensions. A value tension refers to tensions between two different socio-cultural values. This tension culminates in a process of institutional change in order to offer an institutional set associated with the socio-cultural value, which rises from the tension. Institution tensions are associated with institutions, which are different, but emerged as a result of socio-cultural values coming into a conflict and pressure for an institutional change. This pressure for an institutional change can generate doubts about the legitimacy of institutional furniture. Hence, the logic of a conflicted institution may chance in order to a socio-cultural value, but through time became associated with another socio-cultural value. In this case, a tension will take place between the original socio-cultural value and the institution, hence the institution changes to adapt to the other socio-cultural value (Dolfsma and Verburg 2008).

To conclude, it is also possible to find some mentions of institutional chance in studies on cognition. For instance, according to Stein (1997), there is a cognitive inertia in adapting to changes, including institutional changes. Additionally, Almeida (2011) highlights that Hodgson's reconstitutive downward causation is possible owing to the cognitive consonances spread in the society. It was called "socio cognitive consonances", by Almeida (2011), which assists people to build their own cognitive consonances. Despite the mention to institutional change in studies which take cognition into consideration, they do not introduce a cognitive approach to institutional change, while merely presenting brief mentions.

Final remarks

As this papers starts with (1) a reading of Neale (1987) as a contribution to institutional analysis and (2) a bibliometric study, it is important to highlight that this paper is merely one possibility of understanding the evolution of institutionalists' studies after Neale (1987). This paper points out that institutional analysis evolves in relying on pragmatic philosophy and cognitive issues to understand the identification of institutions. Additionally, new perspectives on institutional change were also introduced. In relation to pragmatism, this paper points out that institutionalist studies considered James's appropriation in connecting inner impulses to institutional analysis. Furthermore, contemporaneous institutionalist studies rely on Dewey for a better understanding of the concept of habit. Considering cognitive issues, the key issue is the process through which people learn how to internalize habits and institutional content. The learning process is central. Taking institutional change into consideration, my sample pointed out that Bush (1987) refers to the current structure of institutional change analysis as papers highlighted by my sample–which regards the ceremonial-instrumental dichotomy–appear to focus on enlightening some concepts (not strictly offering another structure of analysis). Without considering the ceremonial-instrumental dichotomy and taking more systematic contributions into consideration, Geoffrey Hodgson's upward and downward causation and Wilfred Dolfsma's social value nexus are highlighted.

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