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What to learn from the spirit of Gesell today? Keynes, Marx and the fundamentals of money

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ABSTRACT: Keynes did not agree with Marx's theory of money because it impeded the elaboration of monetary reforms to control capital accumulation. In contrast to Marx's ideas, the policy proposals of Gesell, which reach back to Proudhon, indicate that it is possible for society to tame the chaotic forces of money in search of profits to guarantee economic and social prosperity. By interpreting the concept of liquidity preference with help of set theory from mathematics, we indicate that the core of the controversy lies at the question about the structural distinction between goods and money, and that Marx's theory of money is indeed compatible with a monetary reform along the lines proposed by Proudhon, Gesell and Keynes.

KEYWORDS: Keynes; Gesell; Proudhon; Marx; money theory.

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INTRODUCTION

Keynes and Marx belong to a tradition of Political Economy that radically differs from the standard canon that sustained neoliberalism. They were game changers of the world in which they lived and proposed lines of action that have decisively shaped world throughout the 20th century. A promising approximation between Marx and Keynes has been repeatedly mentioned since the 2008 crisis (Parguez and Thabet, 2013), also stimulated by the astonishing ascension of China in the face of the persistence of neoliberalism in the West (Warner, 2015).

There are two main approaches in attempts to relate Keynes to Marx. One emphasizes conciliation between them, while the other focuses on their differences and opposing political positions. Traditionally, the debate has revolved around the question of whether their theories can be merged, and a yes/no answer is highly expected. However, this way of approaching the issue is flawed because it is not a matter of deciding whether their theories are entirely compatible with each other, but of identifying what both, with their differences and similarities, have to teach 21st century economists who have the mission of facing the systemic unfolding crisis.

According to our approach, Marx's and Keynes's theories must relate to each other in the same manner as reform and revolution as systematized by Luxemburg ([1900] 1986). This is because both are engaged in solving real problems of real people, yet in a very contradictory way. Marx focused on criticizing the profound aspects of alienation, which sustain commodity relations of production and thus capitalism. Therefore, he thought that the solution to the economic problems of modernity would require a massive process of politicization. On the other hand, Keynes' attention was directed at fixing the economy to immediately improve the living conditions of the population in general, without delving into the workers' conscientization about the social system in which they lived. While Marx's main message was directed at the masses, Keynes was communicating with people at the top, who were already in charge of extremely important political and economic decisions.

Instead of having to choose one author over the other, it is necessary to combine the strengths of both. To do this, it is essential to recover the creative and in-depth thinking of a still relatively unknown character who has today mostly been associated with the issue of negative interest rates (Ilgmann, 2015; Maclachlan, 2019; Pressman, 2019)[1]: Silvio Gesell.

Almost a century ago, Keynes ([1936] 2012) wrote that

> "the future will learn more from the spirit of Gesell than from that of Marx. The preface to *The Natural Economic Order* will indicate to the reader, if he will refer to it, the moral quality of Gesell. The answer to Marxism is, I think, to be found along the lines of this preface." (p.355)

So, what can we learn from Silvio Gesell today? This paper looks for an answer by arguing that, despite fundamental difficulties for the conciliation between Marx and Keynes, a strategic combination is viable when we focus on money theory and the need to employ economic policy with real impact in the world.

GESELL'S NATURAL ECONOMIC ORDER

Silvio Gesell (1862-1930) was a German businessman who migrated to Argentina in the last quarter of the 19th century. He focused on the problems of the monetary system towards the end of the 1880s due to the international economic crisis. In 1891, he published the first of a series of pamphlets on money entitled "Die Reformation im Münzwesen als Brücke zum sozialen Staat" (The Monetary Reform as a Bridge to the Social State) (Keynes, [1936] 2012, pp.353-354, and Onken, 2000). Gesell continued to think and write about money from the turn of the 19th to the 20th century and his intellectual activity culminated in his masterpiece *Die natürliche Wirtschaftsordnung durch Freiland und Freigeld* (*The Natural Economic Order*), which was published in 1916 in Berlin and Bern (Onken, 2000). According to Keynes, "The purpose of the book as a whole may be described as the establishment of an anti-Marxian socialism" (Keynes, 1936, p.175).

In the book, Gesell ([1916] 1958) asks how money could be used to consciously construct an economic and social system more adequate to human nature. According to him, the way money has been used since the beginnings of civilization is inadequate for promoting all human potentialities. Money is not used exclusively as a means of exchange, but it is also used to fulfill other economic tasks that block all positive potential behind labor division[2]. As a result, the entire economic organization of modern society is harmed due to a sick monetary system, which is incapable of liberating and promoting all the good things that come from increased productivity via specialization.

In the second session of the preface of *The Natural Economic Order*, Gesell ([1920] 1958, p.22) states that the First World War and the outcome of the German Revolution proved his theory right and confirmed

[1] For a broad treatment of the connection between Gesell's and Keynes's philosophies, see Darity (1995) and Dow (2017). For an introduction to Gesell's broad ideas see Preparata and Elliot (2004). The most embracing research developing a systematic relation between Marx and Keynes through Gesell and Proudhon is the one initiated by Dudley Dillard in the 1940s. See Dillard (1940, 1942a, 1942b, 1946, 1948, 1984).

[2] See Yuki (2015) and Yuki (2021) for a detailed presentation of a series of thinkers who also identified the same problem with "real existing money" and became known as the theoreticians of labor vouchers. According to Marx ([1867] 2015, p.109), this way to approach the problem of money reaches back to Aristotle, who coined the term chrematistic to refer to the social damaging potentials of turning money from a means into an end.

the correctness of his proposals for social reform. According to Gesell, the War made it clear that the laissez-faire era was over and that the world had to make a choice: either it adopted the path to communism or the path to what he called "the natural economic order."

The collapse of laissez-faire did not mean that a path had to be taken immediately. Therefore, society was in a provisional stage during the period after the First World War, in a kind of a purgatory where it waited to see if it was going to hell (communism) or heaven (his "natural economic order"). In that stage, the economic system was an indefinite thing, a hybrid where the State accommodated tensions and allowed for the coexistence of the two alternatives. In the aftermath of the First World War the economy had characteristics of common property and the pursuit of equality, but also aspects of "the natural economic order" based on free and independent citizens who were rewarded according to their efforts.

According to Gesell, this situation was unsustainable: "the choice lies between private control and State control of economic life; there is no third possibility" (Gesell, [1920] 1958, p.15). In his view, communism and "the natural economic order" are incompatible, even though both are the outcomes of the collapse of laissez-faire. Gesell's natural economic order is founded on self-interest, on free human effort where privileges and money do not interfere in the "natural selection" of market competition. It is thus different from laissez-faire. Communism, on the other hand, is not based on these values because here self-interest is subordinated to the interest of the collective. Gesell believed that experience had shown human natural impulses of group and species preservation to be weaker than human natural impulses of individual preservation. So, when the division of labor develops and primitive communism comes to an end, it becomes impossible to reestablish it. The complexity of impersonal relations leading to the gigantic market and capitalist civilization make self-interest more relevant than collective well-being.

As the division of labor intensifies and market relations become more dominant, individuals who manage to fulfill their survival tasks with greater efficiency break away from communal economic activity. From the standpoint of natural selection and the subsequent evolutionary process of humans, this would explain how social classes were formed and primitive communism ended. Gesell ([1920] 1958, p.21) states that if the common good were a stronger impulse than self-interest, then the communist economy would have persisted and remained. Gesell thinks that the biology of humans, in association with a large population, leads to a refusal of the communal way of living. The bigger the population, the more complex the division of labor becomes. Consequently, the forces in favor of the common good become more diluted and dispersed, making communism an artificial arrangement. So, Gesell argues that communism is not compatible with human nature. The only way communism could be established in a society with intense division of labor would be through compulsory tasks imposed upon individuals.

As for the system of laissez-faire, Gesell also argues that it is artificial. It is unnatural in the sense that privileges are reproduced through the power of money. Natural selection is not at play here because some individuals manage to subvert the rules of free competition through the sick monetary system. By differentiating egoism from selfishness, Gesell indicates that "wise men soon recognise that their interest is best served by the prosperity of the whole" (Gesell, [1920] 1958, p.11). However, the prevailing circumstances of the laissez-faire system somehow impede this wisdom from becoming general practice. Thus, private property in association with the real existing monetary system is also incompatible with human nature and freedom, similar to communism.

If neither communism nor laissez-faire matches the prerequisites for building a society where humans can truly prosper and thrive, then society needs to find another system. What does Gesell suggest? He proposes a policy program towards "the natural economic order". It is an alternative to both laissez-faire, which failed due to the crisis, privileges and war, and communism, which was only beginning with the Russian Revolution of 1917 but was already doomed to fail according to his point of view.

Gesell's natural economic order is designed to make the social relations of economic reproduction compatible with the natural characteristics of the human species, according to his interpretation of Darwin (1859). Other social thinkers, such as Herbert Spencer, also tried to build upon the latest achievements in biology. However, Gesell differs from them because he does not think that market free competition, as it really exists, corresponds to the competition of natural selection. "Real existing" free markets, in contrast to natural selection, do not select the most capable because of the existence of that sick money. This kind of money allows individuals to utilize artificial means to obtain advantages, leading to a structure of power and privileges that undermine the rules of fair competition. Consequently, real individual effort and contribution to society's wealth are not adequately rewarded.

Logically, when the monetary system is not properly regulated, the laws of biological selection are subverted. In that case, market competition favors those who own property titles, rather than those who possess functional abilities that amplify the probability of the survival of the species. This means that the market system, as it really is, hampers the development of the human qualities that contribute to the protection and improvement of life. When humans are inserted into that kind of society, they can use money as a tool to their individual benefit mostly at the expense of the collective. As a result, individuals without socially useful characteristics rise to the top. When money does not work as it should, the social hierarchy becomes contradictory to the natural hierarchy: unsocial members become the masters and socially-oriented individuals become subordinated.

In the natural economic order, money would be regulated in such a way that the social hierarchy would align with the natural hierarchy. Gesell's ideas are rooted in the ideals of properly combining economic liberty and social equality, so that everyone has fair conditions to participate in the market. It is a system where the distribution pattern truly reflects individual effort, and therefore everything an individual acquires as property must relate to their own capacity. Privileges of inheritance are eliminated: "success in competition must be exclusively determined by inborn characteristics, for only so are the causes of the success transmitted to the offspring and added to the common characteristics of mankind" (Gesell, [1920] 1958), p.9).

So, private property per se is not the real problem. As long as private property is obtained fairly, according to the rules that Gesell considers to be ideal, everything is fine. The problem is that there are key items that are both privatized and scarce. As long as their abundance is guaranteed, the pernicious effects of private property can be avoided. There are two fundamental items in the economy that become private property and can corrode that natural economic order by becoming scarce: land and money. What kind of reforms would avoid scarcity of land and money?

First, land cannot be produced (in contrast to produced goods) and is a fundamental item because it is the starting point of any production process. Without land, real economic activity cannot be initiated. Accordingly, Gesell's economic reform includes an agrarian policy that guarantees access to land. He calls it "free-land", meaning that there is always the opportunity to migrate to the countryside if no employment is available in the cities. According to Gesell, no particular individual, the State, or social group should have any privilege over land, because we are all natives of the earth (Gesell, [1916] 1958, p.89).

Second, in contrast to land, money is not a tangible item of the real economy and so it is not naturally scarce like land. However, given that the economy is based on private property, money becomes a fundamental and limited item so to speak. Real economic activity requires not only land as means of production but also all other inputs of higher order like tools, equipment, buildings and so on to produce things. Since these inputs must be obtained in the market, money is also a necessary item to work the land. When money is scarce, it has the capacity to bring income to its owner like any other capital asset. The difference is that the owner of a tractor can only obtain income from this real asset if the tractor is operating adequately on the land, while the owner of money obtains by force of law the legal income from his financial asset in the form of interest, regardless of what is happening in the production process. This remarkable difference between these two assets (tractor working the land and money) is at the root of the problem.

The paradox here is that money scarcity evaporates as soon as it loses its capacity to be hoarded. So, it appears to be much simpler to eliminate money scarcity than land scarcity. But the fact is that only a combination of free-land and free-money can accomplish Gesell's proposal to reform the entire economic system. When money is free to be an effective means of exchange and accounting, then it is no longer an item of accumulation and a generator of non-labor income. So, if individuals need to work to obtain their incomes, land and tools must be available so everybody is obliged to participate in the real economy, in the productive sector, instead of making a living in the financial world.

But how can one prohibit money hoarding? Gesell's idea was to depreciate money through a stamp system. Blanc (1998) provides an explanation in the following way:

> "every month or every week notes lose a fixed percentage of their nominal value, for example, a weekly rate of 0.1 percent of the nominal value of the notes, [...]. Then, in order to maintain the value of their

notes, people would have to purchase stamps every week at the Post Office. Stamped money means that the authorities impose on money, not prices, a stable, fixed, and announced inflation." (p. 474)

Commodities, such as grain, steel and machines lose value due to natural factors of corrosion. Their properties as use values degrade and so their values also decrease when hoarded. Money, in contrast, does not depreciate due to natural factors, and so the monetary authority must artificially restrain its ability to carry value into the future to prevent finance from dominating the real economy. Once the advantages of holding money become not so great in comparison to other assets, there emerges a more equilibrated relation between ordinary goods and money, and so market agents become more inclined to invest their wealth in productive projects.

In sum, Gesell's reform is the combination of an agrarian reform (free-land) and a monetary reform (free-money). These two reforms work like a bridge to an economic system not only different from communism but one which repels its fundamental flag of abolition of private property. Gesell, repelling both communist ideals as best represented in Marx's doctrine and the old liberal ideas from before First World War, argues that the economic and social system arising out of such reform would be coherent to the biology of human beings and thus the only adequate way forward.

FROM STAMPED-MONEY TO LIQUIDITY PREFERENCE THEORY

Keynes's money theory is not an alternative to Gesell's theory, but a further development of it with an important improvement and a much more pragmatic view of how the world works[3].

Keynes attests that Gesell's stamped money is in the right direction: "The idea behind stamped money is sound" (Keynes, [1936] 2012, p.357). However, the effectiveness and practical implementation of it are not guaranteed, because "the notion of liquidity-preference had escaped him. He has constructed only half a theory of the rate of interest" (Keynes, [1936] 2012, p.356). Gesell's work gives the impression that money alone has that special characteristic or privilege, but in fact, as Keynes demonstrated more clearly, any asset has some degree of liquidity.

> "In particular, he [Gesell] was unaware that money was not unique in having a liquidity-premium attached to it, but differed only in degree from many other articles, deriving its importance from having a *greater* liquidity-premium than any other article. Thus, if currency notes were to be deprived of their liquidity-premium by the stamping system, a long series of substitutes would step into their shoes – bank-money, debts at call, foreign money, jewellery and the precious metals generally, and so forth." (Keynes, [1936] 2012, pp. 357-358)

It is important to recognize that Gesell was aware of the "substitutes stepping into the currency notes's shoes problem" and that Keynes is perhaps over exaggerating what his innovation might really be (Anwar, 2020, and Barba, 2023). According to our approach, we must consider this as the starting point of an intricate controversy regarding the nature of money, and Gesell's explanation of stamped money should be primarily seen as a didactical explanation of his monetary reform. The comparison between assets and their distinct degrees of liquidity is a fundamental aspect for understanding that the wish to impede the financial sphere from dominating the real economy is realizable.

At this first step of elucidation we can think of a set containing only two elements: money and, in contrast to it, goods. In other words, there are only two contrasting forms of allocating wealth: one which is

[3] Keynes himself in the *General Theory* presented this improvement as a correction of Gesell's theory, as if Gesell had entirely missed the notion of liquidity preference. However, a careful reading of Gesell's work, as done by Anwar (2020) and Barba (2023), shows that Gesell had a solid notion of liquidity preference, using the expression basic interest to develop the idea of contradiction between "a good medium of exchange which preserves Say's law and a good store of value which invalidates it" (Anwar, 2020, p.41).

liquid (money) and the other which is not-liquid (goods). If we call this set P, from portfolio, we can visualize that in its simplest form there are only two options or two classes of assets:

Step 1: discrete set containing two elements

P = {money, goods}

Now, if we consider Keynes's warning, it becomes evident that a more realistic way to conceive the referred set P is to admit that there is a definite number of different elements that can be ordered according to their level of liquidity:

Step 2: discrete set containing an indefinite number of elements

P = {currency notes, bank-money, debts at call, foreign money, jewellery, precious metals, etc.}

So, in reality there is a long list of assets that benefit unjustly from their "moneyness". In terms of acquisition options, all kinds of financial (and non-financial) assets are alternatives to goods and so stamping paper money would not be enough to direct all wealth to production. Moreover, it would not solve the problem of balance among the volumes of consumption, investment and saving of society, meaning it could become inflationary. Therefore, Keynes argued for both Monetary and Fiscal Policies as different tools to tackle the same problem. Financial asset taxation and inflation play the same role as stamped money. However, depending on how they are designed and executed, they reach all assets adequately, and not only paper money.

In that sense, we can imagine Gesell's proposal expanded by Keynes as if each asset received its individual stamp reflecting its particular degree of liquidity. Accordingly, no asset is able to have a purely financial advantage over another. Keynes's main contribution here is to remember that all assets have some degree of liquidity, so that the proposed control would extend over all of them according to that degree. Instead of stamping paper money, the most liquid asset of all, the monetary authority would have to impose a tax on all types of assets depending on their degree of liquidity, i.e. depending on their "moneyness". This means that each asset should have a unique stamp, indicating that it is necessary to define its position in the long series of assets ordered according to their liquidity. In that sense, in line with Dow (2017), Keynes's monetary reform is more comprehensive than Gesell's: it explicitly acknowledges the variety of assets that can substitute money and it includes a series of other State actions to tackle this problem.

Keynes was courageous in pointing out that economists needed to acknowledge that Gesell had correctly identified that money tends to pull wealth away from the real economy and towards the financial sector. After all, Gesell's name is closely associated with authors and thinkers known as "money cranks": visionaries and proponents of money reform that do not enjoy respectability among academics and the status quo of finance theory[4]. By expanding on Gesell's insights and developing a more comprehensive framework that included his own theory of liquidity preference, Keynes brought to attention a radical idea that differed fundamentally from the Marxist line of changing society and its economy.

In fact, regarding the concept of money and its role, both Gesell and Keynes independently arrived at similar conclusions that reach back to Pierre-Joseph Proudhon (1809-1865), a pioneer of structural economic reforms and the most significant opponent of Marx on this topic. Proudhon, Gesell and Keynes all share the understanding that money should become less powerful and be reduced to the level of all other ordinary goods. Although they have different ideas about the necessary institutions to bring about such a transformation of money, they agree on the fundamental idea that the distinction between money and goods is at the root of the problem. Marx also recognizes this critical point, however he is extremely suspicious about the monetary reforms deriving from this knowledge. His negative view on the issue derives from his theory of the commodity: a theory that problematizes not only the tendency towards unproductive financialization, but also the apparently beneficial side of capitalist productive activity.

[4] An insightful distinction between what is the work of "cranks" and what of the "brave heretics" on monetary reform based on Marx and Engels's concept of Utopianism has been put forward by North (2016).

IS THIS MONETARY REFORM COMPATIBLE WITH MARX'S THEORY?

As explained, Proudhon, Gesell and Keynes share the idea of monetary reform where money would become less special compared to ordinary goods. Marx, on the other hand, is extremely skeptical about the possibilities of such reform because he has a different concept of the relationship between goods and money. For him, these two things are intertwined in a complex way related to his unique theory of the commodity. Marx criticized all proposals for monetary reform under the influence of Proudhon because they do not lead to the abolition of private property or commodity production and its fetishism that enables capital exploitation.

The problem is not that Marx thinks it is impossible to maintain the economy operating with markets without it evolving into capitalism. Marx's issue is that his program includes the elimination not only of rentier-capitalism, that is, unproductive capital, but of capitalism per se, including productive capitalist social relations. More fundamentally, Marx argues that markets and the commodity form of the output must at some point be completely surpassed.

When we analyze Marx's notion of money presented in *Capital* and in preparatory works, we notice that he makes a similar distinction as previously indicated by Proudhon, Gesell and Keynes: money distinguishes itself from all other goods. It is the general equivalent. At the same time, there is no formal impediment for another good (rather than gold, for example, which historically took this place) to assume this special function among all commodities. So, money and ordinary goods are at the same time equal and unequal, according to Marx's dialectics. Curiously he does not seem to accept the possibility of transforming the powerful entity of money into something as weak as any other ordinary good, which is at the basis of the monetary reform of Proudhon, Gesell and Keynes.

At first sight, from a purely logical perspective, the equality between money and other goods seems reasonable. It is as if no particular good (not even gold) was capable of becoming the general equivalent, and so all properties inherent to money would be perfectly distributed among all goods. However, Marx rejects such a line of thought because he posits a separation between commodities and money that cannot be overcome in a market economy. According to Marx, all schemes of monetary reform in the line of Proudhon/Gesell/Keynes must be classified as "petit-bourgeois socialism, which, while perpetuating the production of commodities, aims at abolishing the antagonism between money and commodities, and consequently, since money exists only by virtue of this antagonism, at abolishing money itself" and that this attempt is like trying "to retain Catholicism without the Pope" (Marx, ([1867] 2015), p.64, ft. 4, Chapter 2 of *Capital* Book 1)[5].

If we proceed with the mathematical notation of set theory, we see that the next logical step is to conceive a set P containing not simply an infinite number of different assets, each having its unique and determined degree of liquidity, but in fact a continuum containing infinite points between any two defined elements:

Step 3: continuous set of unnamed assets

$P = \{0, \infty\}$

Having this three-step notation as a facilitating tool for discussion, we see that Marx's main concern is with the conceptual distinction between what is considered money and what is considered not-money. Accordingly, Marx traces a distinction between these two states of things by developing a very broad notion of commodity. For Marx, the economic output acquires new characteristics as it becomes more and more

[5] See also Marx's direct answer to Proudhon (Marx, [1847] 2009) and his critique (Marx, [1891] 1973) of the broad socialist program in the second half of the 19th century. Marx distinguishes two main forms of how money can be used. The first one is described as C - M - C (commodity - money - commodity), where money is used as a means for allowing exchange and thus the total amount of value remains the same. The second one is described as M - C - M' (money - commodity - more money), where money is used to become more money. This second way of using money is behind Marx's notion of capital. In Marx's view, it seems that there would be no way to impede the circuit C - M - C from becoming M - C - M' in its most financialized and unproductive form, interest-bearing-capital (M-M'). Proudhon, Gesell and Keynes think otherwise and envision economic policies to impede commodity circulation from being captured by the endless rentier capital movement. A parallel distinction between these two ways of using money is made by Keynes (1933b) with the concepts of Co-operative Economy and Entrepreneur Economy. See also Keynes (1933a).

involved in the development process of a capitalist economy. At first, it is merely a use value. Then, by systematizing the logics and historicity of goods exchange among different communities, Marx shows that economic output becomes commodified: it is produced with the intention of being brought to the market. Among all economic output in the market, one stands out as an extraordinary item, receiving thus a special name: money. So, in Marx's theory, there is a transformation connecting the concrete economic output to the abstract notion of economic wealth called money, where the commodity is an intermediate point.

The nature of division between commodity and money in Marx must be seen dialectically: assets with higher degrees of liquidity are "more money" than assets with lower degrees of liquidity. This means, first, that everything is money to some extent. Second, it means that the qualitative distinction between what is money ("more moneyness') and commodity ("less moneyness") is based on a quantitative dimension separating any two specific assets. As long as this quantitative dimension is large enough, it is possible to sustain that they are also qualitatively different. However, if the quantitative distance between these two specific assets is too short, it is possible to conceive them as qualitatively equal.

Marx's argument is that all assets are essentially the same thing. A thing he considers of the utmost relevance for analyzing the specific socio historical form of the capitalism mode of production. For him, this thing is the cell-form of capitalism, and he calls it "commodity". Within this framework, under capitalism, absolutely everything is "commodity" and that one with the highest degree of liquidity is called money. In that sense, money and commodities (or goods, as it is usually referred to commodities by economists who do not problematize the historical specificity of market relations) differ only due to their different degrees of liquidity[6].

This is not entirely different from what we have learned from Gesell, Keynes and Proudhon. Perhaps one distinguishing element is Marx's tendency to repudiate all attempts to break the continuum between any two assets. In his view, artificially bringing all of them to the same status will not avoid "money" from always emerging in the pores of the system. If we compare Step 2 (discrete set containing an indefinite number of elements) with Step 3 (continuous set of unnamed assets) we notice that there are both similarities and differences among them. For example, a discrete set may have an infinite number of elements, just like a continuous set. But the nature of the gap between each two elements is very different. In the discrete set, the elements are separated from each other by clear gaps, and there are no values in between. In the continuous set, the gaps form a continuous range and so there is no break in the sequence.

According to the reading here proposed, this continuous nature of the liquidity line demonstrates how the "substitutes stepping into the currency notes's shoes problem" is much more serious than it seemed at first sight and that there may be no way to end the antagonism between money and commodities. More precisely, Marx's approach to the problem highlights that bringing all assets to the same status in terms of liquidity advantage does not change the nature of the entire system since each basic unit (call it an asset, a good or a commodity) remains being what Marx calls "the economic cell-form" of bourgeois society (Marx, [1867] 2015, p.6).

What is somewhat disturbing is that we cannot find in Marx an absolute theoretical negation of the monetary reforms in the sense that they are impossible to be implemented. All we can assert is that in Marx's view, the monetary reform bringing all assets to equality in terms of financial advantage will not modify the fundamentals of commodity production, which is really under his attack. So, he sees all these reform proposals with high skepticism since they are not only too ambiguous regarding communism, but in fact in sharp opposition to it[7]. It is not that these monetary reforms are theoretically impossible or practically unfeasible, but that their outcome does not surpass the general nature of the system, which is still based on

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[6] Keynes has come to the essentially same conclusion after analyzing the essential properties of interest and money, in Chapter 17 of *The General Theory* by writing that "it may be worth emphasising what has been already stated above, namely, that 'liquidity' and 'carrying-costs' are both a matter of degree; and that it is only in having the former high relatively to the latter that the peculiarity of 'money' consists" (Keynes, [1936] 2012, p.239).

[7] The subtleties distinguishing socialism from communism or still, non-Marxian from Marxian-socialism are very intricate to be dealt with here. For an introduction, see Engels ([1880] 1970), Leopold (2005) and Paden (2002). For our purposes in this work it suffices to say that Marx wants to abolish the commodity form of economic reproduction, and that Proudhon, Gesell and Keynes believe it is possible to eliminate the negative aspects of capitalism without necessarily erasing market relations of production.

the contradiction between use-value and value within the commodity form of the economic output of social labor.

Marx does not believe the task is to control or regulate capitalism, but to abolish it. In the Marxian framework, the transformation of commodity into money is a force that cannot be canceled by any kind of economic policy. There is a flow of transformation from goods into more complex forms, such as the commodity, money and finally, capital, which is unstoppable according to Marx's theory. The urge for abstract wealth is like a river flowing down the hill: if blockades are constructed, it circumvents them.

In our opinion, however, Marx seems to be excessively pessimistic here, because there really is a way of making the river flow in the way we need without having to abolish the laws of gravity and geology. It is a matter of engineering. Similarly, the "animal spirits" of which Keynes talks about can be tamed and directed towards the production of what appears, at least at first sight, to be totally harmless, socially useful goods. Capitalism can certainly be macroeconomically managed. However, the contradictions and certain "invisible problems" continue to accumulate, especially as massive mental health issues among the population due to alienation (Matthews, 2019); Eisenberg-Guyot and Prins, 2022). This is the crux of the problem[8].

There is still another point on the negative opinion of Marxists towards the framework of Proudhon, Gesell and Keynes, which is a little more complicated because it requires a more consistent reflection on the theory of value. Marx employs a labor theory of value that grew out of Physiocracy and Smithian Political Economy. This perspective departs from the principle of the exchange of equivalents and is very resistant to the relativistic idea that each economic agent has an individual evaluation of the price of a traded item. Proudhon, Gesell and Keynes are much more open to that individualistic, subjectivist approach to value than Marx. Marx's appropriation of Classical Political Economy and his analysis of the duplicity of the exchange of equivalents and non-equivalents is complex. For our purposes, it is enough to note that there is an important divergence here between Marx on one side and Proudhon, Gesell and Keynes on the other[9].

In the physiocratic tradition, the objectivist approach to value and the notion of equilibrium are so intense that there is almost no room for conceiving the surplus as a derivative of individual evaluations about the future. The mercantilist tradition, on the other hand, explains the augmentation of value based on that discrepancy of prices and expectations. So, while Marx is bound to think in terms of materiality, where the surplus is the result of a real production process that has already occurred in the definitive past, Proudhon, Gesell and Keynes are more flexible and can think in terms of individual subjective evaluation directed to the uncertain future.

The psychological aspect involved in determining the interest rate is something alien to the physiocratic, materialist way of doing economics. Logically, Marx's system does not consider the possibility of a monetary reform that would influence the trust and expectations of agents. Keynes believed that the State is capable of manipulating these sentiments, and that this capacity, if wisely used, will avoid the negative effects of capitalism (Proudhon and Gesell have a more anarchist approach to this point). Marxian economics has much to learn here by leaving the dogmatic approach that turns Marx's system into a plain materialist and deterministic scheme. Still, we must recognize that a competent and creative interpretation of Marx's work does not exclude the strategy of using the State to achieve political goals. In fact, this is really what an organized political party would do if it followed Marx's doctrine coherently. Control over the State and its channels of economic policy is key to transforming the economic system.

So we see that there are convergences between Marx and these three monetary reformists, but the divergences are also significant, especially regarding the methodological approach to the problem of value. However, if the pragmatic wisdom of the mercantilists (expressed in the subjectivist approach to value) and, above all, the importance of practical macroeconomic management can somehow be incorporated to the Marxist edifice, then perhaps it would be possible to think about a consistent monetary reform along the

[8] Keynes surely was aware of this problem, as Spencer (2023) explains when commenting on the challenges posed by reducing working time, but he was too optimistic about the future on this point.

[9] For an exploratory approach trying to identify the foundations of a value theory behind the concept of monetary theory of production, see Wray (1992) and Wray (1999).

lines of Marx's Critique of Political Economy[10]. This shows that the connection between Marx and Keynes, although limited as expressed by Dillard (1942a and 1984), is still promising, especially when we focus on the specifics of the money theory and leave aside major philosophical and political ideas.

Finally, is the monetary reform of the kind Proudhon-Gesell-Keynes compatible with Marx's theory? While the literature tends to answer in the negative, we affirm that yes, it is compatible, as long as we do not stick to an orthodox reading of Marx. Monetary reforms contribute to changes in the reality of capitalism, and together with a consistent political movement anchored in the organization of the working class, they cannot be excluded a priori by Marxian economists. Even if the reformed system may not be labeled a non-capitalist economy in the Marxian vocabulary, it is one in which all working people can work, rest and obtain a decent income, which is already a great step forward considering the humanitarian tragedy of the current crisis.

FINAL REMARKS

So, what is there to learn from the spirit of Gesell today? That the possibilities of monetary reform are more promising for transforming the world than a dogmatic Marxist-Leninist approach which disregarded fundamental insights into the nature of money.

Gesell's insight into money was decisive for conceiving a monetary reform that has been conceptually expanded by Keynes. This approach to money means that a structural change in the economic system is possible via the State, and that political turmoil can be avoided at the same time as social progress is achieved. However, to extract the most out of Gesell, it is necessary to revisit the debate between Marx and Proudhon. The correct merging of the positive ideas of Marx and Keynes will only be possible if there is a deeper understanding about that complex controversy.

We pointed out that the core of the debate is related to how we differentiate assets according to their liquidity degree. As a communicating tool to transverse the idiosyncrasies of the vocabulary employed by four thinkers who experienced the reality of capitalism in different contexts (Proudhon, Marx, Gesell and Keynes), we used the mathematical notion of set theory to develop the idea of continuity and discontinuity of the liquidity line.

We conclude that what Keynes really opposed was not Marx as a curious and inventive thinker but the economic and political regime that represented his ideas in the reality of that time: the Soviet Union. In that sense, as long as we adopt an undogmatic approach to Marx's work, there emerges a concrete possibility for social change that does not have to undergo all negative aspects of a revolution. In Keynes's view another system is achievable (something Marx highly emphasized) through means indicated by Gesell and other non-Marxian social reformers. This means that the combination of the theories of Marx and Keynes can indeed bear fruits despite their disparities, as the current development in China demonstrates.

REFERENCES

Albritton, R. and Westra, R. (2022), *A Japanese Approach to Stages of Capitalist Development: What Comes Next?*, 2nd ed., Palgrave Macmillan, London.

Anwar, A. (2020), "From Keynes' Liquidity Preference to Gesell's Basic Interest", Edinburgh School of Economics Discussion Paper Series No. 299. Available at: https://www.ed.ac.uk/files/atoms/files/from_keynes_liquidity_preference_to_gesells_basic_interest.pdf

Barba, A. (2023), "Gesell's half a theory of the rate of interest", *The European Journal of the History of Economic Thought*, Vol. 30 No. 4, pp.525-555.

Blanc, J. (1998), "Free Money for Social Progress: theory and practice of Gesell's accelerated money", *The American Journal of Economics and Sociology*, Vol. 57 No. 4, pp.469-483. Available at: http://www.jstor.org/stable/3487118

[10] For a selection of works in that direction based on the Japanese School of Kozo Uno and Makoto Itoh see Albritton and Westra (2022), Yuki (2024) and Shibasaki and Ehara (2024).

Darity Jr., W. (1995), "Keynes' Political Philosophy: the Gesell connection", *Eastern Economic Journal*, Vol. 21 No. 1, pp.27-41.

Darwin, C. (1859), On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life, 1st ed., John Murray, London.

Dillard, D. D. (1940), "Proudhon, Gesell and Keynes: an investigation of some 'Anti-Marxian socialist' antecedents of Keynes' general theory of employment, interest and money", (Diss. Univ. of California), reproduced (1997) by Roemheld, L. (Ed.), Angela Hackbarth Verlag, St. Georgen, Germany.

Dillard, D. (1942a), "Keynes and Proudhon", *The Journal of Economic History*, Vol. 2 No.1, pp.63-76.

Dillard, D. D. (1942b), "Silvio Gesell's Monetary Theory of Social Reform", *American Economic Review*, Vol. 32 No. 2, pp.348-352.

Dillard, D. D. (1946), "The Pragmatic Basis of Keynes's Political Economy", *The Journal of Economic History*, Vol. 6 No. 2, pp.121-152.

Dillard, D. D. (1948), The Economics of John Maynard Keynes: the theory of a monetary economy, Crosby Lockwood, London.

Dillard, D. (1984), "Keynes and Marx: a centennial appraisal", *Journal of Post Keynesian Economics*, Vol. 6 No. 3, pp.421-432.

Dow, S. (2017), "Keynes and Gesell: political and social philosophy, epistemology and monetary reform", *Annals of the Fondazione Luigi Einaidi*, Vol. LI, June 2017, pp.77-92.

Eisenberg-Guyot, J. and Prins, S. J. (2022), "The impact of capitalism on mental health: an epidemiological perspective", in Bhugra, D. *et al*. (Ed.s), *Oxford Textbook of Social Psychiatry*, Oxford Textbooks in Psychiatry, available online edn, Oxford Academic, 1 August 2022.

Engels, F. ([1880] 2003), "Socialism: Utopian and Scientific", Marx/Engels Internet Archive. Available at: https://www.marxists.org/archive/marx/works/1880/soc-utop/index.htm

Gesell, S. ([1916] 1958), *The Natural Economic Order*, Peter Owen Ltd, translated from German into English by Philip Pye M.A., London. Available at: https://www.silvio-gesell.de/the-natural-economic-order.html.

Gesell, S. ([1920] 1958), "Preface" in Gesell, S. ([1916] 1958), *The Natural Economic Order*, Peter Owen Ltd, translated from German into English by Philip Pye M.A., London. Available at: https://www.silvio-gesell.de/the-natural-economic-order.html

Graeber, D. and Wengrow, D. (2021), *The Dawn of Everything: a New History of Humanity*, Farrar, Straus and Giroux, New York.

Ilgmann, C. (2015), "Silvio Gesell: 'a strange, unduly neglected' monetary theorist", *Journal of Post Keynesian Economics*, Vol. 38 No. 4, pp.532-564.

Keynes, J. M. [1933a], "A Monetary Theory of Production", in *The Collected Writings of John Maynard Keynes*, Vol. XIII, pp.408-411.

Keynes, J. M. ([1933b] 1973), "The Distinction Between a Co-operative Economy and an Entrepreneur Economy", in *The Collected Writings of John Maynard Keynes*, Macmillan for the Royal Economic Society, London and Basingstoke, Vol. XXIX, pp.76-87.

Keynes, J. M. ([1936] 2012), *The General Theory of Employment, Interest and Money*, The Collected Writings of John Maynard Keynes, Vol. 7, Cambridge University Press, Cambridge.

Leopold, D. (2005), "The structure of Marx and Engels's considered account of utopian socialism", *History of Political Thought*, Vol. 26 No. 3, pp.443-466.

Luxemburg, R. ([1900] 1986), *Reform or Revolution*, Militant Publications, London. Available at: http://www.marxists.org/archive/luxemburg/1900/reform-revolution/index.htm

Maclachlan, F. (2019), "Negative interest rates: a Keynesian perspective", *Review of Keynesian Economics*, Vol. 7 No. 2, pp.171-184.

Marx, K. ([1847] 2009, *The Poverty of Philosophy*. Available at: https://www.marxists.org/archive/marx/works/1847/poverty-philosophy/

Marx, K. ([1867] 2015), *Capital. A Critique of Political Economy*. Book One: Process of Production of Capital. Progress Publishers, Moscow, USSR. Available at: https://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf

Marx, K. ([1891] 1973), *Kritik des Gothaer Programms. Marx-Engels-Werke* (MEW 19,4), Dietz Verlag, Berlin. Available at: https://www.marxists.org/deutsch/archiv/marx-engels/1875/kritik/

Matthews, D. (2019), "Capitalism and Mental Health", *Monthly Review*. Available at: https://monthlyreview.org/2019/01/01/capitalism--and-mental-health/

North, P. (2016), "Money reform and the Eurozone crisis: panacea, utopia or grassroots alternative?", *Cambridge Journal of Economics,* Vol. 40 No. 5, pp.1439-1453.

Onken, W. (2000), "The Political Economy of Silvio Gesell: aa Century of Activism", *The American Journal of Economics and Sociology*, Vol. 59, No. 4, pp.609-622.

Paden, R. (2002), "Marx's Critique of the Utopian Socialists", *Utopian Studies*, Vol. 13 No. 2), pp.67-91.

Parguez, A. and Thabet, S. (2013), "The Twenty-First Century World Crisis: a Keynes Moment? A True Systemic Crisis Fitting Keynes's Prophecy", *International Journal of Political Economy*, Vol. 42, No. 1, pp. 26-39.

Preparata, G. (2002), "On the art of innuendo: J. M. Keynes' plagiarism of Silvio Gesell's monetary economics", in Zarembka, P. (Ed.), *Confronting 9-11, Ideologies of Race, and Eminent Economists* (Research in Political Economy, Vol. 20), Emerald Group Publishing Limited, Bingley, pp.217-253. doi: 10.1016/S0161-7230(02)20007-3.

Preparata, G. and Elliot, J. E. (2004), "Free- economics: The vision of reformer Silvio Gesell", *International Journal of Social Economics*, Vol. 31 No. 10, pp.923-954.

Pressman, S. (2019), "How low can we go? The limits of monetary policy", *Review of Keynesian Economics*, Vol. 7 No. 2), pp.137-150.

Proudhon, J. P. ([1847] 1888), *System of Economical Contradictions or The Philosophy of Misery*. Benjamin R. Tucker, Boston, 1888. Available at: http://socserv2.socsci.mcmaster.ca/~econ/ugcm/3ll3/proudhon/misery.htm

Shibasaki, S. and Ehara, K. (2022), "What is commercial capital? Japanese contributions to Marxian market theory", *Capital and Class*, Vol. 46 No. 2, pp.235-256. doi: 10.1177/03098168211029005.

Spencer, D. A. (2023), "Marx, Keynes and the future of working time," *Cambridge Journal of Economics*, bead046. doi: 10.1093/cje/bead046.

Warner, M. (2015), "Keynes and China: 'Keynesianism with Chinese characteristics'", *Asia Pacific Business Review*, Vol. 21 No. 2, pp.251-263.

Wray, R. L. (1992), "Alternative theories of the rate of interest", *Cambridge Journal of Economics*, Vol. 16, issue 1, March, pp.69-89.

Wray, R. L. (1999), "Theories of Value and The Monetary Theory of Production", working paper No. 261, Levy Economics Institute. Available at: https://www.levyinstitute.org/publications/theories-of-value-and-the-monetary-theory-of-production

Yuki, T. (2015), "Reconsiderando a crítica de Gesell sobre a teoria do capital de Marx", *Revista da Sociedade Brasileira de Economia Política*, No. 40. Available at: http://revista.sep.org.br/index.php/SEP/article/view/135

Yuki, T. (2021), Socialism, Markets and the Critique of Money: The Theory of "Labor Notes", Palgrave Macmillan, Cham, Switzerland.

Yuki, T. (2024), "Unoist contributions to the triangular debate on money theory in Japan", *The Japanese Political Economy*, Vol. 50 No. 1), pp.25-46. doi: 10.1080/2329194X.2024.2341642

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The authors have no conflicts of interest to declare.

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AUTHORS' CONTRIBUTION

Tiago Camarinha Lopes: Conceptualization; Data curation; Formal analysis; funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Writing – original draft; Writing – proofreading, and editing.

Everton Sotto Tibirica Rosa: Conceptualization; Data curation; Formal analysis; funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Writing – original draft; Writing – proofreading, and editing.