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# From the Core to the Cores: Surplus Approach, Institutions and Economic Formations

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## Abstract

The paper moves from Garegnani's "core" of the classical income distribution theory to propose a deeper integration of the concept of social surplus and institutions. Our main tenet is that the social surplus does not exist independently of the institutions (or social order) that oversee its production and distribution, starting from those that prevail in the sphere of production. In this sense we supplement the surplus approach with important insights from the Polanyian approach, from economic archaeology and anthropology, but also from Sraffian authors and Sraffa's manuscripts. Taking inspiration from Garegnani's core while also considering its specificities, this work is a premise to the design of different economic "cores" for different stylized economic formations.

**Keywords:** surplus approach; economic anthropology; economic formations; institutions; capitalism.

**JEL Codes:** A12; B51; B52.

## 1. Introduction<sup>1</sup>

As is well known, Sraffa (1951) and Garegnani (1960) revived the classical surplus approach "submerged and forgotten since the advent of the 'marginal' method" (Sraffa 1960, p. v; Cesaratto 2019a). Since the early pre-classical thought on primitive societies (Meek 1976), a widespread application of the concept of economic surplus is also appreciable in economic anthropology and archaeology. Many scholars in these fields have also been greatly influenced by Karl Polanyi who, however, was sceptical of the classical surplus approach and attached prevalent importance to the institutions vis-à-vis the economic mechanisms that regulate income distribution.

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Both institutions and the surplus approach play a role in authors such as Melville Herskovits (1895-1963) and Gordon Childe (1892-1957) among the founders, respectively, of the modern disciplines of economic anthropology and archaeology (for a short review of their work see Cesaratto 2019b). In explaining the social consensus around the distribution of the social surplus, Herskovits (1952) incorporated ideas of Veblen's institutionalism - as the prestige that comes to the ruling classes from flaunting their wealth. Childe (1936) put into practice Marx's design to develop a historical and comparative science of human societies and of their change (Earle 2015, p. 320; Testart 1988, pp. 3-4).<sup>2</sup> Sraffian economists have also attributed great relevance to the historically determined institutional circumstances that regulate the production and distribution of the social surplus, although in practice this aspect has been so far rather overlooked by this school.

We believe that a fuller integration of the classical surplus approach with an institutional perspective is not only possible, but desirable for the progress both of critical economic theory and of economic archaeology and anthropology (Cesaratto and Di Bucchianico 2020). Encouragement to this integration came long ago from anthropologist Stephen Gudeman (1978, pp. 349, 365):

In sum, Sraffa presents anthropologists with that which they lack — a way of conceptualizing and calculating production and distribution — but that which they may accept only upon condition of placing it within a set of historically and culturally determined social relationships. To paraphrase the philosopher, this is a method in search of a society.

The investigation of past and present economic formations is the practical test field of this integration, as shown by many studies in economic archaeology and anthropology that widely use the concept of economic surplus. This integration was also well present in Marx who showed a constant and non-dogmatic interest in the historical variety of economic formations in which institutions and the production and distribution of the social surplus found themselves combined.

In the paper we move from Garegnani's representation of analytical structure of the surplus approach, that he defined the "core" of classical analysis. Garegnani's core only applies to a capitalist economy in which economic relations are predominantly exchange relations, that is regulated by prices and competition. This specific institutional context in which socio-economic interactions are mainly of an impersonal nature permits the identifications of analytically well-defined economic relations between prices and distribution. In earlier economic formations socio-economic interactions were only limitedly ruled by market exchanges but rather assumed the shape of personal relations (say between the feudal lord and serfs). In this regard, Polanyi maintained that economic

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<sup>2</sup> While the social concern of anthropology is self-evident, archaeologists are also concerned with the social and economic organization of ancient societies. As Childe wrote: "archaeology has a distinctive contribution to make to the scientific study of human institutions" (Childe 2004 [1947], p. 90). The concept of surplus is widely employed by this literature. Particularly close to the classical surplus tradition is the "political economy" approach according to which "surpluses were produced for various reasons and purposes, and were used in different ways in differing types of societies, depending also on the political and economic role taken on by the elites" (Frangipane 2018, p. 677).

relations are disembodied in capitalism but embedded in anterior economic forms. When we claim that our work is a premise to the design of different economic “cores” for different stylized economic formations, we are well-aware of using what a referee called an “extended” or loose notion of Garegnani’s core by which to single out the stylized economic and institutional structure of earlier formations. The predominately personal (and not market) socio-economic relations in those formation may complicate but should not impede such an attempt.

In this way we intend to (eventually) respond to the above-mentioned call by anthropologist Stephen Gudeman to provide what anthropologists “lack — a way of conceptualizing and calculating production and distribution”, with the proviso of “placing it within a set of historically and culturally determined social relationships”.

The paper is structured as follows. Section 2 recalls Garegnani’s interpretation of the conceptual structure of classical surplus approach around what he called the “core” of the theory. Garegnani’s approach is extremely open to the consideration of institutions, but still underdeveloped in this respect, not least because it is restricted to the core of some basic analytical relations relative to a capitalist economy. In this regard, section 3 contains some insights from well-known Sraffian authors – including Richard Arena and Jean Cartelier – who point to an extension of the surplus approach to a variety of economic forms. Section 4 reports some criticism to the surplus approach from Polanyian and institutionalist authors. While we welcome this criticism, we will also highlight some of the limitations of the Polanyian approach, in particular the deliberate privilege that this tradition assigns, in Marx’s terminology, to the sphere of the circulation of commodities rather than that of production. Section 5 discusses what Wittgenstein called the “anthropological way” of Piero Sraffa, the necessary connection that he saw between the social surplus and the historical-institutional circumstances that surround its origin — what Marx defined as the method of “specific abstractions” as opposed to that of “generic abstractions”. The section also reports some of Sraffa’s critical remarks on Bronisław Malinowski. Section 6 concludes by comparing the explanations of the concurrent origin of surplus and of social stratification provided, respectively, by economic archaeologists and mainstream economists, and delineates some future research tasks.

## **2. Garegnani’s core**

The social surplus is that part of the product that society can freely employ once the amount needed to reproduce the same output in the next period has been set aside. The surplus is therefore the difference between the final product and its replacements, namely what is necessary to repeat production in the next period at least on the same scale - e.g. in a simple corn-model, grain to sow and to feed the peasants:

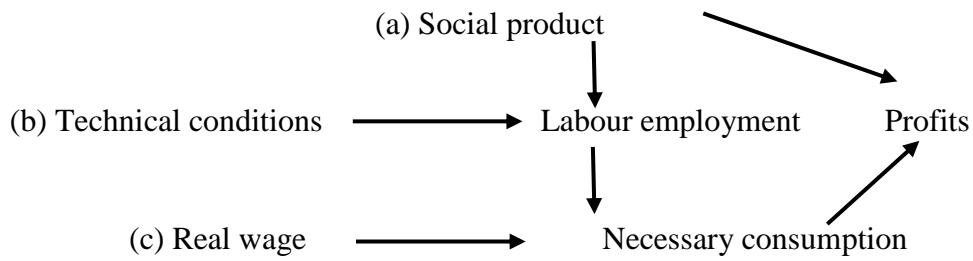
$$\text{(Gross) social product} - \text{replacements} = \text{surplus} \quad (1)$$

The concept of social surplus as what’s left over after the system has been rendered capable of reproducing itself is obviously an abstraction. It involves a set of abstractions

for the sake of conceptualizing a particular theoretical framework. Of course real societies never exactly ‘reproduce’ themselves; they are perpetually in a process of flux and evolution. The abstraction is useful for understanding certain aspects of how real societies function. This applies also to Garegnani’s “core” (Garegnani 1984, 1987, 2007, 2018). This is a simple diagrammatic representation of the classical surplus approach based on equation (2), which is derived from equation (1) by taking into account social product and replacements net of the replacement of the physical means of production, and by identifying workers’ subsistence with wages:

$$(\text{Net}) \text{ social product} - \text{Necessary consumption} = \text{Shares other than wages (surplus)} \quad (2)$$

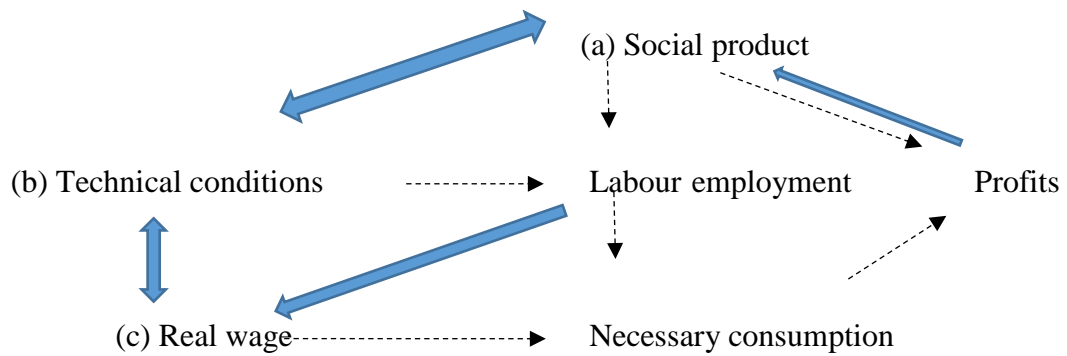
Three “circumstances” are taken as given when approaching the determination of the social surplus: a) the level and composition of output, b) the real wage and c) the technical conditions of production. The analysis of the three categories of “data” is deferred to a different, further stage of the investigation. Combining these data as in figure 1 the “shares other than wages (surplus)” can be determined (Garegnani 1984, p. 293):



**Figure 1-** Garegnani’s core of classical analysis.

inner relations (black arrows): circumstances (a) and (b) determine labour employment that, along with (c), regulates necessary consumption; surplus profits are finally determined on the basis of equation (2). The “data” (a), (b) and (c) are investigated out-of-the-core. Source: Garegnani 2018, p. 622.

Garegnani (2007) defined the three givens as “intermediate data” wishing to underline that they, as well as their interrelations, are also object of economic enquiry, although at a different analytical stage and using different and less general methods (e.g. historical, statistical, modelling etc.) than those employed *within* the core. Within the core are analysed the “necessary quantitative relations, which competition entails between commodity prices and distributive variables and, which, in their comparative simplicity, are of a nature allowing for a mainly deductive treatment” (Garegnani 2007, p. 186). The reader may immediately figure out what Garegnani means by “necessary quantitative relations” by referring to the relations studied in Sraffa (1960). Conversely, the intermediate data outside the core and their reciprocal relationships require not so much mathematical treatment as institutional and historical analysis (Garegnani 2007, p. 186). The thick arrows of figure 2 suggest some intuitive off-the-core relations between the data - such as the influence of production levels on the division of labour and vice versa; of employment levels on labour’s wage bargaining power; of wage levels on technical change and vice versa; of profits on accumulation and output.



**Figure 2** - Examples of off-the-core relations (thick arrows); source: adapted from Garegnani 1984, p. 294.

### 3. Beyond Garegnani's core?

We may note a difference between the generality of equation (1), applicable to different economic formations, and equation (2) and related “core” that evoke a specific capitalist institutional framework — a “market economy” (Garegnani 2007, p. 186) — in particular the distribution between wages and profits (in the simplistic hypothesis that there are no scarce natural resources).

On closer inspection, however, also equation (1), despite being more general, requires the definition of a precise institutional framework because, as Cartelier (2014) notes, a “surplus may be objectively observed only if individuals are not homogenous from the point of view of production”, e.g. “wage-earners working for entrepreneurs”.<sup>3</sup> Commodities’ prices, to give another example, would only make sense in a market economy, while in a “domanial economy... Production and circulation of goods would be ruled by ‘les humeurs, les modes et les façons de vivre du Prince, et principalement des propriétaires de terres’ and no longer by the market” (p. 170, quotation from Cantillon).<sup>4</sup> So, Cartelier concludes: “the objectivity of the starting point of [Sraffa

<sup>3</sup> From the abstract of the pre-print version kindly mailed by the author, 10 November 2019 (the abstract has not been published).

<sup>4</sup> Cartelier also points out some ambiguity that Sraffa (1960) would encounter in Chapter 2 where he *presupposes* the existence of a social surplus, as shown by the incipit “Se l’economia produce più del minimo necessario per la sua reintegrazione e vi è un sovrappiù da distribuire...” (p. 7). Cartelier argues that the surplus cannot be identified before the social conditions of production explaining it are known: “Sraffa is well aware of the fact economies with surplus [those to which he refers to in Sraffa (1960)] are capitalist economies. But the way in which he introduces the surplus and the problem of its distribution may make the reader think that the observation of the surplus is logically prior to any proposition about the existence of capitalists (or entrepreneurs)” (p. 173). He also notes that: “*There is no physical description of the technique of an economy independent from a specific problem to be solved, the problem depending on the social framework.* In other words there is no objective technique observable by the ‘man from the moon’ having access only to physical objects.” (p. 171, italics in the original text; the ‘man from the moon’ is a famous Sraffa’s metaphor). An “institutional indefiniteness” can perhaps also be found in the beginning of chapter 1 where Sraffa supposes “an extremely simple society” (translated in Italian as “primitive society”) where the commodities are traded “for one another at a market held after the harvest”. (Sraffa 1960, p. 3). Can we describe this as a mere expository expedient, or as a rationalization of the proportions in which

(1960)] is not physical but *social*: assumed here is not *only* a certain state of the material world but *also* a certain type of social organisation” (Cartelier 2014, p. 171, italics in the original). This implies that not only the economic circumstances outside the core, but also the relations studied within the core itself are related to specific historical and institutional circumstances. This also implies that different “cores” associated to specific historical and institutional contexts can be singled out. A good example of a pre-capitalist economy is the one described by Quesnay in the *Tableau Economique*. There the class of capitalists does not exist and the surplus is completely intercepted by the class of the owners (nobles and clergy).<sup>5</sup>

Similarly, Richard Arena observes that “the system of production prices which is investigated in [Sraffa 1960] and in where capitalist producers *and* workers share a *variable* part of the surplus is only one illustration, one example of society (this is the word which Sraffa used at the beginning of [Sraffa 1960]) and not the ‘true object of economics’; this also means that price theory as such is not for Sraffa the main purpose of economics” (Arena 2013, pp. 97-8, italics in the original; see also Arena 2014, 2015a, 2015b). According to both Sraffa and Garegnani, indeed, “in the classical theories of distribution, the central problem is the determination of the circumstances which rule the size of the social surplus’ and *not* price theory as such” (Arena 2013, p. 98, italics in the original; quotation from Garegnani 1960, p. 3). Arena infers from this that “Sraffa’s project was not to construct a price theory as such, especially in a given society, but to transform the ‘prelude to the critique of economic theory’ into a more general theory of the study of the ‘surplus product’ in different surplus-based societies”<sup>6,7</sup>. However, it should not be forgotten that the economic system which Sraffa confronted was capitalism. He was building on the classicals, who themselves developed the tools of economic analysis to understand a system in which economic activity was, increasingly, organized through markets. The fact remains that the recovery of the classical approach by Sraffa did not go unnoticed by scholars of economic forms other than capitalism.

Anthropologist Gudeman (1978, pp. 359 and 360), for instance, contends that:

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necessary goods must be produced and exchanged to ensure reproducibility even in economies where institutions and not the market regulate economic flows? We shall discuss this in future research.

<sup>5</sup> Quesnay also mentions interests, but they have a decidedly secondary role, making them part of the costs of maintaining capital. On this topic, see Serrano and Mazat (2017), Trabucchi (2020).

<sup>6</sup> In this regard Arena (2015, p. 1091) also quotes Bidard: “the system of production prices provided in PCMC has to be interpreted as the representation of a specific economic order, that is, of the ‘social coordination of individual actions through the sole institution of the market’” (Bidard, 1991, p. 322). Somehow similar in spirit, but less persuasive, are Lee and Jo (2011). These authors are not so much interested in the relations between specific historical-institutional formations and related cores, but rather in including *within* Garegnani’s core more detailed structural aspects of the capitalist historical phase under examination, as well as the related decisions of the subjects (agency). In this regard, we believe that Garegnani correctly relegates to the outside of the core the relations to which not enough generality can be attributed, due to their correlation with, for example, specific historical varieties of capitalism.

<sup>7</sup> Sraffa started from the rediscovery of the ‘physical real cost’ concept, enabling the production process to start, on which he elaborated once the Marshallian reliance on utility and cost appeared to him not tenable (Fratini 2018b).

the general perspective of the neo-Ricardians (...) offers much to an anthropological economics, although the argument of Sraffa clearly is not directly applicable to all economies and the method itself must always be culturally embedded. ... The Sraffa system was designed specifically for the analysis of capitalism, and several of the assumptions are not valid outside such an economy. (...) but the general point that distribution is determined outside production-not by marginal productivity is, I think, of central importance.

Cartelier's, Arena's and Gudeman's proposals to extend Garegnani's (and Sraffa's) core of the classical analysis to a multiplicity of economic formations besides market economies is, incidentally, fully consistent with the classical tradition of stages of human development (Meek 1976) and with the Marxian notions of economic (or social) formation and mode of production.

As noted in the introduction, we are fully aware that Garegnani's core is a precise notion referring to the specific (impersonal) institutional features of capitalism in which a nucleus of definite relations can be established between prices and distribution. We wonder, however, whether a similar stylized description of the institutional and economic relations that govern distribution cannot be also provided for earlier economic formations. Precisely because in these formation predominant is the role of social or personal over exchange relations in governing distribution, our definition of "cores" is broader than Garegnani's.

We regard a dominant mode of production as the core of a historically given social formation. This core identifies the modalities in which an élite extracts and appropriates a surplus from its direct producers (formations in which such extraction does not occur are included as extreme cases). The specific form of exploitation is what Marx defines as "the innermost secret, the hidden basis of the entire social structure" (Marx 1974 [1887], Vol. III, p. 791).<sup>8</sup> Hoping not to confuse the reader, Marx's innermost secret is the core of a variety of cores, so to speak, each one being related to a specific economic formation. In other words, the forms of exploitation and conflict encapsulated in equation (1) take different institutional expressions in the different historical socio-economic formations into which the innermost secret manifests itself.<sup>9</sup>

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<sup>8</sup> It's worth quoting Marx's entire passage:

The specific economic form, in which unpaid surplus-labour is pumped out of direct producers, determines the relationship of rulers and ruled, as it grows directly out of production itself and, in turn, reacts upon it as a determining element. Upon this, however, is founded the entire formation of the economic community which grows up out of the production relations themselves, thereby simultaneously its specific political form. It is always the direct relationship of the owners of the conditions of production to the direct producers — a relation always naturally corresponding to a definite stage in the development of the methods of labour and thereby its social productivity — which reveals the innermost secret, the hidden basis of the entire social structure and with it the political form of the relation of sovereignty and dependence, in short, the corresponding specific form of the state. This does not prevent the same economic basis — the same from the standpoint of its main conditions — due to innumerable different empirical circumstances, natural environment, racial relations, external historical influences, etc. from showing infinite variations and gradations in appearance, which can be ascertained only by analysis of the empirically given circumstances. (Marx 1974 [1887]), Vol. III, p. 791).

<sup>9</sup> Interestingly, as reported by Harman (2006), English historian Chris Wickham and Turkish Marxist Halil Bartay, support a narrow definition of production mode in which the forms of exploitation (Marx's inner secret) can be reduced to three: "the exploitation of slaves, the exploitation of waged ('free') workers,



One may wonder here why Sraffa and Garegnani have focused on capitalism and not on a broader historical and institutional perspective. Leaving aside the political priority of the analysis of the contemporaneous economic form, an explanation can be found in Marx's famous suggestion that capitalism "is the most developed and the most complex historic organization of production" that "thereby also allows insights into the structure and the relations of production of all the vanished social formations out of whose ruins and elements it built itself up... Human anatomy contains a key to the anatomy of the ape" (Marx 1973 [1857-8], p. 105-6). These passages are not easy to interpret. Of course there is the idea that the more complex may help to explain the simpler, but the difference between the successive economic forms cannot be reduced in Marx to a difference in degree or complexity, and even less between the imperfect and the perfect.<sup>10</sup> Marx, as much as Polanyi, believed in the existence of substantial differences between economic formations — although different modes of production could coexist within each specific social formation "organized under the *dominance* of one of them" (Anderson 1974a, p. 22 original italics).<sup>11</sup> Marx's passages may perhaps convey the idea that in capitalism economic laws are better identifiable because disembedded, using Polanyi's term, from religious and personal social orders and driven by the impersonal competition of capitalists in valorising capital. This makes more evident and intelligible certain economic relations existing in previous epochs but obscured precisely by the embedded social order.

The predominance of exchange relations and competition as the dominant and specific tract of capitalism is also what makes possible Garegnani's identification of a core of analytically precise economic relations. Exchange relations and competition are of course also institutions (so much that competition is institutionally looked after). The lack of a similar definiteness of economic relations in pre-capitalistic forms, where socio-personal relations are more relevant, should nonetheless not deter a stylized analytical description of the socio-economic relations in those economies.

At the same time, and somehow paradoxically, capitalism is also the economic formation in which labour exploitation is most hidden since, as Marx again explains, in "wage labour...even surplus-labour, or unpaid labour, appears as paid" (Marx 1974

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and the exploitation of dependent peasants forced to hand over a portion of their produce [or of their labour time] to their exploiters" (our addition). These forms of exploitation are actually combined with different institutional arrangements of the élites, but "the differences in the superstructural relations between members of the ruling class cannot be equated with differences in the mode of production."

<sup>10</sup> In the famous controversy initiated by Polanyi (1957) between formalists (marginalists) and substantivists (Polanyians), the former supported the idea of a difference of degree (continuity) between economic forms, the latter one of kind (discontinuity) among them (see Cesaratto 2019b for some basic references). Marx was interested in difference in kind in order to show the historically determined and transitory nature of any economic formation, and the different social rules that characterised them, including the possibility of communitarian relations in primitive formations (Bloch 1983, p. 12).

<sup>11</sup> Marx (1973 [1857-8], pp. 106-7): "In all forms of society there is one specific kind of production which predominates over the rest, whose relations thus assign rank and influence to the others". In capitalism, for example, domestic production, the market, semi-feudal forms of sharecropping and the redistributive State coexist. Also Polanyi (1957, p. 256) denies that what he calls institutional economic and social "forms of integration" as based on reciprocity, redistribution and exchange represent "stages of development".

[1887], Vol. I, p. 505), while in former economic formations, e.g. in ancient slavery or in feudalism, exploitation is more transparent, unmediated by a wage relation that gives the appearance of free exchange.<sup>12</sup> To complicate things, Garegnani (2018, p. 641) warns about the presence of a theory of income distribution in capitalism, based on the relative scarcity of “production factors”, alternative to the surplus approach (a theory that neoclassical anthropologists pretend to extend to non-market economies). Fortunately, Garegnani concludes, the capital theory controversy has shown that marginalism is analytically wrong (Lazzarini 2011).<sup>13</sup> The way is thus open to explain income distribution as a result of the prevailing “social order”, as much as in previous economic formation. As Garegnani put it:

[if] profits have no systematic explanation other than the fact that the existing social order does not allow workers to appropriate the entire product. If, then, this approach holds and it is legitimate to describe the revenue of a feudal lord as the result of labour exploitation, it will seem to be no less legitimate to describe profits in the same terms.

#### **4. The Polanyian and institutional criticism to the surplus theorem**

Cesaratto and Di Bucchianico (2020) accepted the Polanyian accusation to the classical, anthropological and archaeological surplus traditions of deficient institutional analysis. A paper by Harry W. Pearson in Polanyi’s school *manifesto* (Polanyi et al. 1957) is especially concerned with defining the twin concept of social subsistence and surplus as historically and institutionally defined, and therefore as relative notions: if “it is held that the subsistence needs are not biologically but socially defined, there is no room for the concept of absolute surplus”; in other words, if “the concept of surplus is to be employed... at all, it must be in a relative... sense. ... The essential point is that relative surpluses are initiated by the society in question” (Pearson 1957, p. 323). Pearson does not deny the role of changes in the material condition of production as trigger of social change since “there may be important social consequences of increasing in subsistence means” (p. 326); however, this does not automatically generate

available surpluses, for this implies a separation of technological development from the institutional complex of which it is but a part... the operational facilities, as well as the motivations for separating out, counting up, storing, mobilizing material means and human services must be provided by the institutional framework of the economy if surpluses are to be made available for specific purposes (pp. 326, 335).

It is not enough, Pearson insists, to concede that “surplus is a necessary but not sufficient cause of change” (p. 339), since there is no before and after in the analysis. For example, prestige institutions in primitive societies

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<sup>12</sup> It is impressive that the economic form that most ably hides exploitation makes also possible to critical political economy to unveil with more precisions its existence, as shown by Garegnani’s core relations.

<sup>13</sup> Moreover, once marginalism is shown wrong for capitalist economies, it might be difficult to defend it as an explanation of former civilizations.

are not the result of surpluses appearing at certain stages of social development, but neither are cities, nor pyramids, nor markets, nor money, *nor exploitation*, nor civilization. The interrelationship between the material and the societal aspects of existence are such that they cannot be separated into ‘first’, ‘then’ sequences” (p. 338, our italics).

All in all, Pearson concludes, the concept of surplus “is useful only where the conditions of a specific surplus are institutionally defined” (p. 321) since “[t]here are always and everywhere potential surpluses available. What counts is the institutional means for bringing them to life” (p. 339).

Interestingly, Pearson exempts Marx from the accusation of a mechanical application of the “surplus theorem”—that “the appearance of a ‘surplus’ over bare subsistence needs [is] the critical determinant in the evolution of complex social and economic institutions” (p. 321) – which he attributes to Herskovits, Childe and Engels. Pearson thus argues that Marx

pulled out the classical labor theory out of its original naturalistic setting and placed it into a definite social setting...The so-called ‘primitive accumulation’ of capital that provides the starting point for capitalism and surplus value is not the gradual appearance of surpluses born of technological progress; it is ‘nothing else than the historical process of divorcing the producer from the means of production’ Marx scoffed at the idea of a naturalistic surplus and spoke only of ‘surplus value’ which he attributed to the institutional features of capitalism alone” (p. 333-4).<sup>14</sup>

Pearson’s criticism of the “surplus theorem” has been picked up by modern archaeologists and institutionalists. For instance, archaeologists Hastorf and Foxhall (2017, pp. 26-27, 37) contend that: “Surplus is quirky – it is essential and yet elusive... surplus is a cultural concept and not an absolute... a culturally state of mind”. Similarly, Morehart (2014, pp. 163-4) argues that studying surplus “is incomplete without considering the historical and subjective aspects of surplus as it is connected to differing and overlapping institutional spheres, or relative surplus. From a subjective perspective, what constitutes surplus depends on individuals’ positions within an institutional milieu”.<sup>15</sup> Institutionalists Adams has argued that “relative surpluses appear simultaneously with the enabling institutions—rules, procedures, and sortings that achieve their realization and distribution” (Adams 1991, p. 189). On a similar vein, Clark (1992, pp. 458, 462, 463) maintained that:

most Sraffians will mention the importance of historical and institutional factors, yet these factors are given no active role, a point to which primary attention should be focused. Certainly, an analysis of the surplus independent of the institutions that create it is unacceptable .... Any concept of economic order must be placed in the larger issue of

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<sup>14</sup> Quotation from Marx (1974 [1887], Vol. I, p. 668). Pearson also quotes Marx as saying: “Favourable natural conditions alone, give us only the possibility, never the reality, of surplus-labour, not, consequently, of surplus-value and a surplus-product...” (p. 482).

<sup>15</sup> In spite of the deceptive expressions they use - “perceptual perspective about the surplus” (Hastorf and Foxhall (2017 p. 26) or “subjective perspective” (Morehart, 2014, p. 163) - these archaeologists refer to the political institutions that preside over the surplus (e.g. Hastorf and Foxhall, 2017, p. 28). We shall later talk of “social subjectivity”.

social order, and this order is more than a market equilibrium. In fact, it is the social order that creates the economic institutions – in this case markets – and specifies the rules for the markets.<sup>16</sup>

We agree with these arguments that it does not make sense to talk of “surplus” in general as a “generic abstraction”, but only as a “determined abstraction” (a terminology we shall shortly explain) fully immersed in the historical-institutional circumstances that explain it. As acknowledged by Pearson, Marx himself indicated the social, not technical origin of the surplus: “How long is it since economy discarded the Physiocratic illusion, that rents grow out of the soil and not out of society?”, he wrote (Marx 1973 [1857-8], p. 86). Having said so, we moved two criticisms to the Polanyians.

The first is their misleading recognition of marginalism as the appropriate theory to analyse capitalism, limiting themselves to exclude its applicability to pre-capitalistic economic formations, in which behaviour is enshrined or ‘embedded’ in institutions and should therefore be investigated through an institutional approach.<sup>17</sup> While the specific economic regulation that distinguishes capitalism is indisputable, Polanyians remain in this way victims of the “fetishism of goods”, whose unmasking was for Marx a primary objective of critical theory. Commodities fetishism reflects the fact that economic relations, which in pre-capitalist economic forms were regulated by social institutions, in capitalism are regulated by *impersonal* market relations that take the form of natural relations. As Garegnani well explains (2018, p. 634):

Marx’s aim here seems to have been twofold. On the one hand, he was concerned with emphasising, ... the historical nature of commodity production by indicating that exchange value and money are merely elements for a particular solution of the general problem of the allocation of labour in accordance with society’s needs: the problem, that is, which a patriarchal family or a mediaeval society resolved by different means, or a future egalitarian society would resolve by still other means... on the other hand... One fact radically differentiates commodity production and, hence, a capitalist society from other societies. Whereas in these other societies the allocation of labour according to society’s needs is controlled, in the first instance, by conscious activity, in a capitalist society the fact that use-objects are the ‘products of the labour of private individuals or groups of individuals who carry on their work independently of each other’ (Marx 1887 [1974], Vol. I, p. 77), entails that this allocation is done through the market, i.e. it is enforced by impersonal forces akin to natural ones... In Marx’s words, ‘their own social action takes the form of the action of objects, which rule the producers instead of being ruled by them’ (p. 79).

The aim of critical economic theory is therefore precisely to reconstruct the social relations that are behind the relations between goods, Garegnani (p. 335) concludes:

This impersonal and objective character which economic phenomena assume ... in a capitalist society is just what renders necessary and possible a science like political economy, an important part of whose task is precisely to explain these impersonal and

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<sup>16</sup> Interestingly, this paper was inspired by a long conversation with Garegnani.

<sup>17</sup> For example: “The aim is not to reject economic analysis, but to set its historical and institutional limitations, namely to economies where price-making markets have sway” (Polanyi et al. 1957, p. xviii), where economic analysis is identified with “‘optimum’ allocation”, (p. xvii; see also Polanyi 1957, p. 247; Fustfeld 1957, p. 344).

objective phenomena in terms of the underlying personal and social relations: a task which would have no parallel in the study of any other mode of production, where economic phenomena directly assume a personal or social form...Precisely this task of political economy implies however that, especially at its outset, political economy may remain prisoner to the falsely natural, 'fetishist', appearances assumed by the phenomena it should explain.

While we fully agree with Garegnani that the duty of critical political economy is to unveil the social relations behind the exchange relations in capitalism, we find also its duty to disclose the economic relations in earlier social formations, "where economic phenomena directly assume a personal or social form", also as analytical support to economic archaeologists and anthropologists.

Secondly, we criticised Polanyian institutional analysis as based on an "excessive emphasis on the circulation of goods and inattention to the production aspect", as distinguished anthropologist Marcella Frangipane (1996, p. 12, our translation) put it. More precisely, on the one hand, the Polanyian classification of forms of societal and economic integration based, respectively, on reciprocity, administrative redistribution and market prices (Polanyi 1957, pp. 250-7) fits well in the classical tradition of economic stages integrated by Marx's modes of production.<sup>18</sup> On the other, however, these forms of integration are seen by Polanyi as alternative institutional devices aimed at managing the social distribution and circulation of goods without reference to the different modes of production, the historical manifestation of Marx's inner secret (Bharadwaj 1994, pp. 83-6; Cesaratto 2019b).<sup>19</sup> Unfortunately, in fact, contrary to Harry Pearson's sympathy for Marx's institutional origin of the surplus, Polanyi firmly rejects Marx's inner secret talking of

historically untenable stages theory of slavery, serfdom and wage labor that is traditional with Marxism— a grouping which flowed from the conviction that the character of the economy was set by the status of labor (Polanyi 1957, p. 256).

In this way he left institutional analysis hanging in the air.

Keeping these two (serious) shortcomings of Polanyian theory in mind, we take up the thesis that the economy, any economy, is embedded in institutions and that the social surplus cannot be explained separately from institutions (and *vice versa*). Interestingly, at the time of the rediscovery of the surplus approach, Sraffa himself was puzzled by similar questions.

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<sup>18</sup> As noted above (fn. 9), both Marx and Polanyi reject any mechanical stage-sequence analysis.

<sup>19</sup> This would include the institutional settings in which no social surplus is produced. As the archaeologist Roberto Risch (2016, p. 46) explains:

In addressing the questions surrounding economic surplus... the underlying structure of human production does not suggest that there has ever been such a thing as a 'primitive' economy, where no decisions needed to be taken at a communal level and goods were distributed 'naturally'. Economic equality is no less a social outcome than its opposite.

## 5. Sraffa's anthropological way

Much quoted is the relationship between Sraffa and Wittgenstein (Arena 2013, Sen 2016, Ginzburg 2016) and in particular the philosopher's appreciation for Sraffa's "anthropological way of confronting philosophical problems" (e.g. Arena, 2013, p. 92), that is of interpreting them within a social framework. Sraffa's "anthropological way" that Wittgenstein appreciated with regard to his complex language problems has been extended to Sraffa's own effort to conceptualize the rediscovery of the notion of surplus. De Vivo (2017, p. 84, our translation) interprets the anthropological way as the impossibility "to axiomatize the explanation of anything, let alone the explanation of social phenomena". Sen (2016) and Ginzburg (2000, 2014, 2016) contextualize the anthropological way within Sraffa's intellectual exchanges with Antonio Gramsci on which we shall return.<sup>20</sup> Ginzburg finds Sraffa's anthropological way also coherent with Marx's concept of "specific abstractions" (Marx 1973 [1857-8], p. 85). Marx contrasted this method to that of "generic abstractions". The second method "consists in abstracting from the specific characteristics of a certain stage in social development and focusing on the (generic) features common to all" (Ginzburg 2016, p. 158). An example of this method is marginalism, a theory that reduces the explanation of all economic history to some "natural" and timeless individual behaviour— and in particular attributes economic progress to the implementation of the right incentives to entrepreneurial friendly behaviour, particularly of property rights.

In view of Sraffa's anthropological way, it is relevant to dwell upon Sraffa's manuscripts of the years in which he made sense of the surplus approach he had just rediscovered, to begin with some notes on the influential anthropologist Bronisław Malinowski (1884–1942).

In those years Sraffa was very critical of the use that marginalism makes of subjective elements, both in the theory of demand (marginal utility) and supply (costs as a measure of sacrifice for labour and saving) (e.g. Fratini 2018a). In this context Sraffa on the one hand appreciates Malinowski's (1922) criticism of the utilitarian portrayal of the primitive man which is however, on the other, replaced by an equally subjective account:

The whole book contains very sound criticisms of the conventional rationalistic savage of the economists, going straight to his purpose and seeking only "utility". But Malinowski, hardly improves on this, by substituting his own savage swayed by passion and sentiment. ([e.g.?] p. 172) He merely goes backward, from Bentham to Mandeville!

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<sup>20</sup> Sen (2016, p. 6) sums up Sraffa's anthropological influence on Wittgenstein in these terms:

While the *Tractatus* tried to see language in isolation from the social circumstances in which it is used, the *Philosophical Investigations* emphasises the conventions and rules that give the utterances particular meaning". Sen (p. 8) also argues that Sraffa shared 'the anthropological way' also with Antonio Gramsci who in his *Prison Notebook* annotated that 'language itself [which] is a totality of determined notions and concepts and not just of words grammatically devoid of content'.

Sen concludes that:

The role of conventions and rules, including what Wittgenstein came to call 'language games', and the relevance of what has been called 'the anthropological way' which Sraffa championed to Wittgenstein, all seem to figure quite prominently in what Gramsci was putting down as his understanding of the world — an understanding that he and Sraffa, there is every reason to think, strongly shared.

A utilitarian economist might reply that Malinowski's savage is as calculating as A. Smith's, or rather more: he not only calculates utilities, but also esthetic values and social values! (D3/12/7:11)

Malinowski is therefore criticised for remaining confined within methodological individualism in which, speaking of primitive economies, the sober utilitarian world characterized by scarcity is replaced by the ostentation and waste of Mandeville's *Fable of the Bees*. A clarification of Sraffa's aversion to subjective motivations (utilitarian or otherwise) is contained in these passages (cited by De Vivo 2017, p. 86 [our translation], who dates them as written after 1929):

The fact seems to be that we have some categories of 'motives' (religion, wealth and similar bullshit) with which we explain the actions: and the explanation consists in reducing each action to an effect of one of these motives. The utilitarians reduced these categories to a minimum, at least verbally, gathering them under the "pleasure" umbrella. With the utilitarian method everything becomes 'comprehensible', even for example religion since it becomes, no longer an end (incomprehensible in (self) but a means to an end common to all — pleasure. In this way one can 'put oneself in the shoes' of all economic actors.

What Sraffa seems to imply is that, by following the pain-pleasure simplistic formula, everything would go in human behaviour without much necessity of a deeper explanation of human actions, although this “does not prevent” a fake “subjective satisfaction of the explanation from being obtained.”<sup>21</sup>

According to Ginzburg (2014, p. 37 and *passim*) Sraffa's criticism of individualistic subjectivism cannot, however, be reduced to a scientist objectivism in which material conditions are a sufficient explanation of human behaviour — a view that was dominant in the socialist movement during the second and third international movements and that only Gramsci began to correct. Such objectivism would, moreover, be hardly compatible with the mentioned "anthropological way" that Wittgenstein attributes to Sraffa. As an alternative to both individualistic subjectivism and scientific objectivism, Ginzburg (p. 39) suggests, we should refer to the "historical subjectivity of social groups" of which Marx and Gramsci speak: this approach would allow us to go beyond both the subjective reference to "human nature" and positivist materialism. From this point of view we can perhaps interpret the appreciation that Sraffa shows for a chapter in Malinowski (1922): “All the Ch. VI, beginning with § 2 on ‘Tribal Economics’ and particularly communal labour is rather interesting” (D3/12/7:9). It is not easy to identify from this brief indication what precisely drew Sraffa's attention, but we can assume that passages like the following,

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<sup>21</sup> This is the original and complete quote:

Il fatto par che sia che abbiamo alcune categorie di “*motives*” (religione, ricchezza e simili balle) con cui spieghiamo le azioni: e la spiegazione consiste nel ridurre ogni azione a un effetto di uno di questi motives. Gli utilitari riducevano al minimo queste categorie, almeno verbalmente, riunendole sotto l’ombrellone del “piacere”. Col metodo degli utilitari tutto diventa “comprendibile”, anche p. es. la religione poiché essa diventa, non più un fine (incomprensibile in sé) ma un mezzo a un fine comune a tutti – il piacere. In questo modo ci si può “mettere nei panni” di tutti gli attori economici. Che poi questo piacere-utilità venga criticato, e si mostri come esso possa esser solo definito come “lo scopo di tutte le azioni”, e come tale non spieghi le azioni, essendo da esse spiegato, – non toglie che la soddisfazione soggettiva della spiegazione sia stata ottenuta: la critica non la annulla senz’altro, essa deve ricominciare da capo a far sorgere dei dubbi.

concerning the organization of communal labour, may have particularly attracted his interest:

it must be clearly set forth that the real force which binds all the people and ties them down in their tasks is obedience to custom, to tradition....Order is kept by direct force of everybody's adhesion to custom, rules and laws, by the same psychological influences which in our society prevent a man of the world doing something which is not „the right thing” (Malinowski 1922, p. 91).

Community work is not explained here on the basis of the individual prevalence of altruistic over selfish dispositions, but is based on prevailing social conventions (based on social rather than an individual psychology, so to speak), in a manner consistent with the anthropological way that Wittgenstein ascribed to Sraffa.

The second point to which we want to draw attention concerns how Sraffa handled the analytical concept of 'surplus'. In his unpublished 1931 “Surplus Product” manuscript (D3/12/7:161(1-5)), Sraffa raises a problem similar to those recalled above in section 4 about a certain evanescence of the concept of surplus:

The study of the “surplus product” is the true object of economics; the great difficulty of the matter is that this object either vanishes or remains unexplained (D3/12/7:161(1)).

Finally, if one attempts to take an entirely objective point of view, the very conception of a surplus melts away (D3/12/7:161(3))

What does Sraffa mean? He offers a definition of surplus as the difference between the value of social product and the necessary expenses:

This notion is connected with that of “necessity”; & “necessity” has only a definite meaning from a given point of view, which must be explicitly stated, & then adhered to consistently. The surplus product goes all to expenses which are not “necessary” for producing a given commodity (D3/12/7:161(1)).

He seems however trapped by the consideration that once the value of the product — which include the “necessary expenses” and the surplus — is traced back to production costs, the two components are blurred and disappear:

there can be no product for which there has not been an equivalent cost, and all costs (= expenses) must be necessary to produce it. The conception of “necessity” has to be extended to everything that happens, & thus vanishes. Every share distributed must be so for a reason, therefore it is necessary: how can there be a surplus left, unless we assume some sort of indeterminacy (D3/12/7:161(3))?

Hence the stalemate in which Sraffa finds himself:

This is the great difficulty: the surplus is The object of the inquiry, but as soon as it is explained, a cause is found for it, and it ceases to be a surplus. This sounds as if the object of the inquiry had been defined as “the unknown”, but if the inquiry is successful it becomes known, & the object of the inquiry ceases to exist (D3/12/7:161(4))!

In other words, once the value of the product has been reduced to the sum of wages, profits and rent (as it was the case, for instance, in Adam Smith's analysis of price formation [Sraffa 1951, p. xxxv]), the surplus as the difference between the values of the



social product and the necessary expenses seems to disappear.<sup>22</sup> His suggestion to avoid such an issue was to anchor income distribution outside the “economic field”:

When we have defined our “economic field”, there are still outside causes which operate in it; & its effects go beyond the boundary. This must happen in any concrete case.... The surplus may be the effect of the outside causes; & the effects of the distribution of the surplus may be outside (D3/12/7:161(5)).

This anchorage refers to historical-institutional circumstances that regulate the power relations between social classes determining, for example, the historically given level of real wages or the interest rate sets by the central bank. In other words, the analysis of distribution must be "embedded" in historical-institutional circumstances proper to each economic formation (Ginzburg 2014, p. 36). This interpretation fits easily in the "anthropological way" of thinking that Wittgenstein attributes to Sraffa.

Ginzburg (2014, p. 35) also contends that Sraffa’s “outside causes” of income distribution refer to something similar to Garegnani's "core" (giving to it an “extended” meaning similar to ours). He regards the latter as an application to the classical theory of value and distribution of Marx’s method of “specific abstractions”.<sup>23</sup> According to Ginzburg (2016, pp. 176-82), the concept of specific abstractions is also reflected in the Gramscian concept of “determined market” that in the *Letters from prison* the communist intellectual submitted to Sraffa. The latter’s answer, however, was surprisingly "elusive", possibly due to the lack of communication given the severe conditions of captivity under which Gramsci was kept. Ginzburg (p. 180) reports some suggestive definitions of “determined market” by Gramsci in the *Prison Notebooks*:

We must fix the precise point at which we distinguish between ‘abstraction’ and ‘genericisation’ (‘generizzazione’) (the latter term was shortly to be replaced with ‘indetermination’). ...The determined market in pure economics is an arbitrary abstraction, of solely conventional value for the purposes of pedantic, scholastic analysis. The determined market for critical economics will, however be the set of concrete, economic activities characterising a determined social form, taken with their laws of uniformity—i.e. ‘abstract laws’—but without the abstraction ceasing to be historically determined.

In another passage the 'mercato determinato' is defined as "an environment organically connected and living in its movements of development" (fn. 77). Elsewhere Gramsci writes: “a continuous mixing of theoretical deduction and historical description, of logical and factual nexuses ... is one of the characteristic features of the superiority of critical economy over pure economy, and one of the forces making scientific progress more fecund” (p. 182).

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<sup>22</sup> On the “ambivalences” of Smith’s “adding up” price theory see Garegnani (2018, p. 620 and 627). The term “ambivalence” is taken from Bharadwaj (1978, p. 168).

<sup>23</sup> Ginzburg (2016, fn. 23) maintains that in Polanyi “the contrast between generic and determined abstractions takes on the form of a contrast between "formal" and "substantive meanings" of what is 'economics'”. This is acceptable provided that some limits of the Polanyian approach recalled in section 4 are acknowledged. For a comparison between Marx and Polanyi and on the evident influence of the former on the second, see Halperin (1984).

These were, of course, passages that Sraffa could not have known at the time when he reacted dismissively about the concept of “mercato determinato” submitted by Gramsci in the letters, but those show a striking assonance with Sraffa’s own “anthropological way”.<sup>24</sup>

Quoting Ginzburg approvingly, Davis (2017) suggests that in the above-quoted passages Sraffa overcomes the narrow objectivism with which since the mid-1920s he had rejected the subjective elements characteristic of the marginalist theory of value and distribution, integrating the objective determination of prices in the “economic field” (Garegnani’s “core”) with the historical-social determination of distribution. Davis makes useful reference to the application of the distinction between closed and open systems to the different disciplines by the Austrian biologist Ludwig von Bertalanffy (1901-1972). In simple terms, disciplines such as physics that make valid statements in any space-time speak the language of closed systems, while disciplines such as biology, and even more so the social sciences, can only express themselves through open systems, meaning the natural or social-historical environment to which they refer. In terms of this language, Sraffa would have managed to reconcile the objective determination of prices with social subjectivity in determining distribution allowing “for two types of causal forces, one associated with the natural world and one associated with the social world” (Davis 2017, p. 159):

He retained his objectivist, cost of production explanation of commodity values, but assumed that the production of commodities constituted a “closed system” that was acted upon as a whole by causes external to that “closed system” associated with the distribution of the surplus. ... He thus both maintained and modified his objectivism by allowing for different types of causal factors associated respectively with production and distribution that were, as he put it, in “communication” with one another.

Sraffa thus rejects a naive objectivism (p. 160), while at the same time he preserves a core of necessary relationships, realm of economic analysis, albeit with a “leak” to the outside. This position contrasts with that of Polanyi (1957, pp. 241, 247), who sees institutional analysis displacing economic analysis of economic formations, with the exception of the market economy in which the economic analysis of prices has an autonomous role (as said, economic analysis is mainly identified with marginal analysis, but also with the surplus approach, e.g. p. 240). It cannot then pass unnoticed that the “economic field” of Sraffa (or the analogous “core” of Garegnani) concerns the analysis of market economies. The question that follows is thus: what is the economic content of the “economic field” (or “core”) in the case of non-market economic forms? At this stage of our analysis we leave this question still open.<sup>25</sup>

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<sup>24</sup> There are important clues to identify Sraffa behind a passage in a short introduction to Marxism by Maurice Dobb (which caused him quite a few problems with the English communist orthodoxy) in which it is claimed that: “In so far as ‘ideas’ are part of history, they are ‘facts’ of historical experience as much as mechanical inventions or property-relationships, and they enter into the historical process in the same way as other ‘facts’.” (Dobb 1932, p. 14; cf. de Vivo 2017, p. 122). This passage would suggest a deep mutual influence of Sraffa and Gramsci on an “anthropological” reading of historical materialism.

<sup>25</sup> See also fn. 4 above: how can we make sense of Sraffa’s (1960) initial price equations as describing a “primitive society”?

In view of this question, let us finally take note of Ginzburg's (2016, p. 184) warning about a possible Sraffian retreat *within* the boundary of Garegnani's core, a "return to the core" in which "the inverse relationship between wage and rate of profits is divorced from its context". Appropriately, he quotes a dictum by Goethe, whose influence on Wittgenstein was not secondary, "Nature has neither kernel nor shell. She is everything all at once".

In this light, we remark again that an extended notion of core to be applicable to different economic formation cannot but have a broader sense of Garegnani's own core as a nucleus of well-definite distributive relations. This is especially true in the pre-capitalist economic formations where the economic relations are not mediated by the market but assume the shape of socio-personal interactions.

## 6. Where do we go from here?

### 6.1. Surplus and institutions in economic archaeology and anthropology

In his major work Herskovits (1952, p. 413), bluntly acknowledged: "why the surplus is produced remains obscure". He left the question open focusing on the "[striking] almost universal inequalities which seem to mark the distribution of surplus economic goods". In this regard, in section 4 we have shared Polanyian criticism of the "surplus theorem", the mechanical sequence surplus-social stratification,<sup>26</sup> accepting the idea that surplus is an entity definable only in a given institutional context. At the same time, it seems to us that the symmetrical institution-surplus sequence is equally unsatisfactory. The question would find a solution if we could identify the material circumstances that may have transformed potential surpluses, through institutional change, into actual stratification.

A relative notion of surplus is adopted by the anthropological and archaeological literature on the "affluent" hunter-gatherers (H-G), societies that chose not to exploit a potential surplus and gave thus rise to only moderately stratified communities (Sahlins 1972).<sup>27</sup> Whether egalitarian political institutions were the result of a benevolent human

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<sup>26</sup> Without wishing to diminish the richness of their analysis, we may put Childe and Diamond on this side. According to Testart (1988, p. 4) Childe "Adhered to what may be called the 'surplus argument': that in absence of food production, the economy of hunter-gatherers is too weak and underdeveloped to yield a surplus and therefore economic inequalities cannot emerge".

<sup>27</sup> Affluence, according to Sahlins, is a relative term: "For there are two possible courses to affluence. Wants may be "easily satisfied" either by producing much or desiring little" (p. 1-2). The first strategy that identifies prosperity in material abundance leads to the idea of human societies constrained by scarcity - and among them, more dramatically, the primitive one. The second avoids an institutionalization of materialistic instincts: "Want not, lack not" (pp. 11, 13-4). But scarcity is also, symmetrically to affluence, a relative term: "Yet scarcity is not an intrinsic property of technical means. It is a relation between means and ends" (p. 5). For Sahlins scarcity (or the *homo economicus*) is functional to the bourgeois ideology of work as emancipation from a presumed situation of material and moral deprivation (p. 5, 13 and passim). The turnout was enjoyed by these societies essentially in the form of free time, Sahlins speaks of "sufficient work" with regard to that necessary to gather subsistence (p. 52). Pearson (1957, p. 320) also talks of scarcity as a relative concept. For recent review on the affluent H-Gs see Bowles (2011) and Svizzero and Tisdell (2016).

nature — which reminds us of the good savage Rousseau — or of strategies of the weak deliberately aimed at suppressing natural tendencies of the strong to dominate (“reverse dominance hierarchy”), is also discussed (see Ames 2007, 2010; Trigger 2003). According to Gintis et al. (2015), humans share with primates the genetic tendencies to both cooperation and dominance, but the material circumstances linked to the human unique evolution – e.g. the collective management of hunting, preparation and sharing of cooked food, and the availability of weapons to check individual pursuit of dominance – led to the prevalence of egalitarian institutions. The material element that later, in some societies of H-G, and more markedly with the transition to the Neolithic, might have acted as a trigger to stratification may have been the possibility to store the goods (this is a necessity in agricultural societies given the periodicity of crops). In this regard Testart (1988) talks of the existence of sedentary “inegalitarian hunter-gatherers” (p. 4 and *passim*). The kind of collected food, climate, etc. in which they lived permitted them to store foodstuff and, therefore, to stock a surplus. It would be the existence of a storable and appropriable surplus to have provided the opportunity for the emergence of a hierarchy. In this sense Testart concludes that “it is not the agricultural revolution that represents the major break among societies but the adoption of an economic structure of which the central feature is storage” (p. 6). A material event (storage) appears as the link between the emergence of a surplus and institutional change (a new hierarchical social order).

In Neolithic societies with the agricultural revolution, as Testart acknowledges, storage became systematic and massive, and control of the warehouses by an élite constituted the key step for stratification. Indeed, since harvests are typically periodic, the very possibility of storing the product for seeding and deferred consumption is a prerequisite of agriculture. Storage also makes it possible to set aside some surplus over normal replacement requirements and subsistence in anticipation of unfortunate future events, such as famines, floods, etc. These surpluses are referred to in the literature as “normal surpluses” (e.g. Halstead 1989; Urem-Kotsou 2017). Storage in turn implies its social management and defence against potential enemies. “Normal surpluses” may thus constitute an intermediate step towards stratification. The management of warehouses and “normal surpluses” may provide priests or personalities who impersonate the fortunes of the community with the occasion to transform themselves into the dominant élite<sup>28</sup> (Frangipane 2016, 2018; Jiménez-Jáimez and Suárez-Padilla 2019; Renger, 2016, p. 19; Hastorf and Foxhall 2017; Bogaard 2017; Kim 2014; Godelier 1974, 2015; Smith 2004). As Frangipane (2016, p. 3) sums up: “stable and socially accepted differences in the social order usually bear within them the seeds of effective inequality”. In this explanation of a key historical passage, material as well as institutional events combine to explain the simultaneous appearance of the surplus and stratification overcoming the hen-egg dilemma over their correct sequence.<sup>29</sup>

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<sup>28</sup> Polanyi defined this economic formations “redistributive” (see also Earle 2011, pp. 237-9).

<sup>29</sup> Another example regards the “discovery” of slavery as the cause of a new production mode in ancient societies.

Taking advantage of a vast literature, further research is necessary on the complex interweaving of the production and distribution of the social surplus and institutions in ancient economic forms (whether based or not on slavery), and in feudalism, and on the forces that have guided their complicated historical dynamics (transition from one form to another and their merging, overlapping, coexisting).<sup>30</sup> Taking this broader framework into account, our first future task is to stretch Garegnani's notion of the core of the classical analysis developing a series of "extended cores" adapted to stylised pre-capitalist economic formations.

## 6.2. *Surplus against institutions in mainstream economics*

Meanwhile, mainstream economists have taken the lead of formalist economic anthropology. *Mutatis mutandis*, also in this context discussion has often developed as a hen-egg diatribe between institutional and surplus approaches – an example is Diamond (2012) versus Acemoglu and Robinson (2012). While, however, the Polanyian substantivists' contribution can be integrated with the surplus approach, classical economics is the declared foe of mainstream economists.

To take some important examples, North and Thomas (1977) and more recently Bowles and Choi (2019) firmly contend that the invention of property rights predates that of agriculture and of the emergence of a surplus, creating the incentive to cultivation. The contributions of Mayshar et al. (2015; 2019) are more interesting since, on the one hand, they openly reject the surplus approach of the classical economists, Childe, Diamond, Scott (2017) and others while, on the other, they take advantage of the results in economic archaeology and anthropology we reviewed above. More specifically, they find in the appropriability of storable crops, particularly of cereals, the premise to the emergence of the élites; for instance "[f]ood storage and the demand for protection led to population agglomeration in villages and to the creation of a non-food producing elite that oversaw the provision of protection" (Mayshar et al. 2015, p. 4). Interestingly, appropriability is a material factor related to the geographical predisposition to certain crops that can easily be integrated in the classical-Polanyian scheme sketched in sect. 5.1. These authors, however, intend to deny any role to the concept of surplus insisting on an "institutions-surplus sequence". In their words, "the elite generate the food surplus on which it can flourish, once the opportunity to appropriate rises" (Mayshar et al. 2019, pp. 2-3). To the objection that "the creation of a non-food producing elite" presupposes the existence of an actual or at least potential surplus, they answer that tax confiscation may take place even with no surplus (Mayshar et al. 2019, p. 2). In the Appendix we decipher their argument.

According to Bowles et al. (2010) storable crops also encourage the transmission of material and immaterial wealth across generations, an incentive to the formation of élites, again seen as an antecedent to the emergence of a surplus. Again we believe that these factors enrich, rather than contradict, the classical-Polanyian scheme of Sect. 5.1.

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<sup>30</sup> Classical Marxist contributions by Perry Anderson (1974a, 1974b).

Finally, mainstream neo-institutionalism is different from both the old institutionalism *à la* Veblen and Polanyi. For instance North (1977) accuses Polanyi of leaving institutions unexplained and proposes to explain them through "transaction costs". In particular, the difficulty in ancient societies of enforcing property rights and promoting markets, made it rational to adopt hierarchical forms of organization: "It is reasonable to assume that the forces that lead to the substitution of firms for markets today may also help us to explain the variety of forms of economic organization in past societies" (p. 711). This approach is based on a naive Walrasian vision of market exchange as the natural state of human relations (at the beginning there were markets), unfortunately disturbed by transaction costs — which in turn can be traced back to the existence of asymmetric information and opportunistic behaviour. In this view, transaction costs give rise to market failures which are remedied by institutions, particularly by the state in ancient societies. This approach reminds of a famous passage by Marx (1974 [1887], p. 85, footnote 2) in which, quoting himself in French from the *Misère de la Philosophie*, he states that:<sup>31</sup> "Economists have a singular method of procedure. There are only two kinds of institutions for them, artificial and natural. The institutions of feudalism are artificial institutions, those of the bourgeoisie are natural institutions. In this they resemble the theologians, who likewise establish two kinds of religion. Every religion which is not theirs is an invention of men, while their own is an emanation from God. ... Thus there has been history, but there is no longer any". In the light of these insights, our second future task is a deeper examination of mainstream literature on pre-capitalist economic formations.

## 7. Conclusions

This paper argued that the surplus approach recovered by Sraffa and Garegnani is firmly anchored in a non-economicist analysis of distribution grounded in historical social institutions, with Marx's "inner secret" at their core. The paper elaborated the solicitation by some of Sraffa's economists to extend Garegnani's "core" to other economic-institutional forms, and the Polanyian warning to avoid a mechanical application of the surplus approach in explaining the emergence of social stratification. In doing so, we have been aware of the specific meaning of Garegnani's core from which we nonetheless take inspiration for future research on the stylized institutional-economic features of pre-capitalist formations. In this regard, we also feel in line with Blankenburg, Arena and Wilkinson's (2012, p. 1272) invitation to extend Sraffa's and Garegnani's approach:

Sraffa's essential research concern is 'the study of the "surplus product" [that] is the true object of economics' (Sraffa Papers D3/12/7:161, August 1931). Consequently, the system of production prices that receives most attention in *PCMC*—in which capitalist producers *and* workers share a *variable* part of the surplus—is simply *one* example of a specific societal configuration and not in itself the 'true object of economics'.... This perspective on *PCMC* is congruent with the fact that *PCMC* also outlines two other types

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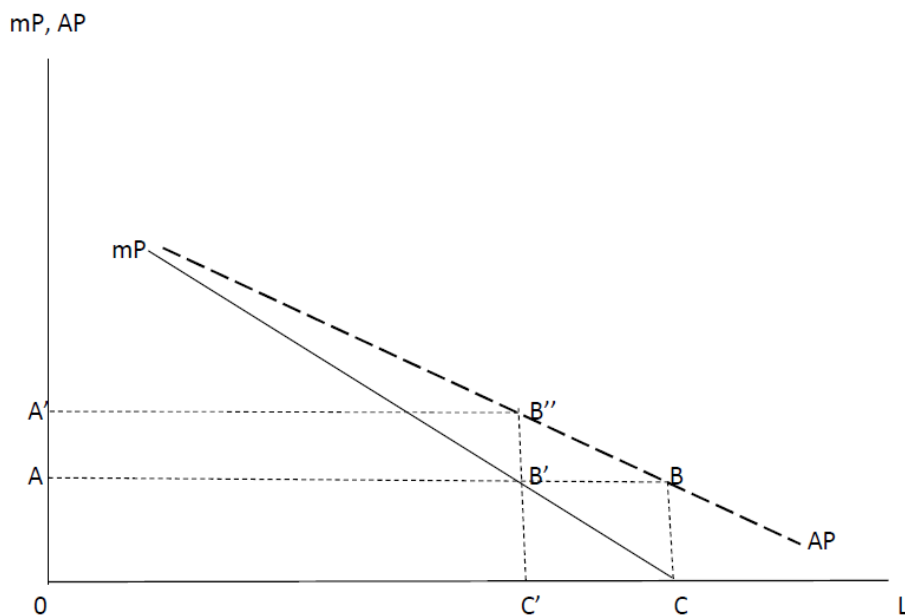
<sup>31</sup> The translation of this passage is available at [www.marxists.org/archive/marx/works/1867-c1/ch01.htm](http://www.marxists.org/archive/marx/works/1867-c1/ch01.htm).

of society. The first are societies without a surplus, described at the start of the analysis. The distinction between producers and workers is superfluous in these circumstances, and there is only one social class. ... The second type of society mentioned in *PCMC* produces a positive surplus that is entirely appropriated by capitalist producers. Wage earners are distinct from these producers, but their wages are fixed by social norms ... We, thus, have three different types of societies in *PCMC* that are differentiated by their respective rules of income distribution. Other societies with yet different rules of income distribution can and should be considered, if we want to build a more general type of economics. Garegnani, for example, noted in the opening pages of his *Il capitale nelle teorie della distribuzione*... that ‘in the classical theories of distribution, the central problem is the determination of the circumstances which rule the size of the social surplus’ (Garegnani, 1960, p. 3), *not* price theory. Garegnani never changed his mind on this point...

In this perspective, while we welcomed Polanyi’s advice, we also believe that institutional analysis should not lose sight of its dialectical relationship with the evolution of the material base of human subsistence and its objective determinants. While we recognize that the historical dynamic of this interaction has yet to be fully understood, we like to recall Marx’s admonition (that we fully quoted in Cesaratto and Di Bucchianico 2020, p. 19) to those who neglect that material basis that even “when people live by plunder for centuries, there must always be something at hand for them to seize; the objects of plunder must be continually reproduced”. In a similar vein, Marvin Harris (1961, p. 563) in his criticism to Harry Pearson (1957) argued that: “For reasons which continue to elude me, both Pearson and Rotstein appear to be unwilling to admit that it is difficult to ‘set aside,’ ‘select out,’ ‘channel,’ and, one might add, by ‘implication,’ give away, potlatch, take, steal, rob, plunder, or expropriate, plants and animals that do not exist”.

### **Appendix. Exploitation generating a surplus.**

To show that the existence of a surplus is not a precondition for stratification, Mayshar et al. (2019, p. 2-3) consider a stationary “farming society” that produces storable cereals and lives at a subsistence level with no surplus. Using the marginalist background of these authors, Figure 3 hypothesizes that the working population is OC so that the marginal product of labour (mP) is zero. The average product (AP) CB is equal to the subsistence level OA — this is in turn defined as that that maintains population constant. The area OABC represents total production equal to total subsistence. Next, an aggressive foreign tax collector arrives and confiscates part of the product in favour of an élite. Confiscation and the fall in living standards below subsistence determines a fall of the working population to OC’. In the new equilibrium, the subsistence level OA is equal to the marginal product of labour C’B’, while the surplus AA’B’’B’ is confiscated.



**Figure 3**

The authors may thus conclude: “Ongoing confiscation of food can be expected to impact adversely the size of the farming population, and due to diminishing average product of labor, this would result in an equilibrium in which total output exceeds the farming population’s subsistence needs, with the surplus confiscated by the nonfarming elite. Thus, we concur with conventional productivity theory that farmers in hierarchical societies produce surplus, but our contention is that rather than surplus generating the elite, the elite generate the food surplus on which it can flourish, once the opportunity to appropriate rises. This scenario demonstrates that the availability of surplus is not a necessary precondition for taxation and hierarchy”.

One objection is that marginal decreasing returns of labour imply the existence of a scarce factor, say cultivable land. Neither factual support to this assumption, nor to the whole story is presented by the authors. An alternative way, grounded in a Sraffian price-equations system, to deal analytically with societies which are not capitalistic but whose institutional setup is based on the extraction of surplus product in the form of rent and/or taxes, can be found in Fratini (2016).

## References

- Acemoglu, D. and Robinson, J.A. (2012b), Why Nations Fail (with a reply by J. Diamond), *The New York Review of Books*, 16 August 2012.
- Adams, J. (1991), Surplus, Surplus, Who’s Got the Surplus? The Subtractivist Fallacy in Orthodox Economics, *Journal of Economic Issues*, 25(1): 187-197.



- Ames, K. M. (2007), The Archaeology of Rank, in Bentley, R.A., Maschner, H.D.G., and Chippendale, C. (eds), *Handbook of Archaeological Theories*, Lanham, Alta Mire Press: 487-513.
- Ames, K. M. (2010), On the Evolution of the Human Capacity for Inequality and/or Egalitarianism, in Price, T. D., Feinman, G. M. (eds), *Pathways to Power: Fundamental Issues in Archaeology*, New York, Springer.
- Anderson, P. (1974b), *Lineages of the Absolutist State*, London, NLB.
- Anderson, P. (1974a), *Passages from Antiquity to Feudalism*, London, NLB.
- Arena, R. (2013), Sraffa's and Wittgenstein's Reciprocal Influences: Forms of Life and Snapshots, in Levvero, E., Palumbo, A. and Stirati, A. (eds), *Sraffa and the Reconstruction of Economic Theory*, Vol. III, Basingstoke, Palgrave Macmillan UK: 84-105.
- Arena, R. (2015a), Order, Process and Morphology: Sraffa and Wittgenstein, *Cambridge Journal of Economics*, (39): 1087-1108.
- Arena, R. (2014), On the Importance of Institutions and Forms of Organisation in Piero Sraffa's Economics: The Case of Business Cycles, Money, and Economic Policy, *The European Journal of the History of Economic Thought*, 21(5): 775-800.
- Arena, R. (2015b), The Role of Technical and Social Factors in the Distinction Between Necessaries and Surplus: Classical Economics After Sraffa, *Cahiers d'Économie Politique / Papers in Political Economy*, 69(2): 185-202.
- Bharadwaj, K. (1994), *Classical Political Economy and Rise of Dominance of Supply and Demand Theories*, India, Universities Press, 3<sup>rd</sup> ed.
- Bharadwaj, K. (1978), Maurice Dobb's Critique of Theories of Value and Distribution, *Cambridge Journal of Economics*, 2(2): 153-175.
- Bidard, C. (1991), *Prix, Reproduction, Rareté*, Paris, Economica.
- Blankenburg, S., Arena, R., and Wilkinson, F. (2012), Piero Sraffa and 'the True Object of Economics': The Role of the Unpublished Manuscripts, *Cambridge Journal of Economics*, 36(6): 1267-1290.
- Bloch, M. (1983), *Marxism and Anthropology – The History of a Relationship*, Routledge, London.
- Bogaard, A. (2017), The Archaeology of Food Surplus, *World Archaeology*, 49(1): 1-7.

- Bowles, S. (2011), Cultivation of Cereals by the First Farmers was not More Productive than Foraging, *Proceedings of the National Academy of Sciences*, 108(12): 4760-5.
- Bowles, S. and Jung-Kyoo Choi (2019), The Neolithic Agricultural Revolution and the Origins of Private Property, *Journal of Political Economy*, 127(5): 2186-2228.
- Bowles, S., Smith, E.A., and Mulder, M.B. (2010), The Emergence and Persistence of Inequality in Premodern Societies, *Current Anthropology*, 51(1): 7-17.
- Cartelier J. (2014), The Positive Surplus Hypothesis: Social versus Physical Objectivity, in Bellofiore R., and Carter S. (eds), *Towards a New Understanding of Sraffa*, London, Palgrave Macmillan: 167-185.
- Cesaratto, S. (2019b), Heterodox Economics and Economic Anthropology: Reflections prompted by two Books, *Working paper DEPS*, no. 807.
- Cesaratto, S. (2019a), The modern Revival of the Classical Surplus Approach: Implications for the Analysis of Growth and Crises, in Gabellini, T., Gasperin, S., and Moneta, A. (eds), *Economic Crisis and Economic Thought – Alternative Theoretical Perspectives on the Economic Crisis*, Abingdon & New York, Routledge: 111-134.
- Cesaratto, S. and Di Bucchianico, S. (2020), The Surplus Approach, Polanyi and Institutions in Economic Anthropology and Archaeology, *Working paper DEPS*, no. 828 (forthcoming *Annals of the Fondazione Luigi Einaudi*).
- Childe, V.G. (1936), *Man Makes Himself*, London, Watt.
- Childe, V.G. (2004 [1947]), Archaeology as a Social Science, in Patterson, T. C., and Orser, C. E. (eds), *Foundations of Social Archaeology - Selected Writings of V. Gordon Childe*, Berg, Oxford.
- Clark, C.M.A. (1992), An Institutional Critique of Sraffian Economics, *Journal of Economic Issues*, 26(2): 457-468.
- Davis, J.B. (2017), Sraffa on the Open versus “Closed Systems” Distinction and Causality, *Symposium on New Directions in Sraffa Scholarship - Research in the History of Economic Thought and Methodology*, Vol. 35B, Emerald Publishing Limited: 153-170.
- De Vivo, G. (2017), *Nella bufera del Novecento. Antonio Gramsci e Piero Sraffa tra lotta politica e teoria critica*, Roma, Castelvechi.
- Diamond, J. (2012), What Makes Countries Rich or Poor?, *The New York Review of Books*, June 7.

- Dobb, M. (1932), *On Marxism Today*, London, Hogarth Press.
- Earle, T. (2011), Redistribution in Aegean Palatial Societies. Redistribution and the Political Economy: The Evolution of an Idea, *American Journal of Archaeology*, 115(2): 237-44.
- Earle, T. (2015), Surplus and the Political Economy in Prehistory, in Morehart, C. T., and De Lucia, K. (eds), *Surplus: The Politics of Production and the Strategies of Everyday Life*, University Press of Colorado: 307-326.
- Frangipane, M. (1996), *La nascita dello Stato nel Vicino Oriente*, Bari, Laterza.
- Frangipane, M. (2016), The Development of Centralised Societies in Greater Mesopotamia and the Foundation of Economic Inequality, in Meller, H., Hahn, H. P., Jung, R., and Risch, R. (eds), *Arm und Reich / Rich and Poor – Competing for Resources in Prehistoric Societies*, Tagungen des Landesmuseums für Vorgeschichte Halle 14: 469-490.
- Frangipane, M. (2018), From a Subsistence Economy to the Production of Wealth in Ancient Formative Societies: a Political Economy Perspective, *Economia Politica*, 35(3): 677–689.
- Fratini, S. M. (2016), Rent as a Share of Product and Sraffa's Price Equations, *Cambridge Journal of Economics*, 40(2): 599-613.
- Fratini, S. M. (2018a), Sraffa on the Degeneration of the Notion of Cost, *Cambridge Journal of Economics*, 42(3): 817-36.
- Fratini, S. M. (2018b), Theories of Value and Ultimate Standards in Sraffa's Notes of Summer 1927, *Bulletin of Political Economy*, 12(1-2): 35-53.
- Fusfeld D.B. (1957), Economic Theory Misplaced: Livelihood in Primitive Society, in Polanyi, K., Arensberg, C., and Pearson, H. (eds.), *Trade and Market in the Early Empires*, Glencoe, Illinois, The Free Press: 342-56.
- Garegnani, P. (2007), Professor Samuelson on Sraffa and the Classical Economists, *The European Journal of the History of Economic Thought*, 14(2): 181-242.
- Garegnani, P. (2018), On the Labour Theory of Value in Marx and in the Marxist Tradition, *Review of Political Economy*, 30(4): 618-642.
- Garegnani, P. (1960), *Il Capitale nelle Teorie della Distribuzione*, Milano, Giuffrè.
- Garegnani, P. (1984), Value and Distribution in The Classical Economists and Marx, *Oxford Economic Papers*, 36(2): 291-325.

- Garegnani, P. (1987), Surplus Approach to Value and Distribution, in Eatwell, J., Milgate, M., and Newman, P. (eds), *The New Palgrave. A Dictionary of Economics*, New York, Macmillan (4): 560-574.
- Gintis, H., van Schaik, C., and Boehm, C. (2015), *Zoon Politikon: The Evolutionary Origins of Human Political Systems*, *Current Anthropology*, 56(3): 327-353.
- Ginzburg, A. (2000), Sraffa e l'Analisi Sociale: Alcune Note Metodologiche, in Pivetti, M. (ed), *Piero Sraffa: Contributi per una Bibliografia Intellettuale*, Roma, Carocci.
- Ginzburg, A. (2014), Two Translators: Gramsci and Sraffa, *Centro Sraffa Working Paper Series*, no. 1.
- Ginzburg, A. (2016), Sraffa and Social Analysis: Some Methodological Aspects, *Situations*, 6(1): 53-87.
- Godelier, M. (1974), On the Definition of a Social Formation. The Example of the Incas, *Critique of Anthropology*, 1(1): 63-73.
- Godelier, M. (2015), Comment on Timothy Earle, *Current Anthropology*, 56(4): 531-532.
- Gudeman, S. (1978), Anthropological Economics: The Question of Distribution, *Annual Review of Anthropology*, 7: 347-377.
- Halperin, R. H. (1984), Polanyi, Marx, and the Institutional Paradigm in Economic Anthropology, in Isaac, B. L. (ed), *Research in Economic Anthropology*, 6: 245-72.
- Halstead, P. (1989), The Economy has a Normal Surplus: Economic Stability and Social Change among Early Farming Communities of Thessaly, Greece, in Halstead, P., and O'Shea, J. (eds), *Bad Year Economics: Cultural Responses to Risk and Uncertainty*, Cambridge, Cambridge University Press: 68-80.
- Harris, M. (1961), A Reply to Rotstein's Note, *American Anthropologist*, 63(3): 563.
- Harman, C. (2006), Shedding New Light on the Dark Ages, *International Socialism*, 109 (Winter).
- Hastorf, C. A. and Foxhall, L. (2017), The Social and Political Aspects of Food Surplus, *World Archaeology*, 49(1): 26-39.
- Herskovits, M.J. (1952), *Economic Anthropology: A Study in Comparative Economics*, New York, Alfred A. Knopf (originally published in 1940 as *The Economic Life of Primitive Peoples*).

- Jiménez-Jáimez, V., Suárez-Padilla, J. (2019), Understanding Pit Sites: Storage, Surplus and Social Complexity in Prehistoric Western Europe, *Journal of Archaeological Method Theory*: 1-37.
- Kim, J. (2014), From Labour Control to Surplus Appropriation: Landscape Changes in the Neolithization of Southwestern Korea, *Journal of World Prehistory*, 27(3-4): 263-275.
- Lazzarini, A. (2011), *Revisiting the Cambridge Capital Theory Controversies*, Pavia, Pavia University Press.
- Lee, F. S. and Jo, T. H., (2011), Social Surplus Approach and Heterodox Economics, *Journal of Economic Issues*, 45(4): 857-876.
- Malinowski, B. (1922), *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagos of Melanesian New Guinea*, London, Routledge and Kegan Paul.
- Marx, K. (1974 [1887]), *Capital - A Critical Analysis of Capitalist Production* [Engels' 1887 edition], 3 Voll., London, Lawrence & Wishart.
- Marx, K. (1973 [1857-8]), *Grundrisse. Foundations of the Critique of Political Economy*, Penguin Books, New York.
- Mayshar, J., Moav, O., Neeman, Z., and Pascali, L. (2015), Cereals, Appropriability and Hierarchy, *CEPR Discussion Paper* 10742.
- Mayshar, J., Moav, O., Neeman, Z., and Pascali, L. (2019), *The Origin of the State: Land Productivity or Appropriability?* Hebrew University of Jerusalem, University of Warwick, Tel Aviv University, and Pompeu Fabra University.
- Meek, R.L. (1976), *Social Science and the Ignoble Savage*, London, Cambridge University Press.
- Morehart, C. (2014), The Potentiality and the Consequences of Surplus: Agricultural Production and Institutional Transformation in the Northern Basin of Mexico, *Economic Anthropology*, 1(1): 154-66.
- North, D., and Thomas, R. (1977), The First Economic Revolution, *The Economic History Review*, 30(2): 229-241.
- North, D.C. (1977), Markets and other Allocation Systems in History: The Challenge of Karl Polanyi, *Journal of European Economic History*, 6(3): 703-716.

- Pearson, H.W. (1957), The Economy has no Surplus: Critique of a Theory of Development, in Polanyi, K., Arensberg, C., and Pearson, H. (eds), *Trade and Market in the Early Empires*, Glencoe, Illinois, The Free Press, 320-41.
- Polanyi, K. (1957), The Economy as an Instituted Process, in Polanyi, K., Arensberg, C., and Pearson H. (eds), *Trade and Market in the Early Empires*, Glencoe, Illinois, The Free Press, 243-70.
- Polanyi, K., Arensberg, C., and H. Pearson (eds) (1957), *Trade and Market in the Early Empires*, Glencoe, Illinois, The Free Press.
- Renger, J. (2016), Weber-Polanyi-Sraffa: A Consideration of Modes of Production, in Bartoloni, G., Biga, M. G., and Bramanti A. (eds), *Not only History*, proceedings of the Conference in Honor of Mario Liverani, Winona Lake, Indiana Eisenbrauns, 2016.
- Risch, R. (2016), How did Wealth turn into Surplus Profit? From Affluence to “Scarcity” in Prehistoric Economie, in Risch, R., Meller, H., and Jung, R. (eds), *Rich and Poor - Competing for Resources in Prehistoric Societies*, Tagungen des Landesmuseums für Vorgeschichte Halle 14, Halle.
- Sahlins, M. (1972), *Stone Age Economics*, Aldine, Chicago.
- Scott, J.C. (2017), *Against the Grain: A Deep History of the Earliest States*, Yale University Press.
- Sen, A. (2016), Sraffa’s Constructive Scepticism, *The Economic and Labour Relations Review*, 27(1): 3-10.
- Serrano, F. and Mazat, N. (2017), Quesnay and the Analysis of Surplus in the Capitalist Agriculture, *Contributions to Political Economy*, 36(1): 81-102.
- Smith, M. (2004), The Archaeology of Ancient State Economies, *Annual Review of Anthropology*, 33: 73-102.
- Sraffa, P. (1951), ‘Introduction’ to D. Ricardo, On the Principles of Political Economy and Taxation, in *Works and Correspondence of David Ricardo*, ed. P. Sraffa (with the collaboration of M. Dobb), Vol. I, Cambridge, Cambridge University Press.
- Sraffa, P. (1960), *Production of Commodities by Means of Commodities*, Cambridge, Cambridge University Press.
- Svizzero, S., Tisdell, C. A. (2016), Economic Evolution, Diversity of Societies and Stages of Economic Development: A Critique of Theories Applied to Hunters and Gatherers and their Successors, *Cogent Economics & Finance*, 4(1): 1-18.

Testart, A. (1988), Some Major Problems in the Social Anthropology of Hunter-Gatherers, *Current Anthropology*, 29(1): 1-31.

Trabucchi, P. (2020), Considerations on the Development of Quesnay's Tableau Économique, in Marcuzzo, M. C., Deleplace, G., and Paesani, P. (eds), *New Perspectives on Political Economy and Its History*, Palgrave Macmillan, Cham, 129-148.

Trigger, B. (2003), All People are [not] Good, *Anthropologica*, 45(1): 39-44.

Urem-Kotsou, D. (2017), Storage of Food in the Neolithic Communities of Northern Greece, *World Archaeology*, 49(2-3): 1-17.

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