

Institutions and institutionalism: what, why and how

**Paper presented to the MSE-MSU conference on
«Куда идти? Проблемы реформирования институтов и
экономической политики в России»**

**Moscow,
April 25th-27th**

Jacques Sapir

**Professor of Economics, Higher School of Social Sciences, Paris
Visiting professor at Moscow School of Economics (MSE-MGU)
Head of IFAEE-CEMI
Foreign member of the Academy of Science of the Russian Federation**

Executive summary

English

The word « institution » is now frequently used by economists to the point one may wonder if institutionalism has not become the new mainstream. Institutionalism arose from the need to give their place to notions of time and money, to understand meaning and consequences of radical uncertainty, and also to understand what a market or a firm are. Institutionalism implies that economic theory is aimed at understanding the world as it is (and not as we would like it to be), and makes reference to "truth realism", which implies that one judges a theory in its confrontation with the world and not only on its criteria of internal coherence or conformity to the initial axioms.

This paper would then focus first on what institutions are, discusses the opposition between formal and informal institutions, and shows a strong link between institutions and the subjective point of view in economics. It would then move on reasons why institutions are necessary to understand the economic system, and why they are making particularly effective devices for processing information. It then would try to explain how do they work, why are they central to political economy, and why they are connected to the issue of social conflict.

Russian

Слово «институт» в настоящее время часто используется экономистами до такой степени, что можно задаться вопросом, не стал ли институционализм новым мейнстримом. Институционализм возник из-за необходимости уделять свое место понятиям времени и денег, понимать смысл и последствия радикальной неопределенности, а также понимать, что такое рынок или фирма. Институционализм подразумевает, что экономическая теория направлена на понимание мира таким, какой он есть (а не таким, каким мы хотели бы его видеть), и ссылается на «реализм правды», который подразумевает, что человек оценивает теорию в ее конфронтации с миром, а не только по своим критериям внутренней согласованности или соответствия исходным аксиомам.

Затем в этом документе основное внимание будет уделено тому, что представляют собой институты, обсуждается противопоставление между формальными и неформальными институтами, и будет показана тесная связь между институтами и субъективной точкой зрения в экономике. Затем он рассмотрит причины, по которым учреждениям необходимо понимать экономическую систему и почему они создают особенно эффективные устройства для обработки информации. Затем он попытается объяснить, как они работают, почему они занимают центральное место в политической экономике и почему они связаны с проблемой социальных конфликтов.

Institutions and institutionalism: what, why and how

The word « institution » is now frequently used by economists, be it in the context of economic development¹ or in a more general way to the point one may wonder if institutionalism has not become the new mainstream². This is a welcome change by comparison to the intellectual context of the 1960's to 2000's where we got fed up with rational expectations and general equilibrium³. But institutionalism is another issue. It actually defines a theoretical field clearly in opposition with the so-called « standard » theory, that is the legacy of Walrasian⁴ and neo-Walrasian theory⁵. Institutionalism could also be seen as an attempt to break with formalism that infected economics since the late 1940's⁶. The battle around institutions and Institutional Economics can be seen also as one of the major battle for pluralism inside economics⁷. We then will explore in the paper what institutions are, why are they necessary, how are they generated, in the context of the big divide between General Equilibrium followers and other economists.

1. The state of the art

Institutionalism arose from the need to really give their place to important notions of time and money⁸, but also to understand what a market or a firm are. An issue institutional economics have been taken to heart⁹. The mainstream theory was quite vocal about what a market was

¹ Rodrik, D., A. Subramanian and F. Trebbi, (2002), 'Institutions rule: the primacy of institutions over integration and geography in economic development', *IMF Working Paper, WP/02/189*. Washington DC, International Monetary Fund.

² Hodgson G.M., (2007), "Evolutionary and Institutional Economics as the New Mainstream?", in *Evol. Inst. Econ. Rev.* Vol. 4(1), pp : 7-25.

³ de Vroey M., (1987), "la possibilité d'une économie décentralisée: esquisse d'une alternative à la théorie de l'équilibre général", in *Revue Économique*, vol. 38, n°3, pp. 773-805

⁴ Walras L., (1900), *Éléments d'économie politique pure ou théorie de la richesse sociale*, Paris, Pichon et Durand-Auzias. Debreu G., (1959), *Theory of Value: an axiomatic analysis of economic equilibrium*, New Haven, Yale University Press.

⁵ See Lucas R.E., (1981), *Studies in Business Cycle Theory*, MIT press, Cambridge, Mass. Lucas R.E. & T. Sargent, (1981), "After Keynesian Macroeconomics", in Idem, (edits.), *Rational Expectations and Econometric Practice*, George Allen & Unwin. Long J. and C. Plosser, "Real Business Cycle", in *Journal of Political Economy*, Vol. 91, n°1, pp. 39-69.

⁶ Insel A., (1994), "Une rigueur pour la forme: Pourquoi la théorie néoclassique fascine-t-elle tant les économistes et comment s'en déprendre?", in *Revue Semestrielle du MAUSS*, n°3, Paris, éditions la Découverte, pp. 77-94

⁷ Chavance B. & Labrousse A. (2018), « Institutions and Science: The Contest about Pluralism in Economics in France », in *Review of Political Economy*, 30 (2) : pp. 190-209.

⁸ O'Driscoll Jr G.P. and M.J. Rizzo, (1985), *Economics of Time and Ignorance*, Oxford, Basil Blackwell; Sapir J., (2000), *Les Trous Noirs de la Science Economique*, Paris, Albin Michel.

⁹ Ostrom E., (2005). "Doing Institutional Analysis: Digging Deeper than Markets and Hierarchies," in C. Ménard and M. Shirley, eds. *Handbook of New Institutional Economics*, pp. 819-48. Springer.

supposed to do but was unable actually describe or analyse what it is¹⁰. The difference here is not just one coming from the opposition between General Equilibrium's lovers and other economists, or between those who believe that economics is a hard science and those who don't¹¹. It also encompasses an opposition on methodology¹². One of the main separation points between the two schools is precisely to know if an economic result is the product of more or less simple mechanics¹³, or if it is the product of a process, implying the possibility of multi-causality¹⁴. The distinction between a mathematical formalism and probabilities based on a rigorous axiomatic¹⁵, and an approach making operational results, has been the subject of a number of work¹⁶. It intersects the opposition between the event and the process¹⁷.

One of the leading author on the methodology of economic, Uskali Mäki, thus considers the distinction between "world realism", which implies that an economic theory is aimed at understanding the world as it is (and not as we would like it to be), and "truth realism", which implies that one judges a theory in its confrontation with the world and not only on its criteria of internal coherence or conformity to the initial axioms¹⁸. Sheila Dow elaborated many times on such a distinction¹⁹.

Table 1

	World-realism	Refusal of world-realism
Processual truth realism	Political economy	
Events truth realism	Neoclassical instrumentalism	
No truth realism	Applied neoclassical theory non-instrumentalist	Pure General Equilibrium theory non applied

¹⁰ de Vroey M., (1990), "S'il te plaît, dessine moi...un marché", in *Économie Appliquée*, tome XLIII, n°3, pp. 67-87. Guerrien B., (1994), "L'introuvable théorie du marché", in *Revue Semestrielle du MAUSS*, n°3, op.cit., pp. 32-41.

¹¹ Cartelier J. and A. D'Autume (eds), (1995), *L'économie est-elle une science dure?*, Economica, Paris.

¹² Caldwell B.J., (1993), "Economic Methodology: Rationale, Foundation, Prospects", in U. Mäki, B. Gustafsson et C. Knudsen, (eds.), *Rationality, Institutions & Economic Methodology*, Routledge, Londres-New York, 1993, pp. 45-60.

¹³ Dow S.C., (1997), "Mainstream Economic Methodology", in *Cambridge Journal of Economics*, vol. 21, n°1, pp. 73-93.

¹⁴ Mäki U., (1993), "Social Theories of Science and the Fate of Institutionalism in Economics", in U. Mäki, B. Gustafsson et C. Knudsen, (eds.), (1993), *Rationality, Institutions & Economic Methodology*, Routledge, Londres-New York, pp.76-109,

¹⁵ Haavelmo T, *The Probability Approach To Econometrics*, supplement, *Econometrica*, vol. 12, 1944

¹⁶ Hahn F.H., (1977), "Keynesian economics and general equilibrium theory: reflections on some current debates" in G.C. Harcourt, (ed.), *The Microfoundations of Macroeconomics*, Macmillan, Londres, 1977. Loasby B.J., (1989), *The Mind and Methods of the Economist: A critical appraisal of major economists in the XXth Century*, Edward Elgar, Aldershot.

¹⁷ Lawson T., (1989), "Realism and instrumentalism in the development of econometrics", in *Oxford Economic Papers*, vol. 41, pp. 236-258

¹⁸ Mäki U., (1988), "How to Combine Rhetoric and Realism in the Methodology of Economics", in *Economics and Philosophy*, vol. 4, n°1, pp. 89-109.

¹⁹ Dow S.C., (1990), "Post-Keynesianism as political economy: a methodological discussion", in *Review of Political Economy*, vol.2, n°3, pp. 345-358.

Source: Dow S.C., (1990), "Post-Keynesianism as political economy: a methodological discussion" in *Review of Political Economy*, vol.2, n°3, pp. 345-358, p. 349

In her paper, Sheila Dow included in the "political economy" segment Institutionalists theories, but also Post-Keynesian ones, Marxist and Austrian theories. This table is then giving us some insights about the big divide between Walrasian and other economists²⁰.

Mäki's criterion, of course, raises the problem of what is considered the "objective world". There is thus an important theoretical challenge between the heirs of the Walrasian movement and the institutionalists. The place of history in the economic process is actually part of this challenge²¹. But how could it be used? Jerome Maucourant suggests that Douglass North, one of the champions of New Institutional Economics²², used history to foster his notion of economic evolution²³.

Moreover, the notion of an economic institution is an old one and it has, under other names, preceded the mechanistic turn of the Walrasian "revolution"²⁴, a turn that had been criticized by several authors²⁵. Institutions could have different meanings, and different consequences, when they are seen by the "old" institutionalist school²⁶ or by the New Institutional Economics (or NEI)²⁷. In the "old" institutional school institutions resulted from social conflicts in an uncertain world. New Institutional Economics were grounded on both the notion of transaction costs and to the view that institutions are chosen on the basis of conscious choice because of their greater efficiency, at time, on markets. The problem here is that transaction costs are linked to uncertainty (and consistent as a concept with the "old" school) and if uncertainty is to make agent to choose institutions over markets then rational computation as the basis of choice could not apply²⁸. Then the choice is not about efficiency

²⁰ Sapir J., (1998), "Calculer, comparer, discuter: apologie pour une méthodologie ouverte en économie", in *Économies et Sociétés*, série F, n°36, 1/1998, special issue, *Pour aborder le XXIème siècle avec le développement durable*, Passaris S and K. Vinaver eds., pp. 77-89.

²¹ Hodgson, G. M., 2001, *How economics forgot history*. London, Routledge.

²² Ménard C. and Shirley M.M., (2012), « The Contribution of Douglass North to New Institutional Economics » in *Economic Institutions, Rights, Growth, and Sustainability: The Legacy of Douglass North*, Cambridge, Cambridge University Press, chap1.

²³ Maucourant J. (2012), "New Institutional Economics and History" in *Journal of Economic Issues*, vol. 46, n°1, pp. 193-208.

²⁴ Nekipelov A.D., (2006), *Formation and functioning of economic institutions*, Moscow, *Ekonomist'* [Становление и функционирование экономических институтов: от «робинзонады» до рыночной экономики, основанной на индивидуальном производстве]

²⁵ Georgescu-Roegen N., (1978), "Mechanistic Dogma in Economics", in *British Review of Economic Issues*, n°2, May, pp.1-10; Idem, (1966), *Analytical economics*, Cambridge, Mass., Harvard University Press. Seba G., (1953), "The Development of the Concept of mechanism and Model in Physical Science and Economic Thought", in *American Economic Review - Papers and Proceedings*, vol.43, pp.259-268. G.L.S. Shackle, (1972), *Epistemics and Economics: a Critique of Economic Doctrines*, Cambridge, Cambridge University Press, Cambridge.

²⁶ Hamilton W.H., (1919). "The Institutional Approach to Economic Theory," in *American Economic Review*, 9(1), Supplement, pp. 309-318.

²⁷ Williamson, O.E., (2000), « The New Institutional Economics: Taking Stock, Looking Ahead » in *Journal of Economic Literature*, Vol. 38, No. 3 (Sep., 2000), pp. 595-613. See also North D.C. (1995). "The New Institutional Economics and Third World Development," in J. Harriss, J. Hunter, and C. M. Lewis, ed., (1995), *The New Institutional Economics and Third World Development*, pp. 17-26.

²⁸ Ankarloo D. and G. Palermo, (2004), "Anti-Williamson: A Marxian Critique of New Institutional Economics." In *Cambridge Journal of Economics* vol. 28, pp. 413-429.

but about heuristic rules. We are then faced to the following dilemma: either to consider that both currents (“Old” and NEI) are sharing the same basis (a view of uncertainty) but to understand that NEI are plagued by serious problems of consistency, or to see NEI as developing in a non-uncertain economy, and then the unity of both currents could be put in doubt²⁹.

Then, three major typologies can thus be distinguished in the economic approach of institutions³⁰: the first based on the opposition between formal and informal; the second based on a hierarchical order of institutions; the third based on the distinction of several "areas" (economy, political, legal and social) but also linking economic action to the social (and legal) structures in a situation called embeddedness³¹.

As a matter of facts, the word « institution » is now fairly used. Yet there is no commonly accepted of what an institution is. As W.R. Scott has written, “*there is "no single and universally agreed definition of an 'institution' in the institutional school of thought*”³²." On one hand, markets and hierarchies (i.e. organizations) are considered and labelled as institutions³³. Oliver Williamson will also consider State or bureaucratic hierarchies as part of institutions³⁴. But in the so-called “new” institutionalism or NIE the domination of methodological individualism³⁵, borrowed from Walrasian and post-Walrasian economics is obvious, as is its opposition to realism³⁶. On the other hand, institutions are what surround and help to work these hierarchies and markets. Hence, in the German Historical School, which is one of the predecessors of the “old” institutionalism³⁷, Schmoller clearly distinguish institutions as *separated* from organizations and markets³⁸. The same author is also précising the distinction between law and customs, which are playing a role in the general economic and social context³⁹. Thorsten Veblen, one of the founding father of American institutionalism is also stressing on the relevance of traditions and customs both as origin of

²⁹ See Dugger W., (1990), « The New Institutionalism: New but Not Institutionalist » in *Journal of Economic Issues*, Vol. 24, No. 2 (Jun., 1990), pp. 423-431.

³⁰ Jütting J., (2003), “Institutions and development : a critical review”, *OECD Technical Papers*, n° 210, OECD Development Center.

³¹ Granovetter M., (1985), « Economic action and Social Structure : The Problem of Embeddedness » in *American Journal of Sociology*, Vol. 91, n°3, pp. 481-510.

³² Scott W.R., (1995), *Institutions and Organizations. Ideas, Interests and Identities*, New-York, Sage ;Paperback, p. 33.

³³ Egidi M., 1996, « Creative destructions in Economic and Political Institutions », in Dallago B and Mitone L., *Economic Institutions, markets and competition*, Cheltenham, Edward Elgar, pp. 33-62, p. 34.

³⁴ Williamson O.E., (1996), *The Mechanisms of Governance*, London-New York, Oxford University Press, pp. 4-5.

³⁵ Furubotn, E. and R. Richter. 1991. "The New Institutional Economics: An Assessment," in Furubotn E. and Richter R., eds, *The New Institutional Economics*, College Station, TX: Texas A&MU. Press. See also, Furubotn E. and R. Richter, (1997), *Institutions and Economic Theory*. Ann Arbor University, Michigan Press

³⁶ Williamson O.E., (1985), *The Economic Institutions of Capitalism, Firms, Market, Relational Contracting*, Free Press, New York, pp. 391-2

³⁷ Labrousse A. (2009), « Le Methodenstreit : une affaire close ? », in : Alcouffe A. & Diebold C. (dir.) : *La pensée économique de langue allemande*, Paris, Economica, pp. 143-169.

³⁸ Schmoller G., 1905 [1900], *Principes d'économie politique Vol. I*, Paris, Giard et Brière, p. 150-156 ; (translated from German, originally published in 1900).

³⁹ Idem, p. 129.

institutions and as institutions *per se* ⁴⁰. He also describes the process of technical accumulation as one both moved and moving the institutional frame⁴¹. To some extent Veblen's work could be seen as converging with Karl Polanyi in a deep break with liberal theories a far the analysis of what market and capital are⁴². For John Commons, the other father of American institutionalism an institution is defined through the concept of *going concern*, the notion of collective actions and the rules of these actions. Collective actions are shaping individual ones through custom, traditions but also going concerns⁴³. An important point, rightly identified by Bernard Chavance is the fact that the freedom content of any institution is first coming through a collective constraint⁴⁴. This is a point raised too by Douglass North who writes that institutions are constraints set up by people to organize and govern interactions between people⁴⁵. The combination of formal and informal constraints shaping individual action was taken a step forward by Douglass North who makes the distinction between formal and informal institutions⁴⁶. By doing so North was making a link between the so-called "old" and the "new" institutionalism, but at the cost of consistency with previous North's work⁴⁷.

The aim of this paper is then to first look at what is called or could be called "institutions", then to inquire about the relations between information, rationality and individual preferences and the need for institutions and then to inquire about how institutions are generated how do they evolve. This leads us to examine the question of whether the economies have the conjuncture of their structures or whether they are gradually acquiring the structures of their conjuncture.

2. What institutions are?

It is then obvious that the field of institutional economics is a complex one. If all thinkers included in this field are agreeing on the fact that institutions matters they are obviously not agreeing on a common definition of institutions nor are they agreeing on the relative weight of intentional or non-intentional actions, on collective versus individual ones.

This is painting a landscape whom where three major issues are raising. The first one is obviously the relation between markets and organizations. This is mostly (but not only) the field of transaction costs. The second one is the relation between formal and informal

⁴⁰ Veblen T. (1970) [1899], *Théorie de la classe de loisir*, translated in French, Paris, Gallimard, p. 126. See also Veblen T., (1901), « Gustave Schmoller's economics » in *Quartely Journal of Economics*, vol. XVI.

⁴¹ Brette O., [2003] « L'accumulation des connaissances technologiques dans la pensée de Thorstein Veblen : ressources pour l'analyse évolutionniste contemporaine », in *Economie appliquée* (56), 4, p. 7-38.

⁴² Maucourant J., (2005), « Le Capital comme Volonté et comme Représentation – (Lectures de Polanyi et Veblen) » in *Rue Descartes – Collège International de Philosophie*, n°49, pp. 20-30. <https://www.cairn.info/revue-rue-descartes-2005-3-page-20.htm>

⁴³ Commons J. (1934, 1990), *Institutional Economics*, New Brunswick and London, Transaction Press, 2 vol., vol 1, p. 134.

⁴⁴ Chavance B., *L'économie institutionnelle*, Paris, La Découverte, 2012, p. 36.

⁴⁵ North D., (1994) « Economic Performance Through Time », in *American Economic Review*, vol. 84, n°3.

⁴⁶ North D. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press, pp. 360-362.

⁴⁷ North D.. (1977), " Markets and Other Allocation Systems in History: The Challenge of Karl Polanyi." In *Journal of Economic History*, vol. 6, n°3, pp. 703-716

organisation, an issue already debated in the “old” institutionalism. The third is the relation between rules and conventions.

A. Institutions, organisations and markets and the problem of transaction costs

The choice between “make or buy” has been lauded as one of the most powerful though to describe the process of economic development and the nature and evolution of the firm⁴⁸. Transaction costs have been acknowledged as one of the major idea in economics⁴⁹ and where applied to a wide ranging of topic from vertical integration⁵⁰, leading to the notion of asset specificity⁵¹, and to a specific analysis of the notion of franchising⁵². Coase wrote his paper from a very simple, but decisive, question: “...why a firm emerges at all in a specialised exchange economy”⁵³. But one has to wonder what he calls a “specialized exchange economy”. Why to put market first? Are market failures the exception or the norm? And, if so, could we not put this question on its head and wonder why markets emerged at all in a “specialized exchange economy”? This question is obviously related to another one: are assumptions made by the neoclassical (or Walrasian) school realistic ones? From a theoretical point of view prices are seen as a co-ordinating mechanism under perfect competition. Nevertheless we find islands of *conscious* coordination inside the economic mechanism and inside the firm direct orders replace the price mechanism. Actually Hugo Sonnenschein and Wayne Shafer have demonstrated logical flaws in excess demand functions that are creating huge problems for any General Equilibrium theory⁵⁴.

When reading back the topical Coase’s paper one can find various quite interesting references, going from Joan Robinson⁵⁵ to Nicholas Kaldor⁵⁶, two authors who will become founders of the “Post-Keynesian” school⁵⁷, and including von Hayek⁵⁸. It is then quite

⁴⁸ Coase R.H. (1937), « The Nature of the Firm », in *Economica*, n°4, NS, pp. 386-405.

⁴⁹ Joskow, Paul. (1991), "The Role of Transaction Cost Economics in Antitrust and Public Utility Regulatory Policies," in *Journal of Law and Economic Organization*, vol.7, Special Issue, pp. 53-83.

⁵⁰ Alchian A. and Demsetz H., (1972) « Production, Information Costs, and Economic Organization » in *American Economic Review*, vol. 62, n°4, pp. 777-795.

⁵¹ Klein B., R. Crawford, A. Alchian, (1978), “vertical Integration, Appropriable Rents and the Competitive Contracting System”, in *Journal of Law and Economics*, vol. 21, pp. 297-326. See also Alchian A., (1984); “Specificity, Specialization and Coalitions” in *Journal of Economic Theory and Institutions*, n°140, pp. 34-49.

⁵² Williamson, O.E., (1983), “Credible Commitments: Using Hostage to Support Exchange”, in *American Economic Review*, vol.73, n°2, pp.519-531. Williamson O.E., (1976), “Franchise Bidding for Natural Monopolies-In General and with Regard to CATV” in *Bell Journal of Economics*, vol. 7, pp. 73-104.

⁵³ Coase R.H. (1937), « The Nature of the Firm », op.cit., p. 388.

⁵⁴ Sonnenschein H. and Wayne S., (1982), « Chapter 14 Market demand and excess demand functions » in Arrow K.J and M. D. Intriligator (edits), *Handbook of Mathematical Economics*, Volume 2, Amsterdam, Elsevier, pp. 671-693

⁵⁵ Robinson J., (1932), *Economics is a serious subject: the apologia of an economist to the mathematician, the scientist and the plain man*, Cambridge, Heffer and Sons.

⁵⁶ Kaldor N., (1934), « The Equilibrium of the Firm », in *Economic Journal*, vol.44, pp. 60-76.

Kaldor is also quoted for a virulent and nearly hayeckian attack against Walrasian economics, Kaldor N., (1934) « A Classificatory Note on Determinantness of Equilibrium » in *The Review of Economic Studies*, pp. 122-136.

⁵⁷ Berr E., Monvoisin V. et Ponsot J-F. (2018), *L’économie post-keynésienne – Histoire, théories et politiques*, Paris, Le Seuil.

obvious, but probably overlooked by most of Coase's partisans in recent years, that he grounded his view in arguments contradicting the general equilibrium view. The fact too that Coase was referring to Knight's seminal work on risk and uncertainty is also to be noted⁵⁹. However, we have to acknowledge what Frank Knight had in mind. He clearly explained the radical difference between "risk" and uncertainty: "*A measurable uncertainty, or 'risk' proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all*"⁶⁰. From this we can deduce that Coase was addressing a very special situation, but one that always could happen, and that situation clearly was at odds with the probabilistic view of the universe to which belonged neo-classical authors.

Coase came back to the origins of his seminal work 51 years after having written it and explained the intellectual atmosphere in which the paper was written⁶¹. Quite clearly this paper originated from a deep dissatisfaction with the Walrasian world mechanism frame. Even if Coase made references to "perfect competition" a large part of his reasoning was grounded on imperfect competition⁶². By stating that both markets and organizations could be seen as "institutions" organizing cooperation among decentralized agents this theory broke new grounds. Then Coase made clear that firms and markets could exist simultaneously and their relative importance was much more the result of changing economic conditions than a non-economic decision. These two institutions had strong and weak points and the borders between them could then change as economic conditions were changing.

Table 2
Firm and Market in a Coasian view

	Firm	Market
Strong points	Reduces transaction costs in a situation of uncertainty. Allows for long-term contract without uncertainty. Eliminates possible ambiguity for the direct producer.	Allows for constant innovation. Unconscious mechanism devoid of any organization costs.
Weak points	Organization costs and growing bureaucracy. Problems with decision-making and the elaboration of strategy. Weakness or non-existence of internal competition.	Uncertainty in Frank Knight sense and unpredictability of behaviours. Possible ambiguities in contracts giving birth to possible litigations.

But, would the switch between a firm and a market be made on the ground of some kind of "rational computations"? At least in its origins, the transaction costs theory was assuming the kind of agent computation abilities that are necessary for the general equilibrium theory as we explained before. Coase wrote that the size of the firm will expand until the costs of organizing any extra transaction become equal or superior to the costs of carrying the same transaction on the market⁶³. This however assumes, if taken at face value, computational abilities of a high order. We are then back to the problem of uncertainty and limits of the

⁵⁸ Hayek F.A., (1933), "The Trend of Economic Thinking" in *Economica*, vol. 13, pp. 121-137

⁵⁹ Knight F.A. (1921), *Risk, Uncertainty and Profit*, New York, Harper.

⁶⁰ Knight F.A. (1921), op.cit., p20.

⁶¹ Coase R.H., (1988), « The nature of the Firm, Origins, Meaning, Influence » in *Journal of Law, Economics and Organization*, vol. 4, pp. 3-47.

⁶² Robinson J., (1933), *The Economics of Imperfect Competition*. London: Macmillan.

⁶³ Coase R.H. (1937), « The Nature of the Firm », op. cit..

human mind. Frank Knight, who used first the dichotomy between uncertainty and risks (risks being part of a probabilistic environment) was clearly separating choice-making possibilities in these environments⁶⁴. Possibilities for a “good” or a “bad” occurrence were clearly not computable, and sometimes could even not be estimated. The latter work of Herbert Simon explored this specific dimension⁶⁵, and explained that agents in such conditions will have to use heuristic guidance for their choice, raising then the question from where came these heuristic guidances.

Oliver Williamson explored the argument⁶⁶ by wondering what the Bounded Rationality notion, as defined by Herbert Simon⁶⁷, and the one of opportunism⁶⁸, would change in the initial reasoning. This introduced also the notion of assets specificity, and the one of the more or less possible redeployment of assets. Then, Williamson we as able to draw another table:

Table 3
How behavioural assumptions impact organizations

Behavioural assumptions	Bounded rationality	Opportunism
Implications for Contractual theory	Comprehensive contracting is infeasible	Contract as promise is naive
Economic organization	Exchange will be facilitated by modes that support adaptive sequential decision-making	Trading requires the support of spontaneous or crafted safeguards

From Williamson O.E., (1991), « The logic of economic organization », op.cit., p. 93.

This table allows us to better understand the link between institutions and assumptions about the individual behaviour. But there is still a problem. Is bounded rationality compatible with opportunism (in its theoretic sense and not as a possible Human behaviour)? That is what is the place for “rational computation” under uncertainty and is there even a place for it?

To a large extent the uncertainty issue is making the link between institutional economics and Keynes. Keynes wrote in a paper commenting (and defending) the *General Theory* the following lines: “By “uncertain” knowledge, let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. ... (...) ... The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, or the obsolescence of a new invention, or the position of private wealth-owners in the social system in 1970. About these

⁶⁴ Knight F., (1921), op.cit.

⁶⁵ Cristofaro M., (2017), « Herbert Simon’s bounded rationality: Its historical evolution in management and cross-fertilizing contribution », in *Journal of Management History* Vol. 23(n°2), pp.170-190

⁶⁶ Williamson O.E., (1991), « The logic of economic organization » in Williamson O.E. and Winter S.G., (eds), (1991), *The Nature of the Firm – Origins, Evolutions and Development*, New York, Oxford University Press, pp. 90-114.

⁶⁷ Simon H.A., (1978), "Rationality as Process and as Product of Thought", in *American Economic Review* , vol. 68, n°2, pp. 1-16

⁶⁸ Alchian A. and Demsetz H., (1972) « Production, Information Costs, and Economic Organization », op. cit., and Klein B., Crawford R.G., Alchian A.A., (1978), « Vertical integration, Appropriable Rents and the Competitive Contracting Process », in *Journal of Law and Economics*, vol. 21, pp. 297-326.

matters there is no scientific basis on which to form any calculable probability whatever »⁶⁹. This is important because this definition of uncertainty will make us to switch for a world ruled by norm and rules to a world where the true decision matters⁷⁰. G.L.S. Shackle who made the difference between improbable and the non-forecasted had also pointed this⁷¹. But if the discrete decision mattered, and conflict between different collective decisions made by economic agents too, what was left of transaction costs? Actually, Keynes was seeing himself as very close to the *old* institutionalism and specifically to John Commons who directly linked institutions birth to social and economic conflicts. From this one could infer that there are two opposite readings of the notion of transaction costs. The first one is to see them as a kind of metaphor, transposing in the mainstream economics universe the idea of the possibility of absolutely non-forecasted events. The second one is to see them as an attempt to reintroduce probabilistic computation where it could not apply. Hence the NEI could be following the first reading re-united with the “old” Institutional Economics or to appear as an attempt to emulate some Institutional Economics results from basis in the second reading. This ambivalence was to plague NEI since its beginning. To this problem one can add another: how formal and informal institutions could co-exist?

B. Formal and informal institutions

We could figure out, with some debates, what formal institutions are, but what about informal institutions? Laws and regulations belong to the first category but customs have frequently the same effect and belong to the second one. John Commons aptly made the distinction between intentional and non-intentional collective rules. He stressed the importance of the combination between formal and informal collective rules and was talking about *organized customs* interacting with organizations built around strategic project that is *organized going concerns*⁷². One can think that informal institutions are actually institutions in a process of emergence and that the formalisation stage is unavoidable. But this is not so. A market is not just an information-processing institution. It is also an information-producing one. And the amount of information, or more precisely “signals” market generated could easily saturate the cognitive system of any agents⁷³, leading them to switch from a substantive rationality to a procedural one⁷⁴. Hence the agent has frequently to use routines. The Herbert Simon view then contradicts the Stiglitz and Radner one explaining routines by a lack of information⁷⁵. One possible way to analyse routines is to equal them with classificatory processes. These processes are highlighting the non-intentional nature of some “rules”: *“In order to enable trial-and-error learning to work, the organizations involved must, in whatever form, implicit*

⁶⁹ Keynes J.M. (1937), « The General Theory of employment », in *Quarterly Journal of Economics*, vol. 51, n°2, p. 209-223

⁷⁰ For all its implications see, Hirst P., (1999), “Carl Schmitt’s Decisionism” in C. Mouffe, (ed.), *The Challenge of Carl Schmitt*, Verso, Londres, pp. 7-17.

⁷¹ Shackle G.L.S., (1969), *Decision, Order and Time in Human Affairs*, Cambridge University Press, Cambridge, 2nd printing.

⁷² J.R. Commons, (1931) "Institutional Economics", in *American Economic Review*, vol. XXI, n°4, pp. 648-657.

⁷³ Simon H.A. (1978), "Rationality as a process and as a Product of thought", op. cit..

⁷⁴ Simon H.A. (1976), "From Substantive to Procedural Rationality", in S.J. Latsis, (ed.), *Method and Appraisal in Economics*, Cambridge University Press, Cambridge, pp. 129-148

⁷⁵ . Radner R. and J.E. Stiglitz, (1984), "A Nonconcavity in the value of information" in M. Boyer et R. Khilstom, (eds.) *Bayesian models in Economic Theory*, Elsevier, New York, pp. 33-52. Stiglitz J.E. (2002)z, "Information and the Change in the Paradigm in Economics", in *American Economic Review*, vol. 92, n°3, pp. 460-501

or explicit, classify problem situations into categories of situations that are, in a relevant sense, similar. Such a classification contains, in essence, a conjecture about what makes a situation, in a behavioural sense, similar or different. And, ..., such classifications are the roots of any rule-making behaviour, whether we are dealing with instincts, un-reflected habits, or deliberately adopted rules."⁷⁶

Routines can then be seen as an informal result of institutions. But, some routines can work as institutions as well, that is shaping our actions and our behaviour. Hence the following quotation from Hayek: "Although it may seem paradoxical to say that to be able to act rationally it is often necessary for us to be guided by habits rather than reflection, or to say that to avoid making the wrong decision we must deliberately reduce the number of opportunities that we have, we all know that this is often necessary in practice if we want to achieve long-term goals"⁷⁷.

This quotation is stressing the relevance of informal, non-intentional, institution. This is closely linked to the notion of "social density" put forward in the mid-1930's by Emile Durkheim. Actually the more dense, in a demographic but also in a social sense, is a society the more non intentional interactions can take place⁷⁸. A good definition of social density has been given by the French sociologist Emile Durkheim: "The dynamic density can be defined, at equal volume, according to the number of individuals who are actually in relations not only commercial but moral; that is to say, who not only exchange services or compete with each other, but live a life together"⁷⁹. As a matter of fact the denser a society is the more diverse and complex is the society too. In a dense society the number of non-intentional relations is fast increasing. Laws and formal rules could regulate some of them, but others imply the development of patterns that are mostly kept informal. These patterns are usually learnt through experience in an informal way. They are highly context-dependent and context-specific.

There is then a strong link between the profusion of signals coming from a dense society and the need for routines to help economic agents to save their time and to concentrate on choice they think are mattering most. These routines are preventing the development of what can be called informational pathologies⁸⁰. And these kinds of pathologies can be frequently found in high finance, as shown by the collapse of the LTCM fund in 1998⁸¹. To some extent these pathologies are just the result of the high formalization of the *Corporate Governance* doctrine⁸².

⁷⁶ Vanberg V., (1993) "Rational choice, rule-following and institutions: an evolutionary perspective", in U. Mäki, B. Gustafsson et C. Knudsen, (eds.), *Rationality, Institutions and economic methodology*, Routledge, London, pp. 171-202, p. 186.

⁷⁷ Hayek F.A. (1960), *The Constitution of Liberty*, University of Chicago Press, Chicago, p. 66.

⁷⁸ Durkheim E., (1937 / 1999). *Les règles de la méthode sociologique*, Presses Universitaires de France, coll. Quadrige, Paris, 1999.

⁷⁹ Id., pp. 112-113.

⁸⁰ Schrage M., (2003), "Perfect Information and Perverse Incentives: Costs and Consequences of Transformation and Transparency", MIT, Security Studies Program, SSP Working Paper 03-1, Cambridge, Mass..

⁸¹ Kaplan I. (2003), "A review of *When Genius Failed: The Rise and Fall of Long-Term Capital Management* by Roger Lowenstein", http://www.bearcave.com/bookrev/genius_fails.html ; see also Lowenstein R., (2000), *When Genius Failed: The Rise and Fall of Long-Term Capital Management*, New York, NY, Random House.

⁸² Jorion P. (1999), *Value at Risk: The New Benchmark for Managing Financial Risk*, MacGraw Hill, New York, NY; Partnoy F. (2003), *How Deceit and Risk Corrupted the Financial Markets*, Times Books, New York, NY.

We could then see how formal and informal institutions could co-exist and interact. Formal institutions are consciously organizing some activities. Economic agents as guidelines for their actions then could use the rules they are generating. Informal institutions correspond to non-conscious and non-intentional organizations of activities. They too are generating rules (informal of course) that are helping the agent decision-making process. To some extent any formal institution needs the presence of informal ones as these latter are creating a global context, which allows the formal institutions to exist. But, the emergence of specific conflicts inside the sphere dominated by informal institutions can also be the reason for the creation of new formal institutions.

C. Rules, conventions and common knowledge

Rules of operation constitute an intermediate level. Institutions, markets or organizations, therefore, produce them⁸³. Their function is to guide the operator in his immediate relations with his environment and to manage his ignorance⁸⁴. These operating rules of thumb can be an implementation of constructed representations, through the law, just as they can result from the systematization of practices. They correspond to a large extent to the "tacit dimension"⁸⁵. In this sense, they also correspond to classifications, or classificatory routines. These rules are especially important for interpreting information to make the most of it. We see it in the game of chess where decisions are rarely the product of maximization but rely above all on the choice of heuristic rules. Associated, among the best players, with an encyclopaedic knowledge of the different possibilities, these rules make it possible not to try to evaluate all the alternative interpretations, but to select some of them⁸⁶. However, there is no evidence that the catalogue for interpretation is complete. In fact, even in the case of chess, which is a very simplified representation of real choices, this catalogue is incomplete to the extent that human memory cannot remember everything. In real life, the catalogue is inherently incomplete because the agents' ability to innovate constantly adds additional situations. It then follows: "*If alternatives in a choice situation are not given but must be discovered or invented, and if the number of possible alternatives is very high, then a choice must be made before all possible alternatives have been examined.*"⁸⁷

Under these conditions, optimization is replaced by satisfaction: the decision-maker chooses the first satisfactory interpretation from the point of view of the rules of research and evaluation that he has given himself, and which results from his character, his experience and his education. The importance of the notion of satisficing proposed by H. Simon as an alternative to maximizing results from this consideration of an inability to calculate everything⁸⁸.

A second problem refers to the notion of time of decision. Not only is the ability to evaluate the content of the signal limited because of the inability to master all the alternatives, but also it is also limited because the usefulness of this interpretation may be inversely proportional to the time required to achieve it. . The introduction of stop rules is then necessary⁸⁹. The

⁸³ Koppl R.G., (1991), "Animal Spirits", in *Journal of Economic Perspective*, n°5.

⁸⁴ Butos W.N. & R.G. Koppl, (1993), "Hayekian Expectations: Theory and Empirical Applications", in *Constitutional Political Economy*, vol.4, n°3.

⁸⁵ Polanyi M., (1966), *The Tacit Dimension*, London, Routledge and Kegan Paul.

⁸⁶ de Groot A., (1965) *Thought and Choice in Chess*, Mouton, La Haye, 1965. Voir aussi Simon H.A. (1972), "Theories of bounded rationality", in C.B. Radner et R. Radner (eds.), (1972) *Decision and Organization*, North Holland, Amsterdam, pp. 161-176.

⁸⁷ H.A. Simon, "Theories of ...", op.cit., p. 168.

⁸⁸ Idem, p. 170.

⁸⁹ Idem, p. 167.

formulation of these rules then refers to the subjectivity of the agent and the evolution of his preferences in the very course of the decision-making process. In this sense, the notion of stop rules used by Simon is quite similar to the decision mechanism devised in 1949 by G. Shackle⁹⁰.

Institutions can be seen as constraints generating rules. Douglass North puts it this way: “*Institutions are the humanly devised constraints that structure political, economic and social interactions*”⁹¹. But there are no possible rules, and then no structure of any kind of social interactions without both a reward and a punishment be they material or moral. However, common knowledge, disseminated in the society, could alter significantly the application of rules. And this “common knowledge” is called convention. But this “common knowledge” is itself the product of interpretative strategy, and even of strategies of justification. For Keynes himself, who wrote the famous excerpt about the “beauty contest”⁹², the comparison between the interest rate and the marginal efficiency of capital was not a maximization procedure, but a justification procedure for a “gamble” decision. a procedure which, in his words: “... *saves our faces as rational economic agents*”⁹³. The importance of subjectivity appears here incontestably. The Keynesian investor reacts to his vision of his place within a given community. He takes the codes, even if he has doubts about them, to guard against the mechanisms of contesting his decision that could arise ex-post. This is the very example of the passive strategies that we have just mentioned. The formula of Keynes however goes further. It is reminiscent of an aphorism of L. Wittgenstein, a philosopher whom he deeply admired: “*From what to me, or to everyone, it seems so, it does not follow that it is so, but what one may well wonder is if there is any reason to doubt it.*”⁹⁴

North will explain his own point of view in a comparison where he pinpoints the different pattern of development between the United-States after the Independence and Latin-American countries once they broke the Spanish domination: “*The divergent path established by England and Spain in the New World have not converged despite the mediating factor of common ideological influences. In the former an institutional network has evolved that permits complex impersonal exchange necessary to political stability as well as to capture the benefits of modern technology. In the latter “personalistic” relationships is still the key to much of the political and economic exchange*”⁹⁵.

Actually, in the XIXth and the beginning of the XXth century a complex political culture developed south of the Rio Grande, merging some old political tradition coming from the Spanish regime⁹⁶ and new innovations resulting from the growing domination of Latin-American countries by the emerging United States. This had definite consequences on the development of economy⁹⁷. From this we are seeing that formal rules, coming from formal

⁹⁰ Shackle G.L.S., (1949), *Expectations in Economics*, Cambridge, Cambridge University Press.

⁹¹ North D. (1991), « Institutions », in *Journal of Economic Perspectives*, Vol. 5, 1, pp. 97-112, p. 97.

⁹² Keynes, J. M. (1936). *The General Theory of Employment, Interest and Money*. New York, Harcourt Brace and Co, chapter 12.

⁹³ Keynes J.M., (1937, 1973), *Collected Writings, vol. XIV - The General Theory and After, part II. Defense and Development*, London, Macmillan, p. 114. See too: Carabelli A.M., (1988), *On Keynes's Method*, London, Macmillan.

⁹⁴ Wittgenstein L., (1976), *De la Certitude*, Paris, Gallimard, coll. Idées, p. 31

⁹⁵ North D. (1991), « Institutions », p. 111.

⁹⁶ Veliz C. (1980), *The Centralist Tradition of Latin America*, Princeton, Princeton University Press.

⁹⁷ Glade W.P. (1969), *The Latin American Economies : A Study of Their institutional Evolution*, New York, American books.

institutions, can be transformed or even reversed by conventions coming from a long standing culture which goes beyond the ideological consensus at one point. This can be seen as a kind of revenge from the long time⁹⁸. But, are conventions themselves immune to any change?

We talked about the long time, something that usually economists dislike. The latter is neither a sum of events taken in short time, nor something that would be perfectly distinct from the latter. In this long time we could see some regularities in economic conjuncture. If societies have the conjuncture of their structures, as Ernest Labrousse asserted⁹⁹, this conjuncture, repeated several times, ends up modifying structures¹⁰⁰. The dialectic between the trend and the event must then be thought of as part of the interactions between the context in which the representations of reality that guide the actors (the institutions, the rules, the customs, the conventions and the beliefs), and the impact on this context of the decisions resulting from these representations. The question of conventions, common rules of action, and institutions is essential. Yet, conventions can be themes carrying formidable aporias.

The classic metaphor of spontaneous authors is that of the crossroads and the rules of priorities, or that of accidentally interrupted telephone communication. It is supposed to demonstrate through the emergence of the rules of priority or that of courtesy (the one who calls must recall his correspondent) a spontaneous origin of the rules organizing the interdependencies. The problem arises here from the fact that these authors never say whether this transparent context is a case study, a voluntarily binding hypothesis to demonstrate the validity of the procedures they describe in the "worst case", or whether it is an assumption held to be realistic. What is involved here is a spontaneous vision of the generation of a rule with significant cognitive content.

From this point of view, it is indisputable that spontaneous approaches are close to the Austrian School and more particularly to Hayek. For Hayek, radical uncertainty condemns constructivist discretionary action. Joining Otto Neurath's argument¹⁰¹ that there is no commensurability between the various alternatives present and future Hayek condemns planning. Implicitly, he sees the latter as an exercise in optimization, identical to that implicitly proposed by the neoclassical economy. But it is interesting to know that Neurath made his case about planning on exactly the same assumption¹⁰²: radical uncertainty. He did so by explaining that when we face the possibility of outcomes potentially disastrous but where there is no possible computation, choice is to be made on the basis of social, political or ethical rules. In that sense Neurath could be seen as the precursor of today "precaution principle". He derived the necessity of planning from our inability to completely and perfectly forecast future events. As a matter of fact Hayek, who first criticized Neurath acknowledged after 1945 his reasoning¹⁰³.

⁹⁸ Labrousse A., Vercueil J., Chanteau J.-P., Lamarche T., Michel S., Nieddu M. (2017), « Ce qu'une théorie économique historicisée veut dire. Retour sur les méthodes de trois générations d'institutionnalisme », in *Revue de Philosophie Economique*, 18 (2), pp. 153-183.

⁹⁹ Labrousse C.E. (1933), *Esquisse du mouvement des prix et des revenus en France au XVIIIème siècle*, Paris, Dalloz.

¹⁰⁰ Lepetit B., (1995), "Histoires des pratiques, pratique de l'histoire", in B. Lepetit, (ed.), (1995), *Les formes de l'expérience*, Albin Michel, Paris, pp. 9-22

¹⁰¹ see Sapir J, (2000) *Les trous noirs de la Science économique*, Paris, Albin Michel, chapitre 2.

¹⁰² See, Neurath O., "Personal life and class struggle" (1928, 1973), in Neurath O., (1973), *Empiricism and Sociology*, Dordrecht, Cluwer Publishers.

¹⁰³ O'Neill J., (1996), "Who won the socialist calculation debate", in *History of Political Thought*, vol. XVII, n°3, fall.

Actually, the market plays for Hayek the role of a process without conscience or purpose that evades the question of social ends and presents no other justification than its ability to ex-post the interconnection between decentralized agents. Nevertheless one can argue that such a market would work if and only if decisions made by decentralized agents are not to be “radical”. If so, the Shackle paradox would apply¹⁰⁴. By the way the market envisioned by Hayek is not a space where anything is possible¹⁰⁵; likewise, it has nothing to do with the Walrasian mechanism. It is strictly framed by rules, which, alone, can allow the progressive convergence of the actors' subjectivities. The idea of a spontaneous genesis of rules or convention¹⁰⁶, from the spontaneous diffusion of an experiment¹⁰⁷, does not correspond to what we observe in reality. The NEI answer to this question of individual-collective interaction is strangely similar to those of the French School of Conventions¹⁰⁸.

The explicit reference to the theory of opportunism (second condition with bounded rationality¹⁰⁹) as a defining element of NEI has exactly the same consequences as Favereau's claim of instrumental rationality. It implies adherence to assumptions of monotony and temporal integration in the structuring of preferences. These two references are in reality probably contradictory. The limited rationality is linked in Herbert Simon to the limits of the agent's ability to process information as we shown above¹¹⁰.

Real opportunism, as opposed to theoretical opportunism, stems from a shift in agent representation. This switch may have been caused by a disappointment, either brutal or progressive. To understand this possible changeover, it is necessary to appeal to the notion of cognitive dissonance¹¹¹. This dissonance, which manifests itself for example in the form of surprise, plays a decisive role in the behaviour of the agent. He can refuse dissonance by refusing to perceive the signal or by refusing the interpretations of the signal, which lead to the interpretation involving the dissonance, just as he can seek to reduce it by changing his perception of the world, and by questioning its certainties and rules of conduct. The reaction to cognitive dissonance, to surprise, also depends largely on the collective context in which the agent is immersed¹¹².

D. Institution and the subjectivist view of economics

To be back to the initial point in the discussion, the complex relationship between rules and conventions highlights the cognitive nature of the issue and the fundamental opposition

¹⁰⁴ Shackle G.L.S., (1969), op. cit..

¹⁰⁵ O'Neill J., (1996), "Who won the socialist calculation debate", op.cit., pp. 431-442.

¹⁰⁶ Salais R., (1989) "L'analyse économique des conventions de travail", in *Revue Économique*, vol. 40, n°2, March, pp.199-240.

¹⁰⁷ Voir aussi O. Favereau, "Marchés internes, Marchés externes", in *Revue Économique*, vol.40, n°2/1989, mars, pp. 273-328, en particulier pp. 294-95.

¹⁰⁸ O. Favereau, "Théorie de la Régulation et économie des conventions: canevas pour une confrontation", in *La Lettre de la Régulation*, n°7, mai 1993, p. 1-3. J.P. Dupuy et alii, "Introduction", in *Revue Économique*, vol.40, n°2, mars 1989, pp. 141-145

¹⁰⁹ O.E. Williamson, "Introduction", in O.Williamson et S.G. Winter (édits.), *The Nature of The Firm - Origins, evolution and development*, Op.cit..

¹¹⁰ H.A. Simon, "Rationality as Process and as Product of Thought", in *American Economic Review*, vol. 68, n°2, 1978, pp. 1-16.

¹¹¹ Chapanis N.P. and J.A. Chapanis, (1964), "Cognitive Dissonance: Five Years Later" in *Psychological Bulletin*, vol. 61. Akerlof G.A. and W.T. Dickens, (1972) "The Economic Consequences of Cognitive Dissonance", in *American Economic Review*, vol. 72, n°1, pp. 307-319.

¹¹² Shackle G.L.S., (1983), "The Romantic Mountain and the Classic Lake: Alan Coddington's Keynesian Economics", in *Journal of Post-Keynesian Economics*, vol. 6, n°1, pp. 241-257.

between the neoclassical school and the institutionnalist one. We are driven here toward the subjectivist view of economics, a view shared by authors that have disagreed at one point or another with mainstream economics. Subjectivism is probably one point that unites all opponents to the General Equilibrium Theory¹¹³. Two authors, Keynes¹¹⁴ and Hayek¹¹⁵, who embraced so radically different view on economic policy, actually converged on the issue of subjectivism¹¹⁶. Because subjectivism is directly linked to human deficiencies in collecting and processing information and to its relevance in the context of radical uncertainties, but is also the product of changing, and context-determined individual preferences. The subjectivist view appears to be the logical answer to the rebuttal of a complete probabilistic world where rational computation would be the only “rational” way to make decision. Actually, subjectivism is at source linked to the same issues that have given birth to institutional theories.

Douglass North, to go back to an actor that is today central in the field on institutional economics, followed the same road in his writings from the seventies to the nineties, and this is quite important to understand on what bedrock institutionalism actually remains. North relevance derives not just because he merges in his writing the work of a great economic historian and one a great economist, but because he too breaks the mechanist description of the economy we inherited from Walras, but also from Condorcet and the Enlightenment¹¹⁷. North is holding the view that the economy is a non-ergodic field¹¹⁸ that is one dominated by what Knight called “uncertainty” and not by risk¹¹⁹. For North no probabilistic law could explain or even describe the economy¹²⁰. This obviously is sharp a difference with Robert Lucas’s view who, to the contrary, thought that where you entered uncertainty there stopped economics¹²¹. One cannot better summarize the huge intellectual divide between Institutionalism and Walrasian heirs and why the latters have for decade denied all relevance to institutions. The importance of the subjectivity of the actors is therefore essential to understand how a decision is made. In this sense, the approach of Douglass North, and Institutionalism as a whole, is part of the subjectivist paradigm where we find Keynes from

¹¹³ Buttos W. and Koppl R., (1997), « The Varieties of Subjectivisme : Keynes and Hayek on Expectations », in *History of Political Economy*, Vol. 29, n°2, pp. 327-359.

¹¹⁴ Carabelli, A.M., (1988). *On Keynes's Method*, New York: St. Martin's Press

¹¹⁵ Caldwell, B. J. (1994), « Hayek's Scientific Subjectivism », in *Economics and Philosophy* vol. 10, n°2, pp. 305-314.

¹¹⁶ Boehm, S., (1989) « Subjectivism and Post-Keynesianism: Toward a Better Understanding . In Pheby J., (Ed.), *New Directions in Post-Keynesian Economics*, Hants, Edward Elgar, pp. 59-93.

¹¹⁷ See, Arrow K., (1951), *Social Choice and Individual Values*, New Haven, Yale University Press, p. 2. For a presentation of Condorcet relevance toward the probabilistic view of society, Granger G-G., (1956), *La Mathématique Sociale du Marquis de Condorcet*, Paris, PUF, (ch. 3)

¹¹⁸ On the issue of ergodicity, see Davidson P., (1996) “Some Misunderstanding on Uncertainty in Modern Classical Economics”, in C. Schmidt (ed.), *Uncertainty and Economic Thought*, Edward Elgar, Cheltenham,, pp. 21-37; Machina J., (1987) “Choice Under Uncertainty: Problems Solved and Unsolved”, in *Journal of Economic Perspectives*, vol. 1, n°1. Mirowski, P., (1989), "How not to do things with metaphors: Paul Samuelson and the science of Neoclassical Economics", in *Studies in the History and Philosophy of Science*, vol. 20, n°1, pp. 175-191.

¹¹⁹ Knight F., (1921) *Risk, Uncertainty and Profit*, op.cit..

¹²⁰ North D. (2005), *Understanding the Process of Economic Change*, Princeton, Princeton University Press, p. 32 and p. 38.

¹²¹ Lucas, R. E. (1981), *Studies in Business-Cycle Theory*, op.cit.. See also, Lucas R.E., Lucas, (1975), “An Equilibrium Model of Business cycle”, in *Journal of Political Economy*, vol. 83, pp. 1113-1124

the *Treatise on Probability*¹²² to the *General Theory*, as well as Shackle¹²³ or Hayek¹²⁴. To a large extent institutions and institutionalism belong to the field of subjectivist theories. Theoretical subjectivism certainly is a direct consequence of time and money¹²⁵, and an answer to the fact that we cannot compute everything¹²⁶.

Here we have again to mention the proximity between two major authors, J.M. Keynes and J. Commons. This proximity is both well known¹²⁷, but also was not really understood till recent years¹²⁸. Keynes quoted Commons for the first time in a lecture he did to the *Liberal Summer School* in Cambridge in August 1925, a lecture that was published in *The Nation and Athenaeum* on August 8th and 15th ¹²⁹. He quoted Commons again in the presentation he made in Moscow at the Academy of Sciences in September 1925¹³⁰. What attracted Keynes to Veblen¹³¹, Commons, but also Mitchell¹³² were two things. The first one the nature of the uncertainty created by the development of financial capitalism. Here, we are back to the already quoted issue of radical uncertainty, a point developed by Keynes in *The General Theory*, but a point he was deeply aware since the end of 1923 and *A Tract on Monetary Reform*¹³³. The second one was the transformation of the structure of the capitalist firm because of the growing importance of finance and money, and the birth of the “corporation”. Here, we are just in the middle of the question above mentioned of what is a “firm” and what is a “market”. This proximity between Keynes and major institutionalist authors is extremely important. Keynes, authors of the “old” current of Institutionalism and most authors of the “new” one were acknowledging major informational problems in dealing with economic choices. They went to the conclusion that these problems could be solved only by institutions (be they formal or informal) or by conventions and rules that institutions, directly or indirectly, are generating. Importance of institutions is coming also from the fact a *monetary* exchange economy is much more open to uncertainty than a non-monetary economy, a point highlighted by Hyman Minsky¹³⁴.

¹²² Keynes, J. M. (1921), *Treatise on Probability*, London, Macmillan & Co.

¹²³ Shackle, G.L.S., (1949), *Expectations in Economics*, Cambridge, Cambridge University Press.

¹²⁴ Hayek F.A., (1928, 1984) “Intertemporal Price Equilibrium and Movements in the Value of Money” republished in F.A. Hayek, (1984), *Money, Capital and Fluctuations: Early Essays*, London, Routledge and Kegan Paul.

¹²⁵ Sapir J. (2000), *Les Trous Noirs de la Science Economique*, Paris, Albin Michel. Sapir, J., (2001), *K Ekonomitcheskoy teorii neodnorodnyh sistem - opyt issledovanija decentralizovannoj ekonomiki* translated by E.V. Vinogradova and A.A. Katchanov, Moscow, Presses du Haut Collège d'Économie.

¹²⁶ O'Driscoll Jr G.P. and M.J. Rizzo, (1985), *Economics of Time and Ignorance*, op.cit.

¹²⁷ Skidelsky R., (1992), *John Maynard Keynes – Vol. 2, The economist as saviour (1920-1937)*, London, Macmillan. Minsky H.P., (1996), “Uncertainty and the Institutional Structure of Capitalist Economy”, in *Journal of Economic Issues*, vol. XXX, n°2, pp. 357-368.

¹²⁸ Thabet S., (2012), « Keynes et l'Institutionnalisme historique américain : une perspective généalogique » in *Economies et Sociétés*, série « Histoire de la Pensée économique », PE n°46/7, pp. 1297-1324.

¹²⁹ Keynes, J.M., (1971-1989) *The Collected Writings of John Maynard Keynes* edited by Donald Moggridge, 30 volumes, London, Macmillan, vol. IX, pp. 295-306.

¹³⁰ Keynes J.M., (1971-1989), *The Collected Writings of John Maynard Keynes* op.cit., vol. XIX, pp. 434-442.

¹³¹ Veblen T.B. (1904), *The Theory of Business Enterprise*, New York, Charles Scribner's Sons.

¹³² Particularly, but not only, Mitchell's works on money and Finance. Mitchell W.C. (1914), « The New Banking Measures in The United States », in *Economic Journal*, vol. XXIV, n°93, pp. 130-138.

¹³³ Keynes J.M., (1923), *A Tract on Monetary Reform*, Cambridge, Cambridge University Press.

¹³⁴ Minsky H.P., (1996), "Uncertainty and the Institutional Structure of Capitalist Economies", in *Journal of Economic Issues*, vol. XXX, n°2, pp. 357-370.

This obviously is an important point. It allows us to understand the relation between institutionalism and the very idea of cognition. We then have to push forward and ask if the very necessity to have what is called “institutions” is not generated by this cognitive problem and its consequences, be it the classical “saturation” problem that is plaguing the choice making process, or be it the preference reversal problem which is coming when agents discover what are their structure of preference in the middle of the process of choice.

3. Why are institutions necessary?

We are now at the very centre of the question: why institutions are necessary in the actual economy? The basic point here is that institutions whatsoever the form, conventions, and rules that institutions generates, are a necessity because of cognitive problems agents are facing once we delete classical Walrasian and Post-Walrasian assumptions about individual agents abilities and preferences¹³⁵.

A. Information processing issues

The question of information, be it how information are collected or how are they processed, is central to the existence of markets functioning as "mechanics" and able of self-regulation¹³⁶. Stigler¹³⁷, for example, focuses on a specific problem: the search for information by an individual actor in a given market. Indeed, it considers the dispersion of prices in a market as a recurring problem, even for homogeneous products. This dispersion is a measure of the ignorance of agents in this market. But, the uncertainty to which Stigler refers is both local and exogenous. The nature of the information to be collected is then biased. Stigler can therefore conclude: "*Ignorance is like a freezing weather: by a sufficient expenditure its effects on people can be contained within tolerable or even comfortable limits, but it would be uneconomic to want to remove all the effects*"¹³⁸.

The original Stigler model has been criticized¹³⁹. Joseph Stiglitz considers that for Stigler the information constituted a kind of transaction cost¹⁴⁰. But this criticism has precisely clarified the problem of information. Stiglitz has shown that there are cases where even the monopoly price does not constitute a limit¹⁴¹. The dispersion of prices can thus be a stable situation without it being necessary to explain it by resorting to the assumption of providing different

¹³⁵ Sapir J. (2005), "Ekonomika Informatzii : novaja paradigma i ee granitsy" in *Voprosy Ekonomiki*, n°10/2005. Idem, (2005), "Novye podhody teorii individual'nyh predpotchenij i ee sledstvija" in *Ekonomitcheskij Zhurnal*, Vol. 9, n°3, pp. 325-360.

¹³⁶ Keynes J.M. (1936, 1972), *La Théorie générale de l'emploi, de l'intérêt et de la monnaie*, Payot, PBP, Paris, chap. 12.

¹³⁷ Stigler G.J., (1961), "The Economics of Information" in *Journal of Political Economy*, vol. 69, n°3, pp. 213-225, p. 213

¹³⁸ Idem, p. 224.

¹³⁹ Diamond P.A., (1971), "A Model of Price Adjustment" in *Journal of Economic Theory*, vol. 3, n°2, pp. 156-168

¹⁴⁰ Stiglitz J.E., (2002), "Information and the Change in the Paradigm in Economics", in *American Economic Review*, vol. 92, n°3, pp. 460-501, p.462

¹⁴¹ Stiglitz J.E. (1989), "Imperfect Information in the Product Market" in R. Schmalensee et R.D. Willig, (eds), *Handbook of Industrial Organization*, Elsevier, New York, vol. 1, pp. 769-847.

services¹⁴². Arbitraging which is specific to pure and perfect markets, can even aggravate these dispersions¹⁴³. The question of the uncertainty induced by the imperfection of the information is thus much more serious, and potentially much more destabilizing for the neoclassical theory than Stigler or Marschak could think¹⁴⁴. It affects the entire decision-making process in all contexts, not just firms and households¹⁴⁵. The market failure is no longer local or cyclical, and therefore becomes structural or irremediable. The importance of discreet decision-making and non-market choices, organizations and hierarchies and therefore overall institutions, is substantially strengthened.

First, there is the problem of information asymmetries, and these have been analysed as such by George Akerlof¹⁴⁶. An extension of this reasoning allowed Frederic Mishkin to show that, if there is an illiquidity of the product (such as what is known about consumer durables, for example), the demand is more volatile and the movement of price is no longer determined by the monetary variable¹⁴⁷. The acquisition of a reputation, which could then be analysed as a convention and then lead us back to the institutionnalist world, but also a repetition of the transaction, could theoretically reduce the impact of information asymmetries. However, the theory of reputation is far from being free of logical problems and paradoxes¹⁴⁸. Indeed, if reputation is an instrument for evaluation, we must consider the agent who refers to this reputation as a strategic actor who tries to influence the perceptions of others. It is tempting to claim that this agent will seek to maximize the symbolic capital called reputation. Such is the interpretation derived from the work of Latour and Woolgar¹⁴⁹. However, as Uskali Mäki has shown in a very relevant way, this assumes that the maximizer knows a priori the effects of his strategy on the representations of others, in other words that he has a perfect knowledge and mastery of the symbolic environment¹⁵⁰. We are here reformulating a hypothesis of perfect knowledge that is perfectly contradictory to the problem posed at the origin of the theory of reputation. Akerlof also acknowledges that reputation cannot apply to credit, insurance and work, thus systematically inducing market failures¹⁵¹. As for the repetition of the transaction, it transports us within the framework of the routine decision and then too in the institutionnalist world.

¹⁴² Stiglitz J and S. Salop (1987), "Information, Welfare and Product Diversity" in G. Feiwel (ed.), *Arrow and the Foundation of the Theory of Economic Policy*, New York University Press, New York, pp. 328-340.

¹⁴³ Salop S. and J.E. Stiglitz, (1977), "Bargains and Ripoffs : A Model of Monopolistically Competitive Dispersion" in *Review of Economic Studies*, vol. 44, n°3, pp. 493-510.

¹⁴⁴ Hirshleifer J. and J.G. Riley, (1992), *The analytics of uncertainty and information*, Cambridge University Press, Cambridge, 1992.

¹⁴⁵ Stiglitz J.E., (1985), "Information and Economic Analysis: a Perspective" in *Economic Journal*, vol. 95, Supplement, pp. 21-41.

¹⁴⁶ Akerlof G.A., (1970), "The Market of 'Lemons': Quality, Uncertainty and the Market Mechanism" in *Quarterly Journal of Economics*, vol. 84, n°3, pp. 488-500.

¹⁴⁷ Mishkin F.S., (1976), " Illiquidity, Consumer Durable Expenditure and Monetary Policy" in *American Economic Review*, vol. 66, n°4, pp. 642-654.

¹⁴⁸ Sapir J., (2002), *Les économistes contre la démocratie*, Paris, Albin Michel, pp. 142-150.

¹⁴⁹ Latour B. and S. Woolgar, (1979), *Laboratory life : the construction of scientific facts*, Princeton University Press, Princeton NJ.

¹⁵⁰ Mäki U., (1993) "Social Theories of Science and the Fate of Institutionalism in Economics" in U. Mäki, B. Gustafsson and C. Knudsen (edits.), *Rationality, Institutions and Economic Methodology*, Routledge, Londres-New-York, pp. 76-109.

¹⁵¹ Akerlof G.A., (2002), "Behavioral Macroeconomics and Macroeconomic Behavior" in *American Economic Review*, vol. 92, n°3, pp. 411-433, p. 413.

The hypothesis of unevenly distributed information, and of knowledge generated differently according to the economic and social position of the actors, appears to have great strength¹⁵². The market and competition can no longer be a central paradigm. Both the normative and prescriptive implications of such a result are considerable and provide insight into some of the pathologies that have developed in transition economies, particularly in Russia¹⁵³.

One of the most essential points therefore lies in questioning the paradigm of the efficiency of competitive markets. Stiglitz shows that markets are not, in themselves, effective devices for processing information¹⁵⁴. This is true for the goods markets¹⁵⁵, but it is even more so for the capital markets, which concentrate all the problems as soon as we abandon the unrealistic assumption of perfect information¹⁵⁶. Stiglitz then reaches a perfectly scandalous conclusion from the point of view of the standard economy: it is necessary to distinguish situations of illiquidity from insolvency situations¹⁵⁷. The consequence is therefore obvious in terms of institutions and rules that must exist on the financial markets but also to organize property rights¹⁵⁸. The specificity of the uncertainty induced by the financial sphere must therefore be taken into account in a normative way, as explained in the first part of this paper¹⁵⁹. It should be noted that this reading of uncertainty leads to reconnect with the radical point of view of George Shackle who, on this point, did not hesitate to criticize Keynes for not having broken sufficiently explicitly with the standard theory¹⁶⁰. The link between the interest rate and the marginal efficiency of capital is a convention because, as G. Shackle has shown, it is impossible to compare ex-ante a variable that will be known only ex-post¹⁶¹. Keynes, defending his positions expressed in the General Theory was aware of it; he explains that the comparison between the interest rate and the marginal efficiency of capital does not constitute a rational calculation on which the investment decision should be based, but a procedure "*which saves our the face as rational economic men*", in other words, a convention¹⁶². This coincides, and it is no coincidence, a reflection of Herbert Simon who had shown that there was no evidence that private organizations were better placed than public organizations to deal with information-induced incentive issues¹⁶³.

¹⁵² Arnott R.G. and J.E. Stiglitz, (1985), "Labor Turnover, Wage Structures and Moral Hazard : The Inefficiency of Competitive Markets" in *Journal of Labor Economics*, vol. 3, n°4, pp. 434-462

¹⁵³ Sapir J., (1993), "Les enseignements d'une transition", in *Cahiers Internationaux de Sociologie*, vol XCV, pp. 289-332.

¹⁵⁴ Grossman S.J. and J.E. Stiglitz, (1976) "Information and Competitive Systems" in *American Economic Review*, vol. 66, n°2, *Papers and Proceedings*, pp. 246-253. Idem, (1980) "On the Impossibility of Informationally Efficient Markets" in *American Economic Review*, vol. 70, n°3, pp. 393-408.

¹⁵⁵ Stiglitz J.E, (1989), " Imperfect Information in the Product Market", op.cit..

¹⁵⁶ Stiglitz J.E., (2002), "Information and the Change in the Paradigm in Economics", op.cit.,

¹⁵⁷ Idem, p. 480.

¹⁵⁸ Chanteau J.P., Coriat B., Labrousse A. et Orsi F. (2013), « Autour d'Ostrom : communs, droits de propriété et institutionnalisme méthodologique. Introduction », in *Revue de la Régulation*, 14 | 2e semestre / Autumn 2013.

¹⁵⁹ Stiglitz J.E., (2002), "Information and the Change in the Paradigm in Economics", op.cit., p. 481.

¹⁶⁰ Shackle G.L.S., (1988), *Business, Time and Thought. Selected Papers of GLS Shackle* , New York University Press, New York, 1988, p. 43.

¹⁶¹ Idem, pp. 104-123.

¹⁶² Keynes J.M., (1937, 1973), *The General Theory and After, Part II, Defence and Development*, in *Collected Writings vol. XIV* , Macmillan, Londres, p. 114.

¹⁶³ Simon H. (1991), "Organization and Markets" in *Journal of Economic Perspective*, vol. 5, n°2, pp. 25-44.

If one considers the uncertainty - or the imperfection of the information - as endogenous then one cannot distinguish the question of the allocative efficiency from that of the distribution of the wealth¹⁶⁴. This has an ultimate consequence. It becomes impossible to defend the hypothesis that a market failure would spontaneously give rise to the institutions that allow it to be corrected¹⁶⁵. Thus, the combination of private institutions with the market can lead to an even worse outcome than the market failure that gave rise to this situation¹⁶⁶. This is an important point, that could tilt the balance toward formal institutions and not informal ones, and that would then emphasises the importance of legitimacy in institutions.

B. Rules as cognitive devices

The question of rules is important. As a matter of fact, Jacob Marschak has demonstrated the need and the importance for rules in his theory of team¹⁶⁷. They refer to the notion of coordination process beyond any intentionality¹⁶⁸. Some argue that rules and institutions are synonymous, which seems to me a mistake¹⁶⁹. We must then distinguish three categories of rules. First of all there are the Rules of the Environment, which delimit the action space of the organization. The Organizational Rules which define the attributions of the members of the collective structure¹⁷⁰, and the Sharing Rules, which specify the internal distribution conditions of the collective¹⁷¹. Environmental Rules then cannot be set by the group that itself needs the rules. They assume the existence of higher levels that are able to organize the space within which coalitions and other groups will move. These rules, which pose the problem of the legitimacy of the action as well as that of the sovereignty of the one who undertakes it, are then constraints for the lower levels. If we equate groups and coalitions with companies, macroeconomic policy is the set of Environmental Rules. The coherent objective of a macroeconomic policy thus becomes the stabilization of the conjuncture, not only in the sense of anti-inflationary stabilization but of the creation of medium-term forecasts and the reduction of exogenous and speculative shocks. This leads to a logical result: the more stable the environment - in the sense of predictable and understandable by individuals - and the stronger is the possibility of building simple groups (coalitions) to exploit the existence of strong complementarities between agents.

The combination of the other two types of rules, the Sharing Rules and the Organization Rules, makes the coalition, the simple group by definition, to evolve towards a complex group with its own structure. In fact, these rules are not simply cognitive devices that help agents; they also change their perception of the environment and the problems to be solved¹⁷².

¹⁶⁴ Stiglitz J.E. (2002), "Information and the Change in the Paradigm in Economics", op.cit., p. 479.

¹⁶⁵ Idem, p. 479.

¹⁶⁶ Arnott R.J. and J.E. Stiglitz, (1991), "Moral Hazard and Non-Market Institutions : Dysfunctional Crowding Out or Peer Monitoring ?" in *American Economic Review*, vol. 81, n°1, pp. 179-190.

¹⁶⁷ Marschak J., (1954), "Toward an Economic Theory of Organization and Information" in D. Thrall, Davis and Coombs, (eds.), *Decision Processes*, John Wiley, New York, Chap. XIV, pp. 187-220.

¹⁶⁸ Durkheim E., (1937, 1999), *Les règles de la méthode sociologique*, Presses Universitaires de France, coll. Quadrige, Paris, 1999 (first printing, P.U.F., Paris, 1937).

¹⁶⁹ Vanberg V.J., (1994), *Rules & Choice in Economics*, Routledge, Londres et New York.

¹⁷⁰ Weber M., (1947, 1964), *The Theory of Social and Economic Organization*, The Free Press, New York, pp. 152-153

¹⁷¹ Thévenot L., (1986), "Économie et forme conventionnelle" in R. Salais et L. Thévenot (edits), *Le Travail. Marché, règles, conventions*, Paris, Economica et INSEE, pp. 195-215

¹⁷² Hayek F.A., (1952), *The Sensory Order*, Chicago, University of Chicago Press.

Combination is necessary since ORs are entirely substitutable for SRs only if they completely eliminate the effects of the uncertainty that affects the quality of the information transmitted as well as that of the transmission process. Thus, ORs are used directly to isolate, or even exclude, certain issues in debate in order to save the attention of actors¹⁷³. However, ORs are themselves dependent on the degree of specialization of the actors concerned as well as the complexity of their tasks. As these two factors increase, so does the complexity of developing, implementing, and verifying ORs. The cost of organization, whether material or in terms of time lost, also tends to increase to the point of being able to achieve an opposite effect to that sought. The ORs then become uncertain because of the opacity created by their inter-crossing and complexity. However, it must be added here that OR effectiveness is all the greatest in that they are determined in concert with the actors to whom they will apply. The effects called Hawthorne¹⁷⁴ and Pygmalion¹⁷⁵ apply here directly.

The incompleteness of OR, except for low levels of specialization of the actors and their tasks, therefore makes the presence of SR necessary. These rules, however, cannot replace ORs for the reasons mentioned above. They are effective only to the extent that they are between what is acceptable for the actors whose results are the lowest and tolerable for the actors whose results are the best. The importance and nature of SR depends on the principles that define the concept of fair sharing or of just contributions as it exists in the society from which the actors come. The balance between OR and SR is therefore not fully determined by functional relationships or technical constraints. It also expresses the weight of another form of Environmental Rules, concerning the notions of justice as they are in a given society.

We can then isolate three complementary results to the one concerning the role of the stability of the environment on the development of organized forms of cooperation.

- First of all, the evolution of organizational forms towards greater and greater complexity, the combination of RO and RP, is a response to a double uncertainty, the external one resulting from the environment and the one, internal, resulting of the specialization induced by the division of labour.
- Then, the articulation between RO and RP cannot be dictated solely by the functionality of the effects of these rules. It must necessarily be based in politics, through an explanation of the norms of justice that serve as a reference for the actors concerned.
- Finally, if external uncertainty is a constraint for the development of cooperation and thus of the technical division of labour, the deepening of the latter, through the processes of specialization and differentiation that it generates, increases the elements uncertainty in the cooperation processes by limiting the immediate possibilities for verification.

It should be noted here that for Hayek, the relevant opposition is between rules described as "genetic" and rules stemming from social organization¹⁷⁶. But in reality, the rules that are

¹⁷³ Sunstein C.R., (1988, 1993) "Constitutions and Democracies: an epilogue", in J. Elster et R. Slagstad, *Constitutionalism and Democracy*, Cambridge, Cambridge University Pressp. 327-356.
Holmes S., (1988, 1993), "Gag-Rules or the politics of omission", in J. Elster et R. Slagstad, *Constitutionalism and Democracy, op.cit.*, p. 19-58

¹⁷⁴ Roethlisberger F.J. and W.J. Dickson, (1939), *Management and the Worker*, Cambridge (Mass), Harvard University Press,

¹⁷⁵ Rosenthal R. and L. Jakobson, (1968), *Pygmalion in the Classroom*, New-York, Holt, Rinehart and Winston.

¹⁷⁶ Hayek F.A. (1967), *Studies in Philosophy, Politics and Economics*, Chicago, University of Chicago Press.

really fundamental for Hayek are the second ones, those that have a social dimension. The choice of rules then results from what he calls a cultural evolution. The selection of "good" rules is done through the selection of the human groups that employ them and ensure their viability¹⁷⁷. Hodgson then points out that there is no longer a mechanism based on individualism but on a collective process¹⁷⁸. In fact, the rules are necessary for the decision for the reasons of information processing that have been mentioned. However, they cannot replace the decision¹⁷⁹.

C. The preference issue

The problem is not limited to the question of information. To be able to build the economy as a mechanics, the Walrasian theory needs to make assumptions when to individual preferences. These hypotheses lead to a rationality model of the economic agent defined by the maximization of a profit, a utility or a pleasure. This explains why economists holding economic orthodoxy¹⁸⁰ prefer the procedures of unintentional confrontation of individual choices (markets and competition) to deliberative and organizational procedures (trust and authority). Thus, Condorcet's Paradox, which in reality should be called Borda's Paradox, shows that, in a deliberative choice with a vote, it is possible that the result of the vote will not satisfy any of the individual participants¹⁸¹. The theory of individual preferences thus constitutes the bedrock of neo-classical theory in all its variants. It permeates other research programs like that of Mancur Olson¹⁸², which stands on the border of political science and sociology, for example.

This neoclassical theory of preferences explains consumer and producer behaviour from a series of axioms.

- Preferences check for a complete pre-order of possible choices, which implies transitivity (if I prefer x to y and y to z then I prefer x to z) and reflexivity. The agent can therefore classify the different elements between which he must choose.
- The preferences are continuous (ie $x > y > z$, there is then a mixture of possibilities x and z which is indifferent with respect to y).
- These preferences are characterized by the axiom of non-saturation (if the consumption of a quantity X_1 of x generates a utility u_1 , then if $X_2 > X_1$, the utility $u_2 > u_1$).

The classical convexity hypothesis of the function generalizes Ricardo's assumption of diminishing returns from agricultural production for his proof of rent theory. This hypothesis is technically crucial because it justifies curves of indifference, a traditional form of representation of preferences, which are convex¹⁸³.

¹⁷⁷ Hayek F.A., (1979) *Law, Legislation and Liberty - Vol. III, The Political Order of a Free People*, London, Routledge, p. 161 et p. 204.

¹⁷⁸ Hodgson G.M., (1993), *Economics and Evolution. Bringing Life Back Into Economics*, Cambridge, Polity Press, p.170-194.

¹⁷⁹ Bellamy R., (1994), "Dethroning Politics: Liberalism, Constitutionalism and Democracy in the Thought of F.A. Hayek", in *British Journal of Political science*, vol. 24, part. 4, pp. 419-441

¹⁸⁰ Favereau O., (2001), "L'économie du sociologue ou : penser (l'orthodoxie) à partir de Pierre Bourdieu", in B. Lahire (edit.), *Le Travail sociologique de Pierre Bourdieu*, Paris, La Découverte, p. 255-314.

¹⁸¹ Arrow K., (1951), *Social Choice and Individual Values*, op.cit..

¹⁸² Olson M., (1965), *The logic of collective actions*, Cambridge (Mass.), Harvard University Press.

¹⁸³ Guerrien B. (1989), *L'économie néo-classique*, La Paris, Découverte, coll. Repères.

In order to pass from utility to the notion of expected utility, a notion derived from Bernoulli and his eighteenth century work on lotteries in a probabilistic universe¹⁸⁴, it is necessary, following the work of von Neumann and Morgenstern¹⁸⁵, to suppose that axiom of independence of preferences. The preferences are independent if, given the possibilities x , y and z such that $x \succ y$, a combination of x and z will be preferred to the same combination of y and z .

It is often added that the preferences are monotonic in time. This monotony must combine from the point of view of the agent to a temporal integration: the utility that one draws from an experiment corresponds to the set of utilities of each moment of this experiment¹⁸⁶. Time monotony and temporal integration play a role if we try to extend the standard theory by including time¹⁸⁷. This axiomatic of the structure of preferences is at the basis of the definition of rational behaviour conceived as the maximization of utility (a certain or stationary universe) or of the expected utility (probabilistic universe). It makes it possible to conceive the economy as an immense mechanism.

Some of these assumptions are very questionable¹⁸⁸. The supposed convexity of indifference curves seems to corroborate the intuition that the demand for a good is the opposite of its price. In fact, recent work has rather shown that convexity is a special case, certainly possible, but neither mandatory nor general¹⁸⁹. In the same way, the "Paradox of Allais"¹⁹⁰ encourages us to question the theory of individual preferences¹⁹¹. Indeed, experimental studies do not confirm the neo-classical assumptions¹⁹². Thus, Slovic and Lichtenstein were confronted with

¹⁸⁴ The expected utility theory is linked to the "Paradoxe de Saint-Petersbourg", Bernoulli D., 1738, "Specimen Theoriae Novae de Mensura Sortis" in *Commentarii Academiae Scientiarum Imperiales Petropolitane*, vol. 5, p. 175-192.

¹⁸⁵ von Neumann J. and O. Morgenstern, (1947), *Theory of Games and Economic Behavior* Princeton, Princeton University Press.

¹⁸⁶ D. Kahneman, "New Challenges to the Rationality Assumption" in K.J. Arrow, E. Colombatto, M. Perlman et C. Schmidt (edits.), *The Rational Foundations of Economic Behaviour*, New York, St. Martin's Press, 1996, p. 203-219.

¹⁸⁷ D. Parfit, *Reasons and Persons*, Oxford, Oxford University Press, 1984.

¹⁸⁸ Hausman D.M., (1992), *The inexact and separate science of economics*, Cambridge University Press, Cambridge, pp. 212-213

¹⁸⁹ Sonnenschein H., (1973), "Do Walras Identity and Continuity Characterize the Class of Excess Demand Functions" in *Journal of Economic Theory*, vol. 6, n°2, pp. 345-354.

¹⁹⁰ Allais M. [1952], « Fondements d'une théorie positive des choix comportant un risque et critique des postulats et axiomes de l'école américaine », *Économétrie*, p. 257-331. Allais M. [1979], « The So-called Allais Paradox and Rational Decisions Under Uncertainty », dans Allais et Hagen (eds), [1979], *Expected Utility and the Allais Paradox*, Dordrecht, D. Reidel, p. 437-683. Mongin, P. (2014), « Le paradoxe d'Allais: Comment lui rendre sa signification perdue ? », in *Revue économique*, vol. 65(5), 743-779.

¹⁹¹ Appleby L. and C. Starmer, (1987), "Individual Choice Under Uncertainty: A review of Experimental Evidence, Past and Present" in J.D. Hey et J. Lambert (edits.), *Surveys in the Economics of Uncertainty*, Basil Blackwell, Oxford-New York, pp. 24-45. Moskowitz H., (1974), "Effects of Problems Presentation and Feedbacks in Rational Behaviour in Allais and Morlat-type Problems", in *Decision Sciences*, vol. 5, pp. 225-242.

¹⁹² C. Camerer, "Individual Decision Making" in Kagel et Roth (edits.), *Handbook of Experimental Economics*, Princeton, NJ, Princeton University Press, 1994. J.W. Payne, J.R. Bettman et E.J. Johnson, "Behavioral Decision Research: a Constructive Processing Perspective", *Annual Review of Psychology*, vol. 43/ 1992, p. 87-131.

preference reversals, unpredictable shifts from one strategy to another¹⁹³. These results have been replicated in different configurations, including taking professional players, playing their own money, to a Las Vegas Casino¹⁹⁴. These results are consistent with the hypothesis developed by Slovic and Lichtenstein that we use different cognitive processes depending on whether we evaluate (a utility or a price) and what we choose¹⁹⁵.

It is also worth mentioning the effects updated by A. Tversky and D. Kahneman. The first, which was called by Amos Tversky the "framing effect" shows that the way of presenting the terms of a choice determines the answers¹⁹⁶. We can thus explain the phenomenon, now well known, reversals of order of preference according to the conditions of presentation of the choices. The second, described by Daniel Kahneman as "endowment effect", shows that the anticipated utility of an object varies greatly depending on the context¹⁹⁷. One can also wonder about the relevance of the hypotheses making it possible to generalize the theory of maximizing rationality to make it the basis of the modern utilitarian theory¹⁹⁸. We therefore come to test the hypotheses of integration and temporal monotonicity¹⁹⁹ of the preferences that are necessary for a dynamic generalization.

Taking into account the results of Tversky, Kahneman, Slovic and Lichtenstein leads us back to a subjectivist and dynamic theory of decision²⁰⁰. This imposes, as indicated a few years ago Omar Hamouda and Robin Rowley, a review of the work of George Shackle²⁰¹ and to seriously face what has been called the "Shackle's Paradox". In a 1990 article, Tversky and Thaler proposed to think of preferences as a constructive, context-dependent process. This is probably a much more realistic view of individual preferences than the body of assumptions which characterise the Walrasian theory. However, the methodological dimension of these implications is threefold. First of all, we must accept the dissociation of the individual, now seen as a legitimate scale of observation, of methodological individualism.

The economist must accept confronting the notion of habitus as Corcuff proposes²⁰². He must also pay renewed attention to the concept of John Commons' Institutionalized Mind²⁰³. By

¹⁹³ Lichtenstein S. and P. Slovic, (1971), "Reversals of Preference Between Bids and Choices in Gambling Decisions", *Journal of Experimental Psychology*, n°86, p. 46-55.

¹⁹⁴ Lichtenstein S. and P. Slovic, (1973), "Reponse induced eversals of Preference in Gambling: An Extended Replications in Las Vegas", *Journal of Experimental Psychology*, n°101, p. 16-20.

¹⁹⁵ Slovic P. and S. Lichtenstein, (1983), "Preference Reversals : A Broader Perspective", *American Economic Review*, vol. 73, n°3, p. 596-605.

¹⁹⁶ Tversky A, (1996), "Rational Theory and Constructive Choice", in K.J. Arrow, E. Colombatto, M. Perlman et C. Schmidt (edits.), (1996), *The Rational Foundations of Economic Behaviour*, Basingstoke - New York, Macmillan et St. Martin's Press, p. 185-197.

¹⁹⁷ Kahneman D., (1996), "New Challenges to the Rationality Assumption" in K.J. Arrow, E. Colombatto, M. Perlman et C. Schmidt (edits.), (1996), *The Rational Foundations of Economic Behaviour*, New York, St. Martin's Press, p. 203-219

¹⁹⁸ Redelmeier D.A. and D. Kahneman, (1996), "Memories of Painful Medical Treatments. Realtime and Retrospective Evaluations of Two Minimally Invasive Procedures", *Pain*, n°1.

¹⁹⁹ Kahneman D., D.L. Frederickson, C.A. Schreiber, D.A. Redelmeier, (1993), "When More Pain is Preferred to Less: Adding a Better End", *Psychological Review*, n°4, p. 401-405.

²⁰⁰ O'Driscoll G.P. and M.J. Rizzo, (1985), *The Economics of Time and Ignorance*, Oxford, Basil Blackwell.

²⁰¹ Hamouda O. and R. Rowley, (1996), "Ignorance and the absence of Probabilities" in C. Schmidt (ed.), *Uncertainty in Economic Thought*, Cheltenham, Edwar Elgar, p. 38-64.

²⁰² Corcuff P., (2001), "Le collectif au défi du singulier: en partant de l'habitus", in B. Lahire, *Le travail sociologique de Pierre Bourdieu*, op.cit..

this term, Commons meant that behaviour is shaped by institutional forms, and especially by mental practices. Therefore, we can no longer reduce the organization to a sum of inter-individual contracts²⁰⁴. The theory of opportunism, explicitly invoked by Oliver E. Williamson and neo-institutional theory of the firm and implicitly by Olson, and the theory of public action of the latter do not withstand conditions put forward by Tversky and Thaler. We find then an important track, the one of collective construction of the confidence, which is opposed to the individualistic vision such of the theory of contract²⁰⁵. Similarly, the spontaneous convergence of expectations can no longer be invoked. Institutions, which allow the construction of this trust and convergence, but also the routines and customs, find their *raison d'être*.

4. How does they work?

It is therefore the Tversky-Thaler's conjecture that best accounts for the actual processes of choice and decision²⁰⁶. The choices and decisions are not dictated by elements and preferences outside these choices and decisions but are determined by the very conditions of these choices and decisions. We can see that cognitive and informational conditions are the *raison d'être* of institutions, whether formal or informal. This explains the functional necessity of institutions in the broadest sense of the term. But, there is a relatively static aspect in the reasoning so far adopted. To move from a static framework to a dynamic framework, we must ask ourselves the question of the birth conditions and evolution of the institutional framework.

A. From Context Generation to the Problem of the Convergence of Expectations: A Dynamics of the Institutions

We must first of all question the modes of generating contexts. This is a major debate between spontaneity and constructivism, which stems from the criticism of von Mises and Hayek of the Austrian tradition against both centralized planning and neoclassical models²⁰⁷. The Austrian tradition, since Menger²⁰⁸, has been interested in the question of processes of transformation and evolution. One of his most important contributions is that subjective behaviours are largely dependent on the contexts in which they appear. Thus, the Hayekian definition of expectations is radically different from the neoclassical notion of rational

²⁰³ Forest J. and C. Mehier, (2001), "John R. Commons et Herbert A. Simon on the Concept of Rationality", *Journal of Economic Issues*, vol. XXXV, n°3, p. 591-605. Commons J.R., (1934, 1990), *Institutional Economics, its place in Political Economy*, New Brunswick, Transaction Publishers.

²⁰⁴ Jensen M.C. and W.H. Meckling, (1976), " Theory of the firm, managerial behavior, agency costs, and ownership structure" in J.B. Barney et W.G. Ouchi, (eds.), 1976, *Organizational Economics*, Jossey- San Francisco, Bass Publishers, p. 214-275.

²⁰⁵ Fox A., (1974), *Beyond Contract : Work, Power and Trust Relations*, Londres, Faber & Faber. Etzioni A., (1988), *The moral dimension : tToward a New Economics*, New York, The Free Press.

²⁰⁶ Tversky A., Thaler R.H, (1990), « Anomalies : Preference Reversal » in *The Journal of Economic Perspectives*, Vol. 4, No. 2. (Spring, 1990), pp. 201-211.

²⁰⁷ Sapir J., (2000), *Les trous noirs de la science économique*, Paris, Albin Michel.

²⁰⁸ Menger, C. (1883), *Untersuchungen über die Methode der Sozialwissenschaften und der politischen Oekonomie insbesondere*, Berlin, Duncker und Humblot. English translation : *Investigations into the Method of the Social Science with Special Reference to Economics*, New York University Press, 1985.

anticipation²⁰⁹. These expectations do not converge automatically. But then, how to think this process of convergence?

As André Orléans acknowledges, it is enough to introduce a differentiation so that the hypothesis of a spontaneous convergence towards unanimity collapses²¹⁰. This is the result obtained by Grossman and Stiglitz, in their analysis of a Walrasian competitive market. However, in Orleans, we find an influence of the theory of rational expectations and, through the example of the so-called "fundamental Girardian theorem", we find the equivalent of a Walrasian equilibrium²¹¹.

We then measure the problems resulting from the attempt to integrate the individual and the collective through a double reference to limited rationality and instrumental rationality²¹². But the latter, at least in the traditionally accepted definition, implies the monotony and temporal integration of preferences²¹³. These assumptions are indispensable if we want to suppose an independent construction of behaviours, and in particular a learning capacity independent of any collective interaction, which results from the claim by some of the authors of methodological individualism²¹⁴, a point which was not completely obvious at first²¹⁵. P. Livet and L. Thévenot are clearly more explicit in a definition of rationality described as interpretative. They integrate a large dose of collective in the determination of individual choices²¹⁶. On the other hand R. Boyer and A. Orléan adopt a vision of the genesis and the diffusion of the conventions that is rooted in a utilitarian spontaneism²¹⁷. We then measure the theoretical tensions that appear within these authors.

For the Theory of Regulation, one of the forms of institutionalism in France and resulting from the seminal works of authors like Aglietta²¹⁸, Boyer²¹⁹ or Lipietz²²⁰, the mode of generating contexts was initially determined by social conflicts. However, in their subsequent analysis of the introduction of the conventions, R. Boyer and A. Orléan gave a very large place to the utilitarian spontaneity of actors²²¹. It is essentially in the monetary field that one finds a defence and illustration of the discretionary action²²², even if in a later paper Robert Boyer corrects an angelic vision (the functionality of the coordination) of the origin of the

²⁰⁹ Buttos W and R.G. Koppl, (1993), "Hayekian Expectations: Theory and Empirical Implications", in *Constitutional Political Economy*, vol. 4, n°3.

²¹⁰ Grossman S.J. and J.E. Stiglitz, (1980), "On the Impossibility of Informationally Efficient Markets" in *American Economic Review*, vol. 70, n°3, pp. 393-408.

²¹¹ Orléan A., (1995), "Monnaie et spéculation mimétique" in P. Dumouchel (ed.), (1995), *Violence et vérité autour de René Girard*, Paris, Grasset, pp. 147-158.

²¹² Favereau O., (1993), "Théorie de la Régulation et économie des conventions: canevas pour une confrontation", in *La Lettre de la Régulation*, n°7, p. 1-3.

²¹³ Parfit D., (1984), *Reasons and Persons*, Oxford, Oxford University Press.

²¹⁴ J.P. Dupuy et alii, "Introduction", in *Revue Économique*, vol.40, n°2, mars 1989, pp. 141-145.

²¹⁵ L. Thévenot, "Économie et forme conventionnelle" in R. Salais et L. Thévenot (edits), *Le Travail. Marché, règles, conventions*, Economica et INSEE, Paris, 1986, pp. 195-215

²¹⁶ P. Livet et L. Thévenot, "Les catégories de l'action collective", in A. Orléan (ed.), *Analyse économique des conventions*, op.cit..

²¹⁷ Boyer R. and A. Orléan, (1994) "Persistance et changement des conventions", in A. Orléan (ed), (1994), *Analyse économique des conventions*, Paris, PUF, pp. 219-247

²¹⁸ Aglietta M., (1978, 1982), *Régulation et crises du capitalisme*, Paris, Calmann-Lévy.

²¹⁹ Boyer R. and J. Mistral, (1978), *Accumulation, inflation et crise*, Paris, PUF.

²²⁰ Lipietz A., (1979), *Crise et inflation, pourquoi?*, Paris, Maspéro.

²²¹ Boyer R. and A. Orléan, (1994) "Persistance et changement des conventions", op.cit..

²²² Aglietta M., (1995) *Macroéconomie financière*, Paris, La Découverte. See also, Aglietta M., (1991), "Le risque de système", in *Revue d'économie financière*, vol.17, n°3.

institutions²²³. For Robert Boyer, even if the state is indisputably present, the dimension of the firm seen in the form of the privileged framework for the deployment of dynamics of the wage relationship, as well as that of competition, is much more present²²⁴. The initial dialectic between the private and the public is disintegrated, however, over time. Strong still in 1986²²⁵, it had resulted in a rallying to what could seem a spontaneous vision of the emergence of rules and institutions close to the evolutionary theory²²⁶. This author has, however, returned to a more decisively decision-making position. In an article published in 2003 he writes that institutions "*do not have the property of being engendered by the spontaneous interaction of agents*"²²⁷. At the heart of the problem lies the question of learning, which is a central problem both for the origin of institutions and conventions and for their evolution.

Learning could then be interpreted as the way good solutions are chosen by agents. The latter is done through evolutions and conscious imitations, which are as many learning strategies agents. But, learning raises specific questions. If we accept the framework, characterizing the Austrian approach and that of a part of the evolutionary authors²²⁸, indeed learning can only be done in two ways, by imitation of others or by a process of trial and error.

To suppose that the imitation is the right process to always arrive at the best of the solutions imply resolved by the agent the question of the generalization of the case of its neighbour. Now, or we must admit a similarity between the agents, and we fall back on the hypothesis of homogeneity, or we suppose that the agent learns to distinguish what is general and what is particular in the experience of others. It is therefore necessary to assume a stationary environment, or to assume that the agents are aware of the tilts of a regime of ergodicity limited to another regime of limited ergodicity. Of course, if the agent concerned were provided with a wealth of information about the experiences of others, the hypothesis of stationarity would no longer be necessary. Then, however, it would no longer be a spontaneous learning, but an education of the agent by an external and benevolent agent.

Let's come to the trial and error process now. It is unquestionably a fast learning factor. Still, the agent must not be destroyed by his first mistake. If that were the case, he could not learn anymore. The trial-and-error approach can actually be a powerful learning process, but only if one builds a variable framework that then falls under the discretionary order (that of the teacher in his class) and not the order spontaneous, and which involves the construction of a collective system.

The learning question inevitably brings us back to the knowledge question and how it is acquired. Behind a certain emphasis on spontaneous learning, we find a hypothesis of direct intelligibility of reality and experience. This hypothesis is necessary to pretend that the know-how allows doing without the know-why. We must therefore return to the interpretation that we give of the phenomenon of learning and routines, the importance of which has just been

²²³ Boyer R., (1995), "Vers une théorie originale des institutions économiques ?", in R. Boyer et Y. Saillard, edits., (1995), *Théorie de la régulation. État des savoirs*, Paris, La Découverte.

²²⁴ Boyer R. and J. Mistral, *Accumulation, Inflation, Crises*, op.cit.

²²⁵ Boyer R., (1986), "Les crises ne sont plus ce qu'elles étaient", et ""Capitalismes fin de siècle", in R. Boyer, (ed.), (1986), *Capitalismes fin de siècles*, Paris, PUF..

²²⁶ Boyer R. and A. Orléan, (1994), "Persistance et changement des conventions", in A. Orléan, (ed.), (1994), *Analyse économique des conventions*, Paris, PUF.

²²⁷ Boyer R., (2003), « Les institutions dans la théorie de la Régulation » in *Les Cahiers d'Economie Politique*, Vol 44, n°1, pp. 79-101, p. 88.

²²⁸ Encore que S.G. Winter constitue ici un cas intéressant. Il se réclame, simultanément, de l'individualisme et de la connaissance collective, ce qui est à l'évidence une contradiction.

emphasized by the evolutionary school²²⁹. We must distinguish between what is pure learning (the agent has an even tacit intelligibility of his personal experiences) and teaching (the agent uses another agent to access the intelligibility of his personal experiences)²³⁰. This amounts to reformulating, but in a dynamic logic this time, the opposition between the know-how and the know-why that has been mentioned.

The question of the process of generating contexts thus radically separates traditional institutionalism from neo-institutionalism. Although the genesis of institutions is largely spontaneous among neo-institutionalists, in the Commons tradition, it is always associated with a decision, even if the final result does not necessarily reflect the hopes placed in the decision²³¹.

Let's go back to the consequences of the cognitive limits of the agents. For Herbert Simon, it is clear that the cognitive abilities of agents are limited. The major risk is not the lack of information but the saturation by excess. On this point, there is total compatibility with Hayek's formulations²³². But, for Simon, if there are no doubt that the rules, whether rules that one sets oneself or rules that a community imposes on you, are of decisive importance in terms of decision-making, this does not lead to spontaneity. Insofar as the rules do not exist, or have proved insufficient or inappropriate, there is room for the discretionary policy decision that sets a new framework of rules. It is precisely the radical uncertainty that implies conscious action. In a sense it is uncertainty itself, because it makes impossible the automatic process of maximization, which makes a form of strategic planning imperative²³³, even if this planning is, for Simon, essentially procedural and not substantive²³⁴. The same hypothesis, the irreducible limitation of the cognitive capacities of agents, leads to two very different conclusions.

Significantly, we are brought here to the problem Carl Schmitt raised about the analysis of political institutions²³⁵. For Schmitt, decision is the daughter of uncertainty. If we were living in a completely probabilistic world, then norms and rules would be enough. It is because we have to cope with radical uncertainty that decision is needed. This is raising the interesting issue of a common basis between Schmitt and Keynes²³⁶. To be sovereign is to have the capacity to decide²³⁷, which Carl Schmitt also expresses in the form "Is sovereign who decides the exceptional situation"²³⁸. The state of emergency, which represents the top of the

²²⁹ R. Nelson, "Recent Evolutionary Theorizing about Economic Change", in *Journal of Economic Literature*, Vol. XXXIII, n°1, mars 1995, pp48-90. R. Nelson et S. Winter, *An evolutionary theory of economic change*, Harvard University Press, Cambridge, Mass, 1982.

²³⁰ La distinction ici introduite entre apprentissage et enseignement recoupe au moins en partie celle entre les apprentissages de classe 1 et de classe 2 dans C. Argyris et D.A. Schön, *Operational Learning : A Theory of Action Perspective*, Addison-Wesley Publ., Reading, Mass., 1978.

²³¹ Ramstad Y., "Is Transaction a Transaction?", op.cit..

²³² Hayek F.A., *Law, Legislation and Liberty*, op.cit., p. 13.

²³³ Simon H.A. (1972), "Theories of Bounded Rationality.", in C.B. Radner et R. Radner, *Decision and Organization*, North Holland, Amsterdam, pp. 161-176, .See p. 171-172.

²³⁴ Simon H.A., (1976), "From Substantive to Procedural Rationality" in S.J. Latsis, (ed), *Method and Appraisal in Economics*, Cambridge University Press, Cambridge, 1976, pp. 129-148, voir p. 143/4.

²³⁵ Balakrishnan G., (2002), *The Enemy: An intellectual portrait of Carl Schmitt*, London, Verso. Voir aussi Kervégan J-F, (2011), *Que Faire de Carl Schmitt*, Paris, Gallimard, coll. Tel Quel.

²³⁶ O'Donnell R. (ed.), (1991), *Keynes as Philosopher-Economist*, London, Palgrave-MacMillan ?

²³⁷ Schmitt C., *Légalité, Légitimité*, (1936), Translated from German by W. Gueydan de Roussel, Paris, Librairie générale de Droit et Jurisprudence; First publication (in German) : 1932.

²³⁸ Schmitt C. (1922, 1969), *Théologie politique*, Paris, Gallimard, p. 16.

decision, is justified when the "normal" rules work more. But this state of emergency, because it involves discretionary decisions, then raises the problem of sovereignty and sovereignty. The question of sovereignty is therefore central to who really wants to account for the institutions.

B. Social conflict, origin of institutions?

The question of the origins of institutions and conventions opposes those who lean towards a spontaneous origin of the latter²³⁹, whether accidental or induced by an "objective necessity", and those who see the birth of these institutions as a social process²⁴⁰. This issue is not unique to the economy and also crosses other disciplines such as history.

Andre Burguière, a well-known historian, dealt with the question of relations between institutions and individuals²⁴¹. The generalization of practices is therefore to be linked to economic and social contexts that make a conceivable behaviour a desirable one by the greatest number. Pierre Toubert gives another example of the construction of institutions. In his thesis devoted to the problem of Middle-Age "Castle-making" (the *incastellamento*)²⁴², it shows the establishment of the institution that represents the seigniorial castle. Its effects on the organization of space, social and economic space are described in these terms: "*It therefore seemed to us that the "incastellamento" of the 10th century, connected to all this past, marked less a "renaissance" (...) a qualitative break imposed by the seigniorial layer to the forms of an older growth (...) To better control the expansion and increase their profit, they gathered the lands. Today, it seems to be the construction of the territories. They have enclosed the workers in a new economic framework ...*"²⁴³ Here again we find the notion of coup de force. The result of this "transaction" is accompanied by significant psychological changes that affect both the subjectivity of the actors and their reciprocal positions²⁴⁴. We are here referred to the very notion of the plurality of the principles of reference of the agent in Commons²⁴⁵. We can then restore all its importance to the social dimension, thus collective, of the analysis.

The point is important. Commons will bring it back to light by relying on Bentley²⁴⁶. It links the creation of institutions to social conflicts. But, it is here that resume the thesis of a historian (and politician) of the first half of the nineteenth century; François Guizot. In any society, it is natural that there be conflicts. Conflicts are legitimate, provided that they can lead to compromises to overcome them. Such was the famous remark made by Guizot on the

²³⁹ Salais R., (1989), "L'analyse économique des conventions de travail", in *Revue Économique*, vol. 40, n°2, pp.199-240.

²⁴⁰ Ramstad Y., (1996), "Is Transaction a Transaction?", in *Journal of Economic Issues*, vol. 30, n°2, pp.413-427. Dow S.C., (1990), "Post-Keynesianism as political economy: a methodological discussion", in *Review of Political Economy*, vol.2, n°3, pp. 345-358

²⁴¹ Burguière A., (1995), "Le changement social: histoire d'un concept", in Lepetit, ed., *Les Formes de l'Expérience. Une autre histoire sociale*, op.cit., pp. 253-272.

²⁴² Toubert P., (1973), *Les Structures du Latium Médiéval*, Publications de l'École Française de Rome, BEFAR, fasc. 221, Rome, 1973, 2 vol.

²⁴³ Idem, p. 1356.

²⁴⁴ Idem, p. 1357.

²⁴⁵ Commons J.R., (1934), *Institutional Economics: Its Place in Political Economy*, Macmillan, New York, 1934.

²⁴⁶ Bentley A., (1908, 1949) *The Process of Government*, Principia Press, Evanston, Ill..

history of the institutions, which characterized "European civilization" in 1828²⁴⁷. We must therefore take up the question of the construction of institutions, and we will regain sovereignty. In its classic work about the "European civilization", Guizot then analyses the process of emancipation of the communes, which leads him to the famous conclusion: "(...) *the struggle, instead of becoming a principle of immobility, has been a cause of progress; the relations of the various classes to each other, the necessity in which they found themselves to fight each other and to give in turn, the variety of their interests and passions, the need to conquer themselves without being able to overcome them, hence has come out may be the most energetic, the most fruitful principle of development of European civilization.*"²⁴⁸

It must be remembered that from this excerpt comes the notion popularized by Marx of class struggles being the actual founding of history. However, Guizot's analysis goes however beyond this simplification. Its implications have not always been fully understood. What Guizot asserts is not only the necessity of struggle as a principle of engendering institutions, but also a circular link, or more precisely a link affecting a spiral where we regularly go back to the same point but not to the same height between an institution of sovereignty, the bourgeois commune for example, and the principle of the class struggle. Guizot, moreover, rightly analysed the political nervousness of these bourgeois and showed all that their strength was due to a collective approach:

*"The bourgeois of a city, comparing himself to the little lord who lived near him and who had just been vanquished, felt none the less his extreme inferiority ... he held his share of freedom not from him alone but from his association with others, difficult and precarious relief."*²⁴⁹

The struggle of the bourgeoisie is subject to this same struggle a qualitative change, because it gives the class in question an institution allowing him to acquire a different consciousness of his interests and needs, and offering him new means. In other words, it is only possible to express one's interests by conquering areas of sovereignty. But this then implies collective action. This is why the different forms of organizations, leagues, associations, unions, are not only legitimate but also still absolutely necessary for the functioning of a heterogeneous society. The existence of a common interest does not erase these conflicts, but must be rooted in the compatibility of their management methods. However, once these spaces are acquired, they tend to influence the representations of those who live there. Conflict is therefore very essential in the birth of institutions, just as market exchange is a social construct and not a natural fact²⁵⁰.

C. Institutional architecture

From this, one can seek to deduce an architecture of institutions that is likely to account for both their place and their evolution. Douglass North asserts that institutions do not have to be selected by a principle of economic efficiency²⁵¹, an analysis that converges with that of François Guizot, for whom the institutions refer to a political compromise. For the French School of Theory of Regulation also institutions must go through the political sphere and

²⁴⁷ Guizot F., (1869) *Histoire de la civilisation en France depuis la chute de l'Empire Romain*, Didier, Paris.

²⁴⁸. Guizot F., (1868, 1985), *Histoire de la civilisation en Europe*, Paris, Hachette, coll. « Pluriel », p. 182.

²⁴⁹. *Ibid.*, p. 184.

²⁵⁰ Boyer R. (2001a), "The régulation Approach as a Theory of Capitalism: A New Derivation", in Labrousse A., J.-D. Weisz Eds, *Institutional Economics in France and Germany: German Ordoliberalism versus the French Regulation School*, Berlin, Springer, pp. 49-92.

²⁵¹ North D.C. (1990), *Institutions, Institutional Change and Economic performance*, Cambridge, Cambridge University Press

recognition by law to have an impact on economic dynamics²⁵². The passage through politics therefore seems indispensable. With him comes the question of legitimacy, and therefore of sovereignty. Moreover, if one accepts the idea that "accumulation regimes"²⁵³ and development patterns are induced by institutions²⁵⁴, then we find back the logical Labrousian conclusion explaining that an economy has the conjuncture of its structures.

Thus, the crisis of 1929 is in its form, but also partly in its substance, the product of the financial institutions of its time, the gold standard, and the institutionalized interactions between the American banks and the German and Austrian banks. Structural crises can only be overcome by the radical transformation of institutional forms, or even the destruction of old institutions and the emergence of new ones through social confrontations. This process of radical transformation, of destruction and creation, takes place under the twofold imperative of reducing previous imbalances and responding to the social and political conflicts that these imbalances provoke. Therefore, it is clear that there is complementarity between the various institutional forms²⁵⁵, and it can be argued that this complementarity is also built on a form of hierarchy of these different institutional forms. An overview will be given in the following table (Table 4). In this table, we have listed the various possible and necessary institutional forms, but also the conditions which define them, which make them possible, which determine their principles of action, and finally the factors of change.

This table must now be analysed line by line. The constitutional order is therefore put in mind because it is naturally the framework that defines both the meta-contexts and the set of possible logics of institutionalization²⁵⁶. It determines, from the forms taken by sovereignty, the nature of the legitimacy of subordinate institutions.

This requires a distinction between *legality*, that is, the conditions under which a rule is enacted and respected, and *legitimacy*, in other words, the conditions under which this rule, even if it may displease or have adverse consequences for certain individuals, is nevertheless recognized by the greatest number. What makes people comply with rules and standards? It is never the functionality of these rules and standards, even though it is obvious. The respect of the rules obviously implies an instance of force which makes the rupture costly²⁵⁷. But, that last one is not enough. The rule must be accepted, and thus internalized at least to a certain point. But this cannot be achieved by force alone. Similarly, the conditions under which a rule and a law have been taken, otherwise the "lawfulness", cannot suffice. It is important here not to make a fetish of the legal dimension²⁵⁸ and the rule of law²⁵⁹. One of the reasons for this is precisely the very kind of uncertainty that for Douglass North was the source of his

²⁵² Boyer R., (2003), « Les institutions dans la théorie de la Régulation » op.cit.

²⁵³ Labrousse A. & Michel S. (2017), « Accumulation regimes », in: Jo T-H, L. Chester, C. D'Ippoliti (eds) : *Handbook of Heterodox Political Economy*, London, Routledge, pp. 54-69.

²⁵⁴ Boyer R., Saillard Y. (Dir.) (2002), *Théorie de la Régulation. L'état des savoirs*, La Découverte, Paris, Nouvelle édition actualisée [Première édition : 1995].

²⁵⁵ Amable B., Ernst E., Palombarini S., (2002), "Comment les marchés financiers peuvent-ils affecter les relations industrielles? Une approche par la complémentarité institutionnelle", in *L'Année de la Régulation 2002*, Vol. 6, p. 285-302.

²⁵⁶ Sabel Ch. (1997), "Constitutional orders: trust building and response to change", in Hollingsworth R.J., Boyer R. (eds.) *Contemporary Capitalism*, Cambridge University Press, pp. 154-188.

²⁵⁷ Spinoza B., *Traité Theologico-Politique*, traduction de P-F. Moreau et F. Lagrée, PUF, Paris, coll. Epithémée, 1999, XVI, 7.

²⁵⁸ Kelsen H., (1996), *Théorie générale des normes*, Paris, PUF.

²⁵⁹ Dyzenhaus D. (1991) *Hard Cases in Wicked Legal Systems. South African Law in the Perspective of Legal Philosophy*, Oxford, Clarendon Press.

institutionalist thought, and which we seen rejected by Walrasian or Neo-Walrasian economists. The fairest rules and the best laws can be overwhelmed by exceptional situations. If we could predict in advance the standards applicable to each exceptional situation, it is that we would be able to predict precisely these situations.

Table 4
Architecture of different institutional forms

	Definition	Prerequisites	Principles of Action	Factors of change
Constitutional order	Set of principles and rules of action organizing a political space	Sovereignty of the space in question and its participants	Legitimacy	Evolution of principles and rules of action.
Institution (formal)	Set of procedures structuring interactions and creating regularities or norms between participants	Verified Agreement	Legality, compliance with standards, issuing rules.	Innovation, challenges inducing breaking the initial agreement and changing the context.
Institution (informal)	Set of implicit procedures structuring interactions and creating regularities between the participants	Consensus, and tacit agreement.	Implicit rules of behaviour, routines, customs.	Changing contexts leading to the breaking of consensus.
Organisation	Collective organization in explicit form (hierarchy) assuming organization rules.	Framework of organizational rules (derived from the institutions).	Rules of behavior and subordination.	Insufficient results, questioning organizational rules.
Conventions	Set of anticipations and representations, of unintended origin, reducing uncertainty and making expectations to converge.	Founding experience, stabilized universe.	"Natural" reproduction of behaviours, predictability of collective actions.	Brutal crisis, return to reality, destabilization of the universe of agents.
Habitus	Set of behaviours internalized by individuals, consciously or not.	Existence of a pre-existing social framework	Adaptation to the social framework, predictability of individual action.	Questioning or changing the social framework, transfer to another setting.

However, this inability to predict is precisely what characterizes uncertainty. As we can see, legitimacy, and not legality, is the principle of action of the constitutional order.

We have to go back to Carl Schmitt again²⁶⁰. When the latter invokes the decision-maker, this ability of the state to make decisions outside any legal framework, it indicates who is the "sovereign". It is in the state of exception, a principle recognized by every consistent jurist, that sovereignty asserts itself and reveals itself. We know that for Carl Schmitt "*Is sovereign the one who decides the exceptional situation*"²⁶¹. This definition is important. Nevertheless, it is necessary to look carefully at the words. Schmitt does not write "in the situation" but "in the situation". It is saying that a situation is exceptional that would establish the sovereign. Emmanuel Tuchscherer rightly points out that this "*marks the link between the decision-making monopoly, which becomes the essential mark of political sovereignty, and a set of situations that the term *Ausnahmezustand* summarizes, the latter qualifying, behind the generosity of the term "Exceptional situation", these limiting cases that C. Schmitt enumerates in the remainder of the passage without really distinguishing: "case of necessity" (*Notfall*), "state of emergency" (*Notstand*), "exceptional circumstances" (*Ausnahmefall*) in short, the typical situations of the *extremus necessitatis casus* which classically control the temporary suspension of the ordinary legal order*"²⁶².

It is important here to understand that this suspension of "the ordinary legal order", and the word "ordinary" is of course important here, does not imply the suspension of any legal order. Law does not stop with the exceptional situation, but it is transformed. The legality and legitimacy pair continues to function, but here legality derives directly and virtually without mediation from the legitimacy and legitimacy of sovereignty. The act of sovereign authority, and held as such, is legitimate. It becomes, in the facts of the exceptional situation, a legal act. And then we can understand the importance of the clear definition of sovereignty. The sovereign decision thus sheds light on what C. Schmitt refers to as an exceptional situation. The exception thus manifests the vitality of another variant of this order. It can be considered as the political or sovereign order usually hidden behind the purely formal and procedural framework of the normative order of ordinary law: "*In this situation one thing is clear: the state subsists while the law retreats. The exceptional situation is always something else than anarchy and chaos, and that is why, in the legal sense, there is always an order, even an order that is not right. The existence of the State here maintains an undeniable superiority over the validity of the legal norm.*"²⁶³

Acknowledging the need for exceptional action is therefore a logical implication of the hypothesis of cognitive limitation and uncertainty. Should we recognize in these exceptional situations the presence of a "pure" violence, anomic, radically hostile to any legal framework as Walter Benjamin suggests²⁶⁴? That societies can, historically, be confronted with situations of great disorder, in which all right has disappeared, is obviously a reality. That some of these situations can be founding right, like the Revolutions, is also obvious. But must we leave empty the space between these situations, which translate the collapse of the totality of the social organization, and the normal situations? This is why we must think of states of

²⁶⁰ Scheuerman W.E., « Down on Law: The complicated legacy of the authoritarian jurist Carl Schmitt », in *Boston Review*, vol. XXVI, n° 2, avril-mai 2001

²⁶¹ Schmitt C., *Théologie Politique*, traduction française de J.-L. Schlegel, Paris, Gallimard, 1988; édition originelle en allemand 1922, p.16.

²⁶² Tuchscherer E., « Le décisionnisme de Carl Schmitt : théorie et rhétorique de la guerre » in *Mots – Les langages du Politique* n°73, 2003, pp 25-42.

²⁶³ Schmitt C., *Théologie politique I*, op.cit. p.22.

²⁶⁴ Benjamin W., (1985), *Origine du drame baroque allemand*, translation by Sibylle Muller, Paris, Flammarion.

exception²⁶⁵, which are states where the decision takes precedence over the law, but to allow a return to the law.

The New Deal was thus challenged in the Supreme Court, and some of these measures were broken²⁶⁶. The situation was stalled until Roosevelt could appoint new members to the Supreme Court. The political legitimacy of the action prevailed, then, on the letter of Right. The Supreme Court here went bankrupt when the US executive renewed the laws that had previously been broken. As we can see, this makes the notion of sovereignty, because it is the latter that founds the legitimacy²⁶⁷, the keystone of the constitutional order²⁶⁸.

Institutions, whether formal or informal, operate within the framework of the constitutional order. They constitute repertoires of knowledge²⁶⁹ and allow the coordination of anticipations and strategies and operate in the field of social and economic interactions²⁷⁰. From this point of view, legality is now the principle of action. The organizations fit into the constitutional order and the network of institutions and implement a principle of power and control over a set of activities operating within a defined area²⁷¹. Conventions result from the "horizontal" interaction of a group of individuals who have to co-ordinate their strategies, without the possibility of a hierarchical principle of the kind prevailing in an organization or legal, and they are based on a significant or founding experience in the past, an experience that can be brutally challenged by a new experience²⁷². Finally, with habitus, we are in the presence of a form that corresponds to the incorporation into individuals of the patterns of interpretation and action that result from the process of socialization²⁷³.

From then on, we can better understand both the birth and the evolution of institutional forms. One can also understand the general organization of their relationships, an organization that also contributes to their evolution and transformation. These different processes have been put on image 1.

As explained, the constitutional order is the main source of legitimation but also of tacit authorisation for institutions, be they formal or informal. In return institutions reinforce the operational conditions of the constitutional order, in a way that contributes to the reproduction of the whole system. But, formal institutions could also be a factor pushing toward an evolution of this constitutional order and informal institutions (like organized crime) could also be a factor of contestation of this order²⁷⁴.

²⁶⁵ Schmitt C., *Théologie Politique*, op. cit., p. 15.

²⁶⁶ Lawson R.A., (2006), *A Commonwealth of Hope: The New Deal Response to Crisis*, Johns Hopkins University Press, 2006. Leuchtenburg, William E. (1995). *The Supreme Court Reborn: The Constitutional Revolution in the Age of Roosevelt*. New York: Oxford University Press.

²⁶⁷ Sapir J., (2016), *Souveraineté, Démocratie, Laïcité*, Paris, Michalon.

²⁶⁸ Krasner S., (1988), « Sovereignty, an institutional perspective » in *Comparative Political Studies*, vol. 21, pp. 66-94.

²⁶⁹ Hodgson G. M., (2003), « Les institutions comme répertoire de connaissance: repères dans l'évolution d'une idée » in *Economie Appliquée*, vol. 3, pp. 211-228

²⁷⁰ Aoki M. (2002), *Toward a comparative institutional analysis*, Cambridge (MA), MIT Press.

²⁷¹ Chandler A.D. (1990) *Scale and Scope: The Dynamics of Industrial Capitalism*, Cambridge, Harvard University Press.

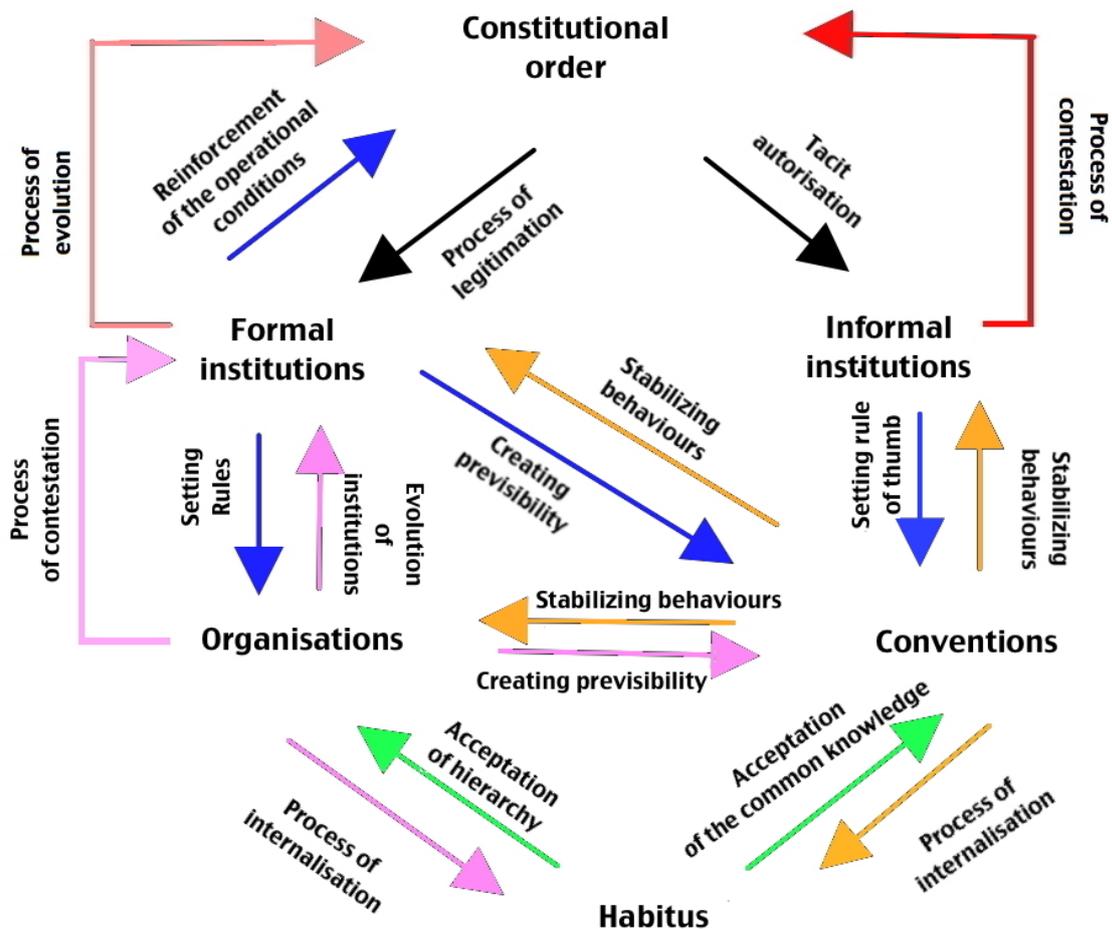
²⁷² Clément-Pitiot H., (2001), « Vous avez dit "faux-semblants" ...? Commentaire sur l'article de C. Bastidon et P. Gilles », in *Economie Appliquée*, vol. 2, pp. 217-240.

²⁷³ Bourdieu P. (1979), *La distinction. Critique sociale du jugement*, Éditions de Minuit, Paris

²⁷⁴ See Sapir J., (2002), "Crisis and transition in the Soviet Union and Russia", in R. Boyer & Y. Saillard (eds.) *Regulation Theory - The State of the Art*, London and New York Routledge, , pp. 274-279.

Formal and informal institutions are also setting rules (and rules of thumb) that are necessary for organizations and conventions, and institutions generally speaking provide previsibility. Conventions stabilize behaviours, making them converging, something which is necessary for the orderly functioning of institutions (be they formal or informal). But, when conventions are destroyed by an unexpected event, non-stabilized and non-converging behaviours are direct a challenge for all forms of institutions. From organizations are coming both a trend toward the evolution of institutions, but also a process of radical contestation, which is one of the main source of the evolution of institutions, and sometimes a source of crisis.

Figure 1
How different levels interact



Both organizations and conventions induce a process of internalisation of their own rules and rules of thumb that is part of the general process of socialization that generates the habitus. From habitus is coming a general feeling of acceptance of hierarchy (which is a necessity for the functioning of organization) and of common knowledge (through the form of a domination of collective ideas over individual ones). But, habitus is not itself fully stabilized and could be unstable either because a change in register or because a growing conflict of interest. The weakening of habitus generates a weakening of organization and conventions.

The representation of the whole system of institutions could carry the idea of a regulated and stabilized reproduction of the system. But this representation would be deeply mistaken as

conflicts, but also the radical uncertainty are ever destabilizing the different levels of this system.

5. Conclusion

In our exploration of institutions and institutions, we have gone through several levels of reasoning. It is clear that institutionnalist theories are more and better able to account for the reality of the economic problems we face. From this point of view, they are coherent in "world-realism" but also in "truth-realism". What separates them from neoclassical instrumentalism is obviously the attachment to the notion of process, and through this notion, to the subjectivist approach. This is basically what separates these two approaches as indicated in Table 1.

The subjectivist approach is based on a refutation of procedural rationality. This refutation comes from the convergence between the observation of the cognitive limits of the human mind that can be saturated by an excess of signals but also by the observation of the phenomena of sudden changes, or even inversion, of individual preferences. The subjectivist approach and the "processual truth-realism" as defined by Sheila Dow thus derive from work in cognitive and informational economics. To put it another way, there is no "fixed point" on which to base a methodologically instrumentalist approach, unlike the natural sciences. The economy is definitely a social science.

Taking these studies into account then leads to the question of radical uncertainty, which is logically seen by many authors as basing the need for an "alternative approach" to the economy and also at the same time institutionalism. Now, this notion of radical uncertainty immediately confronts us with the "Shackle paradox"²⁷⁵. How can decentralized agents act if they are "rational", in the limited sense of not doing anything contrary to their interest, whatever their definition of that interest, if they know that their action will engender a possibility of radical uncertainty? The answer to this paradox lies precisely in the institutions, conceived in the broadest sense, both the formal and informal institutions, the conventions, the rules and norms issued by these institutions, the habitus integrated by the agents. The question of the answer to the "Shackle paradox" is indeed the central issue of institutionnalist theories.

This, however, says nothing about how institutions are generated, and how do they evolve. To answer this question we must return to the work of John Commons and Arthur Bentley, who were at the foundation of the current American institutionalism. These works can be compared to those of the French historian and politician, François Guizot. All these authors put conflict at the source of the creation of institutions. This point is also put forward by what is called the French School of Regulation, which can be considered as one of the institutionnalist currents in France today. The importance and the relevance of the role and place of conflict in the generation of institutions is not to be forgotten. It stems from the existence of divergent interests within modern societies. This refers to the existence of the heterogeneity of societies²⁷⁶. This heterogeneity is an old issue, but it is also naturally multiplied by the development of capitalism. In heterogeneous societies, it is impossible to conceive of a pre-existing "general interest" overhanging society²⁷⁷. The very notion of the general interest must be constructed from different points of view. This construction can be

²⁷⁵ Sapir J., (2005), *Quelle économie pour le XXI^e siècle?*, Paris, Odile Jacob, chap. 6.

²⁷⁶ Sapir J., (2001), *K Ekonomitcheskoy teorii neodnorodnyh sistem - opyt issledovaniya decentralizovannoy ekonomiki*, op.cit..

²⁷⁷ Bodin J., (1993) *Les Six Livres de la République*, (1575), Paris, Librairie générale française, Le livre de poche, LP17, n° 4619. Classiques de la philosophie,

done in logics of compromise, but also conflicts. The mobilizations induced by political and social conflicts are also moments of constitution of visions of the general interest. One of the important lessons that must be remembered is that conflict, whether social or political, is an inevitable moment in a heterogeneous society and that compromise is the founding act of any institution. The elimination of conflicts results in freezing the institutional framework and does not allow the latter to evolve according to the evolution of the society itself.

However, there is one last point to consider. Why did not institutionalism, and the subjectivist approach, become the mainstream of economic thought between the end of the nineteenth century and the first twenty years of the twentieth century? Why has neoclassical formalism exercised so strong a hold on economic science that it has a hard time getting rid of it today? But that's another question, for another paper.