Accepted Manuscript

This is an accepted manuscript of the article published by Taylor & Francis in *Journal of Economic Issues* on 09 Dec 2015, available at

https://doi.org/10.1080/00213624.2015.1105021

Citation for published version:

Caballero, G., & Soto-Oñate, D. (2015). The Diversity and Rapprochement of Theories of Institutional Change: Original Institutionalism and New Institutional Economics. *Journal of Economic Issues*, 49(4), 947–977. https://doi.org/10.1080/00213624.2015.1105021

General rights:

This accepted manuscript version is deposited under the terms of the <u>Creative Commons</u> <u>Attribution-NonCommercial-NoDerivatives License</u> which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

The Diversity and Rapprochement of Theories of Institutional Change: Original Institutionalism and New Institutional Economics¹

Gonzalo Caballero and David Soto-Oñate University of Vigo

Abstract: Understanding the complexity of institutional change is a necessary step in gaining deeper knowledge of economic performance over time, and it is one of the main challenges in the research agenda of institutionalism. Institutional change can be studied using a variety of theoretical approaches. We study some of the main approaches to institutional change in the original economic institutionalism and the new institutional economics. First, after comparing the approaches of Émile Durkheim and Thorstein Veblen, we focus on the contributions of the instrumental value theory and other original institutional traditions in the study of institutional change. Second, the new institutional economics improved on the weak points of rational choice institutionalism regarding institutional change and incorporated an "institutions-asrules" approach (Douglass North) and an "institutions-as-equilibria" approach (Avner Greif, Masahiko Aoki). We analyze both approaches to institutional change. Furthermore, we present an updated non-integral overview of approaches to institutional change, show several inter-connections between original and new institutionalism, and conclude that the dialogue between the different theories of institutional change is relevant and beneficial.

Keywords: institutional change, new institutional economics, original institutionalism *JEL Classification Codes:* B52, B15, B25, O17.

Until recent decades, mainstream economics has been focused on static situations. However, understanding the process of economic change requires the study of the dynamics of institutional change (North 2005). Douglass North (1990a) considered that institutional change shapes the way societies evolve through time, and that a theory of institutional change was essential for further progress in social sciences and particularly in economics. It is in this context that mainstream economics has resumed its interest in institutional change, but "developing better tools to study the evolution of institutions is one important step we can take to reduce emphasis on institutional monocropping that currently dominates much of social science thinking" (Ostrom and Basurto 2011, 337). Therefore, understanding the complexity

_

¹ A previous version of this paper was presented at the 25th Annual Conference of the European Association for Evolutionary Political Economy (EAEPE, Paris, 7-9 November 2013). The authors are grateful to Christopher Kingston, who reviewed a preliminary version of this paper. They acknowledge the financial support of the Spanish Ministry of Economy (HAR2013-40760-R) and Xunta de Galicia (GRC2014/022).

of institutional change require us to study the diversity of theories of institutional change. We review some of the most remarkable contributions on institutional change derived from original institutionalism and new institutional economics.

What has been identified with the works of Thorstein Veblen, John R. Commons, Wesley C. Mitchell and Clarence E. Ayres as "original institutional economics" emerged at the end of the nineteenth century and flourished during the interwar period of the twentieth century. At that time, it was the dominant economic thought not only in the academy, but also in the realm of economic policymaking. For instance, Mitchell was one of the founders of the National Bureau for Economic Research, and Roosevelt's New Deal was designed "to a great extent by institutionalists who were the students of Commons and Veblen" (Bush and Tool 2003, 11).

Original institutionalism had thus been strongly implanted in the North American academy prior the WWII, before declining in subsequent years. Nevertheless, according to Malcolm Rutherford (2001, 186), "for a period from the late 1940s through to about 1970, institutions became almost a prohibited subject within the mainstream of economics." In any case, institutionalisms did not disappear absolutely, as several variants of institutionalism have continued to arise out of mainstream economics right down to the present time. Institutional change has been a core topic in the agenda of original institutional economics since its beginnings.

In parallel with the diverse developments from original institutionalism, in past decades institutions have returned to the main research agenda in social sciences, and this focus on institutions as a foundational concept in the social sciences has given rise to a variety of new institutional approaches. This has generated an ongoing research effort at both the theoretical and applied levels on the subjects of the nature and role of institutions and the processes of institutional change. The leading role in this process has been played by the research program of new institutional economics (NIE), the theoretical body of which was built upon Ronald Coase's (1937, 1960) notion of transaction costs and North's vision of institutions (North 1990a), opening up to the study of the relationships between institutional change and economic performance (Menard and Shirley 2005; North 2005). Recent contributions have led to substantial progress on how institutions should be understood and analyzed, particularly via the surpassing of the weak points of rational-choice institutionalism. In this way, the research program on institutional change has occupied a growing role in the research agenda of economics (Kingston and Caballero 2009).

This paper provides an updated overview of outstanding arguments on institutional change from the original and the new institutional economics. Moreover, although new institutional economics emerged from orthodox neoclassical economics and the original tradition relies on alternative theoretical foundations, we claim that main differences existed at the beginnings of the life of new institutional economics due to its immediate neoclassical roots. In recent years, however, there have emerged several NIE contributions that approach both traditions (Greif 2006; Groenewegen, Kerstholt and Nagelkerke 1995; Hodgson 1998; North 2005). In any case, we assume that there is not one best theory of institutional change and that the different theories can be useful in analyzing different processes of institutional change over time and space.

Here we do not offer a comprehensive survey on institutional change, but point out the relevant selected arguments on institutional change from different approaches. We also provide an updated overview of theories on institutional change from original and new institutionalism. In section two, we characterize some approaches of original economic institutionalism and point out the main contributions on institutional change. In section three, we introduce rational choice institutionalism, and analyze NIE advances and main contributions on institutional change from this approach. In section four, we present some elements that are shared by different contributors of original and new institutionalism, pointing out the potential benefits of communication between them. In section five, we offer our conclusions.

Original Institutionalism and Institutional Change

At the end of nineteenth and early twentieth centuries, several North American economists – including Veblen, Commons, Mitchell, and Ayres – propelled the paradigm of economic institutionalism, which was an alternative to neoclassical economics. The term "institutional economics" was coined by Walton H. Hamilton (1919) in his article "The Institutional Approach to Economic Theory." He formulated some aspects that represent institutional thought to this day. He structured these aspects as five summary points, positing that economic theory (i) should unify economic science, (ii) should be relevant to the modern problem of control, (iii) must be concerned with matters of process, (iv) must be based upon an acceptable theory of human behavior, and (v) has institutions as its proper subject matter.

This "original" institutional economics did not limit human behavior as the homo economicus model did, but assumed a broader approach to the psychological nature of the individual. It also defended a holistic methodological approach to economics. In this way, an economy was analyzed as an open and dynamic system in which the emphasis was not on the notion of equilibrium, but on that of process. Habits, institutions, and coercive relationships were indicated as the key elements underlying economic performance, and a behavioral and collective approach that is distant from formalism was assumed, additionally rejecting the criterion of individual wellbeing (Rutherford 1994).

While the marginal revolution was based on methodological individualism – the importance of efficiency and the study of exchange, original institutionalism assumed a holistic method of analysis. It focused on the distributive consequences of the different institutional structures and on the institutional conflict that existed in processes of institutional change. Original institutionalism elaborated its theory and analysis from the notion of power, or coercion (Toboso 1997).

Original institutionalism did not represent a single unified body of thought, methodology, or research program. We can distinguish at least two relevant research programs. The first research program is associated with the works of Veblen and Ayres, who provided the foundations for the instrumental value theory (discussed below) and studying the fundamental dichotomy between the business aspects and the industrial aspects of the economy. The second program is associated with the works of Commons, who concentrated on law, property rights, and organizations, including their evolution and impact on legal and economic power, economic transactions, and distribution of income (Rutherford 1994, 1-3).

The first research program of original institutionalism can especially be traced to the seminal work of Veblen. Veblen was aware of the need to treat economics as an evolutionary science – as opposed to the ahistorical formulations of the orthodox neoclassical school – and proposed to see the economy as a process of "cumulative causation."

He claimed that "an evolutionary economics must be the theory of a process of cultural growth as determined by the economic interest, a theory of a cumulative sequence of economic institutions stated in terms of the process itself ... The economic interest goes with men through life, and it goes with the race throughout its process of cultural development" (Veblen 1898, 393). Thus, Veblen rejected the neoclassical formulation of the homo economicus, "who oscillates like a homogenous globule of desire of happiness under the impulse of stimuli that shift him about the area, but leave him intact. He has neither antecedent nor consequence" (1898: 389). He considered instead that "the economic life history of the individual is a cumulative process of adaptation of means to ends that cumulatively change as the process goes on, both the agent and his environment being at any point the outcome of the past process" (Veblen 1898: 391). From an institutional perspective, individuals are at once both products and producers of culture (Tool 1986, 6). As Geoffrey M. Hodgson puts it, "most institutions

are temporally prior to the individuals that relate to them. We are all born into and socialized within a world of institutions. Recognizing this, institutionalists focus on the specific features of specific institutions, rather than building a general and ahistorical model of the individual agent" (Hodgson 1998: 172).

This institutional tradition considered the economic action to be to a great extent habit-based. Hodgson defined habit as "a largely non-deliberative and self-actuating propensity to engage in a previously adopted pattern of behavior" (Hodgson 1998: 178). For this reason, habit was broadly considered an important concept for understanding the nature of institutions. Veblen (1919, 239) considered institutions as "settled habits of thought common to the generality of men." Wesley C. Mitchell (1924, 373) claimed that "institution is merely a convenient term for the more important among the widely prevalent, highly standardized social habits." W.H. Hamilton (1932, 84) saw an institution as "a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the custom of a people."²

Regarding the second research program in original institutionalism, John R. Commons's theory of institutions was built on notions, such as transactions, organizations, and working rules. It focuses on the evolution of customs and practices on the part of individuals, and concedes a key role to legislatures and courts when studying the set of working rules changing over time.³ According to Hodgson (2003a, 91), Commons argued that economic phenomena were the result of artificial selection and not natural selection, although he could not explain the causal mechanisms behind artificial selection. In artificial selection, humans manipulate the criteria or environment of selection, but it has been argued that artificial selection is not an alternative to natural selection because "the dispositions, aims, and criteria that the human uses in selecting specimens for artificial selection are also the products of processes of cognitive and cultural evolution" (Hodgson 2002b, 267). In contrast with Veblen, Commons did not consider technological advance so important, and he focused on the resolution of conflicts of interest. "In the most general of terms, the artificial selection occurs as the outcome of a continuing process of conflict resolution" (Rutherford 1994, 103).

Institutions in Veblen and Durkheim: An Introductory Comparative Approach

Thorstein Veblen was a contemporary of the first generation of structural functionalists, among them the French sociologist Émile Durkheim (Tilman 2007). Durkheim considered "an institution all the beliefs and modes of behavior instituted by the collectivity," and he referred to sociology as the "science of institutions, their genesis and their functioning" (Durkheim 1895, 45). The positivist sociological approach of Durkheim and the institutional economics of Veblen share some relevant common elements, although they have their own specific characteristics. A review of their contributions facilitates the understating of the foundations of original institutionalism.

As we previously pointed out, the research program of original economic institutionalists like Veblen emphasized the role of habits, rules, and values in economic decision-making, and they considered that institutions have several properties which cannot be explained in reference to individual characteristics (Dolfsma and Verburg 2008). In this sense, Veblen criticized the individualism of neoclassical economics, and his arguments were complemented by those of the "socioeconomics" of Durkheim, who understood that social facts should be considered "things" because social life implies that structured regularities emerge in behavior processes (Dolfsma and Verburg 2008; Rutherford 2001; Tilman 2002b). Both Veblen and Durkheim rejected methodological individualism, embraced holism, and understood that society is not just a sum of individuals. They both assumed that society is a living entity where humans have an innate capacity to reason and an ability to absorb data from the social world. They advanced

a socio-centric view of human behavior and fought against the artificial conception of individualism, which was propelled by neoclassical economics (Tilman 2002b). Moreover, according to Rick Tilman (2002a, 2002b), some other common elements in the politics and ideology of Veblen and Durkheim should be pointed out. Among those are: (i) the analysis of the social role of religion; (ii) the relevance of institutional and cultural resistance to change; (iii) the influence of Darwinism; (iv) the persistence of continuities that impede the instrumental adaptation of the community to change; and (v) the dependence of human thought upon social structure.

Nevertheless, there are other elements that were not shared by Veblen and Durkheim. For example, while Veblen's theory of status emulation forms the basis of his social theory, Durkheim found a tension in most individuals between a common social conscience and an individual conscience – that is to say, between what is imitative and what is unique to the individual (Tilman 2002b). The role of emulation is different in the theories of the two authors.

Tilman (2007) points out that Veblen's thought is best regarded as a major contribution to "evolutionary naturalism," and Veblen is a precursor to the theory of cultural lag. Cultural lag "means the period between that point in time in which one valued cultural element nears fulfillment and that point at which another element reaches the same level of development" (Tilman 2002a, 58). Regarding cultural lag, while Durkheim's functionalist model of social change tends to assume equilibrium, Veblen did not assume this focus on a stable situation and focused on change.

Veblen and Durkheim also did not agree on the role of government as an instrument to remedying social ills. The studies of Veblen mainly consider that government reinforces the ceremonial nature and power of the hegemonic classes, while Durkheim's contributions found positive functions in the role of constitutional government (Tilman 2002a). In any case, there was a relevant theoretical connection between Durkheim and the original American institutionalism, but it was weaker than the link that was later established by the Durkheimian positive economists, François Simiand and Maurice Halbwachs, with the American tradition (Gislain and Steiner 1999).

Institutional Change in the Instrumental Value Theory

Most original institutionalists regard instrumental value theory as the best developed theory of institutional change. This theory has been developed in the seminal works of Clarence E. Ayres (1944), J. Fagg Foster (1981), Marc R. Tool (1986), and Paul D. Bush (1987). Ayres introduced the so-called instrumental value theory, an adaptation of the instrumentalist philosophy of the pragmatist John Dewey to Veblenian ideas, and this theory implied relevant contributions on institutions and institutional change.

Foster (1981, 908) considered an institution as a set of socially "prescribed patterns of correlated behavior." Later, Bush (1987) analytically decomposed this definition and developed it further. The expression "socially prescribed" reflects the institutionalist's view of human nature: "While it is entirely possible for human behavior to exhibit random characteristics, institutionalists argue that all behavior within a community is ultimately subject to social prescriptions or proscriptions. ... Throughout one's life, the process of habit formation is the mechanism by which socially prescribed behavior is internalized. While some habits may be learned only through conscious effort, most habit formation is probably unconscious" (Bush 1987, 1077). Bush remarks two issues about the term "patterns of correlated behavior": (i) behavior within an institution is not random, but purposeful and correlated; and (ii) "values" function as the "correlators" of behavior within and among patterns of behavior. Values are the standards of judgment by which behavior is correlated.

A philosophy of value is thus crucial since all institutional change must entail, as Bush (1987) claimed, a change in the value structure of the institution. This is another important point of disagreement with orthodox economics: As the value system has a central role in the structure and change of institutions, the study of institutions is "inherently normative" for original economic institutionalism (Bush 1987).

As noted above, the original institutional approach to the study of the value system relies ultimately on the works of Veblen and Dewey, but specifically on the integration and refinement that Ayres made of the formers' thought. Veblen distinguished between the invidious and non-invidious aspects of culture: "The non-invidious cultural factors contain within them the dynamic technological/social forces that give rise to institutional change. The invidious cultural factors, on the other hand, retard those technological innovations and institutional changes that are perceived to threaten existing patterns of status power. ... The non-invidious practices of the community auger for institutional change, whereas the invidious practices of the community tend to defend the status quo" (Bush and Tool 2003, 18).

Ayres realized that this so-called "Veblen's dichotomy" "implied a conception of valuation that bore a remarkable resemblance to John Dewey's theory of 'instrumental' valuation" (Bush and Tool 2003, 19). Tool (1997, 43) considered that "the locus of social value for Ayres is the social process, more particularly, the 'technological continuum' of that process." This technological continuum is based on Dewey's (1938) continuum of inquiry, and it is related to the process of increasing factual knowledge (Rutherford 1981). It is a continuum in the sense that past knowledge or technology is incorporated into the technological process to develop further technology. This is completely consistent with the evolutionary view of human history. Values must be consistent with the instrumental logic of this technological continuum: "When we judge a thing to be good or bad, or an action to be right or wrong, what we mean is that, in our opinion, the thing or act in question will, or will not, serve to advance the life process insofar as we can envision it" (Ayres 1961, 113).

Nowadays, "instrumental" and "ceremonial" are more common words to designate the non-invidious and invidious cultural factors, respectively, and make reference specifically to social values. As Bush put it, "instrumental values correlate behavior by providing the standards of judgment by which tools and skills are employed in the application of evidentially warranted knowledge to the problem-solving processes of the community." On the other hand, "ceremonial values correlate behavior within the institution by providing the standards of judgment for invidious distinctions, which prescribe status, differential privileges, and master-servant relationships, and warrant the exercise of power by one social class over another" (Bush 1987, 1079).

Ayres (1944) considered that "social progress occurs when a society is able to increase its reliance on instrumentally warranted patterns of behavior in its problem-solving processes (Bush and Tool 2003, 23). Therefore, "progressive institutional change" implies the substitution of instrumentally warranted patterns of behavior for ceremonially warranted patterns of behavior (Bush 1987). Tool (1979, 293) defined social progress as the change that "provides for the continuity of human life and the noninvidious re-creation of community through the instrumental use of knowledge." By recreation of community he meant "reconstituting the structural fabric of that social order by utilizing effectively the stock of human wisdom" (Tool 1977, 842).

This theory considers the "technological dynamic" as the basic evolutionary force for social change. In Bush's (1987, 1080) analytical language, "[t]he problem-solving processes of the community, being dependent on the processes of inquiry and technological change, are inherently dynamic, requiring changes in habits of thought and behavior. As new patterns of behavior are required to accommodate the absorption and diffusion of new technology,

instrumentally warranted patterns of behavior must change accordingly; and this requires changes in the instrumental values that correlate such behavior."

It is important to point out, however, that this institutional theoretical tradition did not consider social evolution to be necessarily a force of progress. Institutional change can also be "regressive." This occurs when the ceremonial dominance increases – i.e., when there is a displacement of instrumentally warranted values by ceremonially warranted values. Veblen (1914, 25) recalled the many episodes in history of "triumph of imbecile institutions over life and culture" – episodes, when the direction of institutional change hindered or blocked the technological continuum.

Another feature of this institutionalist thought is that the evolutionary process is discretionary: "Socially prescribed behavior arises from social choices and the critical history of any culture is the story of how these choices evolved in the life experience of the community. ... [I]nstitutional change is discretionary precisely because all social prescriptions are the outcomes of conscious choices made at some point in the life history of the culture" (Bush 1987, 1077).

In this institutional tradition, any definition of social progress or categorization of institutions brings an implicit idea of value. In the concept of progress expressed by Tool (1979), this is particularly evident. All these authors, from Veblen to Tool, developed the political implications that come derived from their criteria of social value and advocated the adequacy of the democratic ideal for the continuum of progress. Bush (1987, 1108) considers that the contributions of Tool imply that "[t]he social value that emerges in this theory of institutional change has the greatest potential for successful application within a democracy polity. Those habits of thought that make instrumental valuing possible are most likely to be nurtured in a system of democratic self-government."

Tool (1986, 25-26) proposed three reasons why democratic self-governance has the greatest potential to lead to social progress: (i) democracy "encourages the development of distinctively human potentialities for creative and reflective use of the mind"; (ii) it "engenders an experimental approach to social change"; and (iii) "self-rule generates consequences that must be endured, a democratic public becomes increasingly self-conscious about the character of the value theory it employs."

Since then, outstanding contributions have further developed this theoretical tradition, permitting a deeper logical treatment of institutional change. In this sense, it is noteworthy to mention the attempt by Wolfram Elsner (2012) to bridge Bush's (1987) analytical proposal of institutional change and evolutionary-institutionally interpreted game theory. That paper formally modelized the dynamics of institutional change, opening up a promising field for cross-fertilization between both areas. Other contributions that deserve attention are the "social fabric matrix" approach (Hayden 1982, 2006) and the institutional dynamics (Radzicki 1988), both highly technical approaches for institutional and policy analysis.

Other Related Non-Neoclassical Institutional Approaches

Original institutionalism had been strongly implanted in the North American academy by WWII, thereafter declining in prominence. Even so, non-orthodox institutionalisms, as the instrumental value theory has proven, did not disappear. Moreover, there were other variants of original institutionalism that continued to arise out of mainstream economics right down to the present time. For example, one such institutionalist perspective arising after WWII – via the work of authors such as John Kenneth Galbraith, Gunnar Myrdal, and Allan Gruchy – maintained several methodological characteristics of the original institutionalist tradition. Many contributions in this new form of institutionalism — which was not yet typically North American — were centered in the study of industrialized societies (but not those in the phase

of industrialization), and it showed a high level of interest in development economics. But the non-orthodox traditions of original institutionalism that emerged after WWII were diverse and presented some differences. Each one of these theoretical frameworks implied its own conception of institutional change.

The tendencies of traditional economic institutionalism have come down to the present via several approaches and schools, appearing as a broad literature unifying different traditions since the late twentieth century (Burlamaqui, Castro and Chang 2000). The following are institutional research programs that have been sufficiently representative in economics and that we summarize because of their focus on institutional change in theoretical bases which are very different from the neoclassical approach:

- (1) Gunnar Myrdal's institutional approach assumed holism as one of its methodological foundations, as well as the relevance of political and social factors and a theory of circular causation. This circular causation, which is very relevant for cases of underdevelopment, is presented as cumulative and, through it, a possible trend of self-stabilization toward social equilibrium is prevented. Myrdal's model of economic underdevelopment, as due to a self-reinforcing rather than self-correcting social process, implies that original changes are reinforced by later changes along the same path (an institutional inertia). Myrdal's analysis points out the interdependence of economic, social, and institutional phenomena and studies the causes and process of underdevelopment.
- (2) The Austrian school, led by Friedrich Hayek, indicates that tradition is an important institution which shapes human behavior and formulates an explanatory theory of the origin of institutions which rejects "rational constructivism" (O'Driscoll and Rizzo [1985] and Hayek [1994] constitute examples of this research effort). In fact, Hayek (1967, 1973, 1978, 1979) constructed a theory of cultural evolution in which cultural evolution was intended to account for the development of free-market capitalism. He distinguished between artificial order (which has been consciously designed and imposed on the group) and spontaneous order (which consists of orderly structures that are the product of the action of many men, but are not the result of human design), and he also presented the competitive market as one of the main spontaneous orders. In this sense, the price system is the result of human action, but not of human design. Moreover, Hayek's evolutionary theory assumed that institutions evolve in a process of natural selection operating at the level of the group, and that selection operates on acquired as well as on inherited properties. According to Hayek, some groups have rules and orders that are more efficient, advantageous, or beneficial, and are more conducive to survival (Angner 2002). Hayek (1984, 318) argued that "cultural evolution is founded wholly on group selection." Thus, he adopted an evolutionary approach to explaining the unintentional order of society, and this approach constitutes the basis of Hayek's theory of institutional change. In any case, on the debate on Hayek's evolutionary approach there is a broad bibliography, that includes Hodgson (1993, 2004a), Caldwell (2001, 2004) and Fiori (2006).
- (3) Other authors emphasize the relevance of power relationships in the origin and evolution of institutions. This approach appears in classical works, such as Karl Polanyi's (1980), and in a line of work extended in compilations, such as those of Neil J. Smelster and Richard Swedberg (1994) or J. Rogers Hollingsworth and Robert Boyer (1997).
- (4) Built on the frontier between original economic institutionalism and political science, there has emerged a research program on the institutional varieties of capitalism (Deeg and Jackson 2007; Hall and Soskice 2001). This program has focused on forms of institutional change that are gradual but cumulatively transformative, rather than abrupt and discontinuous, in advanced political economies (Streeck and Thelen 2005; Thelen 2009).
- (5) Vernon W. Ruttan (2006) elaborated a theory of induced institutional change in which institutional innovation is induced by changes in resource endowments, technical change, and

cultural endowments. Ruttan rejected any demand to choose between the evolutionary and constructivist perspectives because he considered that they should be viewed as complements rather than as alternatives. The relevance of this induced institutional change implies that advances in social science knowledge represent a powerful source of elaborating new institutional designs (Ruttan 2003). In this sense, in addition to developing a more general theory of the sources of technical change – that includes the induced, evolutionary, and path-dependent models (Ruttan 1997) — and if we want to understand the rate and direction of social, political, and economic development, we should study the dialectical relationships between changes in resource and cultural endowments and technical and institutional change (Ruttan 2006).

(6) Evolutionary economics, which incorporates the original legacy of Joseph Schumpeter, has been an active research program since Veblen's time, and it has tried to maintain a close relationship with institutional economics (Hodgson 1993, 1999, 2002a, 2003a; Lewis and Steinmo 2012). In evolutionary economics, some contributions have argued for introducing the approach of evolutionary biology into economic science. Nevertheless, it is still a subject of contention to what extent Darwinist evolution can be adapted to institutional change, and what would be Veblen's opinion with respect to it. Some authors in this line of thought develop a perspective of Veblen's approach that is very close to the biological conception of evolution. Hodgson (2004b, 2004c, 2008) argues that a generalized Darwinism is applicable to both biological evolution and socio-economic evolution. This way, for example, Hodgson (1992) interprets Veblen's evolutionary thought as Darwinian and develops a "post-Darwinian" approach, applying evolutionary metaphors to economic change. According to Hodgson (2003a, 90), Veblen considered that socioeconomic systems actually evolved in a manner consistent with the Darwinian principles of variation, inheritance, and selection, and, in this way, he applied these principles to the analysis of social evolution, interpreting Darwinism as an essentially causal analysis of process. On this theoretical basis, Veblen's evolutionary theory of institutional change focuses on the evolution of "habits of thought," and institutional change should be explained in terms of a cumulative causal sequence.

Other authors, by contrast, doubt this analogy because the social realm is ontologically different (Lawson 2003). Christopher Brown (2013) exposed the limitations of the Darwinist approach to biological evolution as applied to socio-economic evolution. This ontological difference that makes conceptual integration impossible derives from the transmutability of the social domain, i.e., it "is subject to transformation by human agency" (Brown 2013, 216). Many authors in original institutionalism believe that natural selection offers a highly misleading analogy for the processes of social/cultural/institutional change, and they disagree with Hodgson's claim that Veblen's thought is consistent with a "selectionist" view of institutional emergence and change. In this sense, original institutionalism does not want to "biologize" institutional economics.

New Institutionalisms and Institutional Change

Rational Choice Institutionalism: An Efficiency View

The rational choice approach gave rise to a set of tasks that assumed the importance of institutions in political life and included political institutions in the research agenda of rational choice theory. We can, therefore, present the rational choice institutionalism (RCI) (Hall and Taylor 1996; Peters 1999; Shepsle 1986, 2006; Weingast 1996, 2002).

Rational choice theory has assumed methodological individualism and has provided a distinctive set of approaches to the study of institutions, institutional choice, and long-term durability of institutions (Weingast 1996, 167). The RCI has provided a systematic treatment

of institutions through importing the micro-foundations of institutional analysis from rational choice theory. Institutions are conceived as a set of rules and incentives that restrict the choice possibilities of political agents, who seek to maximize their preferences within such an institutional framework. According to Larry L. Kiser and Elinor Ostrom (1982), institutions are rules that individuals use to determine what and who is included in decision-making situations, how the information is structured, what measures can be taken and in what sequence, and how individual actions are integrated into collective decisions. In this manner, RCI sets out the role of institutions in political activity as a means of containing the uncertainty of action and political results.

RCI considers political institutions to be structures of voluntary cooperation that resolve collective action problems and benefit all concerned. Institutions appear as *ex ante* agreements to facilitate cooperation structures: We need institutions to obtain gains from cooperation. But RCI did not incorporate the relevance of positive transaction costs, bounded rationality, and the passage of time. In the pre-Coasean neoclassical world, where transaction costs are zero, political activity would correspond to a simple assignment of rights that would permit efficiency through transfer of rights from owners who value them less to those who value them more (no "Pareto improvement" would stay unexecuted; North 1990b). If institutions and organizations are selected through evolutionary competition among different alternatives in a pre-Coasean world, competitive pressure will weed out inefficient organizational forms of firms (Alchian 1950), and property-rights rules will be viable in the long run only if they generate efficient outcomes (Demsetz 1967). Rules would evolve toward optimality (Greif and Kingston 2011).

Moreover, this institutionalism does not explain the details of how institutions are created, although it recognizes the possibility that the creation of institutions is a rational action of actors who are interested in the creation of the same. This approach, in any case, has a functionalist content (Peters 1999) and concludes a sense of "goodness" of institutions (Moe 2005). K.A. Shepsle (2001) argued that many institutional arrangements have multiple equilibria, and equilibrium selection is an area where rational choice has not much to say, except to allude to history, culture, and focal points, and this requires an integral institutional approach in the sense of NIE. In any case, according to Avner Greif and Christopher Kingston (2011, 13), "[t]he rational choice approach to institutional analysis does not require us to assume that people are always rational, or that institutions are chosen rationally. Rather, it holds that a rational choice perspective enables us to generate a theory with empirically refutable predictions about the institutions that can prevail in a given situation." Probably, this advance in testing theories was the main contribution of RCI.

New Institutional Economics and Institutional Change

Institutional change was not a relevant issue in mainstream pre-Coasean neoclassical economics in the twentieth century. In a neoclassical world without transaction costs, the appearance of institutions would be explained using an economic efficiency argument: New institutional arrangements would appear and prevail when they are more efficient than the previously existing institutions. But as North (2000b, 9) concluded, we "cannot understand the process of change by starting from standard economic theory and moving on from there." A starting point would be new institutional economics.

During the last quarter of the twentieth century, a new research program, which incorporated institutions into the main research agenda in economics, was developed. This new institutional economics (NIE) assumed orthodox neoclassical assumptions of scarcity and competition, but it rejected the neoclassical assumptions of perfect information and instrumental rationality. It also considered a theoretical framework with incomplete property

rights and positive transaction costs and institutions, and assumed a world where the passage of time matters (Menard and Shirley 2005; North 1994).

The foundational theoretical framework of NIE combines the Coasean notion of transaction costs with the Northian notion of institutions, holding that institutions determine the level of transaction costs in economic performance. On one hand, Ronald Coase (1937) generated a micro-analytical approach of organizations that gave rise to "transaction cost economics" (Williamson 1974, 1985). On the other hand, Coase (1960) generated a macro-analytical approach that studied the relations between institutions and economic performance, as well as institutional change processes (North 1990a). NIE incorporates both approaches that are mutually interrelated. That is to say, NIE studies institutions and the way institutions interact with organizational arrangements within the economy (Menard and Shirley 2005).

The analytical framework of NIE is a modification of neoclassical theory that conserves the basic assumptions of scarcity and competition and assumes relevant parts of the approach of microeconomic theory, but modifies the assumption of rationality and adds the dimension of time (North 1994). In this sense, Thráinn Eggertsson (1990) stated that NIE had created a different paradigm from the neoclassical one, as he considered that NIE modified the hard core of neoclassical economics. Table 1 shows some basic differences between the new institutional economics and pre-Coasean orthodox neoclassical economics.

Pre-Coasean Neoclassical Economics New Institutional Economics Economics as the science of choice Economics as the science of transactions Substantive rationality Bounded rationality, shared mental models, beliefs Efficient markets Imperfect markets, with frictions Zero transactions costs Positive transactions costs Absence of institutions Institutions as the rules of the game Firm, law, and polity as black boxes There are firms, law, and polity Higher realism — absence of social optimum An optimal world with Paretian efficiency Universal theories More specific historical and comparative analysis Non-temporal analysis Time and history matter Politics as public choice Transaction cost politics

Table 1. Neoclassical Economics and NIE: Basic Differences

NIE arose as an attempt to extend neoclassical theory toward the explanation of factors traditionally taken as exogenous in the economic mainstream, not as an attempt to replace the standard theory (whereas an attempt at replacement was what motivated traditional economic institutionalism; Rutherford 2001). In fact, the new institutional economics did not consider traditional institutionalism to be its precursor (Coase 1984). In this sense, during its beginnings, NIE assumed methodological individualism, it was centered in the questions of efficiency, and it emerged from a model of interchange, agreeing with the neoclassical approach, but not with the original institutional approach (Toboso 1997). Table 2 shows the main differences between original institutional traditions and the initial theoretical approach of NIE in the 1980s, although in recent years there have been many contributions that have permeated the limits of this introductory comparative characterization. In the next section, we will present this evolution of NIE.

In any case, NIE has surpassed the weakness of RCI regarding the functionalistic, idealistic, and pro-efficiency approach of RCI. RCI understood institutions as a cooperation structure and assumed a model of rationality for political behavior. But NIE pointed out that the economic world is characterized by positive transaction costs, rejected instrumental rationality by assuming the implications of bounded rationality, and considered that the passage of time matters. The transactional perspective of NIE is built on "the assumptions of costly information, of subjective models on the part of the actors to explain their environment, and of imperfect enforcement of agreements" (North 1990b, 355).

The main theoretical approach of NIE adopted the Northian notion of institutions, presenting institutions as the rules that determine the amount of transaction costs and the efficiency gains. This is the most commonly accepted definition of institutions in NIE. Institutions are the rules of the game in a society together with their enforcement arrangements (North 1990a). This includes both formal rules, such as laws and constitutions, and informal rules, such as conventions and norms. These rules are "humanly-devised" in the sense that they are a product of social interaction among people (thus, technological constraints like the "laws" of physics are not institutions).

Table 2. Old and New Institutionalism: Basic Differences

Original Institutionalism (OI)	Beginnings of New Institutional Economics (NIE)
It rejects the bases of neoclassical economics	It emerged from neoclassical economics
Holism	Methodological individualism
Distributive consequences matter	Efficiency criterion for analysis
Relevance of coercion and power	Focus on free exchange
Individuals should not always be taken as	Assumption of given individual preference
given	functions
Habits are key for human behavior and belief	Rational individual behavior: choices
Understanding institutions requires the study of the process of rule-following and the common settled habits of behavior and thought.	Exogenous view of institutions as "rules of the game"

NIE considers that the orthodox rationality approach of human behavior is defective because: a) Individual motivations are not limited to maximizing wealth or utility; altruism and individual's self-limitations also influence behavior; and b) individuals subjectively process incomplete information of the world around them; there is a need to distinguish between reality and perception (North 1990a). NIE defends that individuals act with incomplete information and models that have been subjectively deduced, and assumes the notion of bounded rationality by conceiving the individual as intentionally rational but only in a limited way (Williamson 2000).

Elinor Ostrom and Xavier Basurto (2011) studied the evolution of rules and norms, where rules contain prescriptions similar to norms, but rules carry an additional, assigned sanction if forbidden actions are taken and observed by a monitor. They cluster rules into seven types based on the seven working parts of a game (position rules, boundary rules, choice rules, aggregation rules, information rules, payoff rules, and scope rules) and distinguish between the relatively self-conscious institutional change and the unconscious process of change. In the first case, institutions are the result of human intentions — therefore, the motivations that affect institutional design are a main determinant — but, in a non-ergodic world, the strategies of individuals would not guarantee the desired result. In the second case, the survival of some "phenotypes" cannot be simply attributed to their higher quality, and the selection processes do not guarantee the selection of efficient "genotypes" (Brousseau, Garrouste and Raynaud 2011).

Beyond institutions, North (1994, 362) stated that "history demonstrates that ideas, ideologies, myths, dogmas, and prejudices matter, and an understanding of the way they evolve is necessary." In order to understand the behavior of individuals in decision-making within an uncertain context, NIE considers the subjective mental models of individuals as key factors. Such mental models will be closely linked with institutions. "Mental models are the internal representations that individual cognitive systems create to interpret the environment;

institutions are the external (to the mind) mechanisms individuals create to structure and order the environment" (Denzau and North 1994, 4).

Together with the study of mental models and human behavior, NIE assumes the importance of the passage of time in creating institutions. Institutional change is characterized by increasing returns and imperfect markets with high transaction costs (North 1990a). In this theoretical framework, path-dependence is reinforced by the externalities of the institutional matrix, the processes of social learning, and the creation of shared mental models, on which individuals make decisions. Path-dependence is one way of bridging the choice gap and binding the evolution of a society over time (North 1990a).

NIE argues that processes of institutional change are normally incremental due to increasing returns⁶ (North 1990a, 1990b, 1995). First, institutional change is an incremental process that is heavily weighted in favor of policies that are broadly consistent with the basic institutional framework. Second, institutional change is characterized by a slow evolution of formal rules and informal constraints. Third, the continuous interaction between institutions and organizations implies competition and investment in skills and knowledge. Fourth, the economies of scope, complementarities, and network externalities of an institutional matrix make institutional change overwhelmingly incremental and path-dependent. Fifth, individual and specific changes in formal and informal institutions can change history, but will find it difficult to reverse the course of history (this happens in relatively few cases). In any case, North (1990a, 1995) explained that institutional change is a path-dependent process, while "small events and chance circumstances can determine solutions that, once they prevail, lead one to a particular path." More recently, North (2005) presented an extension of the new institutional economics toward cognitive science by introducing culture and beliefs into the heart of the analysis of institutional change, thereby pointing out the relevance of contextdependent and historically specific explanations.⁸

In this manner, the institutional framework not only determines the current economic results, but also delimits the set of opportunities that affect future situations. Many previous institutional analyses adopted an efficiency view when they analyzed the evolution of institutions (according to which relative prices are the source of institutional change), but NIE holds that, because of transaction costs, agents do not always successfully coordinate in the search for greater efficiency. "It would be naive to assume that any evolutionary process will always lead to better outcomes" (Ostrom and Basurto 2011, 335). Nothing guarantees an increased efficiency (Brousseau, Garrouste and Raynaud 2011). Moreover, when comparing the outcomes of different institutional frameworks, North (1990a, 2005) would recommend the evaluation of the "adaptive efficiency," because this dynamic adaptability criterion is more relevant than the traditional and static "Pareto efficiency."

Conclusions derived from positive economic analysis cannot be exported from one economy to another in the case of economies with diverse transaction costs, mental models, and processes of institutional change: "[Y]ou get a different answer for every country and every historical situation" (Coase 1999a, 5). Likewise, normative proposals created to achieve certain goals within an economy may not be adequate for those of other countries: "[T]here is no one-way better economic system because everything depends on the society you are in" (Coase 1999a, 5). Formal rules may be imported via an "institutional transplant," but the potential conflict of imported institutions with preexisting norms can generate diverse behaviors and unforeseen outcomes (Brousseau, Garrouste and Raynaud 2011). According to Eggertsson (2005), transplant failure is associated with what can be called "unreceptive transplants," and he pointed out that nations often attempt to import social technologies through institutional transplants but such attempts frequently fail because of imperfect knowledge about the properties of the institutional matrix.

The "institutions-as-rules" approach has been complemented with other important approaches within NIE. Greif and Kingston (2011) and Eric Brousseau, Pierre Garrouste, and Emmanuel Raynard (2011) distinguished two families of new institutional theories. On one hand, according to North (1990a), institutions are viewed as rules imposed on individuals, whereby the focus is on the strategic games among coalitions that aim to promote or block new rules. On the other hand, according to Masahiko Aoki (2001, 2007) and Avner Greif (1998, 2006), the mutual expectations about others' behaviors may configure self-enforcing institutions, and institutional change is studied as a switch of institutional equilibrium. Greif (2006) defined an institution as "a system of rules, beliefs, norms, and organizations that together generate a regularity of (social) behavior, while Aoki (2007) understood institutions as a "by-product" of strategic interaction (the rules or conditions that determine how the game is played).

In the same way, Aoki (2007) distinguished between an exogenous view of institutions and an endogenous view of institutions. He assumed that, "while the exogenous view takes a dichotomous approach to separate the rule-making game and the operational game, the endogenous view takes an integrative approach."

The "institutions-as-rules" approach assumes that rules are exogenously predetermined by the existence of a hierarchical order. When institutions are presented as rules, the enforcement of the rules is considered a distinct issue from the formation and content of the rules themselves (Greif and Kingston, 2011), and institutional change is about changing the rules. In this case, there will be coalitions of agents supporting new rules and coalitions looking for the status quo (Brousseau, Garrouste and Raynaud 2011).

The "institutions-as-equilibria" approach provides an analytical formulation in gametheoretic perspective for the view of institutions as "spontaneously and/or endogenously shaped and sustained in the repeated operational plays of the game itself' (Aoki 2007, 2). In this approach, institutions are salient effects of the societal games played, being played, and believed to be played in a population, wherefore the approach calls for equilibrium thinking (Aoki 2012). When institutions are viewed as equilibria, a theory of motivation is placed at the center of analysis, and the evolution of behaviors and beliefs implies the process of institutional change. Therefore, the study of how new shared beliefs emerge is crucial in this approach. Where a "general cognitive disequilibrium" in the sense of Aoki (2001) exists, the previous existing beliefs cease to be useful for correctly understanding the world, and individuals promote new beliefs, actions, and equilibria (Brousseau, Garrouste and Raynaud 2011). Assuming that institutional dynamics involve interactions of economic, organizational, political, and social domains, Aoki (2007) showed that equilibrium of the game — an institution — cannot be sustained in a single domain, independently of other domains. Studying the dynamics counterparts of institutional linkages and interdependencies across domains, Aoki (2007) presented three mechanisms of endogenous, interactive institutional change: dynamic institutional complementarities, overlapping social embeddedness, and Schumpeterian bundling innovation. These mechanisms show the complexity and interlinking of past, present, and future institutions.

Greif (2006) understood institutions as systems in equilibria, and he tried to endogenize institutions. According to his approach, the institutions-as-rules framework is very useful in examining various issues, but it is not well suited for considering the motivation to follow behavioral instructions embodied in rules and contracts. Therefore, Greif focused on understanding behavior and how the motivation to follow particular rules of behavior is created. Greif (2006) considered that the equilibrium approach may be integrated within the study of endogenous institutional change. Endogenizing institutional change is one of the principal challenges of institutional analysis, and Greif (2006, 6) elaborated a theoretical framework that allows an advancement in the understanding of institutional change via analyzing the relevant

micro-mechanisms at the level of interacting individuals. Greif (2006, 160) introduced the concepts of quasi-parameters and institutional reinforcement: "If self-enforcing outcomes affect the values of one or more parameters supporting the observed equilibrium in a manner that would lead only to long-term behavioural change, these parameters are best reclassified as quasi-parameters." "An institution is reinforcing when the behaviour and processes it entails, through their impact on quasi-parameters, increase the range of parameters values (and thus situations) in which the institution in self-enforcing" (Greif (2006, 160). In this sense, institutions that are self-enforcing in the short run can persist in the long run, but if they imply some changes in the quasi-parameters they can convert themselves into "self-destructing institutions" in the long run. In this sense, Greif and Laitin (2004) presented a theory of endogenous institutional change.

The institutions-as-rules and the institutions-as-equilibria approaches are compatible, and a good example of that is Desiree Desierto and John Nye's work (2011). Aoki (2007) pointed out the "embeddedness" in the evolution of institutions across domains, but he did not provide specific dynamics of institutional change. Greif (2006) assumed the notion of path-dependence in institutional change using results from dynamic games, but he did not explicitly model the role of noise in the process of institutional change. This is a challenge for Desierto and Nye (2011), who used some evolutionary-game dynamics to describe how formal rules become established as informal norms when an increasing number of individuals uphold them. This is an important point since North (2000a) posited that the incoherence between formal rules and informal constraints is a path to failure. While formal rules may change in relatively brief periods, informal norms possess survivability and resistance to change (Musole 2009). In fact, informal institutional change has been presented as "slow moving" (Roland 2004), and one has to recognize that informal and formal constraints exhibit two different dynamics (Fiori 2002).

Distinguishing between formal rules and informal norms, Desierto and Nye (2011) found that whenever populations are rational, the eventual outcome of the game depends only on the initial path. However, this is not the case in the more realistic world where the population is boundedly rational. These authors are able to show that, with mutation, the strategy that survives in the long run is the risk-dominant strategy in a world with boundedly rational players. In this world, large initial shocks, which only alter the initial play, will not be enough to incentivize individuals to sustainably adopt rules. Gradualistic approaches to institutional change, therefore, may be more effective than big-bang reforms.

In a recent contribution, Eric Brousseau and Emmanuel Raynaud (2011) presented a life-cycle theory of institutional evolution. This theory studies how "local and voluntary" institutions endogenously turn into more "generic and mandatory" ones. According to this theory, while local institutional arrangements emerge through negotiations and the voluntary acceptance of common rules, generic institutions appear as a consequence of the spreading and solidification of some local arrangements. In this sense, they presented a logical continuum between contractual governance mechanisms and institutions.

As a summary, Christopher Kingston and Gonzalo Caballero (2009) compared a variety of theoretical approaches to conceptualize institutional change. They distinguished four main groups of theories of institutional change: First, the collective-choice theories of institutional change include theories in which institutions are purposefully designed and implemented in a centralized way, either by a single individual or by many individuals or by groups interacting through some kind of collective choice or political process. In this process of collective choice-making, individuals and groups lobby, bargain, vote, or otherwise compete, trying to implement institutional changes which they perceive as beneficial to themselves, or to block those they view as undesirable. Second, in evolutionary theories of institutional change, new institutional forms periodically emerge (either at random or through deliberate design) and undergo some kind of decentralized selection process as they compete against alternative institutions. In this

way, institutional change occurs spontaneously, through the uncoordinated choices of many agents, rather than in a centralized and coordinated manner. Third, regarding blending evolution and design, in many real-world processes of institutional change, both unintentional, evolutionary processes and intentional processes of design are at work, and it is not easy to neatly separate the two. Building theories, in which processes of evolution and design are integrated within a broader framework, is a priority for research, and some theories have advanced in this way. Fourth, the theories in the "equilibrium view" of institutions shift the focus from the rules governing behavior to the behavior itself. In this sense, institutions emerge as endogenous equilibrium outcomes, reflecting a socially constructed "reality," while institutional change becomes fundamentally not about changing rules, but, rather, about changing expectations. Both deliberate-centralized and evolutionary-decentralized institutional changes are compatible with the equilibrium view. Moreover, Kingston and Caballero (2009) studied the role of institutional inertia, bounded rationality, and history in institutional change.

The Evolution of NIE Toward Original Institutionalism: The Rapprochement of Theories of Institutional Change

Recent contributors to NIE, such as North (2005), Ostrom (2005), and Greif (2006), show that NIE has surpassed the reductionist approach of the beginnings of NIE in the 1980s and 1990s, and it has evolved toward a sharper institutional approach in a way that facilitates the dialogue among different institutional traditions. For example, in its recent evolution, NIE has surpassed the limits of methodological individualism toward institutional individualism⁹ (Toboso 2001), the focus on efficiency toward distributive issues (Toboso 2011), and the approach of free exchange toward the assumption of the relevance of coercion and violence (Nye 1997; North, Wallis and Weingast 2009). Moreover, Greif (2006, 11) recognizes that the original institutionalism "convincingly argued that the prima facie reason for institutions is that individuals are neither fully rational nor in possession of perfect and common knowledge of the situation." North (2005) opens the way to the acknowledgment that individualism itself could be seen as a multi-dimensional concept (Zamagni 2010).

In 1990, William Dugger did not considered new institutional economics to be truly institutionalist and asserted that institutionalists shared some issues in their approaches. He argued that "(1) Institutionalists emphasize the role of power in the economy. (2) Institutionalists approach the study of the institutions of their own economies with the skepticism of reformers. (3) The institutionalist's skepticism is focused through the Veblenian dichotomy of serviceable and predatory activities. (4) Institutionalists take an evolutionary approach to the study of social provisioning. (5) Institutionalists conceive of economies as evolving wholes. (6) Institutionalists, with some significant variations, ... are instrumentalists" (Dugger 1990, 424). However, NIE has evolved and changed in a way that has increasingly incorporated those issues and features proposed by Dugger in the last twenty-five years. Some examples of the recent contributions of new institutionalism can be relevant at this point. In the sections that follow, we discuss the role of power, the predatory activities, the evolutionary approach, and the conception of "economies as evolving wholes" in NIE's contributions, among others.

Commons's Triple and Wiliamson's Transaction Cost Economics

An important link between the original and the new institutionalism can be found in the legacy of John R. Commons in Oliver Williamson's contributions. Williamson (2010) acknowledged that the "Commons triple" of "conflict, mutuality, and order" prefigures the concept of governance. In fact, Commons is considered the founder of transaction cost

economics, and Oliver Williamson is seen as the rediscoverer of this research program (Dugger 1996). Both authors argued that transactions should be made the basic unit of analysis and focused on governance structure, but the transaction-cost-economics approach limits institutional change to the third level of the social analysis of Williamson (2000). But the study of institutional change requires a broader perspective that incorporates the first and second level of social analysis in Williamson's terms (2000).

The Role of Power and Predatory Activities in NIE

The balance of power and the predatory attitude of political elites over time has become a major concern for the agenda of NIE. At the 1990s, North (1990a) thought that institutions could be created to attend the interests of those who have enough bargaining power to elaborate and pass new rules. In 1992, Jack Knight stated that authors must direct their attention to "those factors influencing the capacity of strategic actors to determine the substantive content of institutional rules, and this introduces questions of the asymmetries of power in a community" (Knight 1992, 41). Moreover, John Nye (1997) distinguished between the predatory or parasitic activities and the managerial and positive activities of government for social provisioning. It has been commonly accepted that, usually, "inefficient institutions and policies are chosen because they serve the interests of politicians or social groups that hold political power at the expense of the rest" (Acemoglu 2003, 1). Daron Acemoglu and James Robinson (2013, 190) asserted that "economic policy should not just focus on removing market failures and correcting distortions but, particularly, when it will affect the distribution of income and rents in society in a direction that further strengthens already dominant groups, its implications for future political equilibria should be factored in." For instance, Acemoglu and Robinson (2008) modelled the dynamics of institutional change taking into account the power asymmetries and the distributive consequences of the resulting institutional structure. They posed a scenario of captured democracy where elites have incentives to invest in de facto power in order to prevent or lead institutional reforms in economic matters. The distinction between inclusive and extractive institutions was widely popularized by Acemoglu and Robinson (2011). At microlevel, Ostrom (1995) demonstrated empirically that the balance of power among actors was crucial for institutional design and social enforcement mechanisms. Thus, the balance of power and predatory behavior by elites were also addressed by many authors within new institutionalism, especially in the last two decades. Douglass North, J.J. Wallis, and B.R. Weingast's (2009) work on "violence and social orders" is a representative contribution in this recent tradition of NIE.

Culture in the Research Agenda of New Institutionalism

There is also an increasing account for cultural elements, traditionally holistic concern, like shared beliefs, values, attitudes, and customs. North is a good example of the evolution of NIE in this issue. As Rutherford (1995, 446) posed it, "if one takes North's various statements concerning the importance of mental models, ideologies, and culture seriously, then one must conclude that he is attempting to bridge the gap between the traditional neoclassical view of mankind as a rational chooser and the old institutionalist perspective of mankind as a cultural product." North (2005, 83) considered that "the key to building a foundation to understand the process of economic change is beliefs – both those held by individuals and shared beliefs that form belief systems. ... The whole structure that makes up the foundation of human interaction is a construct of the human mind and has evolved over time in an incremental process; the culture of a society is the cumulative aggregate of the surviving beliefs and institutions." But already at the beginnings of the 1990s, North (1990a, 37) had stated that "[c]ulture provides a

language-based conceptual framework for encoding and interpreting the information that the senses are presenting to the brain," and A.T. Denzau and Douglass North (1994), together, had emphasized share mental models and learning.

Evolution and Institutional Change in North's Work

Scholars of different schools once assumed that institutions would evolve toward optimality (Alchian 1950; Demsetz 1967; Hayek 1973). Other authors, such as Leonid Hurwicz and Roger Myerson, adopted a more normative approach and viewed institutions as rules designed by an ideal and benevolent social planner (Brousseau, Garrouste and Raynaud 2011). Nevertheless, original and new institutionalisms did not assume any of these perspectives. North did not assume an approach based on a benevolent social planner either. Rather, his (pre-NIE) contributions of the 1960s and 1970s assumed the efficiency view of institutions. But North's economic thought gradually changed, and his new institutional approach evolved in different stages. In fact, North (1981) compared different paths of institutional change in economic history and started to develop a theory of institutions in a world with positive transaction costs, rejecting the efficiency view. He (1990a) presented the path-dependence of institutional change and focused on the relevance of informal institutions in institutional change. Our brief reviewing of the arguments and counterarguments about the evolutionary view of Douglass North on institutional change is suitable at this point.

During the last twenty five years, Northian work has deepened in those institutional views that are clearly distant from neoclassical economics, and this has implied a higher connection with evolutionary economics. In fact, it has been defended that North's recent contributions share the evolutionary view of incremental institutional change (Zouboulakis 2005). If North (1990a) developed a theory of institutional change that combined deliberate changes in formal rules with evolutionary change in informal rules (Greif and Kingston 2011), Denzau and North (1994) incorporated the role of shared mental models and the possibility of a "punctuated equilibrium" in the process of institutional change. North (2005) also gave up the emphasis on deliberate changes to understand the role of beliefs.

The evolution of North's approach on institutional change reflects different influences. For example, the Northian case of the "punctuated equilibrium" in institutional change is related to the contributions of Niles Eldredge and Stephen J. Gould (1972) and Gould and Eldredge (1993), who defended an evolutionary perspective in natural sciences. When North incorporated this concept into his theory, it approached the modern Darwinian evolutionary theory (Fiori 2002). Moreover, Michel Zouboulakis (2005) concluded that two remaining Veblenian characteristics of evolutionary economics are present in North's (2005) theory, particularly the open-ended view of social evolution and the cumulative characteristic of the process of institutional change. In any case, North (2005, 3) stated that "the key to understanding the process of change is the intentionality of the players enacting institutional change." In this sense, Darwinian evolutionary theory presented selection mechanisms that are not informed by beliefs about the eventual consequences, while North (2005) indicated that the key to human evolutionary change is the intentionality of the players.

The evolution of North's work has implied a rapprochement to original institutionalism. Therefore, Greif (2006, 11) assumed the relevance of original institutionalism for the study of evolutionary change and pointed out that "incorporating the old institutionalism's assertions about limited rationality and cognition into the study of institutions and institutional dynamics is central to evolutionary institutionalism."

Hayek's Emphasis on Beliefs and New Institutional Economics

North (1990a) viewed institutions as exogenous rules and, therefore, rule-enforcement was treated as a separate issue inside the concept of institutions. But institutional dynamics are mainly about changes in motivation and regularities of behavior, and dynamics was an unsatisfied challenge of the institutions-as-rules approach. Trying to focus on beliefs, motivation, and regularities, the new institutionalism evolved in two ways. In the first way, comparative and historical institutional analysis abandoned the institutions-as-rules approach and proposed an institutions-as-equilibria approach, which focuses on changes in beliefs, norms, and expectations (Aoki 2001; Greif 2006; Greif and Laitin 2011). In the second way, North (2005) explained institutional change, taking contributions about shared mental models, learning, culture, and beliefs from the cognitive science because "the beliefs that humans hold determine the choices they make" (North 2005, 23). North (2005) also viewed institutional change as "a function of changes in the dominant belief system" (Zweynert 2009, 340).

Both ways share Hayek's approach of the spontaneous emergence of institutions. The institutions-as-equilibria approach provided an analytical formulation in the game-theoretic perspective for the view of institutions as "spontaneously and/or endogenously shaped," and North (2005) studied institutional change in a non-ergodic world with uncertainty.

But the connection of Hayek's contributions with NIE is not limited to these two ways because even a more relevant acknowledgement of Hayek is his pioneering view of learning and the formation of beliefs. North (2005, 33) acknowledged the legacy of Hayek (1952), who argued that beliefs were a construction of the mind as interpreted by the senses. North (2005, 33) also pointed out that "Hayek's views have an amazingly modern resonance in recent work in cognitive science."

Conclusion

We presented several institutional approaches to studying institutional change and showed the main arguments on institutional change of a number of outstanding institutional economists. We distinguished between the traditions of original institutionalism and NIE, but we had to point out that nowadays the frontiers of the different institutional approaches are blurred, and thus NIE has evolved toward an intense institutional content since its earliest contributions in the 1970s and 1980s. We also explained some arguments of original and new institutionalism that make evident the interconnection between both approaches in recent times, and we showed that the dialogue between the different institutional approaches may be fruitful.

We demonstrated that original institutionalism and new institutional economics share more points in recent years than in the past. For example, Greif (2006) rejected methodological individualism, just as original institutionalism did a century ago, and many new institutional arguments on institutional complementarities and feedback (Acemoglu and Robinson 2011; Aoki 2007; Greif 2006) are related to Myrdal's theory of circular causation. Moreover, from a different perspective, Aoki (2007) agreed with Hodgson (1998) about the complexity of the problem of infinite regression in institutional change, which reminds us that history matters for understanding the origins, emergence, and sustainability of institutions.

To illustrate that point, we showed several examples of how bridges are being built between NIE and original economic institutionalism in recent years, as pointed out by John Groenewegen, Frans Kerstholt, and Ad Nagelkerke (1995) and Hodgson (1998) some years ago. Particularly, the recent tendencies of NIE, led by North (2005) and Greif (2006), emphasized the dialogue and interconnections between these approaches to institutional change. Hodgson (2007a) concluded that the development of NIE reinforces the emergence of a modern revival in Veblenian institutional economics. Hodgson (2007b, 20) also pointed out that "there is widespread dissatisfaction with neoclassical approaches" nowadays, and "this

shift creates a massive opportunity for institutional and evolutionary economics, which has generally emphasized dynamics, uncertainty and bounded rationality" (2007b, 11).

The role of history, the relevance of distributive issues and coercion, an institutional approach beyond methodological individualism, the relationships between institutions and beliefs, and an interdisciplinary perspective constitute key elements for the dialogue and collaboration between different institutional approaches. Institutional change is a challenge for institutional analysis in the twenty-first century. We emphasized the relevance of institutional change and showed several approaches to institutional change. Our goal was not provide a comprehensive overview of the literature on institutional change, but to furnish a representative survey showing the diversity of theories on institutional change, their contents and connections, and the possibilities of mutual institutional enrichment via inter-institutionalism cooperation. In this sense, we presented a synopsis of several types of economic institutionalisms and updated the existing surveys on institutional change. Understanding the different views of institutional change will help advance new theoretical and applied analyses of institutional change.

Footnotes

- ¹ Ayres (1918, 1944), Commons (1897, 1924, 1934), Mitchell (1910, 1913), or Veblen (1899, 1914, 1919) are representative of the approach of original institutionalism.
- ² For a comprehensive review of the original institutionalists' conception of institutions, see W.C. Neale (1987).
- ³ In this sense, some works have criticized Commons for failing to give sufficient emphasis to extralegal institutions, extralegal self-organization, or spontaneous orders that do not involve legal rules (Hodgson 2003b).
- ⁴ See S.R. Hickerson (1987) for a deeper overview of instrumental valuation in original institutional economics.
- ⁵ RCI assumes the following features (Hall and Taylor 1996; Peters 1999; Shepsle 2006; Weingast 1996): First, it employs a model of rationality to explain human behavior, and rational individuals that maximize personal utility are the central actors in the political process. Second, it has been concerned with the problem of stability of results and of control of public bureaucracy. Third, it provides an explicit and systematic methodology for studying the effects of institutions, which are modelled as constraints on action, and it emphasizes the role of strategic interaction in the determination of political outcomes. Fourth, it is explicitly comparative through models that compare distinct institutional constraints with their corresponding implications in behaviors and outcomes and through the analysis of the way behaviors and outcomes change as the underlying conditions change. Fifth, it explains the existence of institutions via the value provided to actors affected by the institutions, and recently the study of endogenous institutions has yielded a distinctive theory about their stability, form, and survival. Sixth, it provides the micro-foundations for macro-political phenomena, such as revolutions and critical elections.
- ⁶ By studying path-dependence as a social process grounded in a dynamics of increasing returns, Paul Pierson (2000) provides an analytical framework for exploring the causes and consequences of increasing returns processes from the perspective of historical institutionalism.
- ⁷ Institutional change is an incremental process. Nevertheless, there have been some cases where discontinuous institutional change marked a path in history, including some cases of conquest or revolution (North 1990a).

- ⁸ North's (2005) work is an extension of NIE that goes beyond North's (1990) theoretical foundations, which had not recognized the contributions of original institutional literature according to Dugger (1995).
- ⁹ Fernando Toboso (2001) presented institutional individualism as a middle way between methodological holism and methodological institutionalism, and considered that old and new institutionalists may provide institutional individualist analyses of institutional change, while retaining the methodological assumptions of their respective schools.

References

- Acemoglu, Daron. "Why Not a Political Coasean Theorem? Social Conflict, Commitment, and Politics." *Journal of Comparative Economics* 31 (2003): 620-652.
- Acemoglu, Daron and James Robinson. "Persistence of Power, Elites, and Institutions." *American Economic Review* 98, 1 (2008): 267-293.
- —. Why Nations Fail: The Origins of Power, Prosperity and Poverty. London: Profile Books, 2011.
- —. "Economics versus Politics: Pitfalls of Policy Advice." *Journal of Economic Perspective* 27, 2 (2013): 173-192.
- Alchian, Armen "Uncertainty, Evolution and Economic Theory." *Journal of Political Economy* 58 (1950): 211-221.
- Angner, Erik "The History of Hayek's Theory of Cultural Evolution." *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 33, 4 (2002): 695-718.
- Aoki, Masahiko. "Mechanisms of Endogenous Institutional Change." SIEPR Discussion Paper No. 05-13. SIEPR, 2006.
- —. "Endogenizing Institutions and Institutional Change." *Journal of Institutional Economics* 3, 1 (2007): 1-31.
- —. "Historical Sources of Institutional Trajectories in Economic Development: China, Korea and Japan Compared." ADBI Working Paper, No. 397. Tokyo, Japan: ADBI, 2012.
- Aoki, Masahiko. Toward a *Comparative Institutional Analysis*. Cambridge, MA: MIT Press, 2001.
- Ayres, Clarence E. "The Epistemological Significance of Social Psychology." *Journal of Philosophy, Psychology and Scientific Method* 15, 2 (1918): 35-44.
- —. The Theory of Economic Progress. New York, NY: Schocken, 1944.
- —. "The Role of Technology in Economic Theory." *American Economic Review* 42, 2 (1953): 279-287.
- —. Toward a Reasonable Society. Austin, TX: University of Texas Press, 1961.
- Brousseau, Eric and Emmanuel Raynaud (2011), "Climbing the Hierarchical Ladders of Rules: A Life-Cycle Theory of Institutional Evolution." *Journal of Economic Behavior & Organization* 79 (2011): 65-79.
- Brousseau, Eric, Pierre Garrouste and Emmanuel Raynaud. "Institutional Changes: Alternative Theories and Consequences for Institutional Design." *Journal of Economic Behavior & Organization* 79 (2011): 3-19.
- Brown, Christopher. "Transmutability, Generalized Darwinism and the Limits to Conceptual Integration." *Cambridge Journal of Economics* 37, 1 (2013): 209-225.
- Burlamaqui, Leonardo, Ana C. Castro and Ha-Joon Chang, ed. *Institutions and the Role of the State*. Cheltenham, UK: Edward Elgar, 2000.
- Bush, Paul D. (1987), "The Theory of Institutional Change." *Journal of Economic Issues* 21, 3 (1987): 1075-1116.

- Bush, Paul D. and Mark R. Tool. *Institutional Analysis and Economic Policy*. Dordrecht, Netherlands: Kluwer Academic Publishers, 2003.
- Caldwell, Bruce. "Hodgson on Hayek's: A Critique." *Cambridge Journal of Economics* 25 (2001): 541-555.
- —. "Hayekian Evolution Reconsidered: A Reply to Hodgson." *Cambridge Journal of Economics* 28 (2004): 301-305.
- Coase, Ronald. "The Nature of the Firm" Economica 4, 16 (1937): 386-405.
- —. "The Problem of Social Cost." Journal of Law and Economics 3, 1 (1960): 1-44.
- —. "The New Institutional Economics." *Journal of Theoretical and Institutional Economics* 140, 1 (1984): 229-231.
- —. "An Interview with Ronald Coase." ISNIE Newsletter 2, 1 (1999a): 3-10.
- —. "The Task of the Society." ISNIE Newsletter 2, 2 (1999b): 1-6.
- Commons, John R. "Natural Selection, Social selection and Heredity." *The Arena* 18 (1987): 90-97.
- —. Legal Foundations of Capitalism. New York, NY: Macmillan, 1924.
- —. *Institutional Economics-Its place in Political Economy*. New York, NY: Macmillan, 1934.
- Deeg, Richard and Gregory Jackson. "Towards a More Dynamic Theory of Capitalist Variety." *Socio-Economic Review* 5, 1 (2007): 149-179.
- Demsetz, Harold. "Toward a Theory of Property Rights." *American Economic Review* 56, 2 (1967): 347-359.
- Denzau, A.T. and Douglass North. "Shared Mental Models: Ideologies and Institutions." Kyklos 47, 1 (1994): 3-31.
- Dequech, David. "The Demarcation Between the 'Old' and the 'New' Institutional Economics: Recent Complications." *Journal of Economic Issues* 36, 2 (2002): 565-571.
- Desierto, Desiree and John Nye. "When Do Formal Rules and Informal Norms Converge?" *Journal of Institutional and Theoretical Economics* 167, 4 (2011): 613-629.
- Dewey, John. Logic: The Theory of Inquiry. New York, NY: Henry Holt, 1938.
- Dolfsma, Wilfred and Rudi Verburg. "Structure, Agency and the Role of Values in Processes of Institutional Change." *Journal of Economic Issues* 42, 4 (2008): 1031-1055.
- Dugger, William. "The New Institutionalism: New But Not Institutionalist." *Journal of Economic Issues* 24, 2 (1990): 423-431.
- —. "Douglass C. North's New Institutionalism." *Journal of Economic Issues* 29, 2 (1995): 453-458.
- —. "Sovereignty in Transaction Cost Economics: John R. Commons and Oliver Williamson." *Journal of Economic Issues* 30, 2 (1996): 427- 435.
- Durkheim, Émile. *The Rules of Sociological Method*. New York, NY: The Free Press. [1895] (1982).
- Eggertsson, Thráinn. *Economic Behaviour and Institutions*. Cambridge, UK: Cambridge University Press, 1990.
- —. *Imperfect Institutions: Possibilities and Limits of Reform.* Ann Arbor, MI: University of Michigan Press, 2005.
- Eldredge, Niles and Stephen J. Gould. "Punctuated Equilibria: An Alternative to Phyletic Gradualism." In *Models in Paleobiology*, edited by T.J.M. Schopf, pp. 82-115. San Francisco, CA: Freeman Cooper, 1972.
- Elsner, Wolfram. "The Theory of Institutional Change Revisited: The Institutional Dichotomy, Its Dynamic, and Its Policy Implications in a More Formal Analysis." *Journal of Economic Issues* 46, 1 (2012): 1-44.

- Fiori, Stefano. "Alternative Visions of Change in Douglass North's New Institutionalism." *Journal of Economic Issues* 36, 4 (2002): 1025-1043.
- —. "The Emergence of Institutions in Hayek's Theory: Two Views or One?" *Constitutional Political Economy* 17, 1 (2006): 49-61.
- Foster, J. Fagg. "The Effect of Technology on Institutions." *Journal of Economic Issues* 15, 4 (1981): 907-913.
- Gislain, Jean-Jacques and Philippe Steiner. "American Institutionalism and Durkheimian Positive Economics: Some Connections." *History of Political Economy* 31, 2 (1999): 273-296.
- Gould, Stephan J. and Niles Eldredge. "Punctuated Equilibrium Comes of Age." *Nature* 366 (1993): 223-227.
- Greif, Avner. "Historical and Comparative Institutional Analysis." *American Economic Review* 88, 2 (1998): 80-84.
- —. *Institutions and the Path to the Modern Economy*. Cambridge, UK: Cambridge University Press, 2006.
- Greif, Avner and Christopher Kingston. "Institutions: Rules or Equilibria." In *Political Economy of Institutions, Democracy and Voting*, edited by Norman Schofield and Gonzalo Caballero, pp. 13-43. Berlin, Germany: Springer, 2011.
- Greif, Avner and David Laitin. "A Theory of Endogenous Institutional Change." *American Political Science Review* 98, 4 (2004): 633-652.
- Groenewegen, John, Frans Kerstholt and Ad Nagelkerke. "On Integrating New and Old Institutionalism: Douglass C. North Building Bridges." *Journal of Economic Issues* 29, 2 (1995): 467-476.
- Hall, P.A. and Rosemary Taylor. "Political Science and the Three New Institutionalisms." *Political Studies* 44, 4 (1996): 936-957.
- Hall, Peter and David Soskice. *Varieties of Capitalism: The Institutional Foundation of Comparative Advantages*. Oxford, UK: Oxford University Press, 2001.
- Hamilton, W.H. "The Institutional Approach to Economic Theory." *American Economic Review*, Supplement No. 1, 9 (1919): 309-318.
- —. "Institution." In *Encyclopaedia of the Social Sciences*, vol. 8, edited by Edwin Seligman and Alvin Johnson, pp. 84-89. New York, NY: Macmillan, 1932.
- Hamilton, David. "Ayres' Theory of Economic Progress: An Evaluation of Its Place in Economic Literature." *American Journal of Economics and Sociology* 40, 4 (1981): 427-438.
- Hayden, F. Gregory. "Social Fabric Matrix: From Perspective to Analytical Tool." *Journal of Economic Issues* 16, 3 (1982): 637-662.
- —. Policymaking for a Good Society: The Social Fabric Matrix Approach to Policy Analysis and Program Evaluation. New York, NY: Springer, 2006.
- Hayek, Friedrich A. *The Sensory Order An Inquiry into the Foundations of Theoretical Psychology*. Chicago, IL: University of Chicago Press, 1952.
- —. Studies in Philosophy, Politics and Economics. Chicago, IL: University of Chicago Press, 1967.
- —. Law, Legislation and Liberty. Volume one. Chicago, IL: University of Chicago Press, 1973.
- —. New Studies in Philosophy, Politics, Economics and the History of Ideas. Chicago, IL: University of Chicago Press, 1978.
- —. *Law, Legislation and Liberty*. Volume three. Chicago, IL: University of Chicago Press, 1979.

- —. "The Origin and Effect of Our Morals: A Problem for Science." In *The Essence of Hayek*, edited by Chiaki Nishiyama and Kurt. R. Leube, pp. 318-330. Stanford, CA: Hoover Institution Press, 1984.
- —. The Road to Serfdom. Chicago, IL: University of Chicago Press, 1994.
- Hickerson, S.R. "Instrumental Valuation: The Normative Compass of Institutional Economics." *Journal of Economic Issues* 21, 3 (1987): 1117-1143.
- Hodgson, Geoffrey M. "Thorstein Veblen and Post-Darwinian Economics." *Cambridge Journal of Economics* 5, 16 (1992): 285-301.
- —. Economics and Evolution. Cambridge, UK: Polity Press, 1993.
- —. Economics and Biology. Aldershot, UK: Edward Elgar, 1995.
- —. "The Approach of Institutional Economics." *Journal of Economic Literature* 36, 1 (1998): 166-192.
- —. Evolution and Institutions: On Evolutionary Economics and the Evolution of Economics. Cheltenham, UK: Edward Elgar, 1999.
- —. "The Evolution of Institutions: An Agenda for Future Theoretical Research." Constitutional Political Economy 13, 3 (2002a): 111-127.
- —. "Darwinism in Economics: From Analogy to Ontology." *Journal of Evolutionary Economics* 12, 2 (2002b): 259-281.
- —. "Darwinism and Institutional Economics." *Journal of Economic Issues* 37, 1 (2003a): 85-97.
- —. "John R. Commons and the Foundations of Institutional Economics." *Journal of Economic Issues* 37, 3 (2003b): 547-576.
- —. "Hayekian Evolution Reconsidered: A Response to Caldwell." *Cambridge Journal of Economics* 28, 2 (2004a): 291-300.
- —. The Evolution of Institutional Economics: Agency, Structure and Darwinism in American Institutionalism. London: Routledge, 2004b.
- —. "Veblen and Darwinism." International Review of Sociology 14, 3 (2004c): 343-361.
- —. "What Are Institutions?" *Journal of Economic Issues* 40, 1 (2006): 1-25.
- —. "The Revival of Veblenian Institutional Economics." *Journal of Economic Issues* 41, 2 (2007a): 325-340.
- —. "Evolutionary and Institutional Economics as the New Mainstream." *Evolutionary and Institutionalist Economic Review* 4, 1 (2007b): 7-25.
- —. "How Veblen Generalized Darwinism." *Journal of Economic Issues* 42, 2 (2008): 399-405.
- Hollingsworth J. Rogers and Robert Boyer, eds. *Contemporary Capitalism: The Embeddedness of Institutions*. Cambridge, UK: Cambridge University Press, 1997.
- Kingston, Christopher and Gonzalo Caballero. "Comparing Theories of Institutional Change." *Journal of Institutional Economics* 5, 2 (2009): 151-180.
- Khalil, Elias "Friedrich Hayek's Theory of Spontaneous Order: Two Problems." *Constitutional Political Economy* 8 (1997): 301-317.
- Kiser, Larry and Elinor Ostrom. "The Three Worlds of Action: A Metatheoretical Synthesis of Institutional Approaches." In *Strategies of Political Inquiry*, edited by Elinor Ostrom, pp. 179-222. Thousand Oaks, CA: Sage, 1982.
- Knight, Jack. *Institutions and Social Conflict*. Cambridge, UK: Cambridge University Press, 1992
- Lawson, Tony. Reorienting Economics. London: Routledge, 2003.
- Lewis, Orion A. and Sven Steinmo. "How Institutions Evolve: Evolutionary Theory and Institutional Change." *Polity* 44, 3 (2012): 315-339.
- Libecap, Gary D. *Contracting for Property Rights*. Cambridge, UK: Cambridge University Press, 1989.

- Mantzavinos, Chris, Douglass North and Syed Shariq. "Learning, Change and Economic Performance." Paper presented at the Annual Conference of the International Society for New Institutional Economics, Berkeley, California, 2001.
- Mayhew, Anne. "Contrasting Origins of the Two Institutionalisms: The Social Science Context." *Review of Political Economy* 1, 3 (1989): 319-333.
- Menard, Claud and Mary M. Shirley, eds. *Handbook of New Institutional Economics*. Dordrecht, Netherlands: Springer, 2005.
- Mitchell, Wesley C. "The Rationality of Economic Activity: I and II." *Journal of Political Economy* 18 (February/March 1910): 97-113 and 197-216.
- —. Business Cycles. Berkeley, CA: University of California Press, 1913.
- —. "The Prospects of Economics." In *The Backward Art of Spending Money and Other Essays*, pp.342-385. New York, NY: Augustus M. Keley, Inc., 1950.
- Moe, T.M. "Power and Political Institutions." *Perspectives on Politics* 3, 2 (2005): 215-233.
- Musole, Maliti. "Property Rights, Transaction Costs and Institutional Change: Conceptual Framework and Literature Review." *Progress in Planning* 71, 2 (2009): 43-85.
- Neale, W.C. "Institutions." Journal of Economic Issues 21, 3 (1987): 1177-1206.
- North, Douglass. Structure and Change in Economic History. New York, NY: WW Norton, 1981.
- —. *Institutions, Institutional Change and Economic Performance.* Cambridge, UK: Cambridge University Press, 1990a.
- —. "A Transaction Cost Theory of Politics." *Journal of Theoretical Politics* 2, 4 (1990b): 355-367.
- —. "Economic Performance Through Time." *American Economic Review* 84, 3 (1994): 359-368.
- —. "Five Propositions About Institutional Change." In *Explaining Social Institutions*, edited by Jack Knight and Itai Sened, pp. 15-26. Ann Arbor, MI: University of Michigan Press, 1995.
- —. "La evolución histórica de las formas de gobierno." *Revista de Economía Institucional* 2 (2000a): 133-148.
- —. "Understanding Institutions." In *Institutions, Contracts and Organizations*, edited by Claude Menard, pp. 7-10. Cheltenham, UK: Edward Elgar, 2000b.
- —. *Understanding the Process of Economic Change*. Princeton, NJ: Princeton University Press, 2005.
- North, Douglass, J.J. Wallis and B.R. Weingast. *Violence and Social Orders*. New York, NY: Cambride University Press, 2009.
- Nye, John. "Thinking About the State: Property Rights, Trade and Changing Contractual Arrangements in a World with Coercion." In *The Frontiers of the New Institutional Economics*, edited by J.N. Drobak and John Nye, pp. 121-142. San Diego, CA: Academic Press, 1997.
- O'Driscoll, Gerald P. and Mario J. Rizzo. *The Economics of Time and Ignorance*. London: Routledge, 1985.
- Ostrom, Elinor. "Self-Organization and Social Capital." *Industrial and Corporate Change* 4, 1 (1995): 131-159.
- —. *Understanding Institutional Diversity*. Princeton, NJ: Princeton University Press, 2005. Ostrom, Elinor and Xavier Basurto. "Crafting analytical tools to study institutional change," *Journal of Institutional Economics* 7, 3 (2011): 317-343.
- Peters, Guy. *Institutional Theory in Political Science: The "New Institutionalism."* London: Routledge, 1999.
- Pierson, Paul "Increasing Returns, Path Dependence and the Study of Politics." *American Political Science Review* 94, 2 (2000): 251-267.

- Polanyi, Karl. The Great Transformation. New York, NY: Rinehart, 1980.
- Radzicki, M.J. "Institutional Dynamics: An Extension of the Institutionalist Approach to Socioeconomic Analysis." *Journal Economic Issues* 22, 3 (1988): 633-666.
- Roland, Gérard. "Understanding Institutional Change: Fast-Moving and Slow-Moving Institutions." *Studies in Comparative International Development* 38, 4 (2004): 109-131.
- Rutherford, Malcolm. "Clarence Ayres and the Instrumental Theory of Value." *Journal of Economic Issues* 15, 3 (1981): 657-673.
- —. *Institutions in Economics*. Cambridge, UK: Cambridge University Press, 1994. Cambridge.
- —. "The Old and New Institutionalism: Can Bridges Be Built?" *Journal of Economic Issues* 29, 2 (1995): 443-449.
- —. "Institutional Economics: Then and Now." *Journal of Economic Perspectives* 15, 3 (2001): 173-194.
- Ruttan, Vernon W. "Induced Innovation Evolutionary Theory and Path Dependence: Sources of Technical Change." *Economic Journal* 107, 144 (1997): 1520-1529.
- —. Social Science Knowledge and Economic Development. Ann Arbor, MI: University of Michigan Press, 2003.
- —. "Social Science Knowledge and Induced Institutional Innovation: An Institutional Design Perspective." *Journal of Institutional Economics* 2, 3 (2006): 249-272.
- Shepsle, K.A. "Institutional equilibrium and equilibrium institutions." In *Political Science: The Science of Politics*, edited by H.F. Weisberg, pp. 51-81. New York, NY: Agathon, 1986.
- —. "A Comment on Institutional Change." *Journal of Theoretical Politics* 13, 3 (2001):321-325.
- —. "Rational Choice Institutionalism." In *Oxford Handbook of Political Institutions*, edited by Sarah A. Binder, R.A. Rhodes and Bert A. Rockman, pp. 23-38. New York, NY: Oxford University Press, 2006.
- Smelster, Neil and Richard Swedberg, eds. *The Handbook of Economic Sociology*. Princeton, NJ: Princeton University Press, 1994.
- Streeck, Wolfgang and Kathleen Thelen, eds. *Beyond Continuity: Explorations in the Dynamics of Advanced Political Economies*. Oxford, UK: Oxford University Press, 2005.
- Thelen, Kathleen. "Institutional Change in Advanced Political Economies." *British Journal of Industrial Relations* 47, 3 (2009): 471-498.
- Tilman, Rick. "Emile Durkheim and Thorstein Veblen on Epistemology, Cultural Lag and Social Order." *History of the Human Sciences* 15, 4 (2002a): 51-70.
- —. "Durkheim and Veblen on the Social Nature of Individualism." *Journal of Economic Issues* 36, 4 (2002b): 1104-1111.
- —. Thorstein Veblen and the Enrichment of Evolutionary Naturalism. Columbia, MO: University of Missouri Press, 2007.
- Toboso, Fernando. "En qué se diferencian los Enfoques de Análisis de la Vieja y la Nueva Economía Institucional?" *Hacienda Pública Española* 143 (1997): 175-192.
- —. "Institutional Individualism and Institutional Change: The Search for a Middle Way Mode Explanation." *Cambridge Journal of Economics* 25, 6 (2001): 765-783.
- —. "Institutional Arrangements Matter for Both Efficiency and Distribution: Contributions and Challenges of the New Institutional Economics." In *Political Economy of Institutions, Democracy and Voting*, edited by Norman Schofield and Gonzalo Caballero, pp. 137-156. New York, NY: Springer, 2011.
- Tool, Marc R. "A Social Value Theory in Neoinstitutional Economics." *Journal of Economic Issues* 11, 4 (1977): 823-845.

- —. The Discretionary Economy: A Normative Theory of Political Economy. Santa Monica, CA: Goodyear Company, 1979.
- Tool, Marc R. Essays in Social Value Theory. Armonk, NY: M.E. Sharpe, 1986.
- Veblen, Thorstein. "Why Is Economics Not an Evolutionary Science?" *Quarterly Journal of Economics* 12, 4 (1898): 373-397.
- —. The Theory of the Leisure Class: An Economic Study in the Evolution of Institutions. New York, NY: Macmillan, 1899.
- —. The Instinct of Workmanship, and the State of the Industrial Arts. New York, NY: Augustus Kelley, 1914.
- —. The Place of Science in Modern Civilization and Other Essays. New York, NY: Huebsch, 1919.
- Weingast, B.R. "Political Institutions: Rational Choice Perspectives." In *A New Handbook of Political Science*, edited by R.E. Goodin and H.D. Klingemann, pp. 167-190. New York, NY: Oxford University Press, 1996.
- —. "Rational Choice Institutionalism." In *Political Science: The State of the Discipline*, edited by Ira Katznelson and Hellen V. Milner, pp. 660-692. New York, NY: W.W. Norton, 2002.
- Williamson, Oliver. Markets and Hierarchies. New York, NY: Free Press, 1974.
- —. The Economics Institutions of Capitalism: Firms, Markets, Relational Contracting. New York, NY: Free Press, 1985.
- —. "The New Institutional Economics: Taking Stock, Looking Ahead." *Journal of Economic Literature* 38, 3 (2000):595-613.
- —. "Transaction Cost Economics: The Natural Progression." *American Economic Review* 100, 3 (2010): 673-690.
- Zamagni, Vera. "What Is the Message of 'Understanding the Process of Economic Change' for Economic Historians?" *Structural Change and Economic Dynamics* 21, 2 (2010): 157-163.
- Zouboulakis, Michel. "On the Evolutionary Character of North's Idea of Institutional Change." *Journal of Institutional Economics* 1, 2 (2005):139-153.
- Zweynert, Joachim. "Interests Versus Culture in the Theory of Institutional Change." *Journal of Institutional Economics* 5, 3 (2009): 339-360.