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Title of paper:

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Paper:

Friedrich August von Hayek (1899-1992), Austrian economist winner of the 1974 Nobel "For his pioneering work in the theory of money and economic fluctuations and the penetrating analysis of the interdependence of economic, social and institutional" significantly contributed to the study of social sciences and especially the economy. His thinking uses scientific foundations of scholars such as Karl Popper and fundamentals of economics of established names such as David Hume, Adam Smith and Adam Ferguson.

He termed it a Whig direction (as seen in your text Why I am not a conservative?) And not a liberal or a conservative. This term originates Scottish and drift whigg that during the seventeenth century, Scotland, designated a kind of sour milk or whey that was part of the power of poor or indigent population. In contrast to that party on the other side of the political dichotomy was the conservative tendency party, Tory, whose name had origin Irish.

The whiggism was the foundation of the American system of government and it was represented in purest form, by James Madison, fourth president of the United States (1809-1817) and father of the American Constitution. Also it was part of the tradition that is common to Anglo-Saxon countries and was one of the few sets of ideas that has always opposed all arbitrary power. He was taken to the United States by settlers after the Glorious Revolution of 1688, where its adherents were called "constitutional".

To assume the position of a party whose existence was made between the seventeenth and nineteenth centuries in the UK, Hayek supposedly moves away from the English liberalism of the utilitarians, as it had been heavily influenced by Enlightenment Jeremy Bentham, and the rationalist liberalism of the European continent - that, for him,

no different from conservatism - which had its meaning changed by the originating ideas of the French Revolution and its totalitarian democracy with socialist leanings. This ideology significantly influence the basic construction of their theories, but before entering them themselves, it is necessary to define logic and methodological bases.

The error of 'Social Darwinism' was That It concentrated on the selection of Individuals rather than on que of Institutions and practices, and on the selection of innate rather than on culturally transmitted capacities of the Individuals. (Hayek, 1998, p. 23)

Hayek concluded his paper on complex phenomena in 1961, two years before Edward Lorenz post your about chaos theory, which describes dynamic systems as relations between a system of nonlinear differential equations. Such an approach is closer to reality by not aim to make predictions about specific events, but rather describe parameters of dynamic systems or parts of those systems that exhibit transition to chaos. (Ott 2002 Hayek cited).

One of the order of settings that can contribute to the understanding of Hayekian thought is to Hedley Bull, for whom the order would be a number of things related to each other according to certain structure where their mutual relationship would not be purely the effect of chance and whose characteristic fundamental principle would have some discernible inside. So, do not have to do with a pattern or methodical arrangement of social phenomena and not emerge from any regularity in the relationships between individuals or groups, but a structure that would lead to a particular outcome, such as an arrangement of social life that promotes certain goals or values. In this functional sense, it implies a purpose.

This is clearly one teleological conception of order and is close to what Santo Agostinho defined it as "a good array of disparate elements, each occupying the most appropriate place." Of course, this definition implies problems, such as organic feel of an organism, but serves as a starting point, because it shows the order does not like any structure, but as a certain structure and also focusing on your goals and values.

Order is necessarily therefore a relative concept; It is synthetically an organized arrangement that aims at a particular purpose. Nevertheless, the order is not the only value for which the conduct of the men can be modeled, and we should not assume that it precedes other values. Regarding this point, there is one aspect to be clarified on the relationship between order in social life, as Bull and set the rules or general imperative principles governing individual conduct. Sometimes the order is defined in terms of obedience to certain rules of conduct, or, as obedience to the rule of law. However, the definition of order in social life excludes the notion of rules, because despite being a widespread means of creating order in human society, is not part of the very definition of order,

The conduct subject to the order is predictable because it fits laws that can be applied and one of the consequences is that the standards of conduct become known and become a basis for expectations about the future conduct.

For this reason individuals assign value the order, since value greater predictability of individual behavior resulting from compliance with the elementary or primary goals of coexistence which can result in direct, indirect or neutral interactions to other individuals and the system as one all.

It is this individual interaction that defines a social system and the way it has, it can be cooperation or conflict, or neutrality or indifference reciprocal or not, with respect to the objectives of each.

Thus, an "action system" would be defined as a set of such linked form variables, in contrast with its surroundings, the internal relationships of these variables to each other and the external relationships of the set of individual variables with respect to a combination of variables regularities are characterized by external conduit could be described.

In addition, it is necessary to consider that all social action, even if conscious, produces unintended effects: increasing the degree of unpredictability of social life and a simplified linear analysis making insufficient.

In this sense, for Popper science can not start with observations or data collection; before collecting them, interest in the data of a particular type should arise, since the problem always seems to come first. Thus, observation is always "watching the light of theories" and all perception involves a theory or hypothesis. It may be noted here the role of chance in perception as development of cognition theory.

That said, we see that the Austrian thought, general way, was being molded around a critique of historicism and the use of methodological individualism - called him compositional method of the social sciences - in understanding of society. There is in this method a logical circularity between individuals and social institutions where institutions at the same time are the result of human action also affects.

The term "methodological individualism" was first proposed by economist J. Schumpeter and designates the theoretical project to explain social phenomena from individual behavior. Menger used the expression "atomistic method" to describe the same thing. Indeed, the Methodological Individualism has no specific proposals or behavioral prerequisites, only certain economic processes based on the actions of individuals. (SCHUMPETER, 1909, p. 3)

The compositional method used by Hayek to explain the spontaneous order comes from this chain, according to which the phenomenological the social are the result of rational individual choices and she does not accept the "social determinism" materialized in individual work and places the individual as front man of a logic that goes beyond.

His obvious skepticism may have happened of David Hume, as well as the design of the rules that define our morality are not a product of reason, but precede it; feeling so

would not be the opposite of reason, but of traditional rules and therefore between instinct and reason would be located in the field of morals.

The idea of a self-organizing structure of spontaneous evolutionary behavior would come from Adam Smith and Charles Darwin, but with the fundamental difference between the mechanism and the object selection of each type of evolution. This process is central to his theory, it is the cultural evolution that produce moral traditions that determine, for Hayek, the emergence of civilization.

So to understand this social whole - called civilization - that emerges after the establishment of a society based on division of labor as that arises post-industrial revolution in the eighteenth century, which was named by Adam Smith as Great Society, Hayek part of the problem economic fundamental that he identified: the division of knowledge. This concept is not just about the division of labor and its resulting individual expertise, but also the notion that it is from this that there will be a resource coordinated use based on both branched division, incomplete and often contradictory knowledge that individuals They have as the price system, through which much of the information is passed or signaled, to represent the degrees of relative scarcity of different types of goods.

The communication system which underpins the functioning of a developed industrial society is very subtle, such a system, which is more efficient than the company was able to conceive, is called market, and is a condensation of dispersed information (HAYEK. 1985).

The real reason why the market order systematically superimposed on other types of order, since it is not affected by the level of government - lies in the resulting allocation of resources (Hayek 1985.).

It is seen that current disputes concerning economic theory and economic policy have their common origin, often confusion about the real nature of the economic problem of society.

Hayek in his writings emphasizes the functioning of markets from an information economy and are characterized by decentralization and dispersion of knowledge. Therefore, the problem to be solved when trying to build an economic social order is the problem of the use of knowledge, which is implicit in the question of the best use of available resources for private purposes that each individual has. Economic calculation was one of the tools found to deal with this logical problem, but still not solved, because the information needed to make-up, as was said above are not all available. Moreover, in general, there is a certain homogeneity in the body of knowledge of agents and so theorists of rational expectations diverge radically from Hayek. Mises and Hayek thus represent

The crucial problem of the economic process is therefore the various ways in which the knowledge on which people base their plans is passed to them. The question is not whether planning should be done or not, but whether it should be done centrally by an

authority for the economic system or whether it should be divided between several individuals, since competition on the other side means decentralized planning by many individuals.

The word "planning" describes the complex relations interrelated about possible allocations. In this sense all economic activity is planning and in any society in which many people collaborate, this planning is to some extent based on knowledge which is not given to the planner but obtained by people from your surroundings that will have to convince.

For Hayek, midway between central planning (one person making decisions) and competition (decentralized decision making between several people) are monopolies (or in other words organized industries). Which of these systems is more efficient it depends mainly on the question of which one is expected there will be an optimal use of existing knowledge.

But the position that answers that question will likely depend on the different types of knowledge that they are dealing with and at that point, one can reflect on the importance of these different types, those that are expected to be within the reach of private individuals and those it is expected that a society or a ruler possesses.

In recent centuries, a kind of knowledge has occupied a prominent place, scientific knowledge, in such a proportion that has forgotten that this is not the only type of relevant knowledge. It is almost heresy to assert that scientific knowledge is not the sum of all available knowledge. But there is a vast knowledge unorganized what is important and what can not be called scientific in general terms: the knowledge of the particular circumstances of time and space.

That's why almost every individual has some advantage over others because only he has some specific information about a subject, which were obtained over their everyday personal experiences, but can only be used if the decisions are left to individuals or if taken with his active cooperation.

It is curious to note that this kind of knowledge is generally viewed with contempt for work as an advantage over others, but it's almost as important to make use of it as the latest scientific discoveries. And the problem that want to address is just like making knowledge available as possible.

One reason economists have been increasingly able to forget the small constant changes that make up the economic whole, is probably their growing preoccupation with statistical aggregates that show more stability than the movement of the details.

The stability of the aggregates can not be supplanted by the "law of large numbers" of mutual compensation of random changes. The number of elements with which one has to deal is not large enough to accidental forces to produce stability.

The type of knowledge that concerns Hayek is the kind which by its nature can not enter into statistics and therefore can not be conveyed to any central authority in

statistical way. So the best is the central planner to find another way to direct the decisions for the "man on the spot".

If the economic problem of society is mainly the rapid adaptation to changes in relation to the particular circumstances of time and space, it seems sensible to Hayek, that decisions are left to people who are familiar with these circumstances, who directly know the relevant changes and know the resources immediately available every situation. One can not expect that this problem will be solved first communicating all this knowledge to a central point, which should analyze it and only then make a decision. This should be solved by some form of decentralization, because only then the knowledge of the particular circumstances of time and space can be readily used. But the "man on the spot" can not decide just based on his intimate but limited knowledge,

Probably have nothing that happens anywhere in the world can not have an effect on another's decisions - chaotic character of social relations, which makes it impossible to translate our theoretical knowledge in specific events of predictions, which do not need to know all your effects and accordingly economic calculation (or pure logic of choice) helps to see how a problem can be solved and indeed how it has been solved, by the price system.

Even problems of the relationship between means and ends can have its resolution aided by the construction and constant use of equivalence rates provided by the contribution of the Pure Logic of Choice and its significance in view of the whole means-ends structure.

Of course, these adjustments are not perfect in the sense of an economic analysis that aims to balance. The problem is precisely how to extend the period of use of resources beyond the control of the period of a particular mind, such as making unnecessary the need for conscious control and how to provide inducements which will make the individuals do what they should without anyone talking to them.

Alfred Whitehead "civilization advances by Extending the number of important operations Which we can perform without thinking about Them." They develop practices and institutions by building habits (formulas, symbols and rules) that have proven important in their own spheres and became the foundation of civilization was built.

This subjective knowledge is the result of the interaction of sensory order with the external conditions and features evolutionary transformations as is a process of learning by the agent within the conception of evolutionary subjectivism. The subjectivism places the subject as the core of the social fact and methodological individualism, which analyzes the subject to reach the social fact. In addition to these, another foundation of human civilization and was first recognized by Adam Smith is private property, a human indiscriminately product of cultural evolution (Hayek, 1984).

"That the adoption of the convention of individual property and respecting the determination of prices on the competitive market Were the only ways in Which Could Become man able to exploit resources discoverable so

intensely to the raise his Increasing numbers seems to me incontestable; This is still Contested by some who have missed the central teaching of economics. "(Hayek, 1979).

Moreover, it argues that an equal distribution or even just the product would cause virtually all had much less now that and the current total population probably not enough to keep their survival.

"The wishfully invented morals According to Which each out to have what he deserves in the light of his perceived merits or needs (already two conflicting criteria) are irreconcilable not only with personal freedom, but Also with the guide mechanism That alone can tell the individual how to Contribute to the much he can common to the product. Several property in the means of production is irreconcilable with just the distribution of the product, but it is an indispensable condition for the existence of this product in anything like its present size. Socialists offer us the upper moral what is, in fact, the very lower morality, yet because alluring They promise greater pleasure or enjoyment to people They would be Unable to feed. "(Hayek, 1979).

Thus, it is observed as a particular type of order is being generated by interactions of independent individuals who have only partial knowledge and limited yet to Hayek, the balance of system analysis - as emphasized and desired by neoclassical - it's just a preliminary useful in the main study of the problem because it does not cover the social processes that are complex and chaotic.

The author of the differentiation of two types of order based on classical Greek concepts of Taxis and Cosmos, explains the preponderance of the second on the first (Hayek, 1998), demonstrates how such an order, society and the very reason, are products of cultural selection and assume this position criticize the Age of Reason, period beginning in the seventeenth century that marks the beginning of modern philosophy, and constructivistics - term he preferred the constructivist (Hayek, 1990).

Thus, according to Hayek, the Cosmos order is spontaneous and abstract, ie it was not deliberately sought nor has a specific purpose; assuming that "purpose" is defined by actions that consciously try to ensure the preservation or restoration of an order. Therefore, it is sufficient that the evidence it subject only to behave on a regular basis, for their maintenance, following general rules of conduct that only create contextual conditions, which are not and need not be known by the individuals so that they follow them leaving right decision space for the individual to use his concrete knowledge, which is often unique to you, the time and place circumstances. The order resulting from these interactions (Hayek, 1983).

Many of the natural regularities are recognized by our senses, but where we find new patterns, this causes surprise and questioning so science arises. But many of these standards, especially the social, are only discovered after the rebuild with the mind.

The "all" are defined in terms of certain general properties of its structure and are the subject of each theory, even if it is only a particular way to fit the statements about the relationship between the individual elements.

Therefore, it seems misleading approach your analysis of an angle at which these structures are reduced to binary, open or closed systems, for in reality there is no closed systems in the universe. So, all we can ask is whether, in the specific case, the points of contact through which the rest of the universe acts on the system we try to delimit are few or many.

What designated as integral parts of a system, or when designing the boundary of the partition, will be determined by consideration of being able to isolate recurring patterns of a different type of coherent structure and it will depend on a particular type of pattern that the structure described is persistent or purely accidental. coherent structures we are interested in are those in which a complex pattern produced properties that make self-maintenance of the structure and constantly displays.

For scholars of simple phenomena, the theory or the standard of knowledge, it is merely a tool whose usefulness depends entirely on the ability to translate it into a representation of the circumstances that produce a particular event.

A social theory made allows us to understand how the independent action of several men can produce all consistent, persistent structures of relationships that serve important human purposes without having been designed for this purpose (Hayek, 1979).

To address the cultural selection of analysis, it is necessary first to their differences with respect to natural selection, it automatically, when speaking of selection is what comes to mind. The Darwinian process of natural sciences selects individuals through genetic selection from the reproduction of those who survive to several factors, thus transmitting their genetic traits to their offspring. However, when dealing with a society that no longer makes sense, because the selection that occurs is cultural, namely concerns habits, behaviors and individual rules of conduct, generated and transmitted by inheritance, whose variability comes from human interactions depend on the context and particular tacit elements of each individual, thus such selection, seems much more Lamarckian.

The failure of economists with respect to the orientation of effective policies is related to the tendency to imitate the methodology of the physical sciences, that is, to act according to the "scientism". But this way of acting is unscientific because it involves a mechanical and uncritical application of a methodology that works in an area with certain types of data, but not so in another work.

In disciplines that deal with complex phenomena, such as the market (which depends on the action of several individuals), only get data for some of the aspects that should be explained and not necessarily those are the most important. One should beware of the illusion that only what is measurable quantitatively has relevance. Otherwise, you can even get a great evidence "scientific" for a false theory and this may even be

acceptable to appear more "scientific" a theory that has valid explanation, but does not have sufficient quantitative evidence to underlies it (Hayek. 1985).

Thus, it becomes possible to prove that some empirical theories are false and that inductivism can not and should not be applied indiscriminately. In relation to the human sciences, sometimes the procedures that appear to be the most scientific is actually the lesser degree of scientific. There are limits as to what is expected to science can accomplish.

This kind of behavior is resistance, particularly to mitigate the possibility of shaping society as you see fit, since the assumption of the unlimited power of science is based on the false belief that the scientific method consists of a prefabricated technical or simple imitation of the form / a manual to follow, which is much simpler to use reasoning processes to identify problems and find ways.

Still, constantly make claims to direct science to all human activities, in an attempt to replace spontaneous processes by "conscious human control." This is what has been called parcialismo scientific.

Karl Popper was a modern philosopher of science who developed a test to distinguish between what can and what can not be accepted as scientific - test by which this did not pass some doctrines today accepted (HAYEK 1985.).

The complex phenomena essentially - as are the social structures - have specific problems that have an even larger number of insurmountable obstacles regarding the provision of certain events.

It is worth remembering that the broad and rapid development of the natural sciences took place in areas that allowed based explanations and predictions related to the phenomena observed by laws are relatively few variables functions, both in singular facts as relative frequency.

One of the main problems that arise when dealing with complex systems is the fact that these phenomena they are based on a large number of particular facts and thus its real difficulty is therefore in the investigation of these facts.

Preliminarily, a distinction must be made between: complex and complicated process. In a complex process, according to Paulo Granjo, the interaction between factors and variables change not only the future interactions framework, but also the very factors and variables, which makes it to affect the dynamics of future interactions, ie complex is what turns and produces itself, or second Mitchell Waldrop and more simple and objective way, in a complex process relationships are nonlinear. Already in a complicated process there is no real uncertainty and yes, ignorance, where despite the high number of variables, there is a linear relationship between them, making such interactions, largely predictable.

This non-linear relationship with respect to individuals is clearer when you realize that humanity to transform nature, transformed itself, producing new shares to the world, developing a new culture and perception of what it is itself. (LUCENA et al, 2010).

According to Kauffman, the level of complexity above the atomic, the universe is in a trajectory that never repeats itself (non-ergodic), where the final destination of the process is completely random, there are a countless number of final destinations and all are unique. It is known that reductionism is not enough to grasp a complex system, which makes it necessary to develop a new science, possibly based on a relational ontology, because the objects have internal and external links, and emergentist because the complexity is increasing. So they are unknowable in its entirety and can only partially understand them.

Being a system and being complex to be subject to uncertainty could incur "disorder" - understood as missing information or degree of randomness - it could be measured by the notion of entropy, where the more uncertain is the result of a random experiment, most the information will be obtained by observing its occurrence or, as his contemporary Norbert Wiener, the amount of information in a system is the measure of the degree of organization. So where unpredictability is full is because there is no information, but where there will be made possible a self-organization more or less efficient, according to the degree.

Hayek in his two articles, *Economics and Knowledge* (1937) and *The Use of Knowledge in Society* (1945) argues that no central planner would be able to have enough information to decide what is best for society as a whole, because the concept of overall balance is as comprehensive as unlikely and thus becomes empty.

It is observed then that the established order is not in a binary Manichean training, the two order types will exist together, but in different degrees in every sphere of social life.

Therefore, of course, every social phenomenon is complex and to analyze social dynamics, as Levi-Strauss had already postulated that the focus should not be variables, but the interactions. One should add to that a systemic approach, based on the definition of "system" it is inseparable and irreducible parts.

Approximately in 1880 the physicist and mathematician Henri Poincaré was studying the impossibility of problems related to the impossibility of solving nonlinear equations, finding that there was a regular and harmonious order, but chaos and random movements, not consistent with classical mechanics.

Thus, taking the deterministic character, it can be from the chaos theory, noted that sociological system in an attempt to grasp its dynamics whole, which according to Franz Brüseke, was affected by both the mainstream Marxist-partisan thinking and positivism.

The result becomes therefore unpredictable scientifically, although much can be known about the effects that certain events can have. But that does not mean it can not make predictions about the route, if the rules are known, one can not expect or certain events. But foresight is always restricted the general characteristics of possible events, unable to provide particulars of unique events.

This corresponds, in fact, a simple prediction standards, which will be holding more and more in that it goes phenomena dominated relatively simple laws for a class of phenomena characterized by rules of organized complexity.

It is generally not possible to predict more than a few features abstract pattern that will emerge as the relationship between types of elements, about which very little may be known. Nevertheless, it is still possible to obtain predictions that have been falsified, satisfy the empirical Popper significance test.

Of course this kind of simple pattern forecasts compared with the precise predictions of the natural sciences is presented as alternatives of little use and even if the power to shape the social structure were possible, no government agency should have all the information nor should she knew what should be done to the public interest, be in a position to act in this way because their exercise could come to obstruct the functioning of orders spontaneous forces that effectively help people to pursue their goals, even if they can not understand them.

If it is intended to cause less harm than good in order to improve the social order (where predominates the complexity of organized type) it is necessary to understand that it will not be possible to come to the knowledge that would allow the domain of events.

From this it can be seen that for Hayek what is spontaneously generated is almost always better than what the individual wisdom and collective can plan and at that point it assumes an anti-democratic stance to emphasize that it is not in the decisions of most you can find a superior wisdom and that they differ radically from the free evolution process that generates and selects institutions and customs. In addition to such tend decisions not to produce general results desired, have a coercive character, monopolistic and exclusionary, that destroy the self-regulatory forces, where he will defend the position of the free market and limiting state action ball (government).

This is seen as an organization, so it would be a type of Taxis Order - made, which invariably serves the purpose of "maker" - and would have functions just what the spontaneous order could not, at least up to certain minimum requirements (Hayek, 1998) provide: a coercive function and service to manage resources. And, as an organization would own particular and concrete rules.

An order of the wait type, that is produced by arrangement allows more power of influence requires rules for different regulation of the Cosmos requires and had aspects very widespread especially in "organization theory", as a natural consequence of the power of discovery the human intellect and the general attitude of constructivist rationalism. For its development is one of constructivism results, neglect its boundaries is one of its most serious defects. The most comprehensive range of functions of the organization is based on the unpredictable adaptations and the only way to transcend the capacity of individual mind is to rely on self-organizing forces of a supra-consciousness that create spontaneous orders.

In his text on "Origins and Effects of Our Morals" Hayek (1979) attempts to demonstrate how rationalism can be wrong and that traditional morality can in some sense provide a safer guide for individual action than rational knowledge.

The knowledge will be used not to mold, but to cultivate growth by preparing a suitable environment and recognition of its insuperable limits should be, for those who study society a lesson of humility, which kept them away from the fatal effort to try control society, which can lead to destruction of civilization that was not engendered by a brain, but has developed as a result of the free efforts of millions of individuals (HAYEK. 1985).

Fear of using any anthropomorphic conception, Hayek (1979) is characteristic of the scientific attitude and it almost banned the use of the concept of "purpose" of the discussion of spontaneous social growth, and has led the positivists the mistake of thinking that all appears to behave intentionally (with purpose) was created "by the designing mind" and that no result of the action of several men can show order or serve a useful purpose unless it is the result of "deliberate design". This also leads to the thought of the eighteenth that the institution of language or family century were invented, or that the state was created by an explicit social contract as opposed to the composite theories of social structures developed, "In its original meaning strict purpose indeed presupposes an acting person deliberately aiming at the result."

This shows an aspect of the problem clearly: a result that was deliberately sought could be achieved only through a limited number of ways, it can even be reached by one of these methods where no one is consciously seeking. But this leaves open the question of why the particular result produced in this way should be looked at differently from others and deserves to be described as "purpose". The "end" or "purpose" are always preservations of the whole and this is a persistent structure relations. This has to be seen as given before to understand the nature of the mechanism that holds the parts together.

The most familiar instance of this kind of all are biological organisms, for in them the design function of an organ as an essential condition for the persistence of all proved to be the fundamental heuristic value and within a parsimonious conception of nature, it would be more It would make sense.

There would be losses if all teleological conception had been excluded from biology, for example, questioning whether a newly discovered organ has purpose or function to serve. But when it comes to society, it is dangerous to describe the social sphere as a body, since the use of this borrowed term tends to obscure the important differences between the objects of study.

The all social, unlike the biological organisms, are not given to us as natural units actually are recognizable only by a process of mental reconstruction and parts, which unlike an organism can exist away from their particular places in the whole and they are large mobile and interchangeable measure.

But both also have similarities: the parties move as if its purpose was to preserve the whole and here we realized that someone had the deliberate aim of preserving the structure of all, assuming that he had knowledge and power to do so, would cause the same precise movements that occur without conscious direction (Hayek, 1979).

These spontaneous movements that keeps certain structural connection between the parts, connect with individual purposes, as all social are a condition for obtaining many of the things that individuals seek from the stability that "just Conducts" provide for formation of expectations and the pursuit of individual goals.

There is nothing more mysterious, according to Hayek (1979), the money and the price system, characteristic of the social-economic system described by it, allow man to achieve the things he wants, since neither of them was designed for this purpose and could hardly have been consciously designed before the rise of civilization make them possible.

The central problem of the social sciences for Smith is the man in society constantly promote purposes that were not originally part of his intentions. In this sense "purposive force" is defined as one that created the persistent social structures we take for granted and which form the conditions of existence.

Menger already questioned how it was possible that institutions that serve the well-being (which can be replaced by "achieving its purposes aware") common and are important for their advance, can arise without a primary common objective in its creation. So the basic model institutions in methodological individualism, where both institutions appear as unintended consequence of actions, provide parameters that affect individual stocks.

There is confusion about what we mean to say that human institutions are man-made, since the term institution is misleading as it suggests something deliberately set. It would be better if that term was used for laws and private organizations and a more neutral term like "formations" (in the sense that geologists use and which corresponds to the German Gebilde¹) - which can be understood as changes that crystallize in a configuration or structure - to be used for this type of phenomenon, such as language or money that were not created and emerged spontaneously (Hayek, 1979)

If all the institutions were made by man, so he has full power to remake them the way you want, but this is a complete non sequitur based on misunderstanding of the term institution and that would only be valid if these deliberate formations / purposeful were the result design (Hayek, 1979).

¹ The German philosopher Hans-Georg Gadamer in his *Wahreit und Method* 1960 book is perhaps one of the most didactic references to understanding the concept of "Gebilde": for him "transformation means that something suddenly turns into a completely different thing, and that this second thing which has been converted by its transformation, is your true self, before which his being earlier was nothing. " - *Wahrheit und Methode* p.116 (seen in the book: *Hermeneutics and dialectic: the Platonic studies to meet with Hegel*, Custódio Almeida).

However phenomena such as language, market, money and morality, are not products of deliberate creation, by the way, they not only were not designed by any mind as dependent and are caused by the actions of people who are not guided by the desire to keep their existence. As they are not due to any design, but are maintained by the individual actions that do not control, we can not improve them by any deliberate control or movement of the parts.

Thus, civilization appears as a result of an individual accumulation of knowledge or as a personification of a supposed individual brain that controls everything in symbols, habits, institutions, tools and concepts that are used often without even being understood.

Much of the old "historical school", according to Hayek (1979), was essentially a reaction against the kind of erroneous rationalism we are discussing and that failure strand is to treat this phenomenon as an accident of time and place.

For Hayek (1979), the conclusion that socialism is the logical consequence of rationalism does not imply that socialism is right, but that rationalist moral judgment is wrong. In this text, the author still insists on as the type of established order allows billions of the human species survive and how much it would not be possible to be designed by any mind, but by obedience to traditional customs that were selected by the evolution of the group without he needs to understand the process and also highlights the role of religion in strengthening just conduct and tradition:

"The Adam Smith Understood, it was religion [which] in its crudest form gave the sanction to the rules of morality, long before the age of artificial reasoning and philosophy "(Morality Theory of Sentiments, p.273). In fact, even agnostics ought to be grateful to the religious traditions Which, for Reasons They can not accept have preserved long enough Those nonrational beliefs que made available the building elements of the extended order Which We call civilization. "(Hayek 1979)

The explanation of how the parts of a social whole depend on each other will always appear as a genetic justification, in which, in short all this is not something historical, but rather the result of compositional social life. It is only through the individualistic method, or compositional, we can give a definite meaning to social processes and formations in any sense as more than the mere sum of its parts and that would understand how interpersonal structures emerge (Hayek, 1979).

In contrast, there is the collectivist method, according to Hayek (1979), refusing to rely only on the interactions of individual effort and so rarely get to define the precise nature of these or all of its mode of operation; Moreover, it is regularly taken to design these all on the model of an individual mind and it is this theory that exalts the individual reason and demand to all forces in society to be subject to the direction of a single mastermind, while on the other hand there is the individualist who recognizes the limitations of the power of individual reason and consequently advocates freedom as the most complete environment for the development of the powers of the inter-process. It is

seen that the design of a mind explaining completely involves a logical contradiction, because of the practical limits determined by the impossibility of checking all the data and the limits of reason. While this movement is a kind of irrationalism, for Hayek (1979), is also a kind of superrationalismo and advocates in favor of reason.

So Hayek adopted the "compositional method" in the social sciences, as evidenced in *The Counter-Revolution of Science*:

"While the method of the natural sciences is, in this sense, analytical, the method of the social sciences is best described as compositional or synthetic. These are the so-called sets, groups of components which are structurally connected, which have learned to discriminate the whole phenomena observed only as a result of our systematic adjustment of elements with familiar properties and build or rebuild the properties of the known elements." ([The Counter-Revolution of Science](#), P. 39).

The social sciences have to deal with essential complexity of structures whose representation could only be by models made up of a lot of variables in the same way, competition is a process that would only result if it involved a large number of competitors (HAYEK . 1985).

In the physical sciences, however, the use of statistics solves the difficulty of obtaining specific information on different elements and are confined in "phenomena of unorganized complexity" and that are opposed to the social sciences that are organized complexity, which means that the structures that generate these phenomena are characterized by not only depend on the properties of the different elements that compose them or the relative frequency with which they occur, but also the manner in which its elements are interconnected. So you can not replace these unique information by statistics.

Without such specific information would not have more than "pattern predictions" without any specific statements about the different elements that constitute these structures.

Still, using mathematical techniques brings great advantage by offering the possibility described by equations, the general characteristics of a standard, even when their numerical values are ignored, but that does not imply to use such a technique to determine or predict the numerical values of those quantities.

It is therefore doubtful that this kind of quantitative contribution can make significant contributions to the theoretical understanding of economic phenomena, it is understood that this understanding is different from a mere description of particular situations. Therefore, it is preferable to an imperfect but real knowledge (even unable to forecast and much uncertainty) than a would-be accurate knowledge, but probably false.

It is important to be aware of the consequences of errors involving abstract problems of philosophy of science and that can be avoided from a not uncritical acceptance of assumptions that only seem scientific.

One way to measure the degree of complexity of different types of abstract patterns: the minimum number of elements involved. C. Judson Herrick "for a few minutes of intense activity in the cortex number of inter-neural connections can be made as large as the number of atoms of the solar system." But the increasing complexity as it passes from the inanimate to the animate (more highly organized) and social phenomena becomes obvious. The "emergency" of new standards as a result of the increased number of elements including simple relationships exist, means that this higher structure as a whole will have certain abstract or general characteristics which will be recurring regardless of the particular values of individual data while the overall structure is preserved.

The real strength of mathematics is to describe patterns that can not be perceived by the senses and describe the common properties hierarchies or classes of highly abstract features standards. You must first invent the standard, before discovering his presence in a phenomenon, or rather of being able to test its applicability to what we observe. A theory will always set only one type (or class) standards, and the particular manifestation of the expected pattern depend on the particular circumstances.

It is necessary to talk about the method that is used often, but wrongly, they believe provide the understanding of complex phenomena: statistics.

Statistics deals with the problem of large numbers essentially eliminating the complexity and deliberately treating the individual elements as if they were not systematically connected. It avoids the problem of complexity and ignores the fact that the relative position of the different elements in a structure can import. Information in numerical frequencies of different elements of a collective are sufficient to explain the phenomenon and there is no information request on how the elements are related.

Statistics allows gain simplicity and replace a single attribute by attribute unverifiable individual in a community. It is therefore irrelevant to the solution of problems where the relationships between the individual elements with different attributes are what matters. Its role is to provide information on the relative frequency with which particular properties of complex structures, the members of a species of organism, occur together; but it assumes that it has an independent criterion for identifying structures of these type. It is clear, therefore, that we should not use it unless we know the theory that determines its structure.

The most complex structures we are called bodies and they can not tell us anything about the structure and functioning of social structures. Probably the best illustration of a theory complex phenomenon is the Darwinian theory of evolution by natural selection certainly does not fit the orthodox criteria of prediction and control.

There is a misconception in relation to it: it is often presented as a succession of particular species of organisms that gradually moved to other, but this is not a theory of evolution, but an application of the theory to particular events that took place on Earth in last two billion years.

The essence of the theory of evolution is the claim that particular species have common ancestors or that the similarity in structure refers to a common ancestor, but this is emphatically not the point of this theory of evolution.

Many of the erroneous application of evolutionary theory (particularly in anthropology and other social sciences) and its various abuses (as in ethics) are due to this erroneous interpretation of its content. In fact, the theory of evolution by natural selection describes a process type (or mechanism) that is independent of the particular circumstances.

This mechanism that transmits variations and competitive selection of those that prove to have a better chance of surviving will over time produce a wide variety of structures adapted to the continuous development and setting each other. This does not refute the Darwinian theory of evolution but rejects its application to the particular case.

One theory describes only a certain range of possibilities and only she can tell what is covered or not. For this purpose it can be considered the fact that in one respect the theory of evolution is still incomplete because we still know little about the mechanism of mutation. And even if we knew completely and its advantages it does not allow us to explain why the species or organisms have the particular structures they have.

The reason for this is the current inability to check the particular circumstances in the course of two billion years decided the emergence of existing forms or those that over the next hundred years will determine the selection of the types that will survive.

Prediction and control usually seen as essential criteria for science are less reliable in biology, because it deals with standards of construction strength and the knowledge of what is useful for the creation of favorable conditions for the production of certain types of results, as it will only in comparatively few cases, it is possible to control all the relevant circumstances.

The statement about the knowledge of how something is certain is ambiguous: it can mean that only know the class of circumstances determines certain kind of phenomenon without being able to specify the particular circumstances that decide which member of the class under the standards will appear and can mean that we can also explain the second, that is, we can say fairly that a certain phenomenon is determined by known natural forces and at the same time admit that we do not know precisely how it was produced.

It can establish that all human action is necessarily the result of the structure inherited from your body (especially your nervous system) and all external influences that acted upon him since his birth. So, if we say that the most important of these factors was the same among many individuals, a particular class of influences will have some kind of effect. However, this would be an empirical generalization based on an assumption "ceteris paribus" it would not be verifiable in a particular instance.

The individual personality will remain a unique and countless phenomenon we expect to influence in a desired direction by the empirical development admire and

blame, but whose specific actions can not generally predict or control, because we can not get information on all the particular facts which determine it.

The same mistake is derived from various types of relativism arising from misinterpretation of the theory of evolution. Our present values exist only as elements of a particular cultural tradition and are significant only for some more or less long phases of time, linked the individual generations. But, paradoxically, although it is known that all values are relative to something, we do not know what they are relative.

We may be able to indicate the general class of circumstances that made them, but we do not know the particular conditions which our values are to be or what our values would be if the circumstances were different. In addition, the search for a specific prediction alone justifies the reductionism of desires.

The "etc.-cuts" are not reductions that allow us to dispense biological or mental entities are, in fact, mere explanations of the characteristic of the type of order or pattern whose specific manifestations we only know through our concrete experience them.

Popper and others claimed that "the more we learn about the world, and the deeper our learning, more conscious, specific and articulate will be the knowledge of what we know and knowledge of our ignorance."

Once recognized that the general mechanism that produces a certain kind of standards are not merely a tool for specific predictions, but important in itself because it can generate important guides to action (or inaction preference for directions).

We must end the naive superstition that the world should be organized as to be possible only by direct observation find simple regularities between all phenomena and that is the necessary presupposition for the application of scientific method.

If we want to advance it is necessary, so that the objectives of what is expected of complex phenomena is different from that expected from the simple phenomena. For the purpose of theoretical science is to establish "laws" and scientific law is a rule by which two phenomena are connected to each other according to a causal principle, as cause and effect. In this regard it is worth a quote from Max Planck: "a true scientific law must be expressible in a single equation."

Thus it is observed that a law in this sense has little to do with the theory of complex phenomena and that even the description of scientific theories as nomological or nomothetic are appropriate only for problems in two or at most three variables to which the theory of simple phenomena It can be reduced.

This "law" would be valid only for a particular set of values for all other parameters and change with every change in any of them, but this does not seem to be a very useful concept of "law."

If the parameter values are continuously variable, an infinite number of particular laws, showing dependence on each other, appear and so are no known laws that this kind of phenomenon obey.

Thus, the search for the discovery of laws does not seem a productive scientific procedure, but merely a feature of theories of simple phenomena. In the field of complex phenomena the term "Law" as well as the concepts of cause and effect do not apply without a change in your direction.

The incessant search for laws on regularities discovered in bivariate relationships is probably a result of inductivism but for complex phenomena is more obvious that we should have our theory before checking if things behave according to it or not. If this behavior were followed it would have avoided the mistake of having said that the biological theory of evolution proposed some laws defined as the law of the necessary sequence of stages or forms.

Another important criticism that can be made to the Austrian doctrine concerns the Hayekian idea of standards as an unconscious process. In order to better elucidate this assumption of the social model of Hayek, worth a brief digression on the meaning of the concept of standards.

This type of rule should not be confused with so-called "moral standards". You can not identify an ethical notion of good or evil underlying social norms. The ethical question only applies to moral standards, in which case a ground search rules to tell us under what conditions prevail good. Can analyze the consequences of a standard and ask if it produces effects that lead to the greatest happiness of the community (as in "utilitarian ethic") or ask if moral norms preserve or not some inalienable right of mankind (to life, freedom etc.) and based on the consideration of these rights judge the validity of a moral norm (if the "ethics of human rights"). Another thing, different social and moral norms, are the "legal norms", made by legal experts, standards with legal validity expressed in a code of laws that do not overlap with the previous cases. We therefore have different standards, though this distinction is somewhat arbitrary. What shall we say then applies to "social norms." For them there is a moral imperative or even cool to impose its observance. If you want consistency with the Austrian principle of methodological individualism, we must investigate why individuals the share.

In Hayek, there is still a creative space in the unconscious acceptance of the norm when it examines the relationship between mind and brain, but he does not emphasize adequately in his model the role of human deliberation. Even if these reasons are partly unconscious, this does not imply that the choices are not rational or that compliance can not be interpreted as a consequence of rational choice self-interested individuals. In Hayek, there is still a creative space in the unconscious acceptance of the norm when it examines the relationship between mind and brain, but he does not emphasize adequately in his model the role of human deliberation. Even if these reasons are partly unconscious, this does not imply that the choices are not rational or that compliance can not be interpreted as a consequence of rational choice self-interested individuals. In Hayek, there is still a creative space in the unconscious acceptance of the norm when it examines

the relationship between mind and brain, but he does not emphasize adequately in his model the role of human deliberation.

Hayek uses an evolutionary explanation for the origin of the rules. For him, the rules governing human action have evolved over generations without conscious human design. They are an unintended consequence of human action as unintentional product of an evolutionary process. Social norms grow by accident, the same type of accident that determines the outcome of all types of evolutionary processes. However, not enough to postulate the existence of such proceedings; it is necessary to demonstrate the mechanism of evolution of social norms.

Government interference in the market cause disorientation in the production process "the past instability of the market economy is the consequence of the exclusion of the most important regulator of the market mechanism, Money, from itself being regulated by the market process."

Once the government has the power to benefit groups or particular sections of the population, the majority of the government mechanism forces them to use it to gain support enough of them to command a majority. The constant temptation to find local or sectional dissatisfaction manipulating the amount of money and then more be spent on services for those who are clamoring for assistance will be irresistible. This type of expenditure is not an appropriate remedy but necessarily discourages the operation of the market.

The act of simply printing money (cheap money) generates an initial positive effect on productive activity but at the same time destroys the mechanism of the market and this is not easily seen. a distortion in the relative price structure that allocates resources and allocates according to need is produced. Indirect and slow effects that are generated are difficult to recognize and less tempting than the immediate and nice benefit that easy additional money provides. Distortions in the price structure generally occur by setting monopolistic or governmental character prices.

Finally, after all the above, one can see how the descriptive development of Hayek's evolutionary mechanism based on the concept of spontaneous order, which is the result of cultural selection idea is complex and fundamental to science, by not accept scientificisms and strive along with his contemporaries in the scientific advance from a comprehensive methodological synthesis of both individual behavior as the consequences of their interactions, which are complex and chaotic, in determining a structure of social life along the lines of Great Society.

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