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The problem of the commodity economy coordination in Marx

- 1 The theoretical difficulties in understanding the processes through which individual products and private efforts receive public recognition (through exchange and market), are of key importance for understanding commodity economy and later the capitalist economy¹. This affects the broader issue about the place of money in Marx's intellectual construction. Marx solved the coordination problem by formulating the famous "Law of Value" (LV). According to the latter individual products are exchanged according to their value, *i. e.* according to the quantity of abstract and socially necessary labour embodied in them.² The LV plays a role similar to that of the "invisible hand of Smith" and which, with some reservation, may be called the "invisible hand of labour value". The LV is a coordinating and balancing mechanism formulated in volume I of the *Capital*:

Since individual capitalists meet one another only as owners of commodities, and every one seeks to sell his commodity as dearly as possible (being apparently guided in the regulation of hidden production by his own arbitrary will), the internal law enforces itself merely by means of their competition, by their mutual pressure upon each other, by means of which the various deviations are balanced. Only as an internal law, and from the point of view of the individual agents as blind law, does the law of value exert its influence here and maintain the social equilibrium of production in the turmoil of its accidental fluctuations. (Sweezy, 1962 [1942], p. 53)

- 2 Unlike the neo-classical models, where coordination is realised directly through prices and market, for Marx it is done in a more complex way, via labour efforts within the process of production. In order to get to prices and to the real world the notorious "transformation problem" needed to be overcome.³ The transformation problem assumed two forms – quantitative and qualitative (logical).
- 3 The quantitative problem about transforming value into prices (prices of production), is well known and has found a solution in Ladislaus Bortkiewicz's works. After Bortkiewicz, numerous solving attempts have been proposed, starting from Paul Sweezy, and now by Fred Moseley, Bertram Schefold and others.⁴
- 4 The problem of the transition between the two levels in Marx's model (ideal/abstract and real/concrete) is not only quantitative: it is also *qualitative* (logical). The logical inconsistency is also interesting.
- 5 Traditionally, Marxists consider that money is derived from the dual character of commodities (use value and value), and the latter from the ambivalence of labour (private and social, concrete and abstract). According to that dialectic, the contradiction between private and social labour was transferred as a contradiction between concrete and abstract labour. It found its dialectical solution in the contradiction between use value and value. Further on, there was the transition of the contradiction in the forms of value, between the equivalent form and the relative form thereby resulting in the logical emergence of money. For its part, money was marked by a contradiction between its functions (as a measure of value and a means of circulation), and two new functions emerged as well – those of a means of payment and of accumulation. Being the last element of the commodity economy, money was also the first and initial point of the capitalist economy. Its contradictions (the aspiration

for quantitative growth) were manifested in the development of capital and of the special commodity – the labour power which for its part had also a dual character. The inner contradictions of the commodity were transferred into contradictions of money, then of capital thereby resulting in the concrete forms of the manifestations of capital (set forth on the third volume of Marx's *Capital*). Money is the last stage in the evolution of the equivalent form of value. Thus, money is derived from value and labour that, in turn, are rooted in relations of production. To this effect the theory of money is derived from the theory of value (LTV) (see PE, 1954; Chavance, 1979; Zyabliuk, 1989)⁵.

- 6 Things took an “unpleasant” turn when Marx tried to solve the problem of reducing the various types of concrete and private labour to some universal measure which he called “abstract labour”. Marx offered basically two solutions as regards the labour devoid of any concreteness. The first is a physiological one and boils down to some form of average expenditure of human energy (a trend developed later by Alexander Bogdanov, the founder)⁶, Vladimir Bazarov, Serguei Kon, Nikolai Bukharin, Maria Smith, Sokrat Klepikov, Albert Vaynstchein, Stanislav Strumilin, A. Dembo as well as within the frameworks of the early models, e.g. of the Soviet Gosplan). The second solution, which is known better and is often called social (that of Isaak Rubin, Abram Deborin, and partly Boris Borilin)⁷ is the definition of abstract labour as socially necessary labour-costs (costs for the reproduction of the labour power)⁸. But those labour costs, their social evaluation according to Marx was nothing but an evaluation of those types of labour which were carried out on a daily basis and at any time on the market (!). In this case the market evaluation presupposes the availability of market prices, *i. e.* the existence of a monetary measurement, of money. Or in other words, the categories derived from labour and value, namely prices and money underlie the evaluation of labour, they are part of the world of value and of abstract labour. Therefore, Marx imperceptibly built a vicious circle, which could not be overcome in the traditional interpretations. In a nutshell money is at the core of any theory of value and the theory of money does not follow from it but implies the theory of value.
- 7 More broadly speaking, money has been eliminated from the economic models or has been included in them in an extremely unnatural and exogenous way. This is likewise valid for the most developed forms of the neoclassical and classical model (for the general equilibrium and for the model of Sraffa respectively)⁹.
- 8 The integration of money in the economic system attracted the attention of numerous French economists who displayed an interest for Marx¹⁰. Their original approaches provided the grounds for referring to the existence of the “French school of monetary institutionalism” which emerged during the past 30-40 years (Alary *et al.*, 2016; Dodd, 2016). Two books by Benetti and Cartelier (1980) and by Aglietta and Orléan (1982)¹¹ may be regarded as its beginning. Subsequently, the representatives of the French school¹² released a series of articles and books¹³. The first conference which brought together almost all leading figures of that school as well as their supporters¹⁴ was held in Lyon in May 2016. Most of these French economists tried to overcome Marx's analytical problems in their own original way and offered solutions principally inspired by what Schumpeter called “monetary analysis”. For all of them (further on we will simplify the differences) money is a social coordinating institution, more fundamental than the market and capitalism. Each theoretical system places money in the centre, it is a systemic founding component. In this sense money is a more important category

than value. Money is not an object, a substance (natural, or even social), money is a social relation, a social connection, a social phenomenon.

- 9 We may single out two sub-trends within the frameworks of the French school which are defined as “money analysis”¹⁵ namely: (1) authors who consider that money plays a leading role as regards value and that the theory of money precedes and envelops the theory of value (e.g. Orléan) and (2) authors who consider that the theory of value (including the labour theory of value) is redundant (the world of the unmeasurable is devoid of economic meaning) while the theory of money, the payments system and monetary accounting are the only possibility to comprehend contemporary economy (e.g. Cartelier). Importantly, the new monetary approaches provide the possibility for preserving and formulating in a new way some of Marx’s sociological achievements. What we have in mind here is the emergence of social classes, exploitation, etc. Each of the two authors mentioned above (Orléan and Cartelier) offer their own solution of “Marx’s problem” and they could be compared to two important Russian economists who worked half a century before them, namely Isaak Rubin (1886-1937) and Peter Struve (1870-1944). Isaak Rubin was an original Marxist well-known in the West and in France owing to his *Essays on Marx’s Theory of Value* (the second edition in French dates back to 2009)¹⁶. On the contrary, Peter Struve was almost unknown apart from his sociological and historical studies – though he published two theoretical papers in French, Struve (1921a, 1921b, 1922) and many in German.
- 10 Rubin is well known to the representatives of the French monetary school. Orléan has a special interest in Rubin’s reconstruction of Marxism (although according to Orléan Rubin’s conclusions have not been brought to a logical end). For his part Struve (who himself published an article back in 1899 in which he outlined Marx’s problem), went further and gave up the theory of value (including that of Marx). Struve reduced the economy and the economic activity to a movement of prices, *i. e.* to the monetary evaluations of commodities. Money and prices attained prime importance while value was “an unnecessarily doubling of prices”, “a logical phantom”, “a distortion of thought”, and so on. Struve’s ideas were featured in the two volumes of his book entitled *Economy and Price* (1913/1916)¹⁷. The author’s main ideas were upheld until his last publications, e.g. his historical works published posthumously in 1952. As far as the technical aspect of Struve’s monetary theory is concerned, it is closely associated with regarding money as book-keeping, as accounting. That approach takes us directly to the theory of payments systems and of monetary accounting of Cartelier. What is important for our paper is the fact we can find in both Rubin and Struve (the former was a Marxist and the latter was a former Marxist and a good connoisseur of the *Capital* – Struve was the editor of one of the translations of the *Capital*) the main elements characteristic of the models of Orléan and Cartelier. In a sense this coincidence is a further evidence of the seriousness and validity of the approaches of the two French scholars.
- 11 Before going on it is necessary to explain why Marx’s theory of value and money serves as a starting point, as a background against which the four authors have been reviewed.
- ¹⁸ I consider that starting from Marx in reconstructing the views of the four authors is, on the one hand, justified from a historical point of view (all authors though to a different extent started as Marx’s interpreters); on the other hand, it has helped me to find a common framework for setting forth their theories. There could certainly be other starting points for reconstructing the theoretical models of Rubin, Orléan, Struve

and Cartelier. With a different degree of radicality these four authors criticized the traditional understanding of value, be it based on labour or on marginal utility. Although the economic views of Struve, which will be dwelt upon further on, in many respects approximated those of Cartelier, Struve is different from the other three for he early quitted Marxism (and value theory in all its forms) and became one of the key liberal Russian thinkers.¹⁹

- 12 Therefore, the objective of this paper is to reconstruct in a comparative perspective the approaches of Cartelier and Orléan by comparing them with the approaches of Rubin and Struve. Each one of the four scholars offers his own methods of solving the issue of the integration money and value, solving the “coordination problem” based on the leading role of exchange and money. Although the ideas of the four authors intertwine, we can differentiate between two pairs namely Rubin-Orléan (see this paper, part 1) and Struve-Cartelier (see the following paper, part 2). This corresponds to the radicality of their analytical solutions. While the former pair upholds the theory of value (each one in his own way) the latter actually eliminated it (again each one in his own way).
- 13 This study has been prompted by several concrete occasions. First, there were some events associated with Rubin. It was above all the commemoration of his anniversary (see the collection edited by Voyekov and Melnik, 2017), and the publication in the 2011 of the unreleased manuscript *Essays on Marx's Theory of Money* (Rubin, 2011)²⁰. Second, the growing interest for a number of forgotten Russian economists and scholars with a huge impact outside Russia in the early 20th century. The scholar I have in mind here is Struve and his school in the Balkans (Nenovsky & Penchev, 2017). Third, the publication of two books of major importance – by Orléan entitled *L'empire de la valeur. Refonder l'économie* (2011)²¹ and by Cartelier entitled *L'intrus et l'absent. Essai sur le travail et le salariat dans la théorie économique* (2016)²². And finally, the anniversaries related to K. Marx and the *Capital*, which along with the anniversary of the October revolution have provided the occasion for reassessing the past and reflecting on the future of Marxism. Moreover, Marx and the *Capital* have re-appeared recently in academic literature (Thomas Piketty's *Capital*) and even in mundane bank analyses. As an example, we could mention two articles of the otherwise “mainstream” economist Patrick Artus published by the Natixis. Artus explained the crisis as well as the future of capitalism through the prism of Marxian economics (Artus, 2010, 2018)²³.
- 14 As we have already mentioned, both Rubin and Orléan developed their theoretical models of money by upholding the existence of the theory of value. And while Rubin adhered strictly to his interpretation of Marx, Orléan was much more radical. He offered his own model of comprehending value where money was of primary importance and was sociologically defined. Let us dwell on Rubin first.

1. Isaak Rubin's solution: dialectics and the theory of fetishism

- 15 LV's difficulties were important for the first-generation Marxists who overcame them in a different way: Luxemburg, Hilferding, Kautsky and Varga among others. From a historical point of view that discussion was important because it was related to the theoretical and practical issues of the place of money in the future socialist economy. The “correct” interpretation of Marx's theory of money and particularly of its

evolution into a regime of paper money was of key importance. The point was whether and to what extent paper money was to be separated from metal - from gold. Of particular interest are the publications in Russian of two collections of works of outstanding Marxist economists such as Otto Bauer, Nikolai Bukharin, Eugen Varga, Rudolf Hilferding, Karl Kautsky, Vladimir Lenin and Rosa Luxemburg (Shmelev & Shtern, 1929). Other Marxists also attempted to interpret and reconstruct Marx's model. They were prompted to do that by the critics of Marx's labour theory of value (e.g. the quantitative and logical discrepancies between value and prices). In this regard Russian economists including Russian Marxists were particularly innovative during the first decades of the 20th century (for a comprehensive survey see Francois Allisson's book *Value and Prices in Russian Economic Thought*, 2015).

- 16 Having realized that the integration of money was extremely important for preserving Marx's model, and that it had not been done in his first (Rubin's) book on value (known to Western readers as *Essays on Marx's Theory of Value*²⁴, Rubin undertook the task to prepare a special work dedicated to the concept of money according to Marx. The result was *Essays on Marx's Theory of Money* (*Essays on Money*, a manuscript published in 2011, but written around 1924).
- 17 The *Essays on Money* represents an interesting reconstruction of Marx's monetary theory. It preserved the spirit of Marx's system and justified it theoretically as a whole. The book consists in eight parts (chapters). First, the author sets forth his views on the relation between the theory of money and the theory of value, on the role of monetary exchange as an initial system category. Then the theory of money is introduced (*i. e.* the systematics of money), as well as the relationship between money and abstract labour (*i. e.* the two types of measuring through labour cost of production, and by prices, *i. e.* in the exchange (circulation)/on the market). This was followed by the analysis of the historical interpretation of money and the difference with the systemic interpretation. In the last three parts Rubin dwelt on the main money functions as a manifestation of the forms of value. He subsequently dwelt on the measure of value, the means of exchange and money as store of value. Money as a store of value made it possible to analyse the capitalist exchange economy, the class differentiation, exploitation, and the chances for a crisis and so on, but the manuscript is incomplete (see the survey in Takenaga, 2017b)²⁵.
- 18 The ideas in Rubin's book on value became the subject of a discussion in the context of the disputes about the character of abstract labour and socially necessary labour which was held on the pages of *Under the Banner of Marxism* journal (two articles were of a particular interest - Rubin, 1924, 1927 - as well as the articles by Sh. Dvolaitskii, B. Livshits, A. Mendelson, A. Voznesensky, V. Motilev, etc.). The main points in Rubin's interpretation of Marx's theory may be reduced to the following:
- 19 First, according to Rubin, the theory of money and the theory of value held an equal and symmetrical place within Marx's system. They were developed in parallel and only when being taken together could they give an idea of the commodity economy and, consequently, capitalist commodity economy. Each of the two theories presupposed the other. According to the author:

The theory of money does not only arise from the theory of value, but inversely, the theory of value cannot be developed without the theory of money and finds its accomplishment only in this theory. [...] Now the close relation between the theory of value and the theory of money becomes clear in Marx's economic system. The relation does not boil down only to what is often set forth namely that the money

theory is developed on the basis of the theory of value, but also to the fact that the latter is accomplished only through the theory of money. (Rubin, 2011, p. 502 p. 513)²⁶

- 20 Hence the objective undertaken by the Russian economist: to establish “to what degree Marx’s theory of value was built on presuppositions of monetary economy” (p. 502), or in other words, how the two theories could be integrated.
- 21 The solution, according to Rubin is simple. It is to be found within the frameworks of the Hegelian dialectics (it was no accident that Rubin was accused of idealism, and was subsequently physically liquidated). There is no contradiction between the world of money and the world of value and the quantitative transitions between the two worlds are redundant (“transformation problem” doesn’t exist). Transitions are dialectical, they are qualitative. The integrating mechanism in that dialectics, linking the theory of value and the theory of money is “the theory of fetishism, or of the transformed forms of value”. Marx’s theory of fetishism according to which relations of production in the commodity economy assume a commodity form and according to which the illusion is created that commodities drive people (not *vice versa*), according to Rubin is an extremely original idea and should be placed in the centre of Marxist analyses.²⁷ It is noteworthy that this theory was highly appreciated by Marx’s critics (for example Struve, 1913/1916, vol. 1, p. 66)²⁸.
- 22 Second, according to Rubin, Marx started his analysis within the realm of universal, developed commodity exchange, with the monetary form of value (which was the fourth step in the analysis of the forms of value whereas the first three forms were analytical stages, the third form was that of the expanded form of value)²⁹. In other words, money was something given, it was presupposed at the beginning of Marx’s system. According to Rubin it was erroneously considered that Marx had begun his analysis with the simple two-commodity form of exchange. That error was due to a way of presenting the system, the starting point of the analysis.

The presuppositions of the monetary economy underlie Marx’s theory of value or more precisely: Marx took as the starting point of his analysis the universal equalization of all commodities to one another, which is characteristic of the monetary economy and is impossible without the mediation of money. [...] As the starting point of his analysis Marx did not take the equalization of one commodity to another commodity, but an equalization of each commodity to all the other commodities existing on the market, *i.e.* all-round equalization of all the commodities. [...] The analysis of the commodity economy should show us that the universal commodity exchange is impossible without the mediation of money. This is the theme developed by Marx in the general theory of money. (Rubin, 2011, p. 502, p. 503 & p. 517)

- 23 Thus, in solving the measuring of the various types of labour (in the process of production), money plays its role through prices on the market (in the process of exchange). In the universal (all-out) form of exchange and at its final stage – the monetary form of exchange, each private commodity producer and each specific type of labour are compared with all the others. That is done through the mediation of the universal equivalent, *i.e.* through money. Rubin did not see “a vicious” logical circle which was mentioned in the introduction (labour/value/↔money/prices)³⁰. On the contrary, that circle was presented as natural, as a manifestation of the dialectics itself, and the two levels of analysis developed in parallel. The link was realised through the active role of the forms of value, of the theory of fetishism (see scheme 1).

- 24 Rubin rejected the substantive and “natural” interpretations of value and money. He considered them to be social relations and functions. To this effect I would like to point out that he was often criticized.

The Rubin School, on the other hand, brings the form of value to the centre of the stage, but at the risk of losing sight of labour as the substance of value. For the Rubin School, the substance of value is not embodied physical labour but abstract labour. However [according to Rubin] the amount of abstract labour embodied in a commodity cannot be defined independently of the exchange of commodities through which private labour is reduced to its common social substance. The only measure of abstract labour is accordingly a monetary evaluation of the products of labour, expressed in their prices. The danger of [Rubin’s] interpretation is that reference to labour as the substance of value is reduced to an empty rhetorical gesture in a theory, which never manages to penetrate the appearances of exchange relations because it obliterates the distinction between value and exchange value. (Clarke, 1989, p. 135).

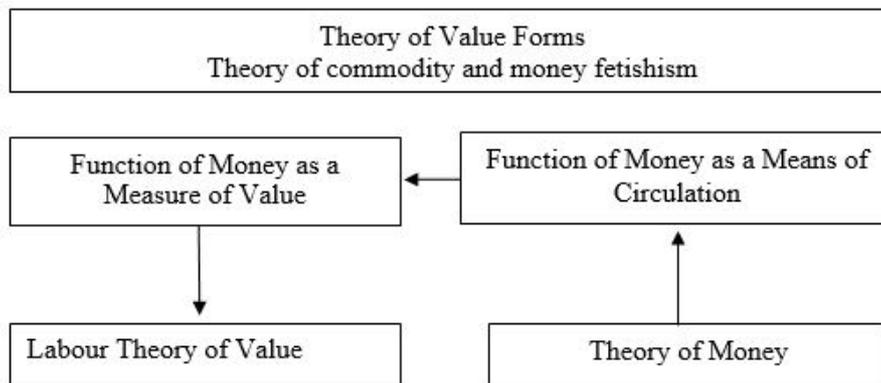
- 25 Back to Rubin’s social interpretation, the fundamental contradiction of commodity economy [consists “in the fact that the private labour of each commodity producer must attain a social character in the dual sense – ‘material-technical’ and ‘formal social’” (Rubin, 2011, p. 519). But according to Rubin, the contradiction between exchange and use value – are overcome through money as a form of value. Within the frameworks of the exchange, that form of value is called “universal, expanded equivalent form of value”. In short, a universal equivalent realizes three equalizations (Rubin referred to a “threefold equalization”) between: (1) commodity producers, (2) between commodities and (3) between different labours (*i. e.* equalization of people, commodities and working conditions) (Rubin, p. 553). In more concrete terms, if we limit to the equalization of labour: “Through a single act of exchange the simultaneous turning will take place of the private, concrete, qualified and individual labour into social, abstract, simple and socially necessary labour” (Rubin, 2011, p. 554-555)³¹.

- 26 Third, Rubin went deeper into the analysis of the universal equivalent, the monetary form of value, by analysing its manifestations, *i. e.* the monetary functions. According to Rubin, they are a manifestation of the relations of production rather than of the productive forces:

Marx’s theory about the functions of money and their role as a means of circulation and his theory about the measure of value, manifests their deeply sociological character in assuming as granted a definite type of relations of production among people as commodity producers. (Rubin, 2011, p. 554-555)

- 27 Of particular importance is the relationship between the functions of money as a “measure of value” and “a means of circulation”. Rubin himself underscored that Marx did not give a direct answer about the correlation between those functions. It must be noted that here, the logical circular trap related to the primary role of one of the two functions has been overcome by Rubin in the same way, *i. e.* through the Hegelian dialectics.³² The two functions are again together and develop in parallel. Essentially the problem of the transition from the theory of money to the theory of value and vice versa has been resolved through the bridge of the theory of the forms of value, namely the theory of fetishism. Within the theory of fetishism, a new problem has emerged, that of switching from the function of a means of exchange to the means of measuring the value and vice versa (see the scheme 1)³³.

Scheme1. Rubin's theoretical model integrating the theory of money



Source: author

- 28 One can see that, through its function as a measure of value (ideal money) it comes closer to the world of value, while the function of exchange (real money) brings it closer to the world of money and prices. As has already been mentioned Rubin offered a dialectical solution. In a nutshell it boils down to the fact that even before entering the exchange, commodities already have definite mental or ideal prices, prices in the minds of commodity producers. Those mental evaluations, or prices are the result of the measure of value function. Rubin points out a quotation by Marx (which was pointed out by Struve as well):

Marx called ridiculous the hypothesis, according to which “commodities entered into the process of circulation without prices”. Those persistent Marx’s instructions were understood in the sense that, since in the process of production a certain amount of socially necessary labour had already been performed therefore the value of the product should be determined not by the market exchange conditions but by the technical conditions characterizing the production process and preceding the act of exchange. Such an understanding, however, narrows Marx’s notion. Marx claimed that there were not only certain technical conditions ready in the process of production, but also a definite social form of production (production meant for sale or commodity production). Therefore, already in the process of production itself the product of labour appeared not only as the result of a definite labour consumption but also as a commodity of a definite social form namely a commodity which had attained a definite evaluation in money. Marx’s theory of the measure of value function performed by money prior to the circulation process became comprehensible as regards his doctrine that “the character of commodities as value is accounted for already in the course of their production”. Therefore, the product of labour obtained a certain evaluation already in the course of its production and entered the process of circulation with a definite price. In order to understand the possibility for such an evaluation of the product of labour prior to the act of exchange we should remember that the process or production was preceded by a process of exchange whose results as definite social properties of commodities or a system of prices of different commodities served in turn as prerequisites of a particular process of production. (Rubin, 2011, p. 573-574)

- 29 It is clear that the process of exchange and money as a means of exchange (medium of exchange) provide the final monetary evaluation, the final prices of the products of labour, which have already become commodities. Based on those prices, in the next act commodity producers would change their mental, ideal, expected prices, etc. (p. 564) Therefore there is a process of a continuous repetition and reproduction³⁴.

30 Fourth, of special interest is the last chapter of the *Essay on Money*, where Rubin discusses the third function of money – “money as a hoard” (we use normally the term “store of value”)³⁵. That function is also a manifestation of the form of value and a part of the theory of fetishism. According to Rubin “money as a hoard” (store of value) interrupts the circulation (separates the *C - M* act from the *M - C* act), and is in conflict with the “means of circulation” function. The new function brings radical changes in the character of commodity economy, that becomes a capitalist economy. Therefore, the logical basis of the existence of the “capital” and the “exploitation of the labour power” categories can emerge. According to Rubin (and Marx) there appeared “professional collectors of hoards” (capitalists). The “hoard” (the accumulated sum of money) appeared to be a potential “social force”, or “readiness for action” (again according to Marx), ready at any moment to join the economic capitalist action. That hoard represented capital which mobilized the special “labour power” commodity which contributed to the earning of profit.

31 According to Rubin the possibility of social differentiation, of sustainable social formations and finally of classes emerges within the frameworks of the hoard function. And while the means of circulation function results in the differentiation of buyers and sellers who continuously switch their places (Marx referred to “transience”), being neither stable, nor fixed or “crystallized” (Marx), things radically change with the hoard function. Social differentiation is stable and continuously self-reproducing. In general, that hoard function is a manifestation of the relation of money with power and power relations.

The conversion of the simple commodity producer into a hoard collector represents the first step on the way from a society of free commodity producers to a capitalist society with its profound differentiation of people boiling down to the class division of society. (Rubin, 2011, p. 615)

32 Fifth, we could mention some ideas of Rubin related to the place of the categories of “equilibrium” and “disequilibrium” in Marx’s theoretical system. We shall limit ourselves again to the *Essays on Money*. One often has the impression that Rubin considered Marx as “an equilibrium economist”. A careful reading, however, shows that Rubin provided two interesting summaries, presenting the dialectics of “equilibrium/disequilibrium” in Marx.

33 The first line refers to Rubin’s claim that the “theory of value” is equilibrium theory in its character (the manifestation of equilibrium being the well-known LV). In turn, “the theory of money” is unbalanced, *i. e.* money causes inequality, disproportions and imbalances (p. 575, p. 576). The second point refers to the monetary functions. There, money as “a means of circulation” is equilibrium function and as “a hoard, an accumulation” it is imbalanced, disequilibrium function (p. 607). In general, money and above all its function of “a hoard, or a means of accumulation” causes the disequilibrium in the economy and boosts its dynamics.

34 I’d like to note here that the equilibrium character of LV was repeatedly underscored by the Russian Marxists during the first years of the Soviet regime. For instance, according to Dvolaitkii “The law of value is manifested in its capacity of a law on equilibrium of the simple commodity economy” (Dvolaitkii, 1922a, p. 101). In his article “On the Setting Forth of the Monetary Problem from the Viewpoint of the Law of Equilibrium”, Livshits wrote: “The law of equilibrium is an eternal law of the

existence of society as a system. Within a definite historical formation this law of the economic (labour) equilibrium assumes the form of a LV” (Livshits, 1924, p. 226).

The compatibility of the labour theory and Marx’s theory of money with the conceptualization of equilibrium and disequilibrium of economic processes was the subject of discussions during the 1920s. Under the influence of the disputes between Struve and Bilimovich (see the part 2 of this study) Marxists also joined it. For instance, in 1924 Livshits set forth the Marxist views on the equivalent and non-equivalent character of money and their functions³⁶.

- 35 Thus, according to Rubin, the commodity economy turns into a dynamic capitalist economy characterized by cycles, crises and social differentiation (social classes and stratifications). Money, according to Rubin, becomes “a universal form of coercion, obedience and subordination” (p. 532, p. 533). Money and its functions make it possible to coordinate the separate economic activities.
- 36 As a summary, it may be noted that Rubin has integrated the “theory of money” and the “theory of value” dialectically through the theory of the forms of value (value-forms) and their final manifestation, the theory of fetishism. The dialectical approach has made it possible to overcome the problem of logical causal links and vicious circles. All categories in Marx’s system evolve simultaneously, dialectically. To sum it up we may use a quote from Rubin: “We are faced with a process of a simultaneous and parallel change in the social nature of people, of commodities and of money” (Rubin, 2011, p. 607).
- 37 One of the dialectical methods of Rubin (and of Marx as well) is to overcome the separation of production and circulation by uniting them in the general category of reproduction.³⁷ Reproduction features a continuous cycle, a series of stages of production and circulation following each other (universal exchange). The emphasis on “reproduction” can be found in the third edition of 1928 (which was actually known to the Western reader).

This uninterruptedness of the process of price formation reflects the uninterruptedness of the process of reproduction. The current process of production repeats the foregoing one. It does not begin without any context, but it has as its own preconditions already the results of the foregoing production, fixed in the form of certain prices. Though social relations connect commodity producers immediately only in the act of market exchange and are interrupted with its cessation, as their result appears a certain social character consolidated behind the products of labour, for example, certain average prices. [...] If in the theory of value we said, that in the immediate process of production a given commodity producer works independently from the other commodity producers (anarchy of commodity production), with whom they are connected only in the process of exchange, this proposition was right, in so far as we spoke of the process of production and of the process of exchange, considered each individually, from an abstract point of view. In reality, however, a given process of production presents itself only as one of the repeated phases of an uninterrupted social process of reproduction, a phase, preceded and followed by an act of exchange. (Rubin, 2011, p. 570-571)

- 38 It is true that Rubin sometimes underscored the exchange (Rubin often placed the exchange before production, society before the individual commodity producers). The central place of exchange, circulation in Marx interpretation, is also one of the original aspects of Rubin’s theory appreciated by the French scholars influenced by Marxism, and above all by Orléan.³⁸ However, it is noteworthy that Rubin was stuck within the frameworks of the Marxist interpretations of value and money (see Sobolev, 2017) and

he also remained in the world of commodity money of Marx (credit money was not dwelt upon). To this effect Orléan made a resolute step forward in the interpretation of Marx's theory of money.

2. André Orléan's solution: sociology and the theory of social authority

- 39 André Orléan is familiar with the approach of Rubin and his interpretation of Marx from the standpoint of the theory of fetishism – which he has read in Rubin's book on value –, whereas he is not familiar with Rubin's *Essays on Marx's Theory of Money*. Orléan has also grasped the limits of Rubin's interpretation. Therefore, as a result of his many years' research in the area of monetary theory (part of which jointly with Aglietta) Orléan offers a fundamentally different approach.³⁹
- 40 Definitive version of Orléan's theoretical system can be found in his book *L'empire de la valeur. Refonder l'économie* (2011). This book features succinctly the author's quests (in most cases jointly with Aglietta) related to the theory of money which started with their book entitled *La violence de la monnaie* (1982), and developed further in their book entitled *La Monnaie entre violence et confiance* published in 2002.⁴⁰ Further on, we shall try to dwell briefly on the main tenets in Orléan's approach to solving the coordination problem of the commodity economy. We shall dwell in particular on his latest book *Empire of Value*, on his article on the sociology of money (Orléan, 2016), his latest article on the place of money in Marx's works (Orléan, 2017) and recently a book chapter where, as a tribute to de Brunhoff, he develops his ideas about the interpretation of the simple commodity production (Orléan, 2018). His interview published in *Revue de la régulation* (Orléan, 2013), and the discussion with the Marxist Jean-Marie Harribey (Harribey, 2011; Orléan, 2011a)⁴¹ are worth to be considered.
- 41 In a nutshell, as I understand it, the logic of Orléan's theory is as follows: first, the starting theoretical point can be reduced to the need of formulating a theoretically adequate coordination mechanism within the frameworks of the commodity economy, an alternative to the LV. Why has Orléan opposed the Law of Value (LV) and what is his fundamental criticism of it?
- 42 First, it must be emphasized that Orléan has reasoned mainly within the frameworks of a commodity economy, focusing on the role of money in the commodity and capitalist economy. It is noteworthy that since his early publications (e.g. Aglietta & Orléan, 1982) Orléan has had the ambition to develop a theory that would explain money and monetary forms in general. However, Orléan progressively confined his work to the analysis of a commodity and capitalist money against the background of a commodity economy set forth by Marx.
- 43 Second, Orléan has not duplicated Marx, but has criticized orthodox marxism and has offered new analytical directions. According to the French economist marxist approaches analysed the commodity economy starting from the differentiation (division) of exchange producers. Orléan has followed the analysis of Rosa Luxemburg (e.g. her *Introduction to Political Economy*). Luxemburg regarded the commodity economy as a "catastrophe", *i. e.* as the destruction of the collective forms of life typical of the primitive communist society. As a consequence, Orléan criticised the LV for denying the conflicting nature of a commodity economy. In his approach, the commodity

economy results in the disintegration of social relations. The LV became the magic wand managing all conflicts and resulting in fair exchanges (for Rubin for instance the LV is a law of the equilibrium of the commodity economy).

- 44 This vision is strongly contested by Orléan. There have always been conflicting positions among exchanging producers, related to the definition of the common equivalent - the unit of account - rather than to prices, for which the conflict would be settled by competition. According to Orléan the option of the common equivalent (money) in Marx is purely a technical one, without the interference of power relations (if we would paraphrase Marx, “money is a crystal spontaneously emerging in exchange”). Orléan considers this to be a mistake since the history of money is a history of social and political struggles – the struggles for defining money.
- 45 It is precisely in the light of those political problems that Orléan has sought an explanation for money. Money has been chosen to manage conflicts by imposing a social definition of the unit of account. Money is the authority coining the definition of value. It is derived from value. Value assumes the form of the money chosen. It is not a substance but a result of social relations referred to as “a money relation”. Value becomes a social relation constructed by money while the latter is an indelible part of commodity relations.
- 46 Third, Orléan’s basic question is the need to solve the problem of coordination. According to Orléan, unlike his achievements regarding coordination in the capitalist economy, Marx did not solve the coordination problem adequately as regards the simple commodity economy. In other words, while the law of profit was elucidated by Marx and had a definite logical consistency the law of value (LV) lacked completeness.⁴² In a nutshell the LV was Marx’s weak point.

My disagreement with Marx is his analysis of commodity relations in volume one, in the chapter entitled “Commodity and Money”. Let’s just say that I do not consider that the solutions (of Marx) correspond to the “paradigm of relations” which among other things Marx developed in analysing employment relations (*salariat*) [...].

My research on money has always been aimed, especially after the *Violence of Money*, at offering a modelling of commodity relations corresponding to Marx’s analysis of employment relations (*salariat*). (Orléan, 2011a, p. 2)

Or:

The struggle of all against all in order to appropriate the value is the result of the separation of producers in isolated and independent centers. Our standpoint is that Marx underestimated that antagonistic reality because he was confined within the political economy of his time, which subordinated money to the law of value. (Orléan, 2017, p. 116)

- 47 The fundamental solution offered by Orléan consists in breaking with the leading theories of value called “substantial” and “instrumental”. This means abandoning the LTV according to which labour is a substance (material or social). In a similar way the theory of utility as a basis of value is rejected. Orléan offers a completely new theory which considers value to be the product of social relations, of social interactions only (*i. e.* it is “a social product” devoid of any substance)⁴³. Orléan refers to “economy of relations” (*l’économie des relations*). Value becomes objectivized in the sense of inter-subjectivity, through the mechanism of money.

The secret of money should not be sought for in any specific substance, such as labour, scarcity (rarity) or utility of the commodity. Though labour, scarcity (rarity)

or utility do play a definite role they also have a definite function in so far as money generates a certain objectivity. (Orléan, 2016, p. 41)

- 48 The process of manifestation of value is the process of selecting a universal equivalent, *i. e.* of money. Money becomes a measure of value and without it there is no value, money and value are one and the same thing. Or:

Paraphrasing Marx, we can write that: Now we know the substance of value: it is money. Now we know the measure of its quantity: it is the amount of money. (Lordon & Orléan, 2007, p. 2)

- 49 Hence, the monetary process that gives rise to value is the coordinating mechanism of the separate commodity producers which involves them in the general economic order. In this sense, the theory of money absorbs the theory of value, it is its equal. Money and value are considered as pure products of social relations, of social links, they are institutions. Money becomes a basic anchor of a commodity producers. According to Orléan:

In the approach offered by me money plays a paramount role. It is the fundamental institution for the commodity order since the economic value reaches its social existence through money only. In other words, money and value are the two sides of one and the same reality. They are inseparable. (Orléan, 2013, p. 6)

- 50 Fourth, how is the selection of money implemented? Which is the mechanism for its emergence within a social community, how is this “*élection monétaire*” accomplished?
- 51 Orléan considered that the linking unit was outside the frameworks of Marxism and could be found in a “*theory of social authority*” which explained the nature of money. Social authority invested in institutions is the fundamental thing. Money is regarded as the collective power, since money is coveted by all. In this quest for social authority Orléan has followed Emile Durkheim, Baruch Spinoza and Marcel Mauss.
- 52 In concrete terms the social authority is regarded against the background of the hypothesis of mimetism developed in the early works of Orléan and Aglietta. That sociological hypothesis has been developed because there are no suitable conceptual frameworks within the economic science which may make it possible to describe the mechanism of the emergence of social authority. Here Orléan (together with Aglietta) offers an original theory called the “*theory of mimetism*”. That theory was initially based on social anthropology and in particular on René Girard and later included elements of the sociology of Emile Durkheim and Georg Simmel. At a later stage some elements of Spinoza’s philosophical approach developed today by Frédéric Lordon were added to Orléan’s theory. What is actually this mimetic mechanism underlying the emergence of social authority?
- 53 The mimetic hypothesis in which the isolated and “atomistic individual” is replaced by “a mimetic imitating individual” refers to a social selection process which results in the differentiation of a definite object polarizing and concentrating the desires of individuals⁴⁴. That object contributes to measuring the individual differentiated activities and to maintaining the social wholeness. The selection mechanism subsequently becomes a mechanism of reproduction and its functioning may be subject to destruction at any time (these moments are the social crises). In the economic sphere, this selected institution is money. It is money that carries out the coordinating role between isolated radically differentiated commodity producers and replaces the LV.

54 Before we explain how this works, we must note that Orléan believes that the mimetic selection mechanism mentioned above is universal, in the sense that it is applicable to different social spheres, where values are selected (religion, morals, politics, etc.).⁴⁵ The French economist therefore mentions the need to develop the “*unidisciplinarité*” of social sciences.⁴⁶ It is no accident that in the first works of Orléan, jointly with Aglietta, money is often compared to different gods, monarchs, etc. (curbing mimetic violence in one’s own sphere), though in his later works Orléan has abandoned that long-term anthropological perspective so as to focus on the functioning of commodity economy. Value and money are regarded as a convention.⁴⁷

55 Fifth, therefore, money is the object selected, it is an embodiment of the universal value and its dimension. The contrast with traditional interpretations (Marxist or neoclassical) is obvious. Money is a basic object which is sought for, and the other commodities or benefits are only a means to that end (in traditional interpretations of money the logic is reversed, money is the means of access to commodities). Jean Pierre Dupuy, one of the leading French philosophers in the field of mimetism and close to Orléan said the following:

To own money means to be able to possess (virtually) everything the others possess and I wish to possess as well and at the same time actually possessing nothing except for a material embodiment without any intrinsic value, the possession of a sign which cannot be owned because it refers us to a transcendentality (that of the team as regards its individual components). The possession of money, this is the pinnacle of the desire (*le comble du désir*) to own, which manifests itself in the form of a denial of this possession. (Speech at the award ceremony for André Orléan, AFEP, 2017)

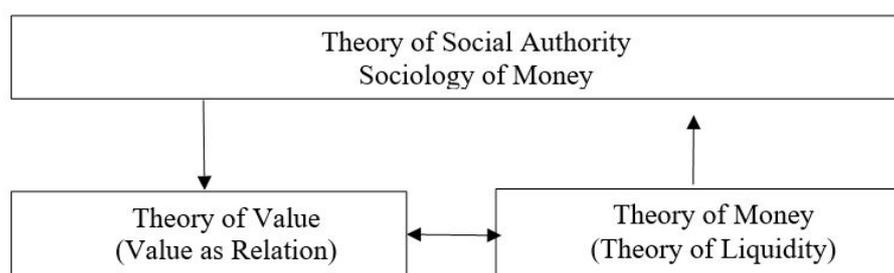
56 On a technical level this common value, money, boils down to the question of liquidity. The main quality of money is liquidity because liquidity designs a capacity, a purchasing power. Here, Orléan is very close to the hypotheses of the emergence of money developed by the Austrian school and by Carl Menger in particular where it was referred to “saleableness/exchangeability” (Orléan, 2011, chap. 4; Orléan, 2013, p. 9). Orléan has mobilized a number of theoretical standpoints developed by René Girard and Thorstein Veblen (the desire), John Maynard Keynes (uncertainty), as well as Georg Simmel, François Simiand and Albert Aftalion. Of particular interest is the use of some concepts of Spinoza’s philosophy (“affect”, “conatus”, “multitudines”...).

57 Finally, in more general terms money and the monetary order assume a leading role as regards market and prices. They become a system-forming institution cementing the commodity economy. The author puts it as follows:

Our thesis is set forth in the following way: the monetary agreement turns the group of exchanging differentiated producers into a collective body, into a commodity community (market society), and this is the result of the very fact of acceptance by all of the same representative of value. This moment is a basic one because it turns money rather than the market into the main, driving (authority) that leads to the emergence of the commodity community. The shared space of evaluation created by the universal equivalent gives rise to the market where the LV is implemented. It can be stressed that the law on the uniform price is valid only for a particular monetary unified economy. But the analysis has to go further and recognise that through money a group of commodity producers as a community as a totality acquires a specific power in the form of a common purchasing power based on the unified community. If we define politics as an activity aimed at managing and capturing power, the power of the group, then the monetary community is established as a political body. (Orléan, 2017 p. 113)

- 58 Here I would like to add the following, regarding the place of the quantitative definition of prices in Orléan's theoretical construction. Actually, the issue of prices has emerged for Orléan only after the concrete definition of the relations of production. Nothing can be said about prices if we remain within the frameworks of a commodity economy. To refer to prices we must be informed of the way production is carried out. For instance, it could be small-sized commodity production (craftsmanship), or capitalist production, or ancient production using slaves, etc. Therefore, the form of prices follows the form of production.
- 59 In lieu of a summary, we may point out that Orléan solves the problem of coordinating heterogeneous commodity producers by replacing LV and abstract labour with the mechanism of monetary institution's emergence. As we have mentioned, money plays the leading role in "discovering" value while the mechanism of selecting money and its subsequent reproduction is of paramount importance for comprehending the commodity economy and subsequently the capitalist commodity economy. This mechanism has been described by Orléan through the theory of mimetism which is a profoundly sociological theory. To this effect "the theory of mimetism" in Orléan is of instrumental importance as a link in integrating money and value similarly to the "fetishism theory" in Rubin's system (see scheme 2).

Scheme 2. Orléan's theoretical model integrating the theory of money



- 60 Source: author

Concluding remarks

- 61 Within the frameworks of the first intermediate summary and before proceeding to the second interpretation of the place of money in the commodity economy (see part 2) we must point out the following.
- 62 Both Rubin and Orléan were aware of the difficulties encountered by Marx in integrating money in the commodity economy, the difficulties of coordination implemented through the law of value. Both of them consider that the contradiction could be overcome by a definite intermediary social mechanism, a theoretical bridge linking value and money. For Rubin this bridge was built by Marx: being placed within the frameworks of Marxism, it was called "the theory of the value forms and fetishism". On the contrary, Orléan considers that the linking unit lies outside the frameworks of Marxism and can be found in "the theory of social authority" which explains the emergence of money. The analytical bridges built by Rubin and Orléan have an "ideal" or rather a behavioural character. The category of value however is of major cognitive

importance for both scholars. Value has what could be called a “labour character” for Rubin and a “money character” for Orléan.

- 63 Orléan’s solution is certainly more radical than that of Rubin, who tried to preserve the labour theory of value. While in Rubin the theory of value and the theory of money develop according to the laws of Hegelian dialectics, that is jointly (whereas the link is the theory of the forms of value, of fetishism), in Orléan the theory of money absorbs the theory of value. As a category, value is preserved, though it is deprived of its “substantive” meaning. While despite all conventionalities Rubin’s approach can be called philosophical, Orléan’s approach can be defined as sociological (in 2013 Orléan published a survey on *Sociology of Money*, Orléan, 2016). We should bear in mind that the main challenge which faced the French institutionalists was to explain theoretically and logically the emergence of money in the various types of societies, market and pre-market ones.⁴⁸

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NOTES

1. According to Marx, the capitalist economy is a developed commodity economy where the specific commodity of labour power is added. The discussion about the logical and historical place of the simple commodity economy within the system of Marx was held in Orléan (2018).
2. The LV reads that the prices of commodities are proportional to the exchange values of commodities while the latter for their part are proportional to the value of commodities or more precisely to the quantity of labour embodied in them". The roots of that equivalence are to be found in production. According to Duménil (2009, 224-229), Marx rather referred to the "law of exchange(s)" than the terms of "labour theory of value (LTV)" and "LV".
3. Recently the Marxist scholar Moseley (2005, 2016) offered a proof of the lack of such a problem. In 2017, the *International Journal of Political Economy* organised a discussion on Moseley's book (Moseley, 2017a, 2017b) and the reaction of Fine, Prado, Mohum and Veneziani. This interesting book has not been considered here, see for more information Fondu (2017). Other

recent important publications with reflexions on Marx's theory of money are Nelson (2012), Harvey (2017), Bellofiore *et al.* (2018) and recent translation of Kuruma's works (2018).

4. Böhm-Bawerk (1949 [1896]), Hilferding (1949 [1919]), Bortkiewicz (1949 [1907]) published with a foreword by Sweezy (1949). Apart from von Böhm-Bawerk and Wicksteed, one of the first criticism of Marx in Russia was that of Frank (1900). Sweezy (1962 [1942]) offered a solution of the transformation problem by placing money before value. See also the classical criticisms of Steedman (1977, 1981), Roemer (1982), Hodgson (1982) and Elster (1985). Summary of all versions of "the transformation problem" are given in Moseley (2016). See also Yoshimura (2018) and in Russian literature Chepureenko (1988) and Melkumyan (1990). An exhaustive survey for that time was presented by Ernest Mandel (1981, p. 9-90) in his introduction of to the third volume of the *Capital*).

5. My former Professor Rimma Zyablyuk (from Moscow State University) set forth systematically the "mainstream" dialectics of Marx's *Capital*, but nevertheless defended the rightful place of use value within the system of relations of production (Zyablyuk, 1989). Within the political economy of Marxism, there were different approaches to the place of money, see for example Kronrod (1960, 1988), Atlas (1969), Shkredov (1973), Anders (1975), Galchinskii (1985), Rozenberg (1984 [1931/1933]), Wiles (1962), Aroyo (1986) and Pevzner (1986).

6. The amount of labour energy that society needs to produce a particular product is called social value, or simply the value of that product (Bogdanov, 2007 [1922], p. 56). See also Bazarov (2014 [1899]).

7. See the survey in Bogomazov (1974), Shuhov and Kalendjyan (1988, p. 178-219), Manevich (1989) and Shuhov (1990, 1991). The discussion came to an end in 1929/1930 after Stalin accused both trends (the "mechanists, energetics" and the "idealists") of being abstract and of having distanced themselves from the real problems of socialism.

8. A synthesis of both variants was provided by A. A. Voznesensky who considered that the two versions were not contradictory, the physiological approach was a continuation of the social one and ensued from the fact that only the physiological approach provided grounds for a quantitative measure (Voznesensky, 1925, p. 119-142).

9. Thus, a paradoxical situation arises - important in life, money becomes insignificant in the economic theory (Poulon, 2016).

10. The problem of money integration in the economic system has long been well-known and different approaches have been proposed above all within the frameworks of the neoclassical system (Hellwig, 1993).

11. Elements of the new monetary approach to value can be found in the pioneer book by Aglietta (1976), developed in (Aglietta & Orléan, 1982). One of the first articles dwelling on that new theory of value is by Michel De Vroey (1981). Without going into detail, we can add also the names of Suzanne de Brunhoff (1971, 1979) and Barnard Schmitt (1975). Recently a tribute to S. de Brunhoff was published (Bellofiore *et al.*, 2018), where leading Marxian economists developed their views on de Brunhoff's monetary theory. See also Rachline (1982).

12. Théret, Servet, Boyer, Gillard, and Lordon among others could be added to Aglietta, Orléan, Cartelier and Benetti. That is the first generation of representatives of that school. Théret's approach to money is more complex than the others (2008, 2009). It will be treated separately.

13. See the bibliography in Alary *et al.* (2016) and recently in de Lourdes Rollenberg Mollo (2018).

14. <https://imf2016.sciencesconf.org/?lang=en> [access on January the 31]

15. Unlike the "real analysis" (Schumpeter's definition).

16. *Essays on Marx's Theory of Value* had three editions - 1923, 1924 and 1928. An important comparative analysis of those versions has been accomplished by Susumu Takenaga (2017a). Recently Orléan (2018) reaffirmed his positions on Rubín. See the important research on Rubín as a historian of economic thought in Boldyrev and Kragh (2015), and documents on Rubín (2012).

17. Struve can be regarded as a Russian economist uniting others, who placed money and prices at the basis of their analyses and who put value in the background. Standing out among those authors was above all Andrei Rykachev (1875-1914) who published in 1910 a pioneer book in Russia entitled *Money and Monetary Power*.
18. That was one of the critical of one of the reviewers who considered that Marx was unnecessary as a basis of the discussion and Struve's relation with Marx is exaggerated.
19. Struve has had many followers which has provided the reason for referring to "Struivism" (Bogomazov, 1974, p. 24).
20. This manuscript was translated in Japanese, Greek, Spanish, German and in late 2017 – in English.
21. Orléan's book was translated into English in 2014.
22. The English translation of Cartelier's main texts came out in a book which unfortunately I could not include in the revised version of this text (Cartelier, 2018a).
23. The contemporary crisis has awakened the interest in Marxism. See Yagi *et al.* (2013), where different aspects of the crisis were analysed by about twenty outstanding representatives of modern Marxism.
24. The third edition out of the total of four editions in 1923, 1926, 1928 and 1929 respectively has served as the basis of translations.
25. Important points of Rubin's *Essay on Money* recently have been stressed by Boldyrev (2012).
26. The translations from Russian and French are made by Masha Benatova and Nikolay Nenovsky.
27. An analysis of the theory of fetishism and the commoditization in Rubin's interpretation of Marx has been made by Voeyikov (2017) and Faccarello (1983, Russian translation in 2017). There are several studies dedicated to fetishism in the French literature including Rubin's theory, *i. e.* Artous (2006).
28. Also, by Semyon Frank (1900) *Theory of Value of Marx and Its Importance. A Critical Study*. Unlike Struve and Frank, Rykachev (1910, p. 148-157) considered that the concept of fetishism was vague, trivial and meaningless and was surprised that it was appreciated by researchers such as them or Tugan-Baranovsky).
29. In the third edition of Rubin it was claimed that the first form included in itself the fourth form (as Takenaga explained). There are definite difficulties in the interpretation of the order of forms be it from a logical or from a historical point of view. Actually, a definite difficulty can be encountered in the transition from the third (expanded) form to the fourth form (the monetary one). In Moseley's recent book (2016) the leading role of the fourth, monetary form of value can also be found.
30. Sheynin (2017, p. 330-333) claimed that Rubin's dialectics is a failure because of the existence of "circle of evidence". The idealistic and dialectical interpretation of Marx developed on a large and original scale in the works of the Soviet philosophers Ilyenkov (2015 [1960]) and Merab Mamardashvili (2011 [1968]). Italian economist Claudio Napoleoni in his chapter on Marx also stressed the philosophical meaning of Marx's Labour theory (Napoleoni, 1973 [1970]). Salama and HaiHac (1992) or Salama (1972, 1975) carried out a synthesized presentation of a social and dialectical interpretation of Marx's theory of value (in the spirit of Rubin). See also Calvez (2006 [1956]), Bedeschi (2001 [1981]) and Knafo (2012).
31. The importance of the equalization process in Rubin's system was stressed by Boldyrev (2012, 148).
32. Takenaga offered a profound analysis of those interactions as well as between production and exchange taken together, as a whole (Takenaga, 2017a, p. 95-106). The role of dialectics, thinking and inverted forms has been illustrated by Mamardashvili (2011 [1968]) – which I consider to be the most interesting presentation of inverted forms in Marx). According to Mamardashvili inverted forms acquire a specific mundanity which determines the structure and movement of

the system. According to him: the inverted form “acquires independent significant importance [...] and plays the role of an independent mechanism in the management of real processes on the surface of the system [...]” (p. 247-249). They are the interaction which is “a special component of the system, they are ready prerequisites, basic reasons of the overall movement of the whole” (p. 250). As regards money Mamardashvili wrote: “The monetary form is inverted commodity form, the inverted form of the self-growth of the sum of money turns out to be internally an ideal form and an incentive of the whole movement” (p. 250).

33. We leave aside the difference between “exchange” and “circulation” in Marx.

34. It seems that Rubin failed to realize that expectations were formed not only on the basis of the past and he frequently interpreted market evaluations as a form of equilibrium among sectors.

35. Though Rubin mentioned the function of money as a “means of payment” he did not analyse it in a specific way which was also the result of its underestimation in Marx where bank, credit money was not appropriately presented (Marx remained in the world of metallic currency). As mentioned, the leading Marxist economists discussed Marx’s monetary theory, and especially the paper currency regime in a voluminous book (Schmelev & Shtern [eds], 1923, 1929).

36. See also the positions of the monetary functions and equilibrium in the popular textbook of Trakhtenberg (1922).

37. Circulation and exchange are not one and the same thing within Marx’s system but here we shall not discuss that peculiarity.

38. Takenaga (2017a) shows, for instance, Rubin’s radicalism decreased in the period between editions of the *Essays on Marx’s Theory of Value*. Thus, in the second edition value was manifested above all on the market, in the exchange, while in the third one exchange increasingly became part of reproduction

39. We have pointed in the introduction some of the elements of the monetary approach to value and to value as a relation were spelled out in Aglietta’s book of 1976. One of the first economists who not only featured Aglietta’s main ideas in English was de Vroey (1981).

40. There is a Russian translation (2006).

41. See also Montalban (2012).

42. As we have already mentioned, the LV is vulnerable as a logical construction. Moreover, according to Orléan LV functioning as well as the formation of abstract labour are only possible in the hypothesis of the existence of a single world (global) economy, of a single world (global) payment community which is a far cry from reality. This statement “takes” Orléan back to 1970s debates about the functioning of the LV in world economy and particularly to discussions between Emmanuel and Amin. In his latest publication Orléan explicitly referred to Emmanuel (1969). See also Nenovsky and Torre (2015).

43. I shall leave aside the discussion about the meaning of substance and Marx’s opinion thereof which includes several versions (according to one of them value as well as labour are a social relation). Jean Marie Harribey wrote the following in a letter: « Je pense que la valeur est un rapport social. Et que chercher une substance intrinsèque de la marchandise avant que le travail a été transformé en travail abstrait par la vente sur le marché est une erreur. [...] Karl Marx a toujours insisté sur le "saut périlleux". Donc ce qui permet de définir la substance sociale, selon moi, c'est la validation par la réalisation monétaire sur le marché. Autrement dit, la valeur de la marchandise est une fraction du travail social, et indique ainsi la place dans la division sociale du travail. Au moment de la validation, la valeur prend nécessairement la forme monnaie, pour grossir le capital ». (Harribey, 2018, personal correspondence).

44. I would like to point out that here, there is another parallel with a Russian economist. In his book *Paper Money and Metal* (1917), Tugan-Baranovsky actually presented the same mimetic mechanism like the one Orléan in explaining the emergence of the paper money value (See Nenovsky, 2018).

45. Chapter 5 of his book (Orléan, 2011, p. 210-260) that was criticized by Harribey (2011), see also Artous (2006).

46. This is essentially an appeal to methodological monism or more precisely – to social monism (in many respects this certainly reminds us in a different respect and scope of the struggle for monism in Bogdanov).

47. By the way Orléan is one of the founders of the specifically French of “Economics of Conventions”.

48. Some works related to this were published in *La Revue du M.A.U.S.S.*, and some were collected in Aglietta and Orléan (eds.) (1998). Noteworthy in this respect is Théret’s approach (2008, 2009). As it has been pointed out Orléan has confined himself to commodity economy and commodity money.

ABSTRACTS

We focus on some original approaches so as to find a solution to the “coordination problem” of the decentralised commodity economy in the different interpretations (and refutations) of Marx, stressing the central role of money. We reconstruct in a comparative perspective the approaches of two contemporary French scholars, Jean Cartelier and André Orléan and of two Russian economists, Isaak Rubin and Peter Struve who worked in the beginning of the last century. Our reconstruction starts with Marx although other approaches are also possible. Each of the four scholars under review offered his own methods of solving the issue of coordination. Although the ideas of the four authors intertwined, we can differentiate between two pairs namely Rubin/Orléan (part 1) and Struve/Cartelier (part 2). This corresponds to the radicality of their analytical solutions. While the former pair upheld the theory of value (each one in his own way), the latter actually eliminated it (again each one in his own way).

Nous présentons des approches originales pour résoudre le « problème de la coordination » de l’économie marchande décentralisée, en soulignant le rôle central de la monnaie comme base de cette coordination. Nous reconstruisons dans une perspective comparative les approches de deux économistes français contemporains, Jean Cartelier et André Orléan (représentants du courant institutionnaliste monétaire français), en les confrontant avec les solutions des économistes russes Isaak Rubin et Peter Struve, qui écrivaient au début du siècle dernier. Chacun des quatre chercheurs a offert ses propres méthodes de résolution de la question de la coordination. Bien que les idées des quatre auteurs soient étroitement liées, nous pouvons distinguer deux couples, à savoir Rubin-Orléan (partie 1/Part 1) et Struve-Cartelier (partie 2/Part 2). Cela correspond à la radicalité de leurs solutions analytiques. Tandis que les premiers auteurs maintiennent la théorie de la valeur (chacun à sa manière), les deuxièmes l’éliminent et la pensent inutile et redondante (à nouveau chacun à sa manière).

Presentamos los enfoques originales para resolver el « problema de la coordinación » de la economía mercantil descentralizada, al resaltar el rol central de la moneda como base de esta coordinación. Reconstruimos en una perspectiva comparativa los enfoques de dos economistas franceses contemporáneos, Jean Cartelier y André Orléan (representantes de la corriente institucionalista monetaria francesa), confrontándolos con las soluciones de los economistas rusos Isaak Rubin y Peter Struve, que escribían a comienzos del siglo pasado. Cada uno de los

cuatro investigadores ha ofrecido sus propios métodos de resolución de la cuestión de la coordinación. Si bien las ideas de los cuatro autores están estrechamente vinculadas, podemos distinguir dos parejas : Rubin-Orléan (parte 1) y Struve-Cartelier (parte 2). Esto corresponde a la radicalidad de sus soluciones analíticas. Mientras que los primeros autores mantienen la teoría del valor (cada uno a su manera), los segundos la eliminan como teoría del valor y piensan que la misma es inútil y redundante (nuevamente, cada uno a su manera).

INDEX

Keywords: French Monetary Institutionalism, theory of money, Karl Marx, Isaak Rubin, Peter Struve, André Orléan, Jean Cartelier

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