Menger and Wieser on the dynamics of the emergence of money

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Abstract: This paper is an attempt to reconstruct Carl Menger and Friedrich von Wieser's argument regarding the process of the emergence of money in the light of current economic analysis. Our reconstruction is based both on the few critiques Wieser addressed to Menger's analysis of the emergence of money and to-day literature that provides interpretations of Menger's theory of the emergence of money in terms of search models or evolutionary game theory. Section 1 describes and compares the methodological background of both authors in a twofold perspective. On the one hand, Menger's strict methodological individualism is contrasted with Wieser's 'institutional individualism' (cf. Agassi, 1975). On the other hand, Wieser's conception of institutions, though sharing some common features with Menger's one appears to be more appropriate to deal with mechanisms of evolution while Menger's one is confined to the description of processes of emergence. Section 2 examines the dominant interpretation of Menger's explanation of the emergence of money as well as Wieser's insights regarding this issue in the light of recent developments in (evolutionary) game theory and search theory. We finally provide an analytical exercise, whereby we contrast Menger and Wieser's argument as regards the dynamics underlying the process of emergence of money. We discuss the possibility to interpret in retrospect Menger's explanation in terms of a pure coordination game where the medium of exchange emerges as a focal point because it possesses some 'objective characteristics'. By contrast, Wieser's conception of money and the way he seems to envisage its emergence process can be more appropriately interpreted as a credibility problem, or a self-referential phenomenon, in which social interactions play a central role, quite independent of the underlying characteristics of money.

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Introduction

In this paper, we focus on two authors, the founding father of the Austrian School, Carl Menger and one of his direct successors, Friedrich von Wieser, and analyse how they deal with the problem of emergence of money. If Menger's theory of money is very well-known and considered as a "fundamental and enduring contribution to economics' (O'Driscoll 1986, 601), Wieser's contribution to this field and more generally, his contribution to economics in general, is either neglected or misinterpreted. On one hand, he is often viewed as a faithful follower of Menger paling into insignificance beside Böhm-Bawerk. On the other hand, his inclination in favour of authoritarian political regimes did not contribute to make him very well-liked. These circumstances certainly contributed to the underestimation of his work. However, we claim that there are at least three reasons for a revival of interest in Wieser's contribution to money and economic theory. First, from a methodological viewpoint, Wieser offers a very interesting mixture of economic analysis and economic sociology, which favours an 'institutionalist' interpretation of Wieser's theory of money. Such an interpretation stands in sharp contrast with Menger's description of the emergence of money as the result of unintended actions by purely self-interest agents.

Second, Wieser develops an original conception of institutions where power and social stratification – encapsulated by interactions between leaders and masses – play a substantial role in their evolution. This constitutes a distinctive feature of Wieser's approach, which makes it more appropriate to deal with evolution in general, as compared to Menger's perspective more restricted to the study of processes of emergence.

Third, Wieser's approach of economic phenomena may be interestingly put in perspective with both Menger's explanation of the emergence of money and recent development in economic analysis in the field of (evolutionary) game theory or search theory.

The remaining of the paper is consequently organized as follows: section 1 describes and compares the methodological background of both authors in a twofold perspective. On the one hand, Menger's strict methodological individualism is contrasted with Wieser's 'institutional individualism' (cf. Agassi, 1975). On the other hand, Wieser's conception of institutions, though sharing some common features with Menger's one appears to be more appropriate to deal with mechanisms of evolution, while Menger's one is confined to the description of processes of emergence. Section 2 examines the dominant interpretation of Menger's explanation of the emergence of money as well as Wieser's intuition regarding the problem in the light of recent developments in (evolutionary) game theory and search theory. We finally provide an analytical exercise, whereby we contrast Menger and Wieser's arguments as regards the dynamics underlying the process of emergence of money. We discuss the possibility to interpret in retrospect Menger's explanation in terms of a pure coordination game where the medium of exchange emerges as a focal point because it possesses some 'objective characteristics'. By contrast, Wieser's conception of money and the way he seems to envisage its emergence process can be more appropriately interpreted as a credibility problem, or a self-referential phenomenon, in which social interactions play a central role, quite independent of the underlying characteristics of money.

1. Menger and Wieser on money: two methodological perspectives

In this section, we compare Menger and Wieser's methodological perspectives, by emphasizing on the one hand, the strictly individualistic approach of Menger contrasting with the more moderate individualism of Wieser that we will interpret as an emblematic case of 'institutional individualism' as defined by Agassi (1975). On the other hand, we underline the differences between Menger and Wieser concerning the way they view economic or social institutions and suggest some interpretation of how this interferes with their respective conceptions of money and its process of emergence.

Before going further into those two questions, let us mention main bibliographical references used to develop our argument.

To begin with Menger, there are mainly five references where his contribution to monetary theory can be found. First, his major contribution to economic theory, *Grundsätze der Volkswirtschaftslehre* (1871) translated into English as *Principles of Economics* (1976), where he devoted two entire chapters (Chapters 7 and 8) to money. Second, there is a German volume, *Schriften über Geldtheorie und Währungspolitik* (1936) which collects Menger's German writings about monetary policies. The most important contribution in this collection is *Geld* (1892 1st version and 1900 2nd version) which originally was published as an article in the reference work *Handwörterbuch der Staatswissenschaften*. Third, there is his famous methodological work *Untersuchung über die Methode der Sozialwissenschaften und der*

Politischen Ökonomie insbesondere (1883) translated into English as *Problems of Economics and Sociology* (1976), where Menger takes money as an illustration of "those social phenomena which are not a product of agreement or of positive legislation, but are unintended results of historical development" (Menger 1976 [1883], x and Book 3, Chapter 2), i.e., what he calls 'organic institutions'. Finally, in 1892, two articles were published, one in English and one in French. The former article, 'The origin of money' was published in the *Economic Journal*. The latter, 'La monnaie mesure de la valeur' was published in *Revue d'Economie Politique*. Unfortunately, this article is often forgotten and neglected in favor of the former, often being referred to in the literature.

Now, concerning Wieser, mainly two references are worth mentioning concerning his contribution to monetary theory. First, there is the *Theorie der gesellschaftlichen Wirtschaft* (1914) translated in English as *Social Economics* (1927), where Wieser analyses the many componentss that makes social economies different from what he calls 'simple economies', which refers to "the most abstract isolating and idealizing assumptions." (Wieser 1967 1927 [1914]). The introduction of money in this basic setting corresponds, according to Wieser, to a 'decreasing abstraction to conditions of reality' – in accordance to the so-called successive approximation method – and constitutes one (among others) of the basic characteristics of social economies.

Second, there is Wieser's last book, *Das Gesetz der Macht* (1926) translated into English as *The Law of Power* (1983), which he published only a few month before his death. Although there is no special attention devoted to money as such in this book, it nevertheless provides an overall analysis of society that emphasizes power – power play, the psychology of power – and the role of beliefs in the emergence and evolution of social institutions from which we can extrapolate Wieser's conception of money.

1.1. Methodological individualism vs. institutional individualism

Menger's individualism cannot be analyzed without taking into account his specific methodology. Menger is an Aristotelian and he stresses the idea that economists as every scientist have to understand the exact (essential) phenomena and the exact relationships between them, phenomena and relationships hidden behind the real (apparent) phenomena and the real relationships between them.

According to Menger, individuals are the basic elements of all human societies and social phenomena[1]. They have specific needs (direct and indirect) and have a specific knowledge of the relationships between those needs and the ordered set of economic goods. “The direct needs of each economic subject are given in each case by his individual nature and previous development (by his individuality).” (Menger 1963 [1883], 217). Those ‘individual nature and previous development’ are linked with the very fact that individuals act and interact. The social interactions create an increase in the knowledge that individuals have of the best way of satisfying their needs by means of the direct and indirect goods. This learning process is at the basis of the emergence of organic institutions. It is also characterized by the fact that it requires neither explicit “agreement”, nor “legislative compulsion”, nor “any consideration of public interest” by them (Menger 1963 [1883], 154).

The social interactions between individuals also create the existence of a “reciprocal conditioning of the whole and its normal functioning and the parts, and vice versa. As a natural result of this fact we are met with a special orientation of social research which has the task of making us aware of this reciprocal conditioning of social phenomena.” (Menger 1963 [1883], 147). This idea of ‘mutual causation’ is however only due to the influence of the individuals on each other and some kind of path dependent effect. Indeed, even if, according to Menger, some social organisms or social structures exist, this is only due to the interactions between individuals following their own interests and using their specific (and evolving) cognitive capacities. When these social structures exist, they condition individuals’ action through the knowledge that these structures bring into them.

The same cannot be said concerning Wieser, who departs from Menger’s strict methodological individualism and promotes an original view that mixes methodological individualism and holism[2], which we interpret as an emblematic case of ‘institutional individualism’, described by Agassi (1975) as a method showing that there need not to be a dichotomy between individualism and holism[3] since, as far as the relationships between

[1] “The origin of a phenomenon is by no means explained by the assertion that it *was present from the very beginning* or that it *developed originally*. Aside from the question of the historical establishment of this theory, it involves a paradox with respect to every complicated phenomenon. Such a phenomenon must obviously have developed at some time from its simpler elements; a social phenomenon, at least in its original form, must clearly have developed from individual factors.” (Menger 1963 [1883], 149).

[2] This is a feature that he shares with Schumpeter. See Festré and Garrouste (2008)

[3] According to Agassi, the three respective characteristics of holism and individualism contradict if and only if a fourth proposition is added: “*If* ‘wholes’ exist *then* they have distinct aims and interests of their own.” (Agassi 1975, 147). The three characteristics of holism are: “1) Society is the ‘whole’ which is more than its parts (holism), 2) ‘Society’ affects the individual’s aims (collectivism), 3) The social set-up influences and constraints the individual’s behavior (institutional analysis)”. Individualism is characterized by: “1) Only individuals have aims and interests (individualism), 2) The individuals behave in a way adequate to his aim, given the

individual actions and institutions are concerned, the former can influence as well as be influenced by the latter (cf. Festré and Garrouste, forthcoming 2008). This perspective is, for Wieser, a necessary one if one wants to deal with social phenomena such as the emergence of institutions. He indeed is not satisfied with individualistic explanations that provide no other explanation "(…) than the one which suggests itself in the personal sphere for the relations between individuals (…)." In particular, such explanations afford no room for "the element of constraint or command without which the [S]tate could neither originate nor endure and which can be clearly established for money as well" (Wieser 1983 [1926], 146)." In this passage, Wieser implicitly refers to Menger's explanation of the emergence of money, which he considers unsatisfactory for reasons that are not only related to the absence of legal or State compulsion but also for other grounds that will be explained in the following. Wieser is no more satisfied with the polar case of collectivist explanations, stating that "in a roundabout way, [they] lead back to the individualistic explanation[s] by taking the people and the masses as a magnified individual" (ibid., 146). For Wieser, there is no hope in those two kinds of monist explanations. He also criticizes "dualist explanations", arguing that they also confront us with problems and do not, therefore, constitute a satisfactory alternative. Wieser takes as an example of the dualist explanations the classical distinction between the subjective (use) and the objective (exchange) value of goods, supposedly able to reconcile respectively the "personal or individual influences" and "those influences which transcend the personal or individual". But without a suitable way for connecting those two elements, this approach cannot be accepted either. For Wieser, the manner classical economics connect the two dimensions is misleading because the "so-called objective exchange value does not by any means apply objectively to everybody". More precisely, on the demand size of the market of a particular good, the principle of the objective exchange value holds true "only for those who can pay the current price, i.e., for those for whom the acquisition of the good brings an increase in utility which at least offsets the decrease in utility brought about by the payment of the price". Symmetrically, on the supply side, the principle holds good "only for those to whom the attainable price brings in an increase in utility sufficient to compensate for the sacrifice which giving up possession of the goods involves" (ibid., p. 147). Wieser therefore concludes that "the objectively determined price gives only the proximate base and not the ultimate standard for valuation, for one and the same quantity if money means a quite

circumstances (rationality principles), 3) The social set-up is changeable as a result of individuals' action (institutional reform)." (Agassi 1975, 146). Agassi remarkably shows that these characteristics alone are not contradictory.

different utility experience for the poor and for the rich person (…)" (ibid., p. 147, *italics in the original)*. In other terms, it amounts to saying that the so-called objective exchange value *is* the subjective exchange value for market participants since those who participate in exchange are oriented towards the same objective base, i.e., the market price. But for those excluded from the market, the objective exchange value has no meaning since "its outcome is as subjectively determined as is the personal use value in each individual case" (ibid., p. 148). *In fine*, the contrast between objective exchange value and subjective use value is nothing more than a "contrast between a multitude of *parallel subjective cases* and the *isolated* case" (ibid., *italics in the original*).

The interpretation in terms of 'institutional individualism' is reinforced by thorough investigation of Wieser's remarks regarding Menger's explanation of the emergence of money. In *Social Economics*, Wieser dedicates several pages to Menger's approach of the emergence of money. If he clearly regards, as Menger, money as one of the founding institutions of social economy, he has reservations about the way Menger deals with the issue of its emergence:

> "For complicated social institutions the historical explanation requires further refinement. We shall show this by the classic illustration of money, whose unknown origin has provoked almost as much interest among men as the origin of the state or of speech. But we must also show that the more subtle explanation at which one finally arrives, *necessarily involves a reduction of individualist stress*.
>
> The long series of writers who sought to explain money as an individualist institution, ends with Menger's penetrating investigation. He uses the phenomenon of money as a paradigm by which he assumes to show that all institutions of the economy are nothing more than 'unintended social results of individual-teleological factors." (*Untersuchungen*, pp. 171-87) (Wieser 1967 1927 [1914], 163) [*Underlined by us*]

More precisely, Wieser means that money is an institution which is not understandable with the help of an individualistic approach only. We shall develop in section 2 that he considers that money is 'something more' than this unintended result, and this relates to his conception of institutions.

1.1. Organic institutions vs. historical formations

1.1.1. Menger on institutions

As it is well-known, Menger's analysis of institutions rests on a twofold distinction. On the one hand, he distinguished between the "exact" and the "empirico-realist" orientation of theoretical research; on the other hand, he differentiated "organic" from "pragmatic" institutions.

The first distinction is central to understand Menger's conception of economics, especially the conception he developed in his methodological work, a conception that is the cornerstone of his analysis of institutions. It refers to two distinct methods, the *exact* one and the *empirico-realist* one since, according to him, "we cannot speak of one method, *the method* of political economy, but only of *its methods*." (Menger 1963 [1883], 23). The *exact* orientation brings to the fore "exact laws, whereas the *empirico-realist* orientation produces "empirical laws." The former are conceived as "strict typical relations" between "strict typical phenomena," while the latter are defined as observed regularities in the succession and the co-existence of "real types." (cf. Garrouste 1994, 271).

The second distinction, i.e., the distinction between organic and pragmatic institutions relates to Menger's conception of the origin of institutions, according to which there are similarities between natural organisms and social structures. Both are characterized by interdependence between the parts and the whole. "In natural organisms we can observe a complexity almost incalculable in detail, and especially a great variety of their parts (single organs). All this variety, however, is helpful in the preservation, development, and the propagation of the organisms as *units* (…). We can make an observation similar in many respects in reference to a series of social phenomena and human economy in particular." (Menger [1883] 1963, 129-30). Those analogies have important consequences for the analysis of social phenomena in general and institutions in particular. "Now, if social phenomena and natural organisms exhibit analogies with respect to their nature, their origin, and their function, it is once clear that this fact cannot remain without influence on the method of research in the field of the social sciences in general and economics in particular (ibid., 130). However, the effective content of such a system of analogies needs to be reduced. Some social institutions indeed do not respect the analogy. Parts of natural organisms participate mechanically, in the constitution and evolution of the whole, while "pragmatic" institutions are the result of a collective deliberate calculation. Social institutions are "the result of human efforts, the efforts of thinking, feeling, acting human beings" (ibid., 133). The strength of the analogy is therefore greatly reduced. It is only for social institutions that are the unintended outcome of individual actions that the analogy, reduced to the problem of the origin of phenomena, is applicable. Concerning pragmatic institutions and problems dealing with the nature and the function of organic institutions, the analogy is erroneous (cf. Garrouste 1994, 274). Accordingly, the distinction between organic and pragmatic institutions overlap: the organic approach, according to Menger, is compatible with the exact orientation of theoretical research while the pragmatic approach relates to the empirico-realist method[4].

Menger indeed considers that “[t]he acknowledgment of a number of social phenomena as ‘organisms’ is in no way in contradiction to the aspiration of exact (atomistic) understanding of them.” (ibid., 141). In passing, one should note that Menger uses the term ‘atomistic ’, in compliance with his methodological individualism, to show his opposition with the collectivist conception of institutions because it treats the origin and evolution of social organisms without an explanation tied to the behaviour of their constituents. This corresponds to what Menger elsewhere referred as the ‘composite’ method[5], nicely summarized by O’Driscoll as a method consist in connecting physical characteristics or objective conditions that play a role in the evolution of organic social institutions to self-interested behavior of individuals (O’ Driscoll 1986, 611). As we shall now develop, Menger’s conception of the origin of money is a perfect example of his analysis of “organic” institutions.

1.1.2. Money as a paradigm of organic institutions in Menger

The case of the emergence of money is typical of how Menger viewed the problem of emergence of organic – as opposed to pragmatic – institutions:

> “How can it be that institutions which serve the common welfare and are extremely significant for its development come into being without a common will directed toward establishing them?” (Menger [1883] 1963, 146)

In his discussion of the origins of money (Menger 1892b ; Menger [1871] 1976, chapters 7 and 8, Menger [1883] 1963, Book 3, chapter 2), Menger points out that individuals do not always get what they want using the barter system. It is both costly and time-consuming to find the exact match, known as the ‘double-coincidence problem’ between individual needs. They tend to abandon direct exchange and exchange their goods for more marketable ones.

[4] In passing, it is interesting to note that Menger’s distinction between pragmatic and organic institutions is purely formal since he neither elaborates on, nor give examples of pragmatic institutions, but for one case: the nationalization of money in colonies.

[5] Menger did so in a manuscript note to Schmoller’s review of Menger’s *Methoden der Socialwissenschaften*. See O’ Driscoll 1986, p. 606.

The causes of saleableness in commodities is related, according to Menger, to different circumstances: to the organization of supply and demand (number of buyers, intensity of their needs, importance of their purchasing power, available quantity of the commodity), to the inner characteristics of goods (divisibility for instance) and to the organization of the market (degree of development of exchanges, of speculation and of free trade). Furthermore the saleableness of commodities are also conditioned by spatial limits (degree of transportability, degree of development of the means of transport, commerce and communication between markets) as well as time limits (permanence of needs, durability and cost of preservation of commodities, periodicity of the market, the rate of interest, the development of speculation, the weight of political restrictions to intertemporal transfers of the commodity) (Menger [1871] 1976, 246-47). Agents thus progressively learn to select increasingly marketable goods and proceeds to indirect exchange, although it does not permit immediate satisfaction of their needs:

> "The economic interest of the economic individuals, therefore, with increased knowledge of their *individual* interests, without agreement, without legislation compulsion, *even without any consideration of public interest*, leads them to turn over there wares for more marketable ones, even if they do not need the latter for their immediate consumer needs" (Menger [1883] 1963, 154)

This positive feedback[6] process eventually singles out one commodity, a commodity that becomes *money*. This selection process however is not the result of purposefully thinking about the advantages of commonly understood or used money. This is perfectly in line with Menger's analysis of organic institutions: "[i]t is clear, rather, that the origin of money can truly be brought to our full understanding only by our learning to understand, the *social* institution discussed here as the unintended result, as the unplanned outcome, of specifically *individual* efforts of members of a society." (Menger [1883] 1963, 155).

1.1.3. Wieser on institutions

As we already pointed out, Wieser's conception of economics shares some common features with Schumpeter's theoretical construction (see Streissler 1988, 195 and Arena and Gloria-Palermo 2001). Among those similarities are the reference to economic sociology and the use

[6] in the sense that a more marketable good is more exchangeable and then becomes more marketable.

of mixture of methodological individualism and holism that we have assimilated to ‘institutional individualism’.

From a terminological viewpoint, Wieser refers to “social institutions” as distinguished from “historical formations” with respect to their mode of emergence. Social institutions are characterized by the fact that they “are *created* by governments or by other order powers for a deliberate purpose and following a deliberate plan” or “in the awareness of a task to be done”, while ‘historical formations’ “grow up without the possibility of one’s becoming aware of a specific creator” but rather as a “searching force” Wieser ([1926] 1983, 141-45).

At first sight, Wieser’s distinction is reminiscent of Menger’s distinction between organic and pragmatic institutions. By analogy, historical formations could be conceived as organic institutions since they are the result of unintended action while social institutions should be considered as pragmatic ones since they are the result of “intentions, opinions, and available instrumentalities of human social unions or their ruler” (Menger [1883] 1963, 145).

Nevertheless, this analogy does not hold any longer if one reminds that for Menger, the distinction between pragmatic and organic institutions overlaps the distinction between “realistic-empirical” approach and the “exact science” one. Even though Menger admits that these two orientations can supplement each other, they nevertheless constitute two logically distinct perspectives. For Wieser, by contrast, explanation of social institutions and historical formations cannot be the subject of independent analyses.

On the one hand, Wieser explains that social institutions are always embedded in “historical formations” (Wieser [1926] 1983, 146) in the sense that an emerging social institution must necessary fits or be consistent with the contemporary existing historical formation. Generalizing this argument, Wieser maintains that:

> “[with] all institutional arrangements it can be clearly seen how in their effect they always depend on being properly adjusted to the nature of historical formations which serve as their foundations” (Wieser [1926] 1983: 143)

One the other hand, historical formations are defined in relation to power, which plays an important role in Wieser’s analysis of institutions. This characteristic stands in sharp contrast with Menger’s framework, in which power (or even state power) is virtually absent. To be more exact, Menger emphasizes the role of power but only in the sense of the power of command over economic resources. In other terms, he deals with power as a necessary condition for being (or not) in position to use economic goods but not elaborate further on how power is distributed among individuals and how this distribution evolves through time and through interactions between agents or groups of agents. Wieser indeed emphasizes that historical formations constitute particular states of the evolution of the society, characterized by a certain social stratification of powers, and which result from "the *accord of many personal units of consciousness* which to a certain degree give up their independence, but without *a higher encompassing unit of consciousness* taking their place" (Wieser [1926] 1983, 146, *italics in the original*). More specifically, Wieser's analysis of power is based on the distinction between masses and leaders. It is fair to mention here that Wieser introduces this distinction between masses and leaders more to put forward that their respective behaviours or rationality obey to different laws or display a distinct psychology of power than to suggest an idea of intellectual superiority of leaders with respect to masses or to convey a pejorative meaning to the term 'mass'. In Wieser's own terms, being a leader "(…) means nothing but to be the first in matters of common concern [and] [t]he social function of a leader is to walk in front (…)" (Wieser [1926] 1983, p. 38). It is nevertheless true that the phenomenon of leadership is based on the existence of inequalities within a given population: it is governed by the "law of small numbers" based "on the *social success of small groups*" (ibid.. p.1). Moreover, it is possible to distinguish between two types of leadership according to the mode of their emergence. On the one hand, there is the *authoritarian* kind of leadership, including despotic as well as lordly leadership, who emerges from historical selection by success. On the other hand, there is the *cooperative* kind of leadership, including leadership in a free society as well as *anonymous* leadership, which results from an election process by the masses."(Wieser [1926] 1983, p. 39)[7].

As far as masses are concerned, Wieser describes them as "following the leader" (ibid.. p. 38), although he distinguishes between two forms of following: *dead masses* or *blind following* and *true following*. Blind following refers to a passive form of following that is reducible to sheep-like behaviour or to normative imitation[8]: "the model of the anonymous leader is being emulated by his environment and subsequently by a wider circle as well" (ibid.. p. 44). True following, on the contrary, refers to reflective searching type of following or active following "which demands of the masses a certain independence of conduct and the

[7] Here again, one may be tempted to apply Menger's typology of pragmatic vs. organic to leadership. The analogy is however quite superficial. What is arguable, however, is that Wieser is more focused on historical formations and cooperative leadership and that he privileges causal-genetic explanations, which places him squarely in Menger's tradition from this viewpoint.

[8] If we stick to Orléan's definition, normative imitation occurs in situations where people, for reputation motives, are inclined to imitate the behaviour of others, by fear of sanctions or social disapproval. In the case of authoritarian leadership, this type of behaviour is very common (Orléan 1998).

capacity to adapt to the given circumstances" (ibid., 45). Moreover, in the case of true following, the psychology of masses also displays a process of internalization (or even true identification) of power:

> "Internal power arouses in the masses the urge for ready emulation. In this connection the individual obeys not only his own instinct, but his behavior is also determined by the contact he has with the attitude of his environment and that of the masses in their entirety. The experience of power is intensified by the fact that the individual submitting to power thereby enhances the effective weight of internal power in society: he joins the ranks of the social rulers, albeit with a minimal share of power" (Wieser [1926] 1983, 57)

This passage suggests a dynamics between masses and leaders that is more complex than the term 'following' suggests. In fact, as we shall develop in § 2.2.2, this dynamics cannot be described in terms of imitation only. In particular, it involves the interplay of 'internal power', which constitutes a critical factor of the dynamics between masses and leaders.

1.1.4. Money as the result of institutional change

For Wieser, money provides a positive example in which institutions serve the general interest. Similarly to Menger, he recalls the advantages of money regarding the double-coincidence problem:

> "The enormous advantage offered by money in the community of exchange is explained solely from the fact that it dissolves the entire turnover into links of such individual transactions of one exchanging couple each. The effect of it is, that men, in their acquisitions are never tied down to the one contracting party with whom they have just dealt. They are altogether unfettered and can with complete mobility turn to any other man who may have the stock required." (Wieser [1914] 1927 1967, 169).

But money is not present in all economies. Its emergence is related to the process of transition from a 'simple economy', i.e., a kind of Robinson Crusoe economy, to a monetary economy, where exchange and money finally appear:

> "(…) the theory of exchange presupposes a social economy, unhampered by interferences on the part of the state. The theory of the simple economy having shown in what manner a single subject manages and calculates his economic affairs, we now show the numerous juridical subjects, who meet in the course of exchange, as they seek their economic advantage, determine prices and thus erect the structure of a social economy." (Wieser [1914] 1927 1967, 10).

Moreover, as we have just developed, Wieser's conception of institutions involves the interactions between leaders and masses. For Wieser indeed, social economics is characterized by social stratification that implies heterogeneity and division between and within social classes. Moreover, a stressed by Arena, "the interaction between leaders and masses is only understandable in a permanent process. Leaders create social devices which correspond to their needs and aims. Masses imitate leaders and therefore, transform those devices into social rules or institutions. These institutional patterns then become constraints for further individual behaviours. The aggregate results of the various agents' decisions change, in turn, and contribute to institutional change etc." (Arena 2004, 10). It is from this perspective that we may reconstruct Wieser's analysis of the emergence of money.

The emergence of money is, therefore, part of a general process of institutional change that takes place in historical time and implies feedbacks on the economic sphere. From this standpoint, institutional impulses "are entirely dependent, [for the average man] upon the practice of his time and environment for their direction and their strength." (Wieser [1914] 1927 1967, p. 159).

To conclude this first section, we can underline that both Menger and Wieser share the view that economic institutions are the product of individual action and not necessarily of human design. In other terms, they are interested in the self-regulating or spontaneous order properties of economic institutions or collective entities while, at the same time, they cannot conceive them as not resulting from interactions between individual agents, in compliance with the principle of methodological (or institutional) individualism. The process of emergence of money must therefore be explained from the perspective of heterogeneous individual agents.

More specifically, Menger conceives money as an emblematic case of organic institutions and of the exact orientation of scientific research. The focus is therefore on the processes of its emergence, which Menger considers to have some general properties common to any organic institution.

By contrast, Wieser focuses on institutional change. Money can therefore be seen as an illustration of social institutions that emerge from interactions between leaders and masses that shape institutional change. This process involves historical time and positive as well as negative feedbacks. In mathematical terms – leaving aside the well-known reservations of Austrian economists about the use of mathematical relationships, this process implies some tensions or conflicts that could be assimilated to path-dependency or hysteresis effects and lead to multiple equilibria.

In sum, Menger and Wieser differ concerning the way they conceive historical development and social institutions. Wieser views them as radically non deterministic, and possibly welfare damaging, while Menger implicitly assumes, judging from his analysis of organic institutions as exemplified by the emergence of money, that they are uniquely determined and always welfare enhancing. To put it in a nutshell, Menger concentrates on the analysis of the emergence of institutions, viewed as a discovery process, while Wieser is more focused on the dynamics of institutions seen as a creative-destructive process.

2. Menger and Wieser on the dynamics of the emergence of money: two contrasting perspectives

2.1. The mechanisms underlying the dynamics of the emergence of money

2.1.1. The usual interpretations of Menger's description of the emergence of money

As summarized by Alvarez (2004), Menger's analysis of the emergence is based on three components: 1) the theory of saleability (*Absatzfähigkeit*) of all commodities and its relation with indirect exchange; 2) The existence, prior to the selection process, of a commodity with the highest degree of saleability or, from another interpretation, the presence of a group of individuals who believe that one particular commodity has a better saleability ; 3) the self-reinforcing process of selection of a medium of exchange.

The theory of saleability has already been discussed (see § 1.1.2).

The second component constitutes the first phase of the process of emergence of money and can be described as a discovery process, i.e., the discovery of the mechanism of indirect exchange and of the importance of the relative saleability of commodities. What is important to note is that this process involves, at first, only a small fraction of the population. The assumption of a fragmented population made of few pioneers or leaders, referred by Menger as “the most discerning and capable economic subjects” (Menger 1892b, 254), governed by self-interest only, and followers, who imitate them and who progressively become aware that through the use of these specific goods become, they can proceed “to [their] end much more quickly, more economically and with a greatly probability of success” (Menger [1871] 1976, 258), is central in Menger’s story. Followers indeed observe that their neighbours perform better by using ‘money’ than they do themselves without it. As Menger explains, “(…) it is admitted, that there is no better method of enlightening anyone about his economic interests than that he perceive the economic success of those who use the right means to secure their own” (Menger 1892, 247). The kind of imitation involved here is essentially of the informational type[9] since ‘follower’ imitates the ‘leaders’ because the latter are supposed to have a better knowledge of the properties of money in exchange and perform better.

The third component, i.e., the self-reinforcing process of selection of a medium of exchange, constitutes the second phase of the process of emergence of money, which can be described as a process of consolidation of the indirect exchange transactions and the convergence towards a monetary exchange economy. This process involves positive feedbacks and eventually singles out one commodity, a commodity that becomes *money*. These positive feedbacks correspond to what economist to-day would call network externalities or network effects, i.e. the idea that the more the commodity is used as an intermediary of exchange, the more it becomes an efficient medium of exchange. In this way, a good which was initially used as an intermediate of exchange is converted, through “customs and practice” into a “commodity that [come] to be accepted, not merely, but by all economizing individuals in exchange for their own commodities” (Menger [1871] 1976, 261).

As already pointed out, this selection process is not the result of intended actions by agents who are purposefully thinking about the advantages of commonly understood or used money. Market participants successfully experience smoother ways of trading for the sake of personal goals and, thus, are prone to carry on. In this case, the use of money by market participants is a spontaneous outcome of the market or the result of a self-organization process[10]. In other words, agents do not invent money, nor do they are able to know beforehand the superior

[9] Referring to Orlean’s typology of imitation (informational, self-reference and normative imitation).

[10] As already emphasized, Menger only reluctantly admits the intrusion of external or legal compulsion in the process of emergence of money. In his 1892 article, he makes clear that “money has not been generated by law. In its origin it is a social, and not a state institution.” but admits that “by state recognition and state regulation this social institution of money has been perfected and adjusted to the manifold and varying needs of evolving commerce (…)” (Menger 1892, p. 255). Clearly, in his analytical framework, legal or state compulsion is, at the most, of secondary importance since social and economic institutions such as money or the organization of markets are the unintended result of interacting agents.

properties of money in exchange, since it is an unintended result of their self-oriented activities. But it is also the use of prior or ex ante knowledge that helps people in finding better ways of carrying out transactions. As Menger explains in his 1892 paper on money, "the willing acceptance of the medium of exchange presupposes already a knowledge of theses interests on the part of those economic subjects who are expected to accept in exchange for their wares a commodity which in and by itself is perhaps entirely useless to them" (Menger [1892b, 261).

Put that way, Menger's explanation is not satisfactory and involves some kind of circular reasoning: the question arises as to where this prior knowledge comes from since it is at the same time the result of a selection process. Menger's answer to this question comes as follows: "this knowledge never arises in every part of a nation at the same time. It is only in the first instance a limited of economic subjects who will recognize the advantage in such a procedure, an advantage which, in itself, is independent of the general recognition of a commodity as a medium of exchange (…)." (ibid., 261).

2.1.2. Wieser's critique

As we have already mentioned in section 1, Wieser criticizes Menger's explanation of the emergence of money for being a 'too individualistic approach'. Let us now enter into the details of his argument by quoting Wieser at length form his *Social Economics*:

> "Menger's explanation would be entirely satisfactory if he had appreciated as fully the part that the masses play in the development of money as he did that taken by leaders. The function of the masses consists in the case of money as in all other social activity that their imitation establishes the universal practice which gives to a rule its binding force and social power. (…) It is in keeping with (…) [his] individualistic point of view that he (…) [did] not fully appreciate the part played by the masses in the creation of money. (…) Therefore it is not possible for him (…) to concede that money represents *something more and stronger than the will of participating individuals*. A money for which a mass habit of acceptance has once been established is no longer the mere result of the individual aims of leaders whom the masses follow. Neither in the beginning nor later did the leaders have in mind a social institutions. (…) The final form of money is not a mere resultant; because of the universal social resonance that it awoke it represents a tremendous strengthening of their endeavors" (Wieser [1927] 1967: 165, *underlined by us*)

Let us put this in perspective with two passages taken respectively from Menger's *Principles of Economics* and *Problems of Economics and Sociology*.

> "Money is not the product of an agreement on the part of economizing men nor the product of legislative acts. No one invented it. As economizing individuals in social situations became increasingly aware of their economic interests, they everywhere attained the simple knowledge that surrendering less saleable commodities for others of greater saleability brings them substantially closer to the attainment of their specific economic purposes. Thus, with the progressive development of social economy, money came to exist in numerous centers of civilization independently. But precisely because money is a natural product of human economy, the specific forms in which it has appeared were everywhere and at all times the result of specific and changing economic situations. Among the same people at different times, and among different people at the same time, different goods have attained the special position in trade described above (Menger 1976 [1871], 262-3).
>
> It is clear (…) that the origin of money can truly be brought to our full understanding only by our learning to understand the *social* institution discussed here as the unintended result, as the unplanned outcome of specifically *individual* efforts of members of a society (Menger [1883] 1863, 155)

One possible interpretation (cf Arena 2004, p. 14) would consist in saying that for Wieser, Menger's story would be substantially correct if "we interpret the 'individual efforts' as the efforts of the 'leaders'." In other words, for Wieser, Menger's explanation could make sense once enriched with his theory of interactions between leaders and masses. Accordingly, within the market process, the leaders who have in charge the organization of exchanges very quickly realize the importance of the drawbacks implied by a barter economy and known be economists as the double-coincidence problem. Through a process of learning, little by little, the leaders create several means of substitution according to their historical and cultural environment. Therefore those leaders who had only in mind their own interests, contribute to create a true unintended new monetary system (Arena 2004, 14).

This interpretation, in particular, fits with Wieser's statement that "the function of the masses consists in that their imitation establishes the universal practice which gives to a rule its binding force and social power." (Wieser [1914] 1927 1967, 104).

However, we claim that there is something deeper in Wieser's critical remarks as regards Menger's approach. As we have already stressed, the assumption of a fragmented population made of leaders and followers is already present in Menger and is not sufficient to discriminate between the two approaches. What appears to be more relevant is the kind of interaction involved between leaders and followers. For Menger, the strategy of followers is limited to informational imitation, while for Wieser the intervention of masses cannot be interpreted as an act of pure recognition of the social utility of leaders' decisions, or as a matter of anonymous leadership, to use Menger's expression, only. For reasons that still need to be elaborated upon, masses tend to create a final rule "far beyond [leaders]' expectations" (Wieser [1914] 1927 1967, 165).

This suggests an interpretation of Menger's approach in terms of a pure coordination game while Wieser's conception of the emergence of institutions lends itself better to interpretation in terms of conventions (or social norms), as we will develop in section 2.2. Before doing this analytical exercise, let us have a look at the existing search theoretic and game theoretic interpretations of Menger's analysis of the emergence of money.

2.1.3. The search theoretic and game theoretic interpretations

During the last fifteen ten years, the role of money as a network good has been emphasized within monetary economics in the context of a search-theoretic framework. Stenkula (2003) surveys this literature, pointing out that there are two kinds of contributions: in some writings the network characteristics of money is explicitly assumed whereas it is an endogenous result in others (Stenkula 2003, 587). The former writings, referred by Economides (1995) as the macro approach of network, focus on the consequences of the network effect whereas the latter, respectively referred as the 'micro-approach' (Economides, 1995) give a theoretical microfoundation to the network effect present in money (see for instance, Kiyotaki and Wright, 1989, 1991, 1993 or Selgin, 2003).

The very first contribution which addressed the issue of money as a network good, or more precisely, which introduced the idea of a so-called transaction externality is Jones' 1976 article in which he referred explicitly to Menger. Other contributions have followed this line since then: Caskey and Laurent (1994), Dowd and Greenaway (1993) or Goodhart (1998).

Now the question arises as to what extent there exists a theoretical connection between this literature and Menger's work. Starting from the well-known definition of a network good given by Katz and Shapiro[11] (1985), Stenkula (2003) precisely attempts to answer this question by investigating, from a retrospective viewpoint, to what extent Menger could be considered as a forerunner to the network theory of money.

Equipped with three criteria[12] in order to examine if Menger can be considered as a forerunner to the network theory of money, he concludes that, taking into account the whole set of these criteria, this proposition cannot be sustained. He indeed concludes that the concept of *Absatzfähigkeit*[13], translated in English as either saleability or marketability, can be considered as a good candidate for covering an essential idea behind the modern network theory of money. It is clear that, by emphasizing this market characteristic of money, Menger indeed went beyond the traditional neoclassical view, which focused only on the intrinsic properties of money. Moreover, he realized some (but only some) of the implications that could result from money being a network good. He wrote rather clearly about the bandwagon effect, i.e., the self-reinforcing nature of the demand for network commodities or the idea that the more people use a network commodity the more interesting it will become for other agents also to use it. He also discusses the problem with parallel standards and a potential role of the state. However, he did not addressed the problems of *excess inertia*, i.e., the fact that agents wait to use a (superior) network commodity and *excess momentum*, i.e. the fact that agents rush to use an (inferior) network commodity that are, according to Farrell and Saloner (1985, 1986) important implications associated with network goods. Finally, Menger's monetary writings are rather broad and can be said to include ideas of many different monetary theories. In particular, Menger makes a strange connection between the need of a consumption demand of metal and the acceptability of (metal based) currency, an idea which, although incidental in

[11] Katz and Shapiro state that a network good is:

> "(…) a product for which the utility that a user derives from consumption of the good increases with the number of other agents consuming the good. (…) The utility that a consumer derives from purchasing a telephone, for example, clearly depends on the number of other households or businesses that have joined the telephone network. These network externalities are present for other communications technologies as well, including Telex, data networks, and over-the-phone facsimile equipment." (Katz and Shapiro 1985, p. 424)

[12] The first criterion is 'coverage', i.e., to what extent the essence of the network theory of money or the idea of money as a network good in question is stated in the writings of Menger; the second is 'distinctness', which imposes that the essential idea should be part of the main theoretical framework of the writer; the third is 'depth' and implies that the implications of the theory or idea is fully integrated into the conceptual framework.

[13] We are grateful to Stenkula for indicating that actually the word *Absatzfähigkeit* does not exist in the German language but was constructed by Menger himself by merging the word *Absatz* meaning something like 'the possibility of sale', 'to find a market for' and *Fähigkeit* meaning 'capability' or 'ability' (Stenkula 2003, p. 592).

Menger's writings[14], stands in sharp contradiction to the network theory of money. But even if Menger can hardly be rigorously considered as the one who made the discovery of the network theory of money, there is no doubt that he covered the basic idea of this theory when integrating the marketability of a commodity in his monetary writings. Moreover, he was aware of the some of the problems, such as the bandwagon effect for instance, associated with the network characteristic money.

The idea of an analytical link, in very broad terms, between Menger and search monetary theory may therefore be accepted as a first approximation. Some results from recent formal models in search monetary theory in an evolutionary perspective give some possible answers to the still debatable points in Menger's theory, in particular concerning the way the self-reinforcing nature of the process of emergence of money is to be interpreted (cf. section 2.2.1). Contrary to Schmizt (2002) who emphasizes the difficulty for search monetary theory to provide a clear solution to the multiple equilibria problem it faces[15], Alvarez (2004) considers that Menger's theory and search approach can be considered as complementary rather than opposite views on money (Alvarez 2004, 54). He indeed argue that "the self-fulfilling character (the so-called 'bootstrap' mechanism) of search theory's Nash equilibria may also be present in Menger's theory" and sees therefore an opportunity of a fruitful dialogue between Menger and modern reconstructions of his theory. In particular, "the results of evolutionary search models show that some of Menger's fundamental propositions may be reappraised in order to found a theory of the liquidity of money (…). The liquidity of money could be the result of a social coordination process that is not necessarily the product of human design. However, liquidity is founded on a coordination mechanism that takes into account strategic interactions." (Alvarez 2004, 63).

In the next section, we develop the idea that Menger's analysis of the emergence of money may be interpreted as a social coordination process along two different lines according to the mimetic behaviour at works. It may be seen as a focal point resulting from *adhoc* objective properties of the medium of exchange (in this case, an agent imitates others because of the intrinsic properties of the commodity-money) or as a norm or convention, whose emergence

[14] This statement can only be found in his *Grundsätze* from 1871 and not in his later work.

[15] This critique refers in particular to search models in the line of Jones (1976), such as Oh (1999) or Iwai (1996). The main results in this type of models show that the emergence of a unique commodity-money does not go without some coordination problems. In fact, the emergence of a particular commodity-money supposes that agents adjust their expectations about other's strategies following an adaptive rule with a low coefficient of reaction to errors. Because agents' future strategies depend on past results, agents may abandon a commodity-money within a single period. The economy may be stuck in a barter situation. In general, a 'fast' adjustment coefficient leads the economy to equilibria with multiple exchange technologies (i.e. barter and multiple commodity-monies).

results from the process of selection itself (in this case, the imitation is based on the credibility attached to a particular exchange strategy without paying attention to the objective properties of the medium of exchange).

2.2. The process of emergence of money as a coordination game: focal point or social norm?

2.2.1. Menger: money as a focal point

As we have already pointed out, Menger's explanation can be to-day interpreted in terms of a pure coordination game where the medium of exchange emerges as a focal point. This seems a justified an interpretation due to the self-reinforcing nature of Menger's explanation of the emergence of money. In other terms, the process of emergence of money may be represented as the emergence of a Nash equilibrium because an agent's best-response to other agents' strategies, when a commodity has been chosen as the medium of exchange, is to accept this commodity even if he does not consume it. Such an interpretation implies, however, to make additional assumptions, namely, that 1) the difference in the degrees of saleability are already present in the barter society; 2) agents, i.e., the most discerning and capable ones or the leaders, can directly observe those differences in saleability. Now, to accept those assumptions causes further difficulties, as noted by Klein and Selgin (2000). A first difficulty appears: if the goods' varying degrees of marketability are directly observable, why should anyone refrain from immediately putting this knowledge to use? A second one arises if agents do not entirely observe goods' varying degrees of marketability. In such a case, how can convergence upon a particular medium be guaranteed? A third difficulty comes if one supposes that all goods are at first equally marketable. In this case, would such a starting point preclude convergence upon a particular monetary equilibrium (Klein and Selgin 2000, 219)?

Those problems may be ascribed to the presence of a common-knowledge hypothesis in Menger's theory. This echoes our argument above about circular reasoning in Menger's explanation. More precisely, Alvarez (2004) points out that 1) if all agents do not know the relative marketability of all commodities, there is no ground to affirm that they will choose the same commodity; 2) the greater or lesser saleability of a commodity cannot be generalized to all agents because it depends by definition on the type of commodity one wants to acquire; 3) the existence of a general most marketable commodity supposes the existence of common needs or preferences structures.

In sum, the 'focal point' solution supposes that saleability is an objective property, already present in the barter economy. This viewpoint is summarized by White as follows:

> “When she [an agent] anticipates such a preference for portability on the part of her later trading partner (whether he is known or as yet unmet), her incentive to get a relatively portable commodity in the first transaction is compounded. The anticipated later trade internalizes in her choices of a medium of exchange the value of its portability to others.” (White 2002, 276)

Whites advances this argument in order to explain how a superior medium of exchange can emerge and opposes this solution to a purely self-enforced process exclusively based on imitation, because of its potential inefficiency. In other terms, he wants to demonstrate that it is a false interpretation of Menger’s theory to pretend that absolutely any commodity could have become money.

Another possibility in order to avoid this common knowledge problem would consist in assuming that coordination results from the pure product of the selection process itself. This idea can be adapted to explain the emergence of a fiat medium of exchange requiring only an imitative behaviour without assuming the existence of prior objective characteristics of money. More specifically, by assigning strategies (i.e. the choice of a particular commodity irrespective of its characteristics) to individuals, it is possible to show that money emerges as the result of the selection process itself and corresponds to an evolutionary stable equilibrium. In this sense, the self-reinforcing nature and the presence of the pioneer agents in Menger’s theory is justified. This perspective is best illustrated by Young’s evolutionary theory of institutions. As Young suggests himself, his approach may well be applied to the problem of the choice of a currency: in the early stage of development, it is possible conceive of the choices of currency as growing out of individual decisions that gradually converge on some norm [let’s say gold]. Once enough people in a society have adopted a particular currency, everyone else wants to adopt it. This kind of decision model can be modelled as a coordination game.” (Young 1998, 11). Young then envisages how an accumulation of random shocks (due to random choice by agents between gold and silver with a low probability) will tip the process into an alternative norm (let’s say silver). According to him, these tipping accidents are infrequent compared to the periods in which one or the other norm is in place. Moreover, once a tipping accident occurs, the process will tend to adjust quite rapidly to the new norm. This pattern –long periods of stasis punctuated by sudden changes of regime – is known as the ‘punctuated equilibrium effect’. When one currency is inherently a little better than the other, over the long run, there is a bias toward the best one (let us say gold), which is not surprising. What is perhaps surprising is that the bias becomes larger the smaller the random perturbations are. What appears is that the smaller the value of random perturbations, the more likely it is that the process is in a gold standard phase, and the longer are the periods between shifts of regime (ibid., 12). This illustrates one of the key concept of the approach of Young (and Foster), i.e., *stochastic stability*, (Young, H.P., Foster, D.P. 1991).

Surprisingly enough (because this has never been mentioned), this interpretation seems to fit better with Wieser's approach, as we shall develop now.

2.2.2. Wieser: money as a social norm

In this last section, we develop the idea that Wieser's approach of institutions or historical formation is more consistent with a conception of money in terms of social norm. We differentiate the concept of focal point from the one of the social norm on the ground that, according to the seminal contribution by Shelling, the concept of focal point is introduced in order to discriminate between equilibria. By contrast, we use the notion of social norm in an evolutionary perspective in order to emphasize the fact, that not only social norms emerge essentially from interactions between agents quite independently of some *adhoc* causes, such as the superiority of one commodity as regards its inner characteristics, but that they are likely to evolve or to undergo some mutation because social interactions also evolve.

We think that Wieser's approach of institutions is more appropriate than the one of Menger for dealing with institutional change. Therefore, it is also more in line with our second interpretation of Menger's insights money as a social norm, i.e., more precisely, the idea that money is the outcome of an evolutionary process, that is the result of interactions of individual agents. As already pointed out, for Wieser, the emergence of money is part of a general process of institutional change that takes place in historical time and implies feedbacks on the economic sphere. What is also important to remind at this stage is a key ingredient of institutional change lies in the interaction dynamics between leaders and masses.

More specifically, one can reconstruct how Wieser's views the emergence of money by emphasizing the key roles of anonymous leadership, i.e., a kind of leadership which results from an election process by the masses as opposed to the authoritarian kind of leadership (see § 1.1.4), and internal power for understanding this dynamics. Wieser indeed distinguishes between internal power and external power: "internal power" is "impersonal and anonymous" (Wieser [1926] 1983, 3) while "external power" corresponds to the power that some persons or some groups exert on people with the help of “external” means such as “numerical superiority, arms or wealth” (ibid.. 3). Internal power may be channelled by several means: science and knowledge for instance, through “historical education”, contribute to the creation of the social interactions which support social internal power (ibid., 107), while arts rather falls in the category of external power and leaders, even if it is rooted in the populace (ibid., 113). Now, the power of knowledge, contrary to faith power, is not a direct power but needs many intermediaries within the ruling classes in order to reach masses. It is therefore associated with Wieser’s first law of social growth: the tendency toward increasing stratification (ibid., 26). However, Wieser emphasizes, there must be some complementarity and consistency between internal and external power. Related to this issue, he criticizes Nietzsche and Spencer’s too emphatic conception of the leader or the “great man” which is, according to him, out of touch with the reality of masses (ibid., 46):

> “[i]ndispensable as is the performance of the leader in front for the achievements of society, no less so is the following by the masses. If the leader is viewed as the sower casting out the seed, the masses may be viewed as the ground which absorbs it” (Wieser [1926] 1983, 47)

This quotation brings us back to the issue of methodological individualism and holism. As we have emphasized, Wieser is neither satisfied with monist approaches nor with dualist ones and tries to find a compromise, that we have assimilated to institutional individualism. As we have also stressed, when he describes the dynamics between masses and leaders, Wieser clearly has in mind something more than passive imitation or ‘blind borrowing’. We could argue that the kind of following that he labels ‘true following’ has some common features with self-reference imitation, defined by Orléan as a kind of imitation that takes place when agents imitate but, by so doing, create a social value or a convention that gather some momentum and gain some autonomy vis-à-vis individuals that initiated the dynamics. By the same token, the idea of “anonymous leadership” could also be interpreted as a sophisticated mechanism that involves more than mutual interaction between masses and leaders. For, as Wieser indicates, this kind of leadership is characterized by the fact that “the social success of small groups can be magnified to *full-fledged social success* if the new strength, which first was formed by the small group in its own interest, is removed from its control and placed at the disposal of the society as a whole" (ibid.. p. 33)[16].

The following arguments may indeed support this view.

First, Wieser refers to the notion of 'objective spirit' which he borrowed from Dilthey and Freyer, whose teaching was widespread in Germany. He argues that the existence of an 'objective spirit' plays an essential role in the articulation between individuals or masses and leaders and strengthens the coherence of social systems. More precisely, this 'objective spirit' relates to the commonly observed psychology of social human beings to infer from others and share some significations or values:

> "Because we ourselves are moved by emotions, follow impulses, act purpose-oriented, connect mental images, forge concepts, and because this structural coherence of minds, characteristic of our very nature, falls within the realm of our experience, we can imagine ourselves as partaking in the consequences of the acts of foreign human beings and can re-create what spiritual values they contain (…) What is foreign becomes a signpost which we are able to follow even when it does not guide us simply in a certain direction but leads us to a plenitude of heterogeneous realities: languages, literatures, states, architectural styles, churches, customs, arts, and systems of sciences" (Freyer, *Theory of the objective Spirit*, quoted by Wieser [1926] 1983, 147)

This idea of 'objective spirit' can be interpreted as a means to articulate individual beliefs or values with collective ones in a manner that is more sophisticated that the one implied by mere imitation. More precisely, for Wieser, the objective spirit of a community is more than a signpost: it is "like a current to which we are glad to yield because we fell its supporting power and whose superior strength we possibly may not be able to escape at all even when we are terrified to discover that it will carry us toward the abyss" (ibid., 148). In other terms, the 'objective spirit' becomes an entity which has its own developmental mechanisms, such as inertia, self-preservation (ibid., 124) and destructive power. However, its autonomy vis-à-vis

[16] In passing, this quotation could be put in perspective with the notion of heteronomy, borrowed from political philosophy, and defined as the subordination or subjection of individuals to the law of another or to something else that individuals fail to see. This notion is in sharp contrast with the a widespread idea among Austrian authors of the autonomy of the individual vis-à-vis the State. As rightly put forward by J-P Dupuy, this boils down to the theoretical problem of the articulation between two kinds of autonomy: 1) the autonomy of the individual freed from any relation of subordination towards the sacred, the State or the social whole; 2) the social autonomy, which does not mean that men do control the society, quite the opposite: the society escape them, it seems to be endowed with a life on its own, foreign to the individuals that form it (see J-P. Dupuy 1992, 247)

individuals "must not undermine our recognition that it is borne out of the spirit of the united individuals" (ibid., 149).

The idea of 'objective spirit' can also be related to Wieser's notion of social egoism, which he already developed in *Social Economics*. For Wieser, social egoism is conceived as an intrinsic component of the psychology of human beings implying that "by reason of the social egoism a man is ready to fit into the social order which includes both submission and domination" (Wieser [1927] 1967, 161).

Second, Wieser refers to the notion of success, a concept that he shares with Menger by the way. But, in contrast to Menger, for Wieser, the notion of success encompasses more than the idea of the replication by followers of supposedly efficient behaviours displayed by leaders[17]. As pointed out by Samuels (op. cit.), Wieser's concept of 'success' plays is not defined *in abstracto* as the achievement of the fittest economic state. In particular, depending on the fact that it is *actual* or *perceived*, success can also lead to negative outcomes, such as dictatorships:

> "Success constitutes a mechanism, as it were, of historical selection. The course of history is marked by a path of success vis-à-vis other paths which might have been. Success in this context signifies survival (…). Success, in Wieser's analysis, has no independent positive or normative, ex ante, test. It is circumstantial, episodic, and without external or internal value basis independent of the fact of survival. It is the consequence of successes, however, which marks the course of history" (Samuels, introduction of the *Law of Power*, Wieser [1926] 1983, xxxi)

Third, Wieser refers to "the law of upward mobility of classes[18]", which implies the existence of a tendency towards the congruence of beliefs between masses and leaders. Indeed, at first, masses have no share in public power, but through social interaction – through labor and art essentially, they may have an opportunity to further their personal achievements and therefore, to resist the pressure from the leaders and not completely succumbing to it. As far as the ruling leaders are concerned, they are themselves aware of their own interest in augmenting the vigor of the people to utilize it better, so that the more enlightened rulers have

[17] This point is demonstrated by Menger in one of the Appendice of his *Problems of Economics and Sociology*.
[18] This law defines the second law of social growth, the first one, being, as already mentioned, the "law of increasing social stratification".

a strong affinity for the populace and begin sharing public power with it. As Wieser summarizes it:

> "In the present epoch, the face of the earth is being technically transformed by the alertness of (…) both those in command and those in subordination positions. All these quietly evolving and ascending collective forces have in due time been transformed into social power or they will do so, acting as a resistance first but eventually also sharing leadership roles" (Wieser [1926] 1983, 26)

To sum up, all these arguments give strong support to an interpretation of Wieser's conception of money and its evolutionary features in terms of a more sophisticated – but nonetheless at the expense of parsimony – dynamics of social interaction than the one put forward by Menger. In particular, they emphasize the difference between Menger and Wieser's approach concerning the patterns of (imitative) behaviours that are required for the emergence of social institutions. What we have indeed underlined is that Menger basically sticks to a notion of imitation that is limited to informational imitation, i.e., imitation based on the idea that one imitates others because we think they are better informed (cf. Orléan 1998). By contrast, Wieser points out the crucial role played by the interactions between masses and leaders, and the underlying (psychological) mechanisms that permit to make a population adheres or confirm to a social norm (e.g. a norm of exchange).

Concluding remarks

In this paper we have examined Menger's analysis of the emergence of money from a twofold perspective: on the one hand, it has been contrasted with Wieser's insightful perspective on the problem of emergence of social institutions; on the other hand, it has been reconsidered in the light of modern search and game theoretic approaches.

This investigation has permitted first to put forward significant differences between Menger and Wieser's methodological approaches. Those differences relate in part to their respective interpretations of methodological individualism: if, on one side, Menger sticks to a 'rather' traditional version of individualism, Menger promotes an original view that mixes methodological individualism and holism, which we interpret as an emblematic case of ‘institutional individualism’. They also relate to the way they conceive and deal with social institutions: on the one hand, Menger is mainly focused on the problem of emergence of organic institutions, which he illustrates by the case of money; on the other hand, Wieser is more concerned on how institutions evolve under the impetus of sophisticated interactions between leaders and masses.

Second, it has allowed us to put forward two distinct interpretations of Menger’s analysis of the emergence of money. On the one hand, the process of emergence of money may be interpreted in terms of Shelling’s notion of focal point. Menger’s theory of saleability strongly supports this view at the expense of the assumption of learning by imitation, which, due to the common-knowledge problem that this interpretation involves, becomes a redundant hypothesis. On the other hand, money may be conceived as a convention or a social norm. This interpretation on the contrary makes the process of learning by imitation relevant and focuses on individual strategies irrespective of the intrinsic characteristics of commodities. The theory of saleability is not required, but may however improve the efficiency of the process.

Menger provides grounds for both interpretations of the emergence of money but we however suggest that Wieser’s approach of money and institutions provides a more convincing illustration of the second interpretation. Two arguments are in favour of this view. First, Wieser, in contrast to Menger, is aware of the possible deficiency of processes of emergence of institutions. Second, he brings forward, in somewhat different terminology, by describing the complex dynamics involved by interaction between leaders and masses, the importance of credibility and reputation problems associated with the choice of a strategy.

Those divergences must not however obscure the common interest of Menger and Wieser, that consists in explaining economic institutions and patterns of behaviour as the product or outcome of many individual decisions. This feature is part of the Austrian legacy that is praised by Young, who incidentally omit to mention Wieser, but is well aware of the fruitfulness of bringing together ideas from past economists and current economic analysis.

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