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Commentary

The place of the capability approach within sustainability economics

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ABSTRACT

The connections between the capability approach and sustainability economics have been explored recently. I argue here that for engaging in a more substantive study of those connections, we must first understand the place of the capability approach within the history of economic thought, as a second stage of the revival of classical surplus theory. Once this is clear, we can then use the capability approach in order to specify concepts such as well-being, surplus, scarcity, and sustainable reproduction, which are essential for the development of sustainability economics.

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1. Introduction

The capability approach has recently been proposed as an important ingredient for the development of sustainability economics – see, for example, Ballet et al. (2011), Martins (2011), Scerri (2012), Birkin and Polesie (2013), Ballet et al. (2013). But for engaging in a more substantive study of those connections, we must also understand the place of the capability approach within the history of economic thought, as a second stage of the revival of classical surplus theory. Once this is clear, we can then use the capability approach in order to specify concepts such as well-being, surplus, scarcity, and sustainable reproduction, which are essential for the development of sustainability economics.

2. Capabilities, Utility, Surplus and Scarcity

The conception of human well-being developed within the capability approach contrasts with mainstream (neoclassical) economics in important ways. Mainstream (neoclassical) economics characterizes human well-being in terms of subjective preferences, or subjective utility. The capability approach, in contrast, does not focus on subjective preferences when explaining human well-being, but rather on objective *functionings*, which Sen (1999) and Nussbaum (2000) define as what a human being is, or does.

Furthermore, while mainstream (neoclassical) economics typically focuses only on achieved utility, Sen and Nussbaum focus on freedom

to achieve instead. Freedom is essential because, as Sidgwick (1874) pointed out, the preferences of human beings may change in the future, and so a choice that limits the options of future generations based on present preferences may lead to a lower level of satisfaction in the future – see Martins (2011, p. 4) and Ballet et al. (2013).

Thus, Sen and Nussbaum focus not only on the actual functionings that are achieved, but also on the *potential* functionings, that *can* be achieved, which are termed as human *capabilities*. Sen (1999) defines well-being achievement in terms of *actual* functionings, and well-being freedom in terms of *potential* functionings, or capabilities.

As Nussbaum (2012) notes, Sen's initial formulation of the capability approach was much concerned with *basic* capabilities, that is, the level of capabilities that is essential for achieving a certain threshold that allows for an humane standard of living. Nussbaum (2000) tried to substantiate this idea, and developed a concrete list of basic capabilities, which are non-negotiable, since they must be provided for every human being.

In mainstream (neoclassical) economics, in contrast, the emphasis is not on the achievement of a certain level of basic capabilities, but rather on the maximization of subjective utility. In fact, a central proposition of mainstream microeconomic theory is that consumers are never satisfied, and always want more. This central proposition leads to the conclusion that all goods are scarce, since human beings would always want more goods. Thus, every student of mainstream economics learns Robbins (1935[1932]) definition of economics, according to which economics is the study of the allocation of scarce resources which have alternative uses.

Robbins' conception of economics, which became dominant, stands in stark contrast with the conception of classical economists like Adam Smith or David Ricardo. As Sen (1999) explains, the conception of the human agent as a relentless utility maximizer advanced in mainstream

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(neoclassical) economics is not only highly unrealistic, as it also misrepresents the classical conception, according to which the human agent is a creature of habits, whose utility level gets adapted to a given social situation, and to a given (customary) standard of living.

Also, the mainstream (neoclassical) emphasis on scarcity stands in contrast to the classical emphasis on the social surplus. According to Smith and Ricardo, political economy is the study of the reproduction and allocation of the social surplus, where the social surplus is the part of production which is not necessary for the reproduction of the existing economic system.

Effectively, a central distinction that emerges between classical political economy and mainstream (neoclassical) economics is that the central analytical concept of classical political economy is the social *surplus*, while the central analytical concept of mainstream (neoclassical) economics is *scarcity*. Classical political economy was a surplus theory, that is, a theory centered on the (circular) reproduction and allocation of the social surplus. Mainstream (neoclassical) economics, in contrast, is the study of the allocation of scarce resources according to our subjective preferences.

In order to understand what the social surplus is, note that production can be divided into a part which is necessary for the reproduction of the existing economic system (such as the means of production and the means of subsistence which replace those that were used in the production process), and another part which is not necessary for the reproduction of the existing economic system (such as luxury goods, or further means of production used in order to expand production beyond the existing economic system). The social surplus is constituted by the latter part of production, which when used in luxury goods does not contribute to further growth, and when used (through investment) in further means of production (i.e., in productive activities) leads to growth, that is, to an expansion of the economy – see Walsh (2000, 2003).

The classical authors had a circular conception of the economy, which goes back to the French Physiocrats, led by François Quesnay. Sraffa (1960: 93), who developed the classical conception, notes that “[i]t is of course in Quesnay’s *Tableau Economique* that is found the original picture of the system of production and consumption as a circular process.” Sraffa (1960: 93) contrasts this circular (classical) conception with mainstream (neoclassical) economics, in which economics studies a one-way avenue, from resources to final consumption.

This circular process can lead to expansion, contraction, or just continue at the same scale of reproduction, depending on whether the social surplus is used in productive activities or spent on luxury goods. In the classical conception, the value of each commodity tends to its cost of (re)production within this circular process, which is measured in terms of human labor. In the mainstream (neoclassical) conception, in contrast, value depends upon marginal utility, which in turn depends upon scarcity.

At first sight, it could seem that a theory centered on scarcity, such as mainstream (neoclassical) economics, would be more appropriate for the study of sustainability. But the opposite is the case. For mainstream (neoclassical) economics does not really address the key problem posed by the scarcity of natural resources. Quite the contrary, mainstream (neoclassical) economics leads to the *trivialization* of the notion of scarcity, by positing that because human preferences are never satisfied, all goods are scarce, since there is no finite limit that brings the satisfaction of human desires. By trivializing the notion of scarcity, arguing that everything is scarce, rather than focusing on the scarcity of natural resources, mainstream (neoclassical) economists divert our attention away from the study of the natural resources which are actually scarce, rather than contributing to a study of sustainable processes of socio-economic reproduction.

Classical economists, in contrast, focused specifically on the scarcity of natural resources such as land, which leads to the existence of a rent, while noting that scarcity does not exist in other respects (for example, human labor is typically available, unless we happen to be in a situation

of full employment). Ricardo (1821: 6) notes that “[t]here are some commodities, the value of which is determined by their scarcity alone,” such as “rare statues and pictures, scarce books and coins, wines of a particular quality.” But Ricardo (1821: 6) adds that “[t]hese commodities, however, form a very small part of the mass of commodities daily exchanged in the market.”

According to Ricardo (1821: 6), “[b]y far the greatest part of those goods which are the objects of desire, are procured by labor, and they may be multiplied, not in one country alone, but in many, almost without any assignable limit, if we are disposed to bestow the labor necessary to obtain them.’ Ricardo is presupposing an economy where there is no full employment, and labor is available for further production, within a circular process of reproduction that must be sustainable.

3. Scarcity and Rent

Walras criticized Ricardo’s perspective. While Ricardo presupposes a case where labor is available for further production (such as a case where unemployment, disguised or not, exists), Walras presupposes a case where commodities cannot be further multiplied (such as a case of full employment). For Walras, scarcity is the general case, while for Ricardo, scarcity is the case only for some (rare) goods, and for (natural) resources (which generate a rent). If scarcity is the general case, as Walras believed, the quantity of a given product is insufficient to satisfy demand, and it is the selling price, determined through supply and demand, which influences the cost of production, and not the other way around, as Ricardo argued.

Marshall (1920) developed the supply and demand approach to value, explaining the determination of prices and quantities in terms of supply and demand curves. For the classical authors, in contrast (and contrarily to Marshall’s interpretation of the classical authors), there were no supply and demand curves. In the classical conception, prices simply gravitate around the cost of production, that is, the natural price, where gravitation refers to a vague process that is not represented by supply and demand curves – see Garegnani (1998).

Supply and demand curves enable Marshall to define the consumer surplus and the producer surplus in geometrical terms, using those curves, and resorting to notions like marginal utility (which leads to the demand curve) and marginal cost (which leads to the supply curve). The price at which commodities are exchanged depends upon the marginal utility of the last (marginal) commodity exchanged, which is lower than the marginal utility of the other commodities. But since all commodities were bought at this lower price, a consumer’s surplus arises, due to the difference between the marginal utility of each commodity, and the marginal utility of the last commodity.

Likewise, the price at which commodities are exchanged depends upon the marginal cost of the last commodity, which is higher than the marginal cost of the other commodities. But since all commodities were sold at this higher price, a producer’s surplus arises, due to the difference between the marginal cost of the last commodity, and the marginal cost of each commodity.

Marshall’s consumer’s surplus and producer’s surplus are radically different notions from the classical social surplus, since Marshall resorts to supply and demand curves which were not used by the classical authors, and are indeed inconsistent with classical analysis – see Garegnani (1998). The supply and demand curves which enable Marshall to define the consumer’s surplus and the producer’s surplus are obtained through marginal analysis, and spring from the abusive generalization of the notion of scarcity, like all the neoclassical theory that emerged after the marginalist revolution. In particular, Marshall is drawing upon the classical theory of rent, which for Ricardo was applied only to land, that is, to the case of natural resources.

According to Ricardo, rent emerges because different lands have different productivities. Ricardo defines the rent of a given land as the difference between the value of the product obtained in that land, and

the value of the product obtained in the least productive land. Ricardo's idea of a difference between the productivity of a given land, and the productivity of the worst land, inspired subsequent applications of Ricardo's approach to rent in neoclassical economics, including Marshall's discussion on the consumer's surplus and the producer's surplus, and marginalist analysis in general.

However, Ricardo's theory of value and distribution was radically different from neoclassical economics. For Ricardo, scarcity is an important element only for explaining rent, but not for the explanation of normal profits and subsistence wages. For Ricardo, the least productive land, by definition, yields no rent, only the normal profits, which are defined as the difference between the value of the production of the worst land, and the value of the wages paid. Subsistence wages are determined by institutional factors, according to the customary standard of living, and not through supply and demand of labor, which only explain the variation of wages around the customary standard of living (in classical analysis, supply and demand explain variations, rather than determining equilibrium conditions as in neoclassical economics).

According to Ricardo's classical conception, land is a scarce resource, with properties that lead to the emergence of a rent above normal profits. The properties of land that enable this higher return in the form of rent are its qualities, including its fertility, the mineral resources it possesses, and also its location, a topic developed in more detail by Karl Marx than by Ricardo. Classical authors, like Smith, Ricardo and Marx, focused on the resources that are really scarce, such as natural resources, while addressing the implications of this scarcity for the economic system.

4. The Capability Approach and the Standard of Living

Walsh (2000, 2003) and Putnam (2002) argue that throughout the twentieth century, there has been a revival of classical political economy in two stages. The first stage consists in Sraffa's (1960) revival of the classical economic theory, in which the economy is seen as a circular process of (re)production of commodities by means of commodities. The second stage is Sen's (and Nussbaum's) capability approach, which is a revival of the classical ethical theory, in which human well-being is seen in terms of objective (actual and potential) achievements, or functionings.

A central aspect of classical political economy is the definition of the social surplus, which is, remember, the part of production which is not necessary for the reproduction of the existing economic system. But in order to know which part of production is not necessary for the reproduction of the existing economic system, while allowing for the maintenance of a certain standard of human well-being, we need to know which part of production is necessary for achieving the standard of human well-being we aim at. The capability approach, developed by Sen and Nussbaum, can play a central role here, by defining the level of basic capabilities which are essential for the reproduction of the economy and society under a given, customary, standard of living.

The idea of a customary level of human well-being, which is essential for the reproduction of the economy and society, was already part of classical political economy. When Smith and Ricardo referred to a subsistence wage, they did not mean a wage that ensures merely the physical survival of the workers. Rather, they meant the achievement of a certain level of well-being according to what is customary, very much in line with what Sen and Nussbaum mean by the basic capabilities that ensure a certain standard of living. Once we define a certain standard of living according to the basic capabilities provided, as Sen and Nussbaum do, we can then define the part of production that is not necessary for the achievement of such a standard of well-being as being the social surplus.

The classical authors noted how workers are in a difficult bargaining condition. Unemployment puts pressure over wages (and wage-earners

cannot hold too long without receiving their wages in a wage dispute). It is for this reason that, for the classical authors, there is a tendency for wages to remain at the (customary) subsistence level. For the classical authors, wages increase beyond this level only if the economy is growing, since in that case more workers will be employed in order to expand production, and the demand for workers increases wages above the subsistence level.

If we focus only on supply and demand, as mainstream (neoclassical) economics does, we are led to the conclusion that only growth can bring about the increase in wages, through the increase in the demand for labor. But for the classical authors, supply and demand explain only variations around a given level, such as the subsistence wage. And the subsistence wage, in turn, is determined in an institutional context, where bargaining takes place, leading to a given distribution of the surplus.

The capability approach provides an ethical framework which we can use for assessing the distribution of the surplus, possibly leading to alternative institutional arrangements which imply a different distribution of the surplus. And in order to engage in a redistribution of the surplus, we must understand the impact of such redistribution in the economy, which again requires an understanding of the process of reproduction and allocation of the surplus, a process that was explained in more substantive terms by the classical authors.

5. Taxation and Redistribution

Once we interpret the capability approach as a revival of classical political economy, as Putnam (2002) and Walsh (2000) suggest, more substantive questions, concerning redistribution, can be addressed drawing upon the contributions of the classical economists. Taxation is an important element to take into account in this redistribution, and Ricardo (1821) indeed called his main work *Principles of Political Economy and Taxation*.

Ricardo (1821) noted that while taxes on raw produce, basic goods or wages would affect the whole process of reproduction, by affecting the prices of basic means of production and subsistence, taxes on luxuries would only affect the price of those luxuries (since these are not used in further production). Ricardo also noted that taxes on rent, or on the land which yields rent due to its higher productivity, fall wholly on the landlord, since they affect a part of the surplus which is above the normal profits that are needed for the reproduction process.

One must note that just like fertile lands lead to an advantage over other competitors, so does a monopolistic or oligopolistic position, for example, lead to advantages which bring profits above the normal competitive level. These, in turn, also enable large wages and other forms of payments (for example to top executives). These higher profits and wages (or other payment schemes) would not exist if there were not a rent being acquired above normal profits, due to the specific position that a corporation or a person occupy in a given institutional context. If the aim is to tax rent, or the (physical, economic, social or intellectual) property that generates those rents, taxation schemes would also capture those rents.

In short, Ricardo argues that taxes on luxuries and on rents (or on the property which generates rents) are taxes which do not undermine the reproduction processes. These taxes provide thus a means for redistribution which does not constrain the circular process of sustainable reproduction. Of course, many of those who obtain the social surplus (the part of production which is not necessary for the reproduction of the existing economic system) do not use all of it in the consumption of luxuries, and accumulate a part of it as capital, in the hope of receiving a return on it (in the form of interest or profit). When capital finds a profitable investment, and this investment finds effective demand, the economy grows.

But once we have an understanding of the various alternative ways of distributing the surplus which do not affect the reproduction

system (as noted above), we find alternative ways to improve standards of living through distribution, rather than through permanent growth. Growth is not a social urgency anymore, but rather a possibility amongst others, which can be discussed with ecological considerations in mind.

Redistributive institutional arrangements that seem to constrain growth, by constraining the accumulation of capital, are not a problem when growth is not needed, as long as those institutional arrangements do not undermine the reproduction process, and thus the standard of living can be maintained. The use of the surplus in wasteful and luxurious consumption (rather than in productive activities), which exists in unequal societies, is much more damaging for the circular flow of economic activity than a redistribution of the surplus aimed at improving the standard of living, as the classical authors knew.

Furthermore, the habit of finding capital rewarded through capitalization leads to a permanent pursuit of profits, which in turn leads to speculative financial activities when profits cannot be found in the real economy. In order to address this problem, Keynes (1936) suggests a tax on financial transactions, which would reduce the incentive to permanent speculation aimed at short term gains, and lead to a much more stable financial system. It is not just the part of the surplus used in luxuries, but also the part used in accumulation and growth, that can bring serious problems to the reproduction process.

In fact, investment is often aimed at the pursuit of profits which are above normal profits, and correspond to what Ricardo calls rents above normal profits. Contemporary capitalism provides abundant examples of how the pursuit of rents above normal profits, or the drive towards accumulation, leads to the exhaustion of natural resources, in a context where the surplus is used for wasteful and luxurious consumption, rather than for efficient productive activities.

We cannot understand the political, social and economic processes that lead to the exhaustion of natural resources without possessing a theory of how those resources lead to a rent above normal profits, and lead thus to attempts to appropriating those resources, in order to obtain those rents. This aspect has been further developed by authors like Henry George who, like the Physiocrats much earlier (who inspired the classical analysis), proposed a single tax on land, due to these specific characteristics. Henry George was able to express this idea in simpler terms than the Physiocrats and the classical authors, and thus his work enjoyed much popularity.

The classical framework enables us to find ways to engage in redistribution which are far less damaging than current taxation schemes which draw upon neoclassical analysis, and Marshall's notions of consumer's surplus and producer's surplus. Taxation schemes based on the neoclassical notions of consumer's surplus and producer's surplus presuppose the existence of supply and demand curves, which can move independently (so that changes can be studied). This study of supply and demand curves, in turn, presupposes that everything else remains constant (*ceteris paribus*) in static equilibrium, as Marshall (1920) noted.

But in order to understand redistribution within a process of sustainable reproduction, we do not benefit from a study of the effects of taxation under static equilibrium conditions. Rather, we need to study the effects of taxation on a dynamic process of reproduction, distinguishing between taxation that undermines this reproduction process, and taxation that allows for a sustainable reproduction process, as Ricardo does.

There are, of course, ways of redistributing the surplus other than through taxation. Raises in minimum wage, reductions of working hours, or of the retirement age, would contribute to increase employment (for example, until the level of full employment is reached), and significantly change bargaining conditions, leading to a different distribution of the surplus through an increase in the share of wages. Of course, increases in consumption cannot go beyond a level that would undermine the reproduction of the economic system.

Any attempt to achieve a sustainable world must start by abandoning the (neoclassical) belief that human beings are never satisfied with a limited amount of goods. For the very idea of sustainability in a world of finite resources cannot be separated from the idea of a limit beyond which consumption cannot proceed. Thus, any attempt to achieve a sustainable world must define what commodities are essential for achieving a certain level of human well-being, which can be measured in terms of basic capabilities, and can be achieved with a limited amount of commodities. Whatever is achieved above this level, is a surplus, as the classical authors argued.

6. Conclusion

In neoclassical economics, distribution is explained through supply and demand curves, obtained through marginal analysis. Thus, distribution is a technical (mathematical) problem, where ethical and political considerations have no place. Hence, mainstream (neoclassical) economics prevents any debate about the issues being considered here. In the classical conception, in contrast, the distribution of the surplus is not technically determined, and depends upon institutional arrangements, which can be discussed according to ethical and political criteria, such as the one provided by the capability approach.

Of course, changes in the distribution of the surplus also trigger social, political and institutional changes, which bring new challenges and possibilities to be considered, many of which were not addressed by the classical authors (and could not have been addressed before a change in distribution provides a new social context). Marx, drawing on the classical analysis, suggested a radical change in the organization of production and distribution that went well beyond taxing rent and luxuries. Taxation addresses distribution only after production takes place, rather than addressing distribution together with production. But Marx also knew that he could not provide recipes for social transformation before more modest changes in distribution provide a different social context.

The analysis of the classical authors contained many problems, which need to be addressed when developing their approach. And they faced a world where environmental problems were not present in daily life in the same way as other social and economic problems were. But the conception they developed, where the economy is studied in terms of a circular process of reproduction in which a surplus is generated (above what is necessary for ensuring the fulfillment of basic capabilities), provides a promising element for the development of sustainability economics. And it enables us to address questions that cannot be addressed adequately within mainstream (neoclassical) economics. The ecological problems we are facing emerged at a time when the dominant (neoclassical) economic theory was much less adequate to address them than the previously dominant (classical) economic theory.

In order to address these problems, we do not need a theory that merely asserts that everything is scarce because consumers are never satisfied, and their desire for more goods is *unlimited*, as mainstream (neoclassical) economics asserts. Rather, we need a conception where we can define a certain *limited* standard of human well-being, which enables the reproduction of the economy, society and nature, in a circular process. The capability approach provides a framework within which we can engage in discussions about the standard of living, defined in terms of basic capabilities. And the capability approach is part of an older perspective, which goes back at least to the classical political economists, in which the economy must be seen as a circular process of sustainable reproduction, where the surplus should be used efficiently, in a non-wasteful way.

This perspective is close to the conception of sustainability economics advanced by Baumgärtner and Quaas (2010), which is centered on efficiency and non-wastefulness, and on the role of justice when assessing the relationship between human beings, and nature,

within a process of sustainable reproduction. Only when, like the classical authors, we focus again on a circular process of sustainable reproduction, rather than on utility maximization, we can then develop more consistently the field of sustainability economics, which can benefit much from the classical contributions, and from the revival of classical political economy developed by authors like Sraffa, Sen and Nussbaum.

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