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On Money as an Institution

Prompted by Luca Fantacci's Book on Money as a Missing Institution
(Fantacci, L. (2005), *La moneta: Storia di un'istituzione mancata*, Biblioteca
Marsilio, Venezia, 276 pp.)

Contents

1. Major theoretical concepts and ideas in Luca Fantacci's work; 2. Moments in Russian monetary history as interpreted by Luca Fantacci's theory; 3. The division between unit of account and medium of exchange in Walther Eucken and the Austrian School; 4. Concepts of dualistic money and the primacy of means of measurement and ideal money in other authors; 5. A new institutional reading of the evolution of money: money as an institutional compound.

1

Luca Fantacci is an economist and historian who works at the Università Commerciale Bocconi in Milan. His recent publications include a book in Italian (Fantacci, L., 2005, *La moneta: Storia di un'istituzione mancata*, Biblioteca Marsilio, Venezia, 276 pp.), an article in English (Fantacci, L., 2005, "Complementary Currencies: A Prospect on Money from a Retrospect on Premodern Practices," *The Financial History Review*, Vol. 12, No 1, pp. 43-61), and an article in French (Fantacci, L., 2006, "Qu'est-ce que la monnaie? La question de la complémentarité a partir des institutions historiques de la monnaie occidentale," *Monnaie sociale*, Lyons, Economica, pp. 59-72). Taken together, these three publications present his views on money which rest on a rereading of monetary history and a novel interpretation of historical concepts of money (monetary theory). They attracted my attention not only with their intrinsic originality, but also with the opportunities they present for new, deeper and more varied analyses of money.

What, then, is the gist: what are Luca Fantacci's major and leading concepts which repay discussion?

First, Fantacci regards money not in its mechanical and often simplified sense (as in the neo-classical model) but as a "human" institution (p.23¹) with a historical evolution, and one whose diversity and vivacity pose a number of theoretical challenges. Naturally, the institutional view of money is not new, having had its adherents for a long time (as we shall see below). Fantacci develops his concepts on the institutional character of monetary evolution in reply to the quandary posed years ago by Italian historian Carlo Cipolla² as to the reason for the millennial historical trend to monetary depreciation. Replying to himself, Cipolla proposed a mechanical universal law resting on diverse reasons; for his part,

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¹ Page references relate to Fantacci (2005).

² Cipolla (1963).

Fantacci considers that a better reason for long-term devaluation may be found in the institutional evolution of money³.

Second, and more important, Fantacci subjects (mainly Western) monetary history to a careful reading and finds that the basic functions of money which modern economists learn from textbooks (*viz.* as a means of measurement or reckoning, a medium of exchange, and a means of preserving value) had much more complex linkages in the past; we cannot comprehend them today and are unable to reconstruct them (p. 53)⁴ without recourse to an alternative theoretical model. If we divide West European history roughly into two long periods, the antique or pre-modern (until the 15th or 18th Centuries AD) and the modern (from the 15th or 18th Centuries to date) and set certain stipulations on the conditionality of this division and on the purity or distinctions of these periods, we note some principal differences in monetary systems. Characteristic of the first period is the division of money into ideal and real, in line with a division between its functions as a means of measurement (unit of account) and a means of exchange (intermediary medium). Throughout this period, money was devoid of its third function of storing value⁵. For the sake of brevity, your Author shall call this monetary system the Type 1: divided or differentiated.

By distinction, in the modern period ideal and real money are indistinguishable, their reckoning and exchange functions merge (they are discharged by a single object, whether a piece of metal as at first, or a piece of paper as later), while the store of value function assumes a leading place in the modern understanding of money. I shall call this monetary system the Type 2: syncretic (merged, monolithic).

Three, according to Fantacci, the function of measurement precedes that of exchange both historically and logically (“no exchange is possible without a measure,” p. 37); while measures accompanied humanity from its very emergence, intermediacy in exchange arose relatively later, as the natural economy collapsed. This claim is opposed to the traditional interpretation which accords primacy to money as intermediary, followed logically by money as measure of value.

Four, as mentioned above, Fantacci distinguishes between the measurement function implicit in ideal money from the exchange function implicit in real money. Ideal or imaginary money (*moneta imaginaria*) has no definite physical shape, being a measure of value; real money has a specific physical shape through which it transfers value. Thus, ideal money is not associated with a specific material vehicle and has no substantial expression (such as a certain metal, be it gold, silver, or copper); its origin is extra-economic, being sacral or else legal⁶. The moment when money is minted into a coin it ceases to be ideal and becomes real.

³ The “mystery” as to why money depreciate over the long-term as posed by Cipolla has many similarities to the “mystery” as to why the state has a growing importance in the economy as posed by Wagner. Below, we shall see that the two mysteries can be merged. I would point out that as early as 1909 Russian economist M. Tugan-Baranovsky not only formulated Cippola’s mystery (while analysing the 16th Century price revolution), but also answers it similarly to Fantacci by stating that the explanation can only be institutional and sociological (Туганъ-Барановскій, 1909, pp. 379-393).

⁴ The difficulties of grasping past monetary practices by reference to modern theoretical models are understandable and have a philosophical explanation. Rather than dwelling on this, I wishes merely to share his astonishment at the degree to which the sense and terminology of monetary theory have migrated from the past, a number of categories and terms used today acquiring senses which are not only different but are often the very opposite to those in the past.

⁵ Hence the proscription on “monetary growth” (interest): money had to circulate and be spent.

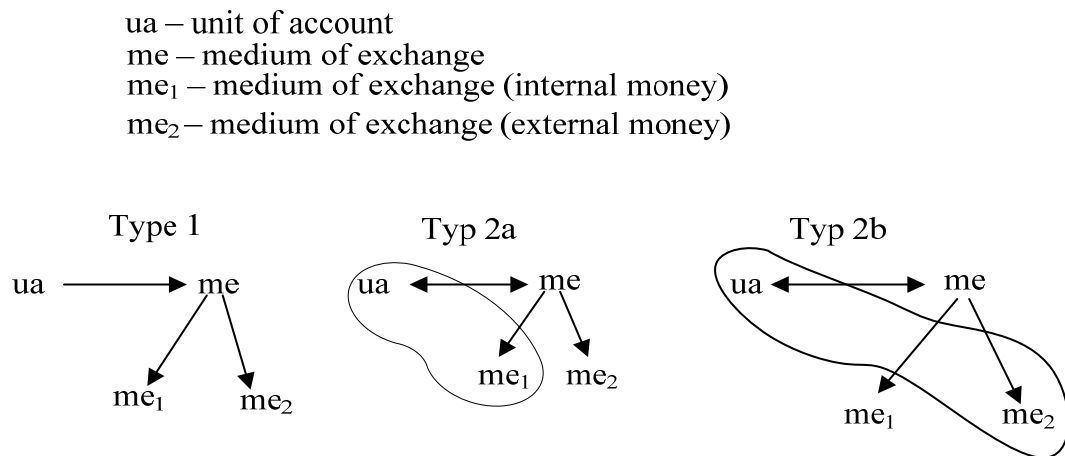
⁶ I will diverge to note that he feels it possible for ideal money also to be regarded as intermediary, but in social rather than economic exchange. In this sense, it is a means of exchange and communication, yet notional ones (within human conscience). Thus we have, broadly speaking, four types of means of exchange: ideal and real (in its three dimensions of legal, metal, and market).

Five, within the framework of real money (the means of exchange), Fantacci stresses the diverse functions and types of petty money (*moneta piccola*, *moneta bassa*, small coin, small change) and grand money (*moneta grossa*, *moneta alta*, large coin). While petty money is as a rule base (its legal value is greater than the value of metal in it, hence its frequently being dubbed “token coinage”⁷), and while it serves internal turnover within a set sovereign community or country, grand money is generally valuable in itself and serves exchange between sovereign communities of countries. Fantacci also calls the former “internal money” while the latter means of inter-communal and international exchange is “external money.”

Internal and external money demarcate two types of monetary area with differing monetary dependencies. Fundamental differences between internal (petty) and external (grand) money⁸ are defined by different degrees and mechanisms of generating confidence. Diverse forms of religious or national sovereignty obtain within communities (cities, countries, empires), while market mechanisms lead relations between communities, with money accepted at its material value (quantitatively by weighing and qualitatively by testing).

After introducing these different aspects of money, Fantacci tackles the different types of monetary policy (changing the face value or metal content of money) applicable to each type of money⁹. Moreover, he points out that redistributive links predominate in internal (petty) money, while exchange prevails with external (grand) money.

Figure 1



Six, within the second or ‘syncretic’ period (which we may assume begins with the adoption of the gold standard by England in 1731 and by France in 1804), the merger of ideal and real money, *i. e.*, of the measurement and exchange functions, underwent two major stages depending on manifestation: metal until the Great War and paper money to date. Convertibility became a basic principle, not just between one type and one means of exchange (internal into external), but also and foremost between medium of exchange and unit of account. Within the period, value preservation and debt repayment became the major functions of money. The gold standard also underwent two main stages, the former featuring reconciliations through balance of trade and fixed external exchange rate rates (16th to 18th

⁷ Of fixed legal value and accepted at the nominal value rather than by weight.

⁸ Similarly we can use “inside” money and “outside” money.

⁹ Coins have three values: internal set by the mint, nominal external value set by the state, and market external value determined by the market (Fantacci, 2005a, pp. 46-47).

Centuries), and the latter featuring variable exchange rates (18th to 19th Centuries). Describing the newest stage, Fantacci lays particular stress on a Keynesian plan for international clearing which would reproduce, in its own way, the monetary principles of the pre-modern era (division between the exchange and measurement functions and removal of the store of value function) at the supra-national or international level¹⁰.

Seven, since Fantacci sees money not only as material history but as a manner of thinking, he presents parallel histories of Western European money and of theories of money:

“Money is a way of thinking. The ability to comprehend money in its historical evolution is related to our ability to reinstate conceptual horizons and discourses which have encompassed, defined and described money again and again. Hence, it is impossible to distinguish monetary history from the history of thought (p. 75)”.

There is no doubt that occasionally reality and practice overtake thought and monetary theory, and that occasionally the opposite obtains (the Fantacci’s book offers multiple examples of this). Without going into details, I would point out that classical political economy essentially informs the second period, closely linked to the theory of metal money (be it bimetal or monometallic), followed by the utilitarian theory. In both cases, however, the issue concerns different variants and manifestations of rationalism and positivism born in the modern epoch. Here is how Fantacci résumés the results of his studies:-

Ideal money is a measure of value¹¹. Metal money is a means of exchange. Fiduciary (paper) money is an instrument of anticipative or delayed receipt of value. In the *ancien regime*, money was a measure above all. In the metallic regime, money was a means before all else. Today money is a store before all else. (p. 262)

Eighth, Fantacci not only finds historical proof for his theoretical model (in Caesar’s Rome, the Middle Ages and elsewhere¹²) but also proffers empirical proof of his theoretical connections, be it in price behaviour or in diverse monetary reforms such as the Piedmont monetary stabilisations of the 16th to the 18th Centuries, the Savoy monetary reforms of the 15th to the 16th Centuries, and others.

Ninth and final, in the purely legal aspect Fantacci claims that contemporary money is not the most efficient possible institution and that a return could be contemplated to the pre-modern differentiated and dualistic model of ideal and real money, and to money’s circulatory essence (*i. e.*, ways could be sought to deprive money of value).

Fantacci shares Keynes’ claim that this division or duality is the essence of the monetary institution. In this sense, the author considers money as a lost opportunity, an institution whose evolution deviated from the optimal route. Degrees of freedom and an efficient institution were thus lost. Fantacci sees today’s monetary institution developing

¹⁰ As a payments system, clearing featured this division, it having been observed within clearing arrangements in the 1930s and immediately prior to the Second World War.

¹¹ Is there a difference between a measure of value and a unit of account? This is rarely analysed in literature and Fantacci is no exception. This Author merely poses the question in the belief that it may be significant.

¹² On the periods mentioned, see Осокин, Н. (2003, [1888]), Кулишер, И. (2004, [1909/1931]), Burns, А. (1927), and Barbero (2006). Though this is a digression, Charlemagne introduced common European unit of account (ideal money), while the medium of exchange (real money) remained distinct within each part of his empire (Fantacci, 2005, p. 54); the difference with today’s euro – both a common unit of account and a common medium of exchange – is evident.

quantitatively at the expense of quality: something expressed in the book's title which, translated, reads, "Money: the Story of a Missing Institution."

Fantacci structures his book thus: after the introduction (*Moneta mancata*), the first part is devoted to ideal or notional money (*Moneta immaginaria*, pp. 25-110) and describes the monetary economy of the *ancien régime* and money doctrine prior to the emergence of classical political economy. The second chapter puts metallic money at the centre of attention (*Standard metallico*, pp. 111-192), treating both the historical emergence of metal money and its influence (particularly that of gold) on the formation of the paradigm of economic thought. In the third chapter, Fantacci presents his views on paper money circulation (*Circolazione fiduciaria*, pp. 193-272): the logical ultimate phase of monetary evolution. Here, along with enumerating the latest stages in monetary systems, he presents his concluding notes which, along with synthesising his ideas, clearly lay down his normative views on future reforms of today's monetary system, *viz.* a return to duality ("to be spent, money has to be conceived").

A mere listing of these postulates shows that they offer opportunities for various interpretations, critiques, deliberations and new analyses. I will dwell on those theoretical aspects to which I feel Fantacci may have given additional depth or which may serve to expand his ideas. I shall begin with some issues connected more closely with Fantacci's concepts, shall then present the concepts of other economists arguing similar theses, and shall end with a theoretical proposal on money as an institution which he feels encompasses theoretically the basic concepts in Fantacci's book, as well as offering a possibility for rewarding integration of some concepts of institutional economics and of monetary theory.

Prior to this, I beg to present some aspects of Russian monetary history. The purpose of this diversion is to amplify the historical examples brought by Fantacci who predominantly leans on West European experience. Having coalesced as a combination of European, Arab and Asian traditions and institutions, the Russian monetary system offers opportunities for discovering a number of shared as well as distinct features in support of the Italian author's theses.

2

Russian monetary history contains two basic peculiarities¹³. First, it tracked West European monetary development with a certain time lag; second, it exhibited a significantly greater inclination to retaining the Type 1 differentiated monetary model. The latter is shown by the difficulties of importing Western monetary institutions and particularly of merging the measurement and exchange functions, as well as by the mechanisms for generating confidence in money. As a whole, transition from the differentiated to the syncretic model was gradual and slow, with much wavering and resistance. While it may be argued that the overall thrust of Petrine reforms (1672-1725) resulted in a Type 2 monetary system, cyclic fluctuations brought reversions to the first, dualistic or Type 1 monetary system. Even reforms by the likes of Speransky, Kankrin and later Vitte failed to attain complete parity between the reckoning and exchange functions. Curiously, history repeated itself even in the early Bolshevik years with the launch of the gold *chervonets* which was used as a measure and rarely circulated in exchange (the latter function was fulfilled by *sovznaks*, *et al.*)¹⁴. During the late 1990s' financial crisis in post-Soviet Russia, the rift between measurement

¹³ For details, see Кулишер (2004, [1925]), Юхт (1994), Коломиец (2001), Центральный банк Российской Федерации (2004), Ильин (2006), and on the Bolshevik period, Голанд (2006).

¹⁴ As early as the years of War Communism, Lenin insisted on the budget being in old gold roubles, though they were penalised by the Soviet authorities in the changeover.

and exchange functions reappeared, with the US dollar or the so-called *uchetnyye yedinitisy* [“accounting units”] acting as measures.

Going back in time, in the 16th Century the silver rouble, equal to 100 silver kopecks, played the role of ideal money (measure), while exchange was effected primarily by copper kopecks called *den'gi* [“money”]¹⁵. Prior to this, until 1536 when they were merged, there had been two units for measuring value: the Moscow rouble and the Novgorod silver rouble (Ключевский, 2003, [1870/1900], с. 88). The metal content of the silver reckoning rouble changed in 1612, with the period between 1630 and 1680 seeing an attempt to make the silver rouble real money by minting it and putting it into circulation. These were the first steps towards a Type 2 monetary system. As regards external money, this role was played by the so-called *yefimka* (a Russian corruption of *joachimsthaler*¹⁶) which was equal in value to the *thaller* and whose issue was a treasury monopoly. Under the Tsar Aleksey Mikhaylovich (1629-1679), an attempt was made to introduce a copper coin (known to Russians from as far back as the Tartar invasion) with a nominal value equal to its silver equivalents alongside which it was intended to circulate. The object was to establish confidence in copper money which would then become a base internal coin or “token coin.”

Peter the Great's monetary reforms delivered a new and decisive thrust towards transition to a syncretic model. In the *status quo ante*, the means of measurement were represented by the silver rouble (100 kopecks), the *poltinnik* (50 kopecks), the *polupoltinnik* (25 kopecks), the *gryvnya* (10 kopecks), and the *altyn'* (3 kopecks). This was ideal money and was not minted. As regards real money (means of exchange), this comprised the wire silver kopeck (1 kopeck)¹⁷, the *den'ga* (0.5 kopecks) and the *polushka* (0.25 kopecks). The sole nexus one can find between means of measurement and means of exchange was the wire silver kopeck. As mentioned above, external money was the *yefimka* (since 1649). Means of exchange depreciated rapidly and counterfeit copper coinage appeared. Meanwhile, we will recall that the large silver coin called the *thaller* appeared in Western Europe in the 16th Century.

It is known that Peter the Great drew his ideas on monetary reform from Western Europe, especially after his stay in England, where he had held thorough conversations with Isaac Newton who, as head of the Royal Mint, had fathered British monetary reform.

Between 1700 and 1704, Russia saw the basic nominals of new post-reform money appear: foremost among them a run of date-stamped silver coins (50, 25, 10, 5 and 3 kopecks) which circulated alongside copper *den'gi* and *polushki*. A silver rouble equal in metal content to the *thaller* was minted in 1704. The European decimal system was also adopted, with means of measurement becoming the rouble, the *grivenik* and the kopeck (and the latter's halves, *viz.* the *poltyna*, the *pyatak*, and the *polushka*). The *altyn'* (3 kopecks) was withdrawn. These measures represented a decisive step to a stage transition to a Type 2 monetary system: ideal and real money, and hence the means of measurement and of exchange, were united in the silver rouble. Alongside this, for external use Peter minted the gold chervonets¹⁸, basing it in entirety on the Venetian ducat (ducats were melted down and reminted as chervontsy). The value of this coin was also expressed in silver roubles and kopecks.

To finance his campaigns and reforms, Peter was subsequently forced to cut the weight of his coins and reduce their quality, *i. e.*, to “change the tariff” (without changing the

¹⁵ The kopeck was unified in 1603 when the Moscow, Novgorod and Pskov mints were consolidated.

¹⁶ On the *thaller*, see Flandrin (2003).

¹⁷ In Russian, “проволочная серебряная копейка.”

¹⁸ It was curious that 200 years hence Lenin would propose that a gold chervonets be minted with a view to its becoming a pillar of the Bolshevik monetary system.

content of means of measurement¹⁹). As a whole, Petrine monetary reform entailed inflation and the devaluation of exchange coinage (copper coins devalued some six to eight-fold), while wholesale counterfeiting has been well documented by chroniclers.

By the initial quarter of the 18th Century, monetary circulation was structured thus: 88.5 per cent silver coinage, 9.2 per cent copper coinage, and 2.3 per cent gold coinage (Юхт, 1994, p. 35). The Petrine monetary system had endured overall. In general, one may state that by the close of Peter's rule the system's basic means of measurement was an imitation silver thaller, its external means of exchange was an imitation gold ducat, while its domestic means of exchange were coins of corrupted silver or of copper. Hence, one may conclude that transition to a Type 2 system with unified measurement and exchange functions was practically completed by Petrine reforms, their having commenced with the wire silver kopeck.

Major stages in post-Petrine Russian monetary evolution were as follows: Catherine the Great (1729-1796) introduced paper money (*assignatsiy*) in 1768 to supplant depreciating copper coinage. These bills initially had metal (silver) cover, yet this was to erode gradually and they depreciated, particularly after the Napoleonic Wars (on 9 April 1812 assignatsiy were designated as statutory means of settlement in private transactions – legal tender). Immediately after these Wars, Speransky attempted monetary reform, being followed by Kankrin. While finance minister in 1843, the latter conducted a devaluation intended to bring the legal value of assignatsiy into line with their market value. He exchanged assignatsiy for state credit tickets (one rouble's worth of credit ticket equalled 3.5 roubles' nominal worth of assignatsiy). This led to a 3.5-fold price drop (a phenomenon we would today call deflation) and a number of economic difficulties.

After the Russo-Turkish War of 1877-1878 the credit rouble depreciated again. Amid a favourable trading environment and after lengthy preparations, particularly by finance ministers Bunge and Vyshnegradsky, in 1897 finance minister Sergey Vitte stabilised the rouble on the basis of the gold rouble. (Gold had been selected after long deliberation in 1893.) The gold rouble was ideal money and was not minted (Ильин, 2006, p. 196). Minted money included the *imperial* (15 roubles) and the *poluimperial* (7.5 roubles), and subsequently a five rouble gold coin; demand for these coins was low and distribution was limited.

The gold rouble became a unit of account according to the 1899 *Monyetniy Ustav* act, while private transactions statutorily employed silver coinage (1 rouble, 50 kopecks and 25 kopecks) for settlements of up to 25 gold roubles and copper coinage for settlements of up to three gold roubles' worth. Issues of credit roubles (bills) were limited by the requirement for not less than a 50 per cent gold cover on sums of up to 600 million roubles and for complete cover for sums in excess of this²⁰.

Evidence that gold coinage was not met enthusiastically by the public is quite considerable; people were either uninterested or found such coinage unsuited to their needs. A number of economists feel that the Vitte reform was forced and wrong-headed, the

¹⁹ Some data put profit from these measures between 1698 and 1711 at 29.3 per cent of the value of the entire money supply.

²⁰ Data from Тугань-Барановский (1909, p. 414). Ильин (2006, p. 194) considers the limit not to have been 600 million roubles but 500 million: a difference of little consequence here. As distinct from the Kankrin reform, no new medium of exchange appeared under Vitte; what did change was the monetary unit, with the value of the paper rouble (*i. e.*, the old credit rouble) being set at two thirds of that of the new gold rouble. According to Tugan-Baranovsky (and implicit in Luca Fantacci), such devaluation is effected by changing the value of the unit of account, this being better “for it does not impact the prices of goods but merely makes the metal monetary unit equal to the market value of paper money in which prices are expressed.” (Тугань-Барановский, 1909, p. 412).

Russian populace having no need for such coinage. (The needs of foreign capital were a different matter, it preferring stable money.) Simeon Demostenov²¹, Mikhail Tugan-Baranovsky and other economists aware of contemporaneous Russian realities felt that the forced introduction of the gold rouble led to losses (thus the non-revenue portion of the foreign currency reserve fell) and contradicted the habits of a public used to paper money. Demostenov cites P A Nikolsky, according to whom:-

We Russians, who deal daily with paper money, can testify that the thought processes [coin evaluations and conversions, N.N.] ascribed to us by the aforementioned economists do not cross our minds. While purchasing the greatest variety of objects with paper money day in and day out, we never see in our mind's eye the value of whatever amount of coin. (Демостеновъ, 1937, p. 126).

Demostenov gives other examples, including ones from India, of cases where paper and base coinage were better received than metal-backed money. If we recall that Asian monetary tradition involved paper money from deep antiquity (China is a notable instance²²), we can conclude that Type 1 monetary systems (divided money) were characteristic of Asian monetary institutions. The unwilling and baulky adaptation to the West European monetary tradition (and especially to the Type 2 monetary system) by the Russian public and merchant classes bear witness to this.

In conclusion, the table below sets out the results of in-depth studies by eminent Russian historian Vasily Klyuchevsky, who in 1882 attempted to trace the purchasing power of the rouble from the 15th to the 17th Centuries, providing a general Russian illustration of the Cippola quandary²³.

Table 1:

Depreciation of the Russian rouble between the 15th and 18th Centuries according to Klyuchevsky

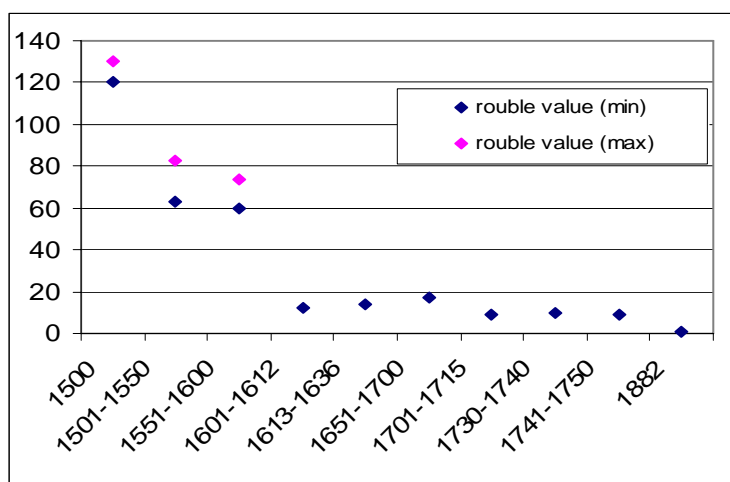
Years	Rouble values expressed in 1882 roubles (1882 price basis)
1500	Over 100
1501-1550	63 to 73
1551-1600	60 to 74
1601-1612	12
1613-1636	14
1651-1700	17
1701-1715	9
1730-1740	10
1741-1750	9
1882	1

²¹ See for instance Демостеновъ (1937, pp. 121-130).

²² See Eagleton and Williams (2007).

²³ The study is exceptionally original in a number of aspects, not least for its theoretical model (an original variation of the quantitative theory of money), and for its entire empirical and statistical approach in reconstructing price indices (methodologies for doing this emerged only at the beginning of the 20th Century), the features of medium of exchange and unit of account. Klyuchevsky's calculations are very close to formulae proposed by Fantacci in analysing coinage (see also Fantacci, 2005a). Based on Russian realities and making certain corrections for changes in monetary units, Klyuchevsky shows that rouble purchasing power is best assessed through price indices, going on to in-depth analyses of prices by product and source.

Source: Ключевский, В. (2003, [1870/1900]), p. 132



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Returning to the basic theoretical postulates in Fantacci's book, for the moment I shall leave aside the evolution of monetary institutions, returning to it in the following paragraph with a proposal for a new institutional insight into the Cippola quandary. Now let us regard the various functional divisions proposed by Fantacci. Since everything is rendered comprehensible by comparison, I shall enumerate others who, in different ways, have also stressed the differentiation of money.

It is worth recapitulating that Luca Fantacci proposes two types of monetary economy. Type 1 or pre-modern money features a division between ideal and real money and between the measurement and means of exchange functions, while money *does not* have the function of storing value. This model may be called the one of differentiation, complementarity, or duality. Type 2 or modern money merges ideal and real money; measures and exchange functions unite within the same object, the preservation of value function becomes foremost. This type of monetary economy may be called the mono or syncretic model.

What immediately comes to mind is the proximity of the typologisation of the monetary economy set out by Walter Eucken in *Die Grundlagen der Nationalökonomie*, Part III, Chapter 2 (Ойкен (2001, [1969])). Employing his own economic analysis methodology which combines elements of the historical school and the deductive approach²⁴, Eucken formulates two types or "pure forms" of monetary economy:-

Many national economists say that money is a means of exchange and a measure of value. This definition cannot take us too far ... History shows that in different cultures and over many centuries, the division between these two functions was customary, that their division and merger were balanced historically, or even that division predominated ... National economics must firmly announce this historical fact. Two pure basic forms of the monetary economy must be distinguished. In the first basic form money is also used as an accounting unit, while in the second basic form

²⁴ Eucken sees this approach as overcoming the great methodological antinomy between the historical, inductive, or empirical method and the theoretical or deductive method.

money and accounting units are two distinct concepts ... The economic process develops in entirely different ways as regards planning and the actual progress of events within each of the two basic forms ... in fact, the entire economic process would appear different [if measures and exchange were not merged, N.N.] (Ойкен, 2001 [1969], pp. 203-205)*

Eucken considered that an *independent* monetary theory must be constructed for each pure form of monetary economy (Ойкен, 2001 [1969], p. 206). This insistence is most interesting in that it recognises the hindrances today's researcher encounters when analysing past monetary relationships while using modern concepts and terminology. Later, using the spot or local abstraction approach²⁵ and observing the specific composition and structure of discrete economic entities, Eucken formulated three types of "pure monetary systems" which relate *solely* to means of exchange (which was, as noted above, what Eucken termed "money"). The German economist defined his three pure monetary systems depending on how money appeared and disappeared, *viz.* where commodities became money; where money arose through commodity supply or the expenditure of labour; and finally, where money arose through credit. From the standpoint of the two ideal/typical classes, the task of monetary theory was formulated anew as the need to show:-

... what influence the presence and utilisation of individual monetary systems exerts on the economic process of an exchange economy and how the difference between the two basic forms of monetary economy affects the economic process ... how money governs the economic process within an exchange economy. This is the task of monetary theory ... therefore monetary theory must not rest with old formulations and pursue solely the research of "money value" or "price levels" (Ойкен, 2001 [1969], pp. 219-220)²⁶.*

The differences in approach between Fantacci and Eucken are mainly that while the former links money foremost with its measuring and assessing function, the latter sees it foremost as a means of exchange²⁷. Focusing on the difference, while Fantacci sets the means of measurement as logically and historically preceding the means of exchange, the ordoliberal (alongside Eucken, here we can mention Wilhelm Röpke and Constantino Bresciani-Turroni among others), Austrian School monetary theorists (Carl Menger, Ludwig von Mises, Murray Rothbard, Friedrich von Hayek, contemporary Austrians like Hans-Hermann Hoppe, as well as Joseph Salerno and Pascal Salin, do the opposite. The economists listed above see the means of exchange function leading both logically and historically to money's also becoming a means of measurement (for them, the means of exchange is the basic and perhaps sole function of money). For his part, and following the logic of prioritising the means of measurement, Luca Fantacci naturally rebuffs the function of storing value and repaying debt. Among the ordoliberals, the means of exchange function leads, thus "genetically" setting the store of value function as basic along with purchasing power (indeed, exactly how long a time must elapse before one can state that a means of exchange has turned into a store of value?).

* Translated into English from the Bulgarian translation in Ойкен, 2001 [1969]. Translator.

²⁵ Sometimes termed the "eliminating abstraction method."

²⁶ Ойкен (1969) contains the claim that it was precisely the division between monetary medium and unit of account (means of reckoning) that allowed European trade to flourish in the late Middle Ages.

* As above. Translator.

²⁷ In his article, Fantacci (2005a, p. 43) calls both measures and means of exchange "monetary units"; see Paragraph 5 below. This causes a number of semantic problems, for the whole cannot bear the same name as its part. Below, your Author shall propose an approach aimed at overcoming this difficulty.

Dwelling a little on the Austrian School, for which money is foremost a means of exchange and of transferring value through time and space²⁸, even since Carl Menger's renowned article of 1892 the origin and evolution of money (as means of exchange) has been regarded by adherents of that school as a self-generating, endogenous market institution which was monopolised and became public significantly later²⁹. By monopolising money supply, intentionally or not, the state disturbed the amount of money needed by the economy, causing deformations in relative prices and calculating chaos. This chaos obscures all reference needed for business decisions. The sole and natural institutional resolution, Austrian scholars feel, is for money supply to be privatised and left to market forces. This would introduce self-regulatory mechanisms such as antagonistic clearing among issuing banks, restoring money supply to its necessary and natural level³⁰. Most Austrian School adherents are uninterested in the unit of account (for most of them it is not a function of money) while generally agreeing on the public and inclusive character of the unit of account. Some of them see merit in arriving at a single means of measurement due to its side effects and to its similarities with language as a means of communication. Few propound competition between units of account, one such being Hayek's 1977-1978 model.

The Austrian School regards critically the very merger of the unit of account and mean of exchange functions (money) which is basic to Type 2 systems. Why so? I shall proffer his own explanation: once production of the merged means of measurement and means of exchange (*i. e.*, money) becomes a state monopoly, money begins to impact the price structure physically and directly, and has significant redistributive effects depending on its quantity and movement within the economy. Thus, the means of exchange influences the unit of account directly, as if from within, destroying its essential communicative properties.

Legally, the Austrian School insists on means of measurement which is stable over extended periods, or else if it is mutable³¹, on change being symmetrical for all economic agents (*i. e.*, on it impacting overall price levels while retaining the structure of relative micro-prices). Thus, changes in overall price levels are removed from changes in relative prices and do not bring major changes in income distribution. While Type 1 systems feature an additional rate of exchange, an additional price (that of buying into means of measure), Type 2 systems lack this rate or price. Syncretic Type 2 models have no ideal money, it having been merged materially with the means of exchange, and thus quantitative and qualitative manipulations of the latter create insecurity from the standpoint of the state. In Type 2 models, the state does not change price, or exchange rate of the medium of exchange expressed in ideal money) but rather manipulates the medium of exchange by changing its supply or amending the metal content of coinage. The dominant monetary theory in Type 2 models is the quantitative theory of money, according to which prices depend on the supply of money (whether coinage or bills) and the state is tasked with controlling this supply either discretionally or to set rules. In Type 1 models, rate changes between measure and means, as

²⁸ For details on the Austrian School, see Неновски (2001) and Неновски (2004) and for general overviews of monetary theory, see Демостеновъ (1937).

²⁹ Eucken distinguishes between two types of origin: global, of the monetary economy (depending on whether unit of account and means of exchange are merged or not) and specific, of the monetary system itself, or of the medium of exchange. In this sense, Menger's article relates only to the second origin: that of the medium of exchange.

³⁰ See the overview of the mechanisms of private money in Selgin and White (1994). Ordoliberals do not necessarily advocate competition between private money (means of exchange) but propose that it may take place to set rules (as did Milton Friedman).

³¹ As is recorded in history (through changes in "tariffs," or the legal rate between means of exchange in its domestic money form and unit of account.

often as they took place, did not entail changes in the value of the unit of measure to be reflected in relative prices³².

Let us dwell on the Austrian School a while longer. Within this school (sometimes termed the school of competing private money without further classification of the diversity of views held by its exponents) there are diverse theoretical models and specific monetary reform proposals which, to one extent or another, rest precisely on the difference between measure and means of exchange (for an overview, see White, 1984 and particularly valuable models by Black, Fama and Hall). Some free money models tackle the subject of dividing its reckoning and exchange functions, with certain theoreticians considering this desirable and possible (Leland Yeager, Yeager (2001)) while others (Larry White) consider it impossible and illogical (White, 1984) and prefer to stop with the privatisation of the means of exchange.

Among the diversity of institutional configurations, Hayek's proposal stands out. Like other adherents of private money, Hayek proposes open competition between means of exchange which may be convertible into commodity baskets. In essence, Hayek also proposes competition between units of account (means of reckoning) and selection between monetary standards. In other words, the state is deprived even of the ability of defining the means of reckoning, an ability assumed by a number of adherents of competing money such as Black, Fama, Yeager, *et al.* Thus, competition would extend even to different expressions of purchasing ability and thus, in effect, to price levels. Monetary competition would be *total*. Hayek opined that after a certain period of competition between standards, most likely exchange rates between "the best" of them would be fixed, facilitating reckoning.

The idea of commodity basket cover was not an original contribution by Hayek³³. First and beyond doubt, covering means of exchange with goods is a natural ('genetically determined') way of overcoming fluctuations in the value of money³⁴. Second, a number of economists have criticised the practice of tying money down to a single commodity (even if it were gold). In reality, theory and practice have known a number of proposals for cover by *more than one commodity*³⁵ such as (i) bimetal combinations within coins composed of gold and silver (Walras, Edgeworth, Marshall), (ii) gold and silver combinations which fluctuate according to trading (Newcomb), (iii) a tabular standard for indexing prices to set tables (Jevons), (iv) the proposed dollar stabilisation through a mean weighted index of basic commodity prices (Fisher), and contemporary proposals such as the one for (v) a basket of time-limited commodity contracts (Dowd)³⁶.

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³² This is significantly closer to the abstract model of Friedman's helicopter according to which all economic subjects suddenly receive more money.

³³ See Хайек (2004, [1985]).

³⁴ Menger and Marx demonstrate that money stems genetically from commodity exchange, while Mises' regressive theorem derives money's current value from its past value in commodities.

³⁵ For details, see Fisher (1920), Laughlin (1931) and Friedman (1951).

³⁶ Another peculiarity in Hayek's model concerns the principle of convertibility and this your Author confesses not to understand completely. In Hayek's proposal, commodity cover is linked with the principle of constant convertibility conceived as the ability of converting one's (privately issued) money at any time into one or more commodities. There is no doubt that the principle of *constant convertibility* is the cornerstone of confidence in money. This is proved by monetary history (Rist, 1938) and is basic to Rist's critique of Ricardo and the quantitative theorists who, he felt, failed even to mention the convertibility principle. Ricardo felt that limiting money supply, regardless of whether it was covered or credit money, was sufficient condition for its value stability. In Hayek's reform, however, convertibility is "unstable," depending on the skill of its issuers in managing commodity baskets whose components would be valued at market prices.

Let us now direct our attention to those authors whose research supports Fantacci's views. As mentioned above, Luca Fantacci is critical of the merger between measure and means of exchange (Type 2) for reasons other than those cited by the Austrian School. He considers that in losing the exchange rate (the price of real money expressed in ideal money or of the means of exchange expressed in means of reckoning), the state has deprived itself of an important discretionary economic management tool, reducing overall freedom of action; in a purely historical aspect, tariff changes and the use of token coinage have offered opportunities of resolving a number of purely internal problems, such as deficits of small change. Deriving his arguments from Type 2 models, Fantacci rejects the store of value function entirely, seeing spending and uninterrupted circulation as the purposes of the means of exchange. All monetary savings are harmful since retaining money is harmful and, as a whole, unsustainable for the economy as a whole. It is no accident that, in one form or another, Fantacci shares Keynes' views³⁷. Though Austrian School adherents consider interest as the price of savings rather than of money, they do not deny the preservation and transmission of value as a basic function of money (something they see as stemming from its means of exchange function).

A number of researchers (economists, anthropologists, sociologists and historians) have shown the leading role of the measure function of money in different ways, all in the spirit of the Italian author. Foremost among them are François Simiand, Marc Bloch, Georg Simmel, Léon Walras, Georg Knapp, and today's French economists Michel Aglietta, André Orléan, Jerome Blanc, *et al.*³⁸ They feel that reckoning preceded exchange; the latter is characteristic only of market (economic) exchange, while the former is a fundamental artefact of social exchange. Units of measure have inclusive – often sacral – origins, drawing legitimacy from the diverse forms of sovereignty society develops. The sacral origin in question has been stressed by many anthropologists of whom Marcel Mauss repays mention, with the French subsequently developing an entire branch of monetary theory which regards money as having arisen from the exchange of gifts (many such papers have been published in the *MAUSS*³⁹ journal).

In this sense, the latest book by Aglietta and Orléan (2002) offers a *new* reply to the question as to the nature of money, discovering its roots in overcoming innate human violence (as in earlier publications, they actively ply René Girard's theory of mimetic violence⁴⁰). Such fundamental detail is beside the point here; what matters is that the two authors place the measurement function centre stage, seeing it not only as basic, but also as offering the possibility of altering the logic of price formation causality. Thus, the sequence is not value → price → money, but rather money → price → value⁴¹ (here, the authors criticise Marx's approach from what they claim to be Marxist positions). Money is the fundamental condition for the genesis of utility and value and thus precedes the monetary economy. The French authors see the emergence of measures as extra-economic and sacral. As regards exchange (which is secondary), it emerged spontaneously and haphazardly (here,

³⁷ Fantacci cites Keynes' view that genuine monetary history begins with Solon's 6th Century BC reforms which intentionally amended the ratio between means of reckoning and of exchange, showing that genuine monetary institutions are linked to sovereignty and politics.

³⁸ Such as the American sociologist Vivian Zelizer (Zelizer, 1994).

³⁹ MAUSS = Mouvement anti-utilitariste dans les sciences sociales. See also the collection of papers by Aglietta, M., A. Orléan (éd.) (1999) and early articles by Orléan (1991, 1992).

⁴⁰ See for instance Aglietta, M., A. Orléan (1984).

⁴¹ It is curious to mention that Simeon Demostenov is sympathetic to this causality reversal as witnessed by numerous quotes from early 20th Century Japanese economist Kiishiro Soda who wrote in German (Демостеновъ, 1937).

the two authors' views have shifted notably over the past two decades to the typically Austrian School model of spontaneously emergent means of exchange of which they were trenchantly critical in the past⁴²). The holistic and abstract nature of measures (which subjects to itself the means of exchange function), however, *renews* the theoretical grounds on which the authors plead for active state management of monetary processes: a basic feature shared by most of those who place reckoning rather than exchange at the base of money. Aglietta and Orléan analyse monetary practice historically (in antiquity, the Middle Ages and the modern period), tracing the “trajectories of money” to show the historical significance of reckoning, as well as the dichotomy between ideal and real money (in Type 1 models, as discussed elsewhere⁴³).

In the same spirit are studies by Gerome Blanc, devoted to parallel money and money substitutes. He, too, names the *fonction de compte* (accounting function) as “the genuinely fundamental monetary function” (Blan, 2000, p. 25). As does Fantacci, Blanc considers that exchange (*modes de paiement*) plays a subject role, while storing value (*réserve de valeur*) is not specifically a monetary function. Blanc regards money as a system which diffuses and transfers its generic functions to diverse monetary instruments⁴⁴.

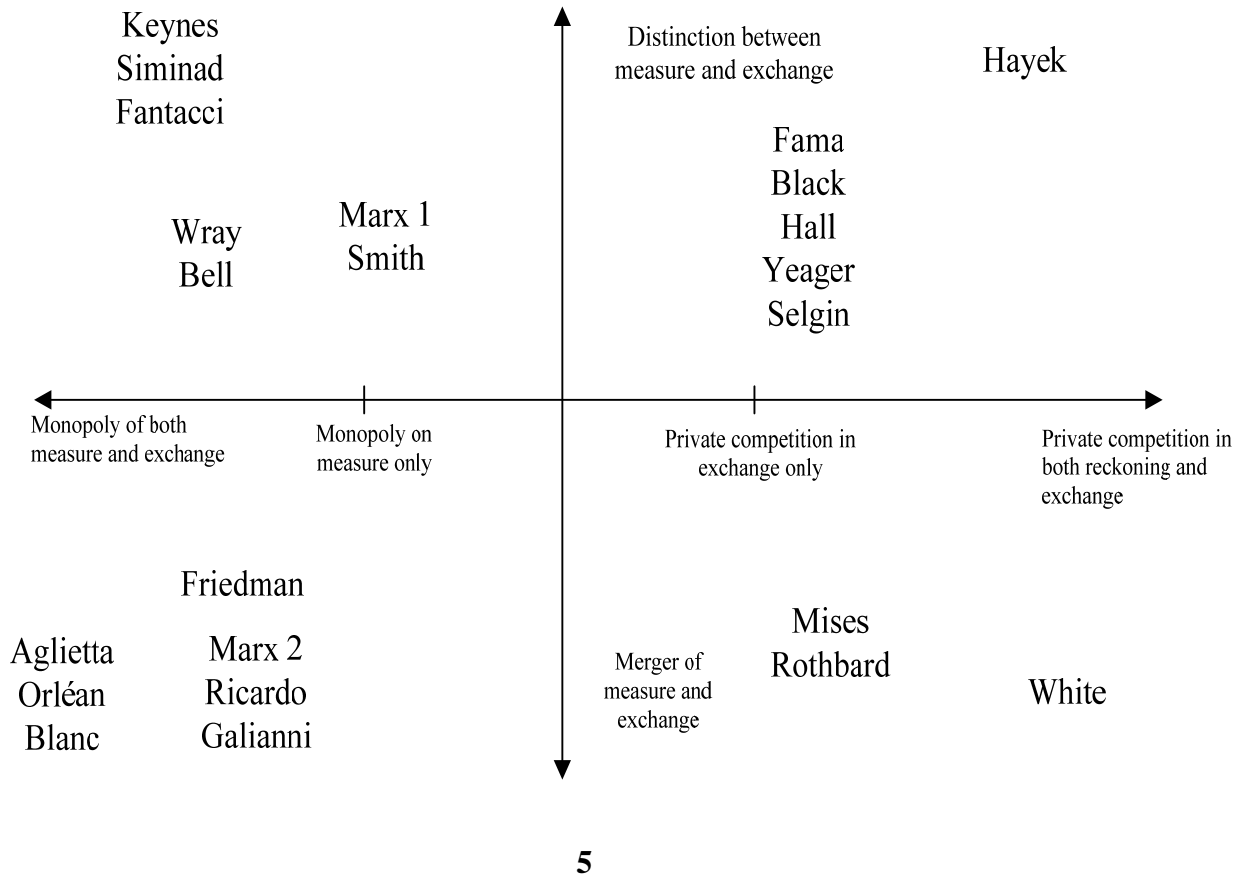
Before proposing what he considers a new theoretical postulate on monetary evolution as institutional evolution, I would like to present (Figure 2) a possible topology of some authors' approaches to money as reviewed above. Theories are ranged from left (adherents of monetary monopoly in both measure and exchange) to right (adherents of private competition in both functions) and from top (adherents of a division between the two functions and of the primacy of the means of measure) down (adherents of the merger between the functions and of the primacy of exchange). I do not claim exhaustiveness and is far from the thought that a flat sheet of paper can encompass the multiple hues and great suppleness of most monetary theories. I do feel, however, that such a classification may be of help as a guide to the manifold approaches to money.

Figure 2. An attempted topology of monetary theories

⁴² For instance, in their seminal work, *La violence de la monnaie*, Aglietta, M., A. Orléan (1984). Also, nowadays the two write of mimetic monetary competition: something not entirely different from institutional competition (competition between monetary issuers).

⁴³ See Chapter IV, pp. 123-166. The authors call the first Type 1 system “dualistic” and the second or Type 2 system “the convertibility system.”

⁴⁴ See also the overview by Генкин (2002). As regards the history of functional distinction between grand and petty money (largely synonymous with the distinction between external and internal money), I shall mention only François Velde (some of whose works joint with Thomas Sargent, Sargent, T., F. Velde (1997), Velde (1998)).



In his book, Fantacci presents a picture of money's institutional character through the prism of what is mostly a historical study. Meanwhile, though recent years have noted a rapid advance of institutional economics within economics as a whole, attempts to integrate knowledge thus accumulated are almost absent in Fantacci's work. Without criticising him (his objectives were clearly different, and namely to show the historical duality and even multiplicity of the monetary institution), I conjecture how this gap may be filled without lapsing into abstract institutional analyses. The approach presented below appears to offer the possibility not only of interpreting the evolution of monetary institutions in the light of the division between unit of account and medium of exchange (crudely speaking the transition from a Type 1 monetary system to Type 2) and also of formulating a solution to the Cippola quandary (why there should be a global trend to monetary devaluation) mentioned at the beginning.

Two basic postulates may be stated without going into methodological details. First, that the rules for measuring and comparing value (Institution 1, I1) and for exchange (Institution 2, I2) should be regarded as entirely *independent* institutions as regards historical genesis and development logic⁴⁵. The former is deeply intrinsic in social exchange, having emerged at the genesis of humanity; the latter appeared at a later stage and is typical before all in economic (and even market) exchange. Second, that money ought to be interpreted as an *institutional composite*: a complex network of institutions which develop not only as a result of the internal interplay between the two rules listed above, but which are also subject to the influence of other basic institutions such as religion and the state, to name but two.

⁴⁵ Though we shall limit ourselves to these two functions, the analysis could involve, *inter alia*, rules of settlement and debt repayment. This would be a diversion at this juncture, since your Author's point is to show a possible manner of analysis. For discussion on these institutions, see Searle (2005) and Hodgson (2006).

The monetary composite does not exist in a vacuum, being integrated into the overall institutional dynamics of a society.

The institutions of reckoning (I1) and exchange (I2) may be complementary or exclusive to and of each other, with the criterion being whether one boosts or cuts the effectiveness of the other⁴⁶. Institutional effectiveness relates to the ability to improve coordination and cooperation between agents and to render the distribution of incomes and goods acceptable to these agents. Effectiveness may also relate to the abilities of an institution to allow increasing complexity in agent behaviour and the appearance of new practices: in a word, to be open to new developments. In the framework of each institution, agent micro behaviour and demand for services linked with reckoning and exchange must be the basic criteria for the emergence of new rules⁴⁷.

There is a certain hierarchical relationship between the two institutions or rules of behaviour: the higher-placed rule would govern (be ‘the rule of rules’) and the lower-placed one would change rarely. Speaking sociologically, the institutions of reckoning and exchange and their hierarchical relationship (within the monetary compound) reflect the efforts of diverse groups and individuals and of the interplay of their economic, political and spiritual interests. These interest groups use other institutions (mostly the state, and prior to that religious ones) as levers to influence the institutional architecture of I1 and I2. This influence results in the different configurations Luca Fantacci sets out: generally speaking, Type 1 or Type 2 monetary systems.

From here, the institutions assume the following logic: setting out from the status of *language* as the fundamental constituent institution which permits the existence of other institutions and which is the fundamental “medium of representation” (Searle, 2005)⁴⁸, we note that the I1 rule of reckoning is *genetically* closer to language (it is a bridge linking language with economic exchange)⁴⁹. As with language and with units of measurement, means of measuring value are ideal in themselves; their origin is not economic but before all else social. This type of rule allows the development of abstract and rational thought, and subsequently monetary reckoning and accounting, in turn lending great impetus to trading. I1 is every bit as intractable to change as are measuring institutions similar to it (we need only think of the failure of introducing the decimal unit of time in revolutionary France in 1792 or of the six-day period instead of the week in the 1930s’ Soviet Union).

The other institution – I2 or the rules of exchange – is first and foremost linked with the emergence of markets and economies in human development. While the former institution sought uniformity (a shared measurement unit), this institution seeks diversity (a diversity of means of exchange). Within this institution we may discern two sub-rules or lower-order institutions, I21 and I22. They coordinate respectively the behaviour of

⁴⁶ Certain parallels may be drawn with the complementarity of goods in the traditional utilitarian economy, though this may be too restrictive. The idea of institutional complementarity was developed by Masahiko Aoki and Bruno Amable, two name but two.

⁴⁷ In his book of some years ago, Centi pleaded for monetary services to be viewed through the prism of demand for monetary services; sadly, this plea was not taken up (Centi, 1984).

⁴⁸ According to Searle (2005, p. 12): “... you may have language without money, property, state, or family, yet you cannot have money, property, state, or family without language.” Without being a monetary theory specialist, he also notes: “You can usually imagine a society that has money without having any currency at all” (p. 16). For him money is before all else ideal, while the actual means of exchange (currency) is secondary. Here, we observe the means of exchange flowing rather than being accumulated, and hence failing to increase and yield the income later called interest, as also noted by Fantacci.

⁴⁹ Let us recall that rules of reckoning value also evolved; early units of account were directly interchangeable with units of weight (the pound, for instance), while so-called measurement scales existed yet earlier as discussed in detail in Burns (1927). On money as language, symbol and sign, see Michel Foucault’s *Les mots et les choses* in his *Archéologie des sciences humaines*.

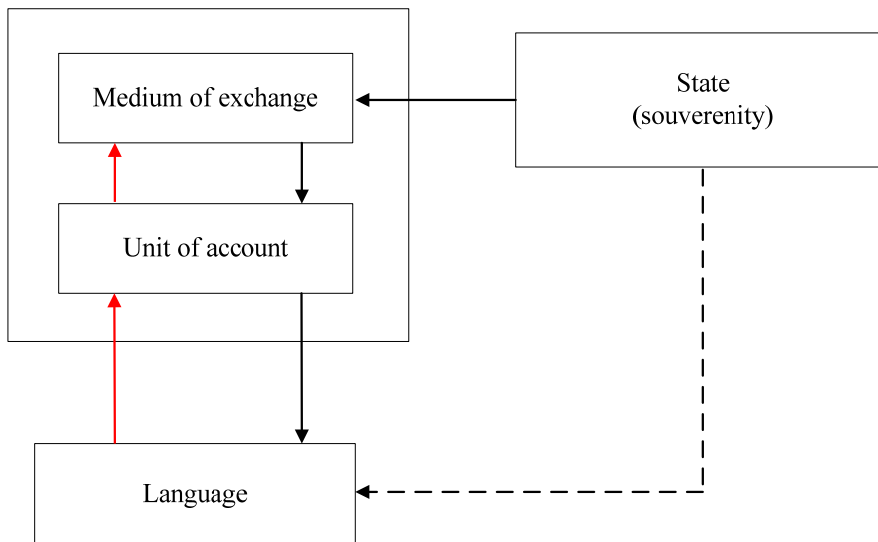
economic exchange within a state and between states, or in other words internal I21 and external I22 money⁵⁰. Though I2 treats real rather than notional processes, following the logic of language internal money is closer to it than external money (proof of this is the presence of base paper bills in internal turnover and of noble metal coinage externally). In other words, the inclusiveness or totality of the rules under examination falls the more we move away from language: $I1 \rightarrow I21 \rightarrow I22$. Continuing, we note that the rules of exchange as manifest in the means of exchange (coin or bill) are private by origin, there being no nexus with the state or the sovereign. This is historically proven, for instance in Burns (1927). Historically, the more a community grows (from city to state and empire), the stronger the functions of the I2 means of exchange at the expense of the I1 measure of exchange (again Burns, 1927).

In time, within the priorities of the state the principle of profit begins to dominate over those of effective money circulation (again Burns, 1927). The state gradually turns into an instrument for the domination of certain groups over other groups and monopolises the rules of internal exchange or I21. Making internal money into token coinage gives the state the opportunity to boost its income (through seigniorage most of all) and to broaden its redistributive abilities (relatively unnoticed). The transition from a differentiated (dual) money system (Type 1) to a syncretic one (Type 2) may also be interpreted using the proposed logic. The interests of the state (or rather of its governing group) are in favour of merging the means of reckoning and of exchange with a view to boosting its capacity for discretionary redistribution. The state gains a *direct*, yet relatively unnoticeable, ability to influence relative prices and income differentials between distinct groups and individuals⁵¹ through controlling the supply of means of exchange and their movements. Put otherwise, manipulating the rules of exchange results in manipulation of that part of the monetary compound which is closest to language. This destroys information, harms the entire system of planning and decision making, increases insecurity, and destroys motivation, *inter alia*. It reverses priorities ($I21 \rightarrow I1$) and changes the hierarchical relationship between the two institutions. I21 assumes primacy and determines I1 structurally.

Figure 3 Money as an Institutional Composite

⁵⁰ I21 and I22 are me1 and me2 respectively. This classification may be found in Marx, Weber, Sombart, Polanyi, *et al.* On the different origin of external and internal money, *viz.* the former from exchange and the latter from measurement, see the empirical analysis by Pryor (1977).

⁵¹ In Nenovsky (2002) I present a theoretical mockup of mechanisms through which monetary changes and flows give rise to redistributive processes.



We have seen how the hierarchy within the monetary institution changes under the influence of external non-monetary institutions (in this case, the state) and how the monetary compound is removed from the primordial significance of language. In this sense, within the Type 2 model the two institutions are at odds with each other, or rather I21 is at odds with I1. From this stem not only logical proposals for decombining this “*institutional mutant*” by privatising the means of exchange (changing I21), but also the pinning of hopes on the ability of new decentralised information technology to tear apart (and even to remove) the means of exchange from the unit of account (through online barter), and to resolve “exact change” issues.

As regards the dilemma of what the word “money” has meant down the ages, Searle’s definition of what an institution is would be suitable: it is the “assignment of status function, *X counts as Y*, or, more typically, *X counts as Y in context C*” (Searle, 2005; original italics). In the case of money, means of reckoning have the status of money in Type 1 monetary systems, while means of exchange have the same status in Type 2 monetary systems⁵².

If we now return to the Cippola quandary, we see that one possible solution is precisely in the state and the progressive expansion of its role (a law noted by German economist Adolf Wagner in the late 19th Century): manipulating the monetary compound in its favour (most of all by transiting from Type 1 to Type 2 monetary systems), it devalues the medium of exchange in the long run. Thus, we are witnesses to what is mostly a social dynamics in which a basic institution (the state), being an arena of conflict between different interest groups, changes the basic structure of the monetary institution in its favour. Indeed, though he focuses only on the Mediaeval period, Cippola himself lists this as one of several possible reasons, without going into Type 1 to Type 2 transitions and looking into the role of the state and the power of pro-inflationary interest groups.

⁵² In the Type 1 era, the names of means of exchange derived from those of units of account. Aristotle called money νομισμά (“institution”), while means of exchange were named after popular commodities such as animals or leather. Intellectual hesitation as to what constitutes money is evident as early as Aristotle. In his *Ta ethiká* he links money with measurement and ideal money, while linking it with means of exchange and thus real money in *Πολιτικά*.

6

Yet, can we judge history and accuse it for the choice of one rather than another model of monetary evolution? Can we divine what may have happened had a different institutional path been chosen? This basic methodological issue in history has broken many a pen-nib.

I can only state that what we may regret is the simplification of monetary rules, or as Hayek put it, the non-use of “broadly defined set rules.” Some years ago Friedrich Hayek showed that the state limited experiments with money from the very outset. This turned money into a “deformed child which suffered from having to traverse limited channels.” This lack of experiment and innovation is the basic reason which limits our theoretical speculation as to possible trajectories of monetary regimens or as to the putative development of money given no state interference. Citing Hayek in detail:

“... we are obliged to admit that we have little empirical evidence of how the various conceivable methods of supplying money would operate, and almost none about which kind of money the public would if it had an opportunity to choose freely between several different and clearly distinguishable kinds of money. For this we have to rely largely on our theoretical imagination and try to apply to a special problem that understanding of the functioning of competition which we have gained elsewhere ... And perhaps the most important reason for not having better money is that there has not been enough experimentation to lead to agreement about what kind would be desirable. Selective evolution was cut-off by authority before we were able to explore adequately the different possible solutions to the problem ... Putting it briefly, the money we now have is not entirely a product of the processes of cultural evolution, but rather a sort of deformed offspring which has suffered in having to traverse too-limiting channels and whose potential has thus been stunted. This offspring was created to serve purposes to which it was not suited. People are yet to discover that money is neither a suitable instrument of economic policy, nor an instrument which governments may use properly in order to secure more means than people are ready to cede.” (Хайек, 2004, [1985], pp. 89-99).

If we strive to improve the effectiveness of monetary institutions in a future doubtless full of deep change, our sole guide to correct decisions would be a striving to understand the various motives of agent micro-behaviour, be it in value reckoning or in exchange practice. This means not only the mechanical measuring of perceived links, but attempting to understand the interests, reactions and strategies of these agents within a broad social context which includes not only the economy but also the political sphere and the emergence of ideas and behaviour models.

Returning at length to Fantacci’s book, we appreciate it not only as an achievement in itself, but also as engendering discussion on basic issues of monetary theory; this study is evidence of that.

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