Very preliminary draft

Institutional Clues in the Thought Of Niklas Luhmann

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Abstract

In this paper we try to identify some points of contact or divergence between institutional research and the theoretical endeavour of Niklas Luhmann. The task meets with some difficulties, depending on the specific Luhmann's language and his epistemic choices. In spite of such obstacles, however, we maintain that the institutional scholars, especially the economists, may take advantage from an in-depth analysis of the Luhmannian theories. In particular, we identify the main points of contact with institutional research in both the concepts of autopoiesis and environment, which are absolutely central concepts in the work of the German philosopher. These concepts could help to make clear both some preconditions for the genesis of institutions and for the process of their evolution.

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1. Introduction

We suggest that there are connections between evolutionary institutional economics and the thought of Niklas Luhmann. The famous German philosopher, indeed, built a theory with several insights useful both for institutional economics and Darwinian evolutionary approach to economics.

As is well known, Luhmann's work has been largely employed by several sets of legal knowledge. On the other hand, economists rarely have explored his theory.

We especially focus on two Luhmanian items, autopoiesis and environment, and on their relationships with evolutionary institutional theory as made clear by Generalized Darwinism:.

The first difficulty of connecting institutional and evolutionary theories with the Luhmanian thought is a linguistic one, as Luhmann basically uses the term "institution" in the strictly juridical meaning of the term. So, whereas this meaning is just a part of the whole institutional phenomenon, the remaining part of what can be considered as "institutional" in his thought has to be traced outside of what he explicitly defines as such. The second difficulty consists in the fact that Luhmann infers his whole theoretical construction from constructivist and relational-oriented assumptions. This obviously implies the abandonment of other epistemic alternatives.

The rest of the paper is organized as follows: the next section summarizes the Generalized Darwinism metatheoretical framework, which ontologically connects institutional economics and Darwinian evolutionism. The third section describes the two concepts of autopoiesis and environment in the thought of Luhmann and shows the relevance of such items for Generalized Darwinism. The last section briefly concludes.

2. The essential of the Darwinian evolutionary institutionalism.

According to the Generalized Darwinism theory (GD) by Hodgson and Knudsen (2010), any population of agents replicating in an open and complex system can be studied in the light of Darwinism. GD appears as a meta-theoretical framework. As such, it logically precedes any domain-related specificity. Therefore, it considers the biological dominion as just one -albeit the earliest- of several contexts that it can

be applied to. There is sufficient agreement that at least two general conditions need to apply for a dominion to be interpreted by means of GD: 1) the three characteristics of the evolutionary process, namely replication, variation and selection and 2) the replicator/interactor pair. Replication and variation on the one hand, and selection on the other, can be viewed as the steps replicators and interactors respectively go through.

The concept of replication refers to the replicators' ability to make copies of themselves. Then, since the copying process is not perfect, replicators cannot be made identical throughout time and, as a result, variations arise among replicators. Selection is (at least in an *ex post* descriptive sense) the survival differential among interactors, whose replicators have meanwhile varied. Just as the genotype is the fundamental unit which genetics focuses on, so the replicator is assumed to be the fundamental unit of GD. Then again, interactors are what allow replicators to exist in time, as do phenotypes in the biological evolution. Yet, if a single biologic replicator (genotype) is made up of all the genes of a specific DNA, what is a single economic replicator made of? As many other authors, we assume the perspective that Cyril (2010) ascribes to Veblen; according to such an approach institutions, intended as socially shared rules of behaviour and thought, are the replicators of the economic domain.

One of the problems related to this framework depends on some peculiarities that recur in the variation of institutions[1]. From a strictly Darwinian point of view, indeed, the usual sources for variation in the biological dominion are both the error in the replication step and the sexual recombination. On the other hand, a frequent source of variation (even of selection) for economic institutions is certainly the intentional human intervention. Despite Hodgson and Knudsen (2010) have clearly showed that the Darwinian evolution of institutions is fully compatible with the human conscious intervention, difficulties remain about the role of human will that intervenes in the evolutionary process.

Our point is that a way to overcome the problem consists in thinking differently from the scheme that contrasts the "natural" selection with the "artificial" human interference. The point is that the human conscious agency should be considered as a part of the outside environment. In other terms, we may imagine that the human will is not

[1] Witt (2004) criticizes the validity of Generalized Darwinism by referring to the feedback between variation and selection that would appear when human conscious agency intervenes in the evolutionary process.

something that interferes *in the working* of the evolutionary institutional process, but that it is a constituent of the environment, which the replicator has to adapt to. Even when the human intervention appears to be intrusive (when, for example, tries to suppress an institution), the dynamics should be considered in terms of the replicator that attempts to survive but finds an obstacle in the human agency that tries to eliminate it. Indeed, it is well possible that, when that intervention falls, then the institution comes back to replicate aplenty. This is impossible only if the human intervention were an insuperable obstacle and the replicator completely disappeared. What happens in such a case is not an interference of the human agency in the evolutionary process as such, but the establishment of a hostile environment by means of human will. In order to better define the relationships between systems of the kind we are talking about and the outside environment, we can turn to consider the contribution of Niklas Luhmann.

3. Contributions from Luhmann's insights.

Since the publication of "Social Systems" (1995), Niklas Luhmann addressed his research to the theoretical foundations of societies. The novelty of his contribution has consisted in the implementation of the general theory of systems (by von Bertalanffy, 1968) to the social reality. He believes that communications, and not individuals as such, are the essential elements for a society to exist. A similar approach appears in the work of one of the most influential institutionalists, John Searle[2]. The institutionalism by Searle, indeed, is based on the first and unavoidable institution: language. Both scholars, therefore, place the interpersonal communication at the centre of their thought. One could even state that, since any kind of institution needs a language to exist, then institutions are communications in the essence.

However, it is sure that the symbolic structure is at the very core of the approaches of these authors: for both of them the social reality depends on the epistemic phenomenon, which only arises if a linguistic communication recurs. Therefore, the Luhmannian and the institutionalist view have in common that the most elementary component of any society is symbolic. For Searle (2005), that

[2] See Searle (2005).

corresponds to the state functions, by which something (or somebody) in the material world acquires a role, which certain powers, rights and obligations depend on. For Luhmann that corresponds more in general to any single communication. This greater abstractness is justified by his aim to build a metatheory that can work for any kind of system. From his point of view, therefore, a given economy and its institutions would be just a subset of a given social system, which is in turn just a case of a more general scheme.

In addition to this epistemological basic sharing, the endeavour of Niklas Luhmann deals with a characteristic of the systems, which is well known to economists: the (spontaneous) interdependence of elements, which ensures that systems keep working even when they are subjected to pressure from the outside. Luhmann calls "autopoiesis" such a feature. The concept of autopoiesis dates back to Varela and Maturana (1974), and consists in the ability of a system to destroy, modify and replicate its own elements so that the system as a whole is redefined.

Luhmann uses such a concept in order to face the question that is at the top of his research: why there is more order than chaos in the world? Why does this happen despite order is so unlikely? The answer that Luhmann proposes is in the intrinsic ability of the different elements of a system to interact so that the whole system can keep the same configuration in time.

The idea of autopoiesis has an eminent parallel in the spontaneous order by Friederick Von Hayek[3]. Apart from the different purposes of the two scholars, the central idea of something capable of continuously remaking itself, regardless of any teleological intervention, is at the very core of the endeavour of both scholars. The fact that such a concept is familiar to economists clearly recalls some ways of thinking to the market.

For our purposes, autopoietic qualities can be attributed to any system/ institution. So replication, variation and selection can be viewed as three autopoietic attributes of the system, and their overall functioning as the ability of the system to remaking itself continuously. In this sense the evolution of institutions can be intended as the way for the pair replicator/interactor to maintain its own essential configuration (although always changing in the details). Replication, in particular,

[3] For a wider parallel between Hayek and Luhmann, see Vilaca (2010). See also Valentinov (2015) for a connection between the evolutionism by Thorstein Veblen and the autopoiesis by Luhmann.

would be the modality for the system to maintain the essential form of the previous time. Luhmann (1995) maintains that the fundamental function of the system is the time-binding, by which the memory of the past is preserved in the present. Variation would be the reaction to what Luhmann calls "irritation", and comes from the outside environment. Selection, finally, would be the *ex post* removal of old elements (that Luhmann calls "distruction"), for new elements to appear. In general, the process of evolution may be considered as the autopoietic expression for the survival of any institution.

In the previous section, we briefly summarized the essential of the institutional evolutionism. There, we suggested the idea that human agency can be considered as a part of the environment that the replicator/interactor pair has to deal with. This idea seems to be perfectly compatible with the Luhmannian item of the outside of a system. In his theory, a fundamental difference exists depending on the complexity degree of the environment that is outside the system. As compared to a simple outside, the system is completely closed and indifferent, whereas a most complex environment can "irritate" the system. A legal system that defines the legal way to do something, for example, embraces the opposite way too, by defining that as illegal. However, when the environment becomes more and more complex, and a new way to do the same thing arises, which is difficult to define whether legal or not, then this is the case where the outside environment is irritating the system. Therefore, a changing process starts within the system as a reaction to the environmental irritation.

We claim that this way to think of the environment, which the replicator/interactor pair has to deal with, appropriately expresses the relationship between institution and environment, which the human agency is considered a part of. This happens because the intentional human intervention, which is teleologically oriented, cannot appear simply by chance, but by choice. Consequently, some difficulties arise when we need to think to variations in the institutional configuration as simple errors in replication. As Hodgson and Knudsen (2010) have made clear, the Darwinian way to look at the institutional evolution do not exclude at all the human intentional intervention. Nevertheless, the idea of both a human agency that irritates the working of a system/institution (trying for example to eliminate it), and of that institution which reacts thanks to the links existing among its own elements, deserves to be considered. Indeed, it allows better understanding of the independence in the working between

institutional evolution and human agency. In other words, the Luhmann scheme allows considering a Darwinian evolution of systems/institutions, which vary not just by chance but also as a reaction to the irritation of environment, which the human intentional will is a part of.

4. Conclusions

This version of our paper has to be considered just as a sketch of an idea, and any element of the reasoning chain needs to be deepened and supported. Nevertheless, we think that the theoretical scheme by Niklas Luhmann has so many points of contact with the evolutionary institutional approach to economics that a systematic study of their interrelationships would be greatly helpful.

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