Institutional Economics and the Relation between Institutions and Development

Basilia Aguirre [1]

1 Introduction

Institutional economics is gaining attention since the 80's due especially to New Institutional Economics – NIE. In the 90's focuses on institutions shifted mainly to the relationship between institutions and development. Many articles exploring the relations between institutions and development[2] were published and organizations such as IMF and World Bank were among those that have been exploring new empirical evidence on the topic. Although much evidence has been provided there are some authors that considered that the relationship between institutions and development should be better addressed.

While recognizing the importance of the empirical literature on economic development and institutions[3], Pande and Udry (2005) consider that *"However, the economic interpretation and policy implications of these findings depends on understanding the specific channels through which institutions affect growth, and the reasons for institutional change or the lack thereof."* (pp. 4) Actually what those findings point is the existence of the relationship but they do not say much about how the relation is established. Also Chang (2011) asserts that it is necessarily to *"critically evaluate the currently dominant discourse on the relationship between institutions and economic development, .."* (pp.3) Arguing that there is *"a rather deficient theory of how institutions themselves change."* (pp. 3)

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[1] FEA/USP, e-mail: basil@usp.br

[2] Acemolgu et ali (2004); Djankov (2002); Kaufmann (2004); Knack (1997); La Porta (1999); Rodrik (2003).

[3] *"These findings are of fundamental importance for development economists and policy practitioners in that they suggest that institutional quality may cause poor countries and people to stay poor."(pp.4)*

On his turn Voigt (2013) thinks it is necessary to precisely define institutions in order to measure then properly. He is uncomfortable with the current state of the empirical literature on institutions and development apparently because for him *"the subjectivity of these measures makes it very likely that improved scores are not due to the institution being improved, but simply based on an increase in income"* (pp. 5)

It is important to understand that these authors, as many others, do not refuse the idea that institutions may be considered the main cause of economic development they just claim for a better theory explaining the complex interaction between these concepts. Many attempts are being done to close the theoretical and empirical gaps which were pointed. Some like Voit (2013) and Easterly (2006) argue that there is a problem with the way the relation has been empirically explored. Others like Pande and Udry (2005) state that the problem is with the methodology that is being used by the majority of works. While Ostrom (2000, 2007), North (2005) and Hodgson (2006) argue that the theory we have for the moment is not sufficient to explain cooperative behavior and collective action. So they indicate some trails that could be followed to achieve this goal. All these three authors agree with Ostrom (2000) that says *"While no full-blown theory of collective action exists, evolutionary theories appear most able to explain the diverse findings from lab and field and carry the nucleus of an overarching theory."(*pp. 138)

As is possible to realize there are still a lot of work to do concerning the extension of the theory we have today. In this article we intend to contribute to this discussion exploring the theoretical findings we have so far. To do that we will first point the main critics that Institutional Economics is receiving and we will argue that the problems are mainly with theory than with measures and methodology. After we will discuss alternative views on institutional economics, highlighting what do they have in common. Then we will present some basic features of modeling Institutional Economics. Finally, we will explore the potential of such theory to deal with problems of development.

2 Institutional Economics and its critics

Most of the critics to Institutional Economics came from authors that believe that Institutional Economics is a promising framework and that claim for an improvement in the approach. While pointing the flaws observed in literature these authors suggest ways to cope with them. It is possible to identify three main deficiencies pointed in literature. Those associate to empirical questions, the one that points that definitions lack accuracy and finally those that argue that the problem is with the theoretical perspective. Each one of these problems refers to a different question so we will dress then separately.

Empirical work on New Institutional Economics began shortly after it was patent the problems faced by Convergence Theory to explain what was going on in East Europe and Latin America as well as in Asia and especially in Africa in the late 80's. Actually only a few Asian countries fit the theory. These results called the attention of many scholars to the potential of New Institutional Economics. Among the first works to apply empirically the concepts of New Institutional Economics is possible to quote Mauro (1995), Hall&Jones (1999), Knack&Keefer (1997), Rodrik (1999) and Clague, Keefer, Knack&Olson (1999). The main dependent variables that were to be measured were: output per work, annual GDP per capita and private investment/GDP. These works used a wide array of independent variables such as: % law students 1963, colonial origin, ethno-linguistic homogeneity, ethno-linguistic homogeneity, distance from equator, English speakers, European language speakers, predicted trade share, ICRG index[4], BERI index[5], ethno-linguistic fractionalization, legal origin and religion. More recently other works[6] continue that tradition adding variables as: settler mortality, log of indigenous population density in 1500, adverseness of policy environment, indices of democracy and centralization, indices of contract repudiation and

[4] International Country Risk Guide index: (i) protection against expropriation risk, (ii) rule of law, (iii) repudiation of contracts by government, (iv) corruption in gov't, and (v) quality of bureaucracy.
[5] Business Environmental Risk Intelligence index: (i) contract enforceability, (ii) infrastructure quality, (iii) nationalization potential, (iv) bureaucratic delays.
[6] Esfahani &Ramirez (2003); Acemoglu &Johnson (2005); Acemoglu, Johnson &Robinson (2002)

bureaucratic quality and corruption. All those works intended to ascertain the importance of institutions to economic development. As Pande and Udry (2005) state: *"These findings are of fundamental importance for development economists and policy practitioners in that they suggest that institutional quality may cause poor countries and people to stay poor."*(pp. 2) However the same authors pointed at least four questions that in their opinion prevent this kind of studies to go further. These are: institutions measures are coarse and urban based, instruments are rare, there are omitted variables and heterogeneous treatment effects. Based on these arguments the authors suggested a micro within-country analysis that takes into consideration the local particularities while maintaining the national governance structure the same to all situations. This will provide a treatment effect base for comparisons. However, the question with variables and instruments can also be solved with better constructed variables. Concepts like income and saving were not measured until Keynes proposed then. So we can think that it is possible to invest in accuracy concerning institutional variables. We agree with Pande and Udry (2005) that micro level analysis is need but they are not the only kind of research that institutionalists should do from now on.

Voigt (2013) criticize studies that tries to ascertain the effects of political institutions on development arguing that measures are flawed and suggests that measures should follow theory. According to this author to better measure institutions it will be necessary to have a more accurate definition of institutions. This more accurate definition should take into consideration the enforcement and pay more attention to the informal rules. Voigt then makes a series of recommendation to cope with the problem. Nevertheless he did not come up with a definition that could be considered useful.

A third line of criticism is the one provided by Chang (2010). This author besides criticizing the measures and the policies recommendation also sees problems with what he called theory. However the problem with theory pointed by Chang (2010) actually has to do with theoretical attitudes and not theory. He complains about either the voluntarism or the fatalism of some New Institutional Economics approaches. On the one hand he says that authors like Acemoglu at alli (2001) suggested that countries will remain the same for the rest of their lives. On the other he affirms that the Good Standard Institutions – GSI school is too optimistic about the easiness of going to change institutions. None of the questions pointed by Chang (2010) are truly theoretical ones.

In our opinion the problems concerning measures are worth taken into consideration and a lot of work on improving measures is badly needed. However we believe that the main problem with Institutional Economics lies on the theoretical ground. But we are not thinking about Chang's theoretical problems. The problem we want to discuss has to do with the fact that we still do not have a unified Institutional Economics.

3 Alternative views on Institutional Economics

As we just have said this article argues that the problem with Institutional Economics is that there is no common understanding about what Institutional Economics is. This does not mean that we are in favor of a new theory as general as New Classical Economics but it also does not mean that we should be happy with an array of theories which may be even conflicting.

The first question we should try to answer is: What is Institutional Economics? Or saying in other words: What do the various institutional approaches have in common? Some authors like DiMaggio and Powel (1997) argue that there are a great number of institutionalisms in Economics, Sociology, Organizational Theory, Public Choice, Political Science and History that are united only by a common skepticism on the atomistic conception's place of social processes and by the shared conviction that institutional mechanisms and social processes are important.

In fact, at a first sight many theoretical approaches seem to have in common only two aspects: that institutions matter and that it is necessary explain institutional change. However as Theret (2000) state the institutionalisms have common characteristics that place then in a convergent rather than a divergent route. Theret (2000) also quote

Defalvart (1992) saying that that convergence goes in direction to what begins to be called a "holindividualism". In fact it is possible to find many examples of common features among the so called various "institutionalisms". Following North (2005) the "*Human environment is a human construct of rules, norms, conventions, and ways of doing things that define the framework of human interaction."* (pp. 11) According to him it was the scientists that divided the environment in many disciplines. So *"Our analytical frameworks must integrate insights derived from these artificially separated disciplines if we are to understand the process of change."* (pp.11) This is the task that lays ahead of social scientists.

We can find many authors with the same view as Theret. Williamson (2000) believes that the differences observable between institutional approaches are mainly due to purposes than to divergences. He develops a framework that identifies the levels and purposes of institutional analysis. As is possible to perceive in Figure 1 he proposes four levels associated to four purposes. Each level/purpose is related to a kind of analyses. The first level is according to Williamson the arena of Social Sciences where the elements are: informal rules, norms, conventions, tradition, and embeddedness. Its characteristics are: non calculative and spontaneous. It is a level that could be associated to Evolutionary Economics. Williamson believes that institutions at this level change very slowly, in centuries or millennia. The second level is the scene of Economics of Property Rights/Positive Political Theory where we find formal rules of the game, especially concerning property rights, bureaucracy, and judiciary. In other words this is the institutional environment. The third level is the one of Transaction Costs Economics that concerns the governance structures, where are discussed the alignment between incentives and organizational structures. Finally, the forth level is the stage of New Classical Economics/Agency Theory when resource allocation and employment are discussed. As is easy to realize in Figure 1, Williamson sees no conflict between the various approaches in Institutional Analysis. He suggested that there is a hierarchy from level 1 to level 4 but he also recognizes influences in the other direction. Or in other words he points the existence the interconnections between the various levels indicating that the higher levels impose constraints over the lower ones but that in the long-run also the lower ones influence the higher.

Williamson framework is very persuasive considering that it proposes a structure that joints all the institutional approaches. However, first it is not so convincing the fact that these different aspects of institutions change in such unlike amount of time. Moreover it is not the pace of change that differs among institutions but probably its frequency. Taking into consideration especially the relationship between levels 1 and 2 it is easy to indicate historical circumstances where formal and informal institutions change at the same time. For instances American Civil War was the product of change in beliefs about slavery and at the same time it brought up new regulation concerning labour. Secondly in Williamson scheme it looks like only level 2 can influence level 1. Or that level 1 affects levels 3 and 4 only through level 2. Again it is possible to thing about circumstances that rejects this view. Many transactions mechanism like loans, mortgages and others appeared in day to day transaction people engaged. So these uses or costumes came up in the continuous situation of market activity. Social networks are another example. In question of a few years they became one of the preferred forms of human communication. Again it was a costume that came up without any formal institution change.

Another example of convergence view came from Hodgson (1998). In this article Hodgson aims to outline the institutionalist approach in broad terms. In his conception the institutional approach goes from general ideas of human behavior to specific economic institutions or types of economies. He also recognizes the existence of many levels or type of analysis. However he criticizes the attitude of some New Institutional economists that build their theories based on the idea of a given utility maximizing agent. For Hodgson individuals are constituted by institutions. It means that agents' behavior is not only constrained by institutions but institutions made agents. So there is a two way relation between agents and institutions. So Hodgson acknowledges that at the same time that agents are constituted by institutions he accepts "*that institutions,* *knowingly or unknowingly, are formed and changed by individuals*." (p. 189) This idea of institutional approach leaves room to convergence between formal institutional explanations like North's (1990) and Nelson and Winter's (1982) Evolutionary Economics. Hodgson criticized what he calls two common types of errors: the "cultural determinism" and the excessive importance of the individual. The "cultural determinism" suggested that the structure determines the individual while according to the New Institutional Economics the individual determines the structure. This view about New Institutional Economics may be consistent with early works by Williamson (1975) but as it will be discussed in the next section new institutionalists like North, especially in his 2006 book, really could not be blamed of that error.

Hodgson (1998) also sees other characteristics that united institutional analysts. First he points that they usually emphasize institutional and cultural factors. Their analysis is openly interdisciplinary. There is little recourse to the model of the rational utility-maximizing agent in their work. Mathematical and statistical techniques are recognized as servants of economic theory. Frequently the analysis starts from stylized facts and theoretical conjectures concerning causal mechanisms. Finally, it is made extensive use of historical and comparative empirical material.

Another author that believes in a convergent trend among institutionalisms is Richter (2001). Comparing New Institutional Economics – NIE and New Economic Sociology – NES Richter concludes that both disciplines have a common objective. This is to understand social action. Richter also points that NIE and NES both are concerned with structures and organizations (institutions). In this article he demonstrates how it is possible to find many similarities between the concepts of the two disciplines like the one he establishes between "transactions" in Williamson's sense and "social networks". For Richter transactions can be perfectly fit into social networks as long as we consider its wider sense that includes *"such "non-economic" relations as associations or affiliations between actors; movements between places; physical connections (a road, a telephone line); legal relationships (the formal debtor/creditor relation); biological relationships (kinship, descent); mental relationships (common* *views, beliefs, convictions, "culture"), and so on"*. (p.26) What Richter acknowledges they disagree is in their "*models of man: various motives of human actions (including rational choice) on the one side, individual rationality (pure or bounded) on the other"* (p.31). To the list Richter and Hodgson provide we may add the dichotomy between perfect information and uncertainty the presence of conflict and the use of methodological individualism. This is exactly the point we want to explore in the next section.

4 Modeling Individuals

A good departure point to discuss individual model is the work of Elinor Ostron. In a 2007 article Ostrom presents the alternatives that theorists have to model human interaction. She develops the concept of action arena that is composed by seven working parts of an interaction and one individual model. Each theorist will choose the individual model that he or she thinks that will give him or her the best explanation of the phenomenon he or she is interested in studying. Figure 2 presents Ostrom's suggestion. First of all the author recognizes the influence of some exogenous variables that she will discuss later. Action arena is composed of forms of interaction and agents that have: preferences, information and some choice mechanism. Action itself occurs in the interaction between actors and this produces outcomes that will be evaluated and that will became feedbacks to further actions. In this scheme the most important feature is the fact that by choice mechanism she means any possible method an actor uses to decide what to do. It means that Ostrom's agents are not only self-interested utility maximizing individuals but that they can use, as Sen (1982) would say, other informational source to decide. In uncertain circumstances it will be most probable that the actor will choose based on some rule other than self-interest as Ostrom (2000), Sen (1982) and North (1990) suggested. Rational choice model supposes that individuals are self-interested, have perfect information, act intentionally, have unbounded rationality and are always coordinated. All these assumptions may be questioned on the basis that their utilization prevents Economics to explain collective action and the production of public goods. And so it is possible to change one or more of the assumptions in the attempt to get an acceptable explanation of the phenomenons cited above.

There are basically three ways of changing economic models assumptions. It is possible to adopt different presupposition about agent's motivation. Models may also modify the perfect information supposition. Finally bounded rationality may replace unbounded rationality. Each one of the authors we are going to discuss in the sequence make one kind of changing in the assumptions. Also the emphasis on the changes vary significantly between authors

Beginning with the authors that adopted different agents' motivation it is possible to point Sen (1982) that proposes the idea of commitment that is the circumstance of "*a person choosing an act that he believes will yield a lower level of personal welfare to him than an alternative that is also available to him*." (p.327) Or as the author says when action is determined by commitment occurs the separation between the decision and the calculus. Ostrom (2000) also proposes a model that takes into consideration three kinds of individuals: the egoist, the potential cooperator and the willingly punisher. The two last agents are as she says norms users. They behave according to norms of cooperation or enforcement.

In another way Nelson and Winter (1982) build its evolutionary theory on the assumptions that people act through skills and routines. According to the authors skill is a sequence of coordinated actions that are effective in respect to an objective in the context that it is performed. The less the agent thinks the quickest he will perform its task and greater will be its productivity. So Nelson and Winter's agents do not actually think they just do. This is a concept similar to Weber's tradition. For Weber action based on tradition is to do what it was always done. Again there is no choice, just like Nelson and Winter. The examples of Sen and Nelson and Winter are cases where self-interest motivation ins replaced by other kinds of motivation. There are also authors like Nobel Laureates Kahneman and Smith that attribute a great importance to hedonist choice in economics. So it is possible to see that economic models of individuals may be very different from the usual neoclassical economics' rational choice model in respect to motivation.

Also in respect to information assumptions models could vary significantly. Sen (1982), North (1990), Nelson and Winter (1982), Coase (1960) all work with uncertainty in the place of perfect information. As Knigth proposes true uncertainty is not measurable whereas risk is. Another assumption that can be made concerning information is asymmetric information. This is a half way assumption between perfect information and uncertainty. Williamson's works by its turn are based mainly on asymmetric information.

Finally all the institutional economics authors mentioned before works with bounded rationality instead of unbounded.

Considering the different individual models that were briefly presented in the last paragraphs it is possible to discuss the possibility of convergence among the authors who seek to explain institutional change. The convergence as was said is crucial to the contribution Institutional Economics could give to the problem of economic development. One way to depict the idea of convergence among authors is to display their position on a graph that presents continuums of the individual characteristics. It is possible to identify at least six individual attributes that could be treated differently depending on the author in question. Figure 3 shows the six individual characteristics continuums. Three of them are related to individual's motivation. The other three refers to information, intentionality and bounded rationality. It is possible to make different combinations of the six characteristics. In this article we present three of the possible ones just to illustrate the idea of convergence.

Figure 4 combines motivation and information. The continuum related to self-interest has on the other pole either routines or commitment. The continuum that includes perfect information goes as far as uncertainty passing through intermediate forms of imperfect information like asymmetric information. In this figure we consider seven highly distinguish authors to represent the various combinations possible. As it is possible to realize there are four authors, naming North, Ostrom, Hodgson and Sen, that have a quite close position concerning these two characteristics. Those four authors accept the existence of uncertainty and consider that it is essential to introduce it into the analysis. Also they agreed that egoism is not the only motive for human action and work with concepts like commitment, habits or ideologies. Then it is possible to identify two almost diametrically opposed positions the one of Buchanan and Williamson and the one o Nelson and Winter. In fact those three authors have positions that could be considered opposite. Williamson and Buchanan represent a more Neoclassical perspective and Nelson and Winter an Evolutionary one. So it is possible to say that there are some influential authors that have pretty close views about individual characteristics in respect to information and motivation.

Figure 5 combines information and intentionality. The spectrum of the information continuum is the same as in the figure before. The difference now is that in the place of motivation we have intention. Neoclassical economics assumes that individuals are totally intentional whereas the institutionalists assume various degrees of non-intentionality or rule followers. In this figure is possible again to see a convergence of position between North, Hodgson and Ostrom while Sen, that was together in the last figure now is little away closer to Williamson and Buchanan in respect to intentionality. Nelson and Winter as it was expected are away in the other direction. Nonetheless the convergence is still present.

Finally Figure 6 relates conflict and motivation. In this figure the motivation continuum is the same as in Figure 4. The difference now is that it is depict a continuum that links conflict to coordination. The Neoclassical Economics view is one of a word of cooperation and coordination. The institutional economists see a different picture. They identify potential conflict in many human relation especially in those that concerns collective action. Actually institutions according to Buchanan (1975) are a mean to diminish damaging effects of externalities and therefore reduce potential conflict introducing forms of coordination. Also Coleman (1990) argues that externalities are a necessary condition to the demand for norms. In this respect is possible to observe an almost complete agreement between the authors considered in Figure 6 and so a high degree of convergence.

The three figures show us that authors that are concerned with institutions have a more or less common perspective about uncertainty. Exception has to be done for Williamson and Buchanan but which also adopt a smaller degree of imperfect information, names asymmetric information. They also agree in a highly degree on the importance of conflict in human relations. What they disagree most is on the individual motivation.

Taking the evidence discussed in the last paragraphs we can point some examples of theoretical positions that go in the direction of building a united institutional explanation for institutional change. Hodgson (2006) acknowledges that even though "*rules are not in the DNA*" (p.4) it will be a mistake to see rules as entirely deliberative. He goes further saying that "*habit and institutional structure are mutually entwined tans mutually reinforcing*". (p.8) The same attitude is possible to observe in North (2005). Bearing mainly in cognitive science North says that part of the structures "*humans erect is an evolutionary consequence of successful mutations*" (p.xi) and "*part is a consequence of cultural evolution such as the development of institutions to favor larger group cooperation.*" (p.ix) In this way he agrees with Hodgson that humans are a compound of internal and external rules.

Ostrom (2000) proposes an indirect evolutionary approach. She argued that this approach should be theoretical rigorous, utilizing game theory, laboratory experiments and field findings. The evolutionary perspective would help the understanding of how preferences, including those associate to social norms, evolve and adapt. Just like North (2005) Ostrom (2000) thinks that the key to understand collective action and the evolution of norms lays on the knowledge of how humans learn. According to her humans are not good in deduction they are better in induction. We learn mainly through observation, experience and adaptation. Most important in the processes of collective action, considering human relations, is how individuals learn how to trust and what is fair.

These findings show that it is possible to imagine that someday a general institutional economic theory would be developed. When this task would be accomplished possibly it will be easier to understand the processes of economic development. Nonetheless there already are some attempts to understand the process of economic development with the institutional economics contribution that is worth mention in this article.

5 Institutional Economics and development

For the moment there are two very promising attempts to integrate institutional theory and economic development. These proposals appear as a consequence of the convergence view between the two main approaches in institutional economics we discuss before. The first was proposed by Ostrom (2007b) and the second by North, Wallis and Weingst – NWW (2009).

Ostrom (2007b) proposes a method to analyze institutional change that captures aspects of evolutionary theory as well as elements that are usually found in formal institutional change analysis like North (1990). Ostrom believed that we would not be able to develop a general theory of institutional change before we understand the process of change in multiple specific setting. She applied this method to study irrigation systems in Asia. The method which was developed by the team she worked with focus on a technique of displaying rule inventory and follow changes in that inventory over time. Like this her team where capable of identify the dynamics of rule change in the specific contexts they study. The process she manages to apprehend shows the interaction between formal and informal rules in a way that one affects the other. With this she was able to understand the choices people did along their history concerning the design of irrigation systems.

Using another line of arguments and proposal the work by NWW (2009) explores the synergies between formal and informal rules and the construction of a social order. Social order to them includes political, economic military, educational and religious systems. The main objective of an order is to control violence. Social order creates and maintains contractual organizations that are enforced by a third part. They identify two main kinds of social orders: Open Access Order – OAO and Limited Access Order – LAO. Each one has its own functioning logic.

In LAO violence is controlled through the distribution of privileges to the elites. There are barriers to entry on elite organizations like arms, churches, and elites receive rents from the privileges. LAO faces a dilemma. The elite have to decide between include more individuals augmenting the order's political support by extending the privileges to individuals that were excluded and diminish the rents accruing to the old members or maintain the coalition as it was. So there is a problem the authors call the double equilibrium which means that economic resources should be in accordance to political resources. This introduces a fragile equilibrium in these societies. The main disadvantage of LAO is its tendency to create market power and limit competition what do not favor development.

On the other hand OAO uses competition on votes, prices and quality in the place of rents to control conflict. In OAO there is little restriction to organizations' access. The state has the monopoly of legitimate use of physical force. In this case there are a great number of political and economic structures that exists to react against constitutional violations. Economic competition favor impersonal relations and prices reflect scarcity and technology. OAO do not eliminate rents however they disappear in the market competition process. In this way there are no more rents to be distributed among elite members and they lose their privileges. In OAO rights replace privileges. Finally OAO creates perpetual organizations which are independent of the individuals that create them.

As is possible to observe OAO is an order that is closer to developed world while LAO to developing countries. NWW (2009) argue that something like 24 countries manage to cross the gate from one order to the other and they go further to distinguish what they call the threshold conditions. They identify three conditions: rule of law, perpetual organizations to the elites and political control of the army. These conditions according to the authors expand greatly the possibilities of exchange and specialization. Violence control diminishes the risks and favor transactions. Finally perpetual organizations accomplish tasks that others could not.

The process that leads a country to an OAO requires the expansion of impersonal exchange and is never linear. Transition may last decades or even never fully happen. There is always a structural discontinuity. A great spectrum of political, economic, military, educational and religious systems may exist in an order and finally orders are stable but not static. According to the authors changes occurring during transition should be product of elites' intentional acts consistent with their interests but not necessarily with their intention. This position reveals the authors' acknowledgment on the idea that not every result is exactly foreseen by elites. This indicates that they believe that some dose of randomness is expected. It means that institutions can be established as a spontaneous order like Sudgen (1989) pointed.

The process of transition from a LAO to OAO described by NWW besides using the contributions of formal as well as informal institutional change explanations is also much in line with Sen's conception of development as freedom. In NWW framework inclusion is a key feature of interpersonal exchange, which is basic to OAO. Inclusion in Sen's framework is the condition to individuals to acquire capabilities which according to Sen are the conditions for development itself. NWW contribution permit them to produce a development process explanation that is compatible with the nowadays accepted notion of development put forward by Sen.

NWW (2009) as well Ostrom (2007b) works are legitimate products of the efforts make by a distinguish group of social scientists to integrate institutional explanations into a joint body of theory. These efforts that went into a convergent direction among various approaches in institutional economics are reaching a common understanding about the interaction between formal and informal institutions. The common understanding lies on the grounds of accepting that human learning process is complex and much influenced by uncertainty. Also it rests on the assumption that individuals are not only self-interest and may behave according to rules and principles. Finally, even though it is supposed that much of human action is intentional unintentional results came up in the processes of individual as well as collective decision.

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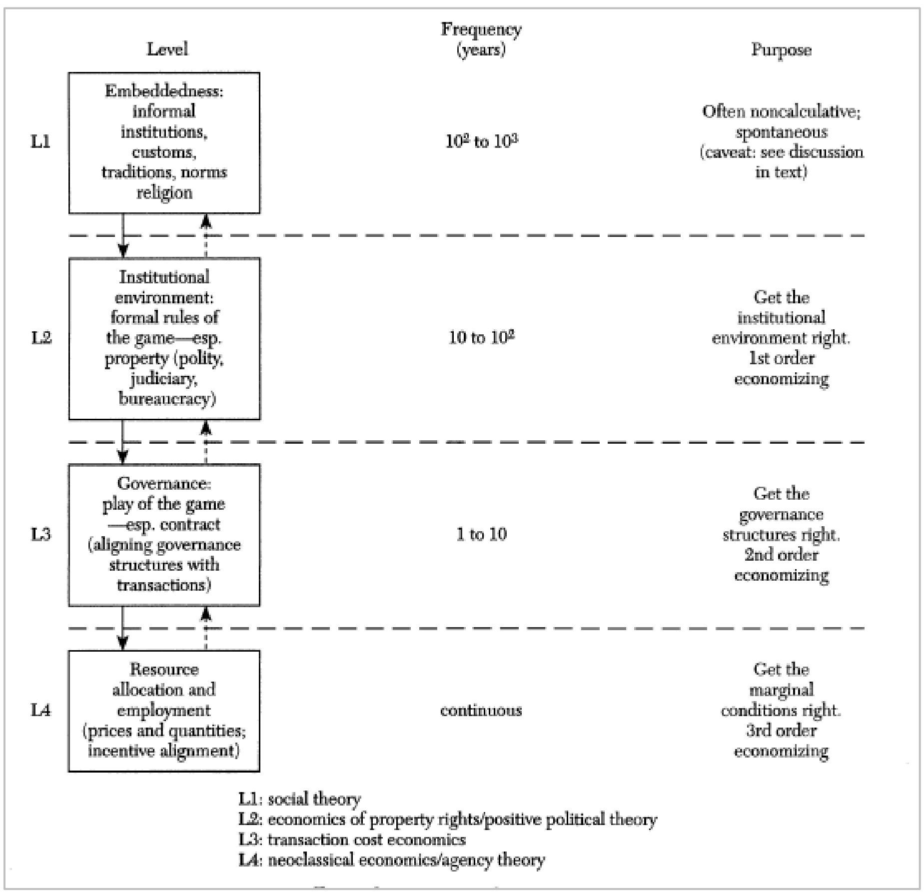
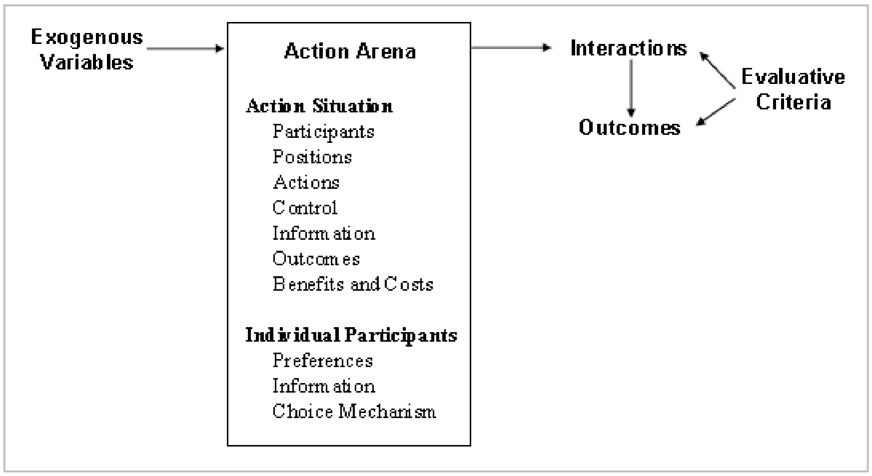
Figure 1. Institutional Analysis Levels and Purposes



Source: Williamson, O., 2000. The New Institutional Economics: Taking Stock, Looking Ahead. *Journal of Economic Literature*, Vol. 38, No. 3 (Sep., 2000), pp. 595-613

Figure 2. ACTION ARENA



Source: **OSTROM,** Elinor (2007) ***Developing a Method for analyzing Institutional Change,*** Workshop in Political Theory and Policy Analysis, Indiana University, Center for the Study of Institutional Diversity, Arizona State University

Figure 3. INDIVIDUAL CHARACTERISTICS

Neoclassical Economics		Other approaches
Coordination	x	Conflict of interest
Intentionality	x	Rule follower
Self-interest	x	Culture/routine
Self-interest	x	Commitment
Perfect information	x	Uncertainty
Unbounded rationality	x	Bounded rationality

Figure 4. INFORMATION AND SELF INTEREST

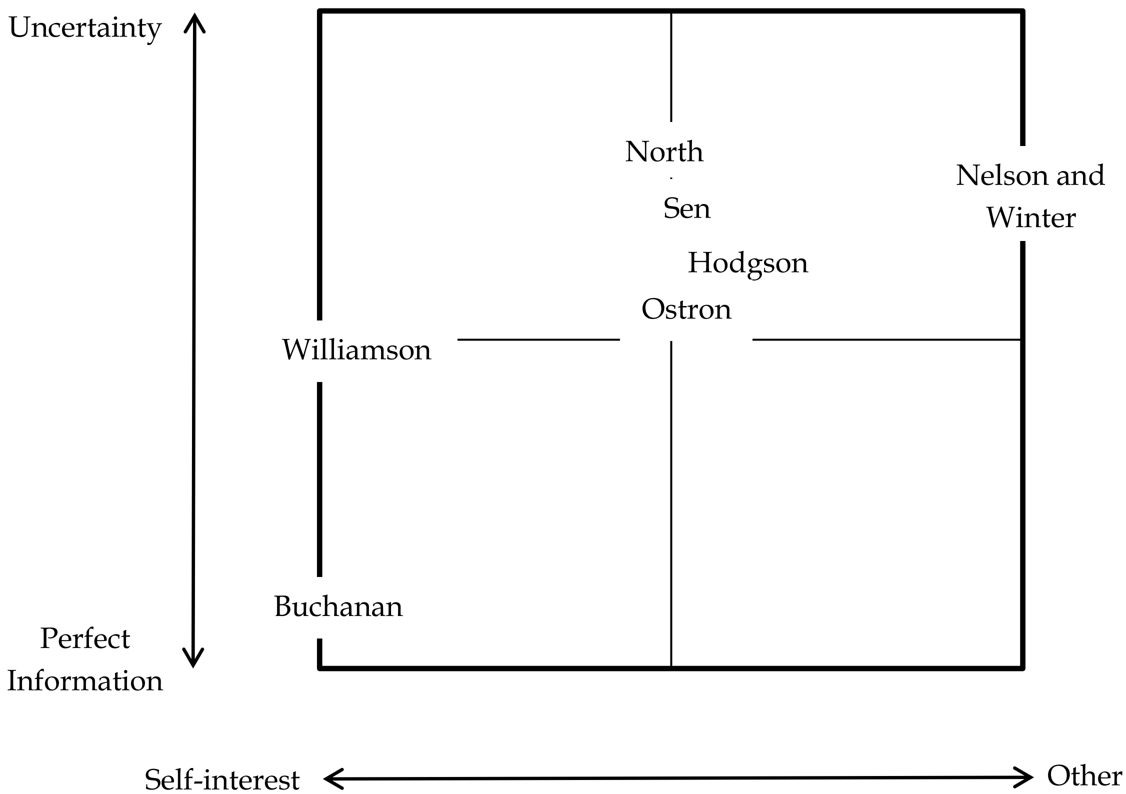


Figure 5. INFORMATION AND INTENTIONALITY

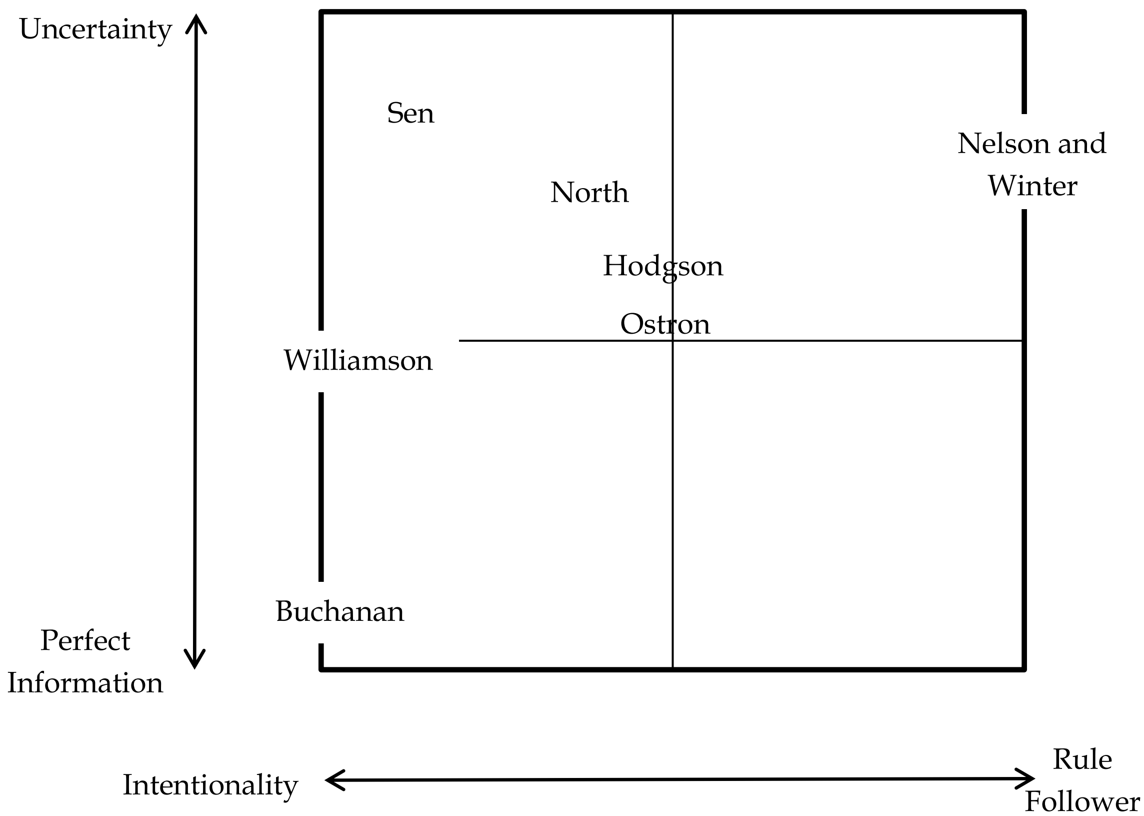


Figure 6. CONFLICT AND SELF-INTEREST