

# LÉON WALRAS' SOCIALISM AND HIS ECONOMICS\*

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Je ne suis pas un économiste. Je suis un socialiste. Mais je sais mieux l'économie politique que les économistes. (Léon Walras, Fonds Lausanne, IS 1927 V /16 /5)

## Introduction

Today, Léon Walras' name is strictly connected with the neo-classic economic theory and in particular with the general economic equilibrium that was, till some years ago, the prevailing program of research.

However, Walras' socialism periodically reappears in the secondary literature, but with a argumentative structure grounded on the distinction between judgements of fact and judgement of value (Gijssels 1989) and/or without calling into question the disciplinary separations among the pure, applied, and social economics (Rugina 1982). Gaspare De Caro (1980; 1985) is probably the first<sup>1</sup> attempt to treat the 'organicity' that characterises the Walrasian work, preceding the numerous studies dedicated to Walras' epistemology<sup>2</sup>. The question of Walras' socialism is here taken up starting from this point of view and following some recent interpretative paths concerning Walras' philosophy of science. The present research aims to point out the *necessary* relations between Walras' (singular)

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<sup>1</sup> Jaffé certainly is a pioneer, nevertheless his position is ambiguous: he treats Walras' epistemology and his work as a whole but he leads the relations among the different aspects to a modern conception, which we would define generically 'positivist'.

<sup>2</sup> (Jolink 1991; Baranzini 1992; De Caro 1992; Lhuillier 1992; Baranzini 1993; Arena et Ragni 1994; Bürgermeier 1994; Dockès 1994; Potier 1994; Koppl 1995; Baranzini 1996; Dockès 1996; Jolink 1996; Walker 1996; Lallement 1997; Lendjel 1998; Potier 1998; Baranzini 1999; Dockès 1999; Potier 1999b; Rebeyrol 1999; Herland 2000; Tatti 2000; Baranzini 2005).

socialism and his (atypical) marginalism.

The most spontaneous way to face Léon Walras' socialism is to predominantly interpret it as a distributive proposal. The first part (I) of this paper thus starts with the explanation of the proposals concerning the nationalisation of land and the abolition of income tax (I.1.a). From these proposals we will go back to the ethical basis that inspired them, recalling some specific aspects of Walrasian pure moral science (I.1.b); we then propose a more philological interpretation of Walras' socialism (I.2): the claim of the existence of a social ideal characterizes socialism more than the initiatives to reach it. In these terms, Walras' socialism is 'scientific'. On the political and practical level, Walras continues defining himself a liberal to the extent that he defends individual freedom also against the enlightened reforms based on a social ideal.

The second part (II) treats the impact of pure moral science on the elaboration of the economic ideal, that is, on pure economics<sup>3</sup>. Firstly (II.1), we identify the theoretic nucleus formulated by the categories of pure morality: the exchange cannot interfere with income distribution and must occur respecting individual freedom. Secondly (II.2), we treat the repercussions on pure economics of such requirements. The first difficulty arises from the exchanges out of equilibrium: in order to assure the distributive neutrality, exchanges have to be suspended until the prices correspond with those of the general equilibrium (II.2.a). A converging algorithm of the mechanism of free competition, the *tâtonnement* takes place in a 'logic time', excluding any exchange at prices that influence the individuals' endowments. A second difficulty (II.2.b) comes from the fact that at the (moral) basis of distribution there is labour. In particular, a possible *bénéfice*<sup>4</sup> does not seem legitimate but in some cases. Ethical considerations and the methodological distinction between distribution and value of exchange force the exclusion from pure economics of the functional distribution that is based on the marginal productivity. The exchange (of good as well than of the factors of production) must be consistent with justice (neutrality) but it cannot (methodologically and substantially) determine the

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<sup>3</sup> Two crucial interpretative hypotheses must here be taken for granted: the holistic character of political and social economy, and pure economics as a formulation of economic ideal. The complexity of both hypotheses is such that they cannot be seriously justified in the context of the present work. The first hypothesis corresponds to a widespread practice among Walras' specialists –see for instance (Baranzini, Diemer et Mouchot 2004)–, whereas the second is debatable according to the epistemological statute of the ideal types.

<sup>4</sup> It is useful to notice that 'profit' for Walras is the service of capital, whereas the difference between the price of sale and the price of production is called 'benefit' (*bénéfice*). See also (Jaffé 1980, pp. 533-534; Walker 1983, p. 350).

justice of distribution. The introduction of money (II.2.c) is a potential source of injustice too. Indeed, it generates variations in the distribution of income according to two modalities: the chronic instability of its real value as time passes and the net issue of fiduciary money which causes a phenomenon of forced saving.

Thirdly (II.3), we will show the applied devices (*theories* of economic policy) that Walras formulates to guarantee the coherence of social and political economy. It concerns the two theories of State intervention that are functional to the general economic equilibrium, that is to say, they are necessary in order to fulfil its role of economic ideal. The monetary policy (II.3.a) has the task of guaranteeing the stability of the value of money, a necessary condition to the exercise of the right to private property. The organisation of competition (II.3.b) replaces the private initiative in the production of collective goods in case of natural monopolies and prevents concentrations, which are an expanding phenomenon. The section ends (II.4) with the specificity of the theoretic structure of the general economic equilibrium: the priority of the mechanism of equilibrium as regards the agents' behaviour, allows the presentation of the relation between free competition and the *entrepreneur unique*.

The third part (III) begins with another particularity useful to our interpretative line. The notion of 'crisis' undergoes an important change (III.1): that which was an occasional affection now becomes inherent to the atomistic organisation of economy. At this point, we have all the necessary elements in order to understand the meaning of the collectivism of production (III.2), which places the State's intervention well beyond the simple correctives of the market failures.

After a brief summary, the conclusion (IV) presents an interpretative prospect according to which Walras' marginalism confirms, in the complexities of its epistemological articulations, the theoretical impossibility of free-market. The blind forces of economy are such that the *entrepreneur unique* can better guarantee the respect towards the principles of equity (meritocracy) and freedom than the market could do.

## **I. Walras' socialism**

In the literature from Walras' death (1910) until the 1970s, the positivistic reduction of his contribution to pure economics has concealed (or, in a certain sense, «removed») the reformist dimension of his

scientific work. All the same, in his last speech –a sort of scientific will– given during the jubilee that the University of Lausanne organised in his honour, Walras firmly argues,

Tel est le socialisme auquel je suis arrivé. C'est un socialisme scientifique, libéral et humanitaire. (Walras 1909b; 1909a; 1987, p. 511)

Walras' contemporaries understood perfectly this aspect of his work. From his lecture in Lausanne in 1861 until his death Walras had indeed been accused of being a socialist<sup>5</sup>.

## 1. Socialism as distributive proposal

If one considers the debates to which Walras took part, the aspects which struck the critics of the time were there of applied order: the nationalisation of the land by the State and the abolition of taxation. These proposals aroused perplexity and adverse criticism even among his most 'friendly' contemporaries<sup>6</sup>.

### a) The nationalisation of land and the abolition of taxation

In 1880, Walras presents his *Théorie mathématique du prix des terres et de leur rachat par l'État* (1881)<sup>7</sup>, where, basing himself on H.-H. Gossen's theory (1854)<sup>8</sup>, he proposes that the State acquire the totality of the land, since the sum spent will be amortised by future income. Even though the tedious mathematical character of the text makes its understanding difficult, this is the most known, or at least, the most quoted aspect of Walrasian Socialism. On the other hand, the young Walras already defended the principle of collective property of land during his speech in Lausanne (Walras 1861b), where he referred to his father's doctrine of natural law, to which he adds new justifying arguments.

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<sup>5</sup> The disappearance of that aspect of Walras thought since his death probably reflects the anti-socialist influence of his successor. On this subject, the events connected to Walras' writings (Mornati 1999a, pp. 42-48) are significant. For a comparison between Walras and Pareto about the question on the social science, see (Steiner 1994; Marchionatti 1999; Mornati 1999b).

<sup>6</sup> See for instance (Loria 1883; Potter 1884).

<sup>7</sup> Later, in the *Théorie mathématique de la richesse sociale* (Walras 1883) and in the *Études d'économie sociale* (Walras 1896b).

<sup>8</sup> Walras finishes reading Gossen's 1854 book in 1879 and with Charles Secrétan's help (Van Daal et Potier 1992) he writes the translation which will be given to the press only more than one century later, in 1996, edited by J. van Daal, A. Jolink, J.-P. Potier and J.-M. Servet (see Gossen 1996). In 1885, Walras publishes in the *Journal des économistes* an article dedicated to Gossen (Walras 1885a), that will be republished with rectification (Walras 1885b) in the *Études d'économie sociale*, at the end of the chapter entitled «Réalisation de l'idéal social».

Walras' starting point is based on the fact that the land is a natural wealth, that is to say, it has an intrinsic value that is independent from labour and saving. That is why it may be considered as one of the three factors of production. In this respect, Walras adopts the point of view of the classics. During the lectures given in Lausanne, he says that, though their theory of value is wrong, «we will see that for everyone [Say and Garnier] the land owner is a man who sells the natural fertility of land at the price of a rent.»<sup>9</sup>

The land being of intrinsic value, its income is natural and for that reason it does not belong to the individuals but to the community, with the State representing its present and future interests. The collecting of rents by individuals is contrary to distributive justice, for which the only legitimate income from which a person should benefit must be the result of his abilities. If the property of an object, as a result of rightful appropriation, includes the eventual future income (Walras 1896d, lemma I), then the individual ownership of the land would imply an income increase, which, once again, is contrary to the concept of distributive justice. In the second theorem of the theory of property (1896d), Walras clearly affirms that, from the point of view of the natural right, the land must belong to the State:

THEOREME II. – *Les TERRES sont, de droit naturel, la propriété de l'ÉTAT.* (Walras 1896d; 1990, p. 189)

Walras regrets the fact that even though the French Revolution could have changed the situation, putting all the land in the State's hands, the land had been sold «à vil prix»<sup>10</sup>. In this way the *Social question* was emphasised in the change from a decomposed social order into an emerging one. One could then expect that Walras would propose to confiscate the land or to repurchase it at a symbolic price, so that the State could regain it. Instead, he defends the rights of the landowners who have bought the land at the market price that reflects the actual expected income. The difficulty that Walras tries to overcome concerns the fair procedure on how the State could privately obtain the land. This is a difficult problem: on the one hand, the price of the land should be fair for the landowners to be willing to sell it; on the other hand, the State needs a reasonable financial project for the purchase of the

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<sup>9</sup> «[O]n verra que, pour tous, le propriétaire foncier est un homme qui vend, au prix d'un fermage, la fécondité naturelle de la terre.» (CES, 1996, p. 236). The *Cours d'économie sociale* (CES from now onwards) and the *Cours d'économie politique appliquée* (CEA from now onwards) are published in the same volume (Walras 1996).

<sup>10</sup> (Walras 1896e; 1990, p. 420).

land. In Walras' 1880 text he suggests a feasible and just solution, which is consonant with the ideal character of pure science, «the scientific perfection» (Walras 1881). The solution is the following:

L'État pourrait donc racheter toutes les terres en amortissant le prix d'achat au moyen des fermages. (CES, 1996, p. 360)

But the above theoretic conclusion is valid only in a specific case. In modern terms we could say that if the title of ownership is negotiated in a free competition market, its price will consider the expected future incomes. The internal rate of return of such a title would inevitably be the same as the rate of discount, in this case the *taux de revenu net*. Under these conditions, and considering that the rate of discount corresponds to the rate of interest, the State could not pay the interest on the loan and redeem it with the simple amount of the rents. On the other hand, paying to the owners of the land a price that is lower than the current price would be unjust. Walras' solution is to assume asymmetrical information, that is to say, individual underestimates of the future returns, which are correctly anticipated by the State. So the State can acquire the land by paying it at the market price, which reflects a constant rate of growth, whereas in a society that progresses the rate increases and depends on the efforts of the community.<sup>11</sup>

Si l'humanité est actuellement en train de passer du régime agricole au régime industriel et commercial, ce passage constituera un progrès exceptionnel et non prévu, [...] d'où résultera une plus-value des terres que les propriétaires n'ont pas pu faire entrer en ligne de compte dans leurs spéculations. (Walras 1896e; 1990, pp. 411-412)

The conclusion is that the State's purchase of land may occur without trespassing the owners' rights and the State could finance the purchase of the land with a loan that would be amortized by the increase of the rent (which the private owners of the land do not foresee).

Quand il [l'amortissement] serait terminé, le montant des fermages des terres serait disponible pour les dépenses publiques et l'on supprimerait tous les impôts. L'intérêt social et la justice sociale seraient absolument satisfaits, l'idéal social serait réalisé. (Walras 1881; 1990, p. 305)

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<sup>11</sup> The market of the land would be then characterised by asymmetrical information and a sort of «moral risk» in the relation between the future income and the State's behaviour.

The redemption of the land represents the first step of the Social reform. Once the State has paid its debt, the income, coming from the rent of the land, can be used to realise the second step towards the Social reform. The income tax should then be lifted since the drawing on the individuals' income is a property transgression and, as such, unjust. So, the State needs another source to finance his necessary activities. However, in expectation of this available income, what are Walras temporary measures?

Although Walras shows some hesitations (of operative order), he remains faithful to his father's conceptions in the many texts that treat of fiscal questions. In his first writings<sup>12</sup>, Léon Walras affirms the necessity to free wages from fiscal burden and «to impose rents and profits only.»<sup>13</sup> About ten years later (1873), in the search for fiscal equity, he excludes the profits, keeping tax of rents only, and «the landed tax is not a tax but a co-ownership of land on the part of the State»<sup>14</sup>. This conclusion is neither terminological nor anodyne, as it might appear at first sight. On the contrary, the land co-ownership allows Walras to affirm that the State takes advantage of the growth of the landed value<sup>15</sup> and that the part of the land that is not subjected to taxation –the part which is still private property– may be negotiated without economic distortions. It is a measure which goes towards the right direction, a first temporary step to the social ideal and «if the circumstances are good, the State would redeem the land step by step.»<sup>16</sup>.

Let's see now how the State property of the land and its fiscal corollary are founded on values that remind the values of revolutionary constitution of 1791: *liberté, égalité* (Lallement 1990).

#### b) The Social ideal

In the last of six lectures that took place in Paris in 1867-68, a text that from the point of view of Walras' classification of sciences (Potier 1994) has the same quality as pure economics, the same 'scientific dignity' (Baranzini et Tatti 2002), Walras (1868) discusses the relations between individuals

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<sup>12</sup> (Walras 1861b). The first important volume published by Léon Walras (1860a), actually was written on the basis of his father's notes, which sometimes had been faithfully rewritten, (Potier et Goutte 1992); that is why Walras and his father's positions coincide. See also the similarities established by Goutte in (Walras 2001).

<sup>13</sup> «[D'] imposer seulement les fermages et les profits» (Walras 1861a; 1990, p. 357).

<sup>14</sup> «[L'] impôt foncier n'est pas un impôt, mais une copropriété de la terre par l'État».(Walras 1873; 1990, p. 379; and 1861a).

<sup>15</sup> In 1873 Walras affirms that the increase of the rent in a society that progresses is constant (Walras 1873).

<sup>16</sup> «[L'] État procéderait au rachat des terres peu à peu, au fur et à mesure que les circonstances le permettraient» (Walras 1896e; 1990, p. 413).

and society. In what could be considered by analogy a 'pure political theory', and he deals with the issue of the State. In open contrast to the tradition of the social contract (Walras 1868; 1990, pp. 131-133), Walras defends the natural (as opposed to conventional) character of man in society: it is the human (moral) nature itself which finds its expression within a community. With an argumentative shift from the notion of 'society' to that of 'State', Walras defends a holistic vision of the latter. In particular, the State cannot be reduced to a collection of separate individuals, where each person is different from the others. The State is a whole, composed by people who have the same rights as well as duties. There are thus two social types that from the point of view of natural right are equivalent: «the natural right of the State has the same value as the individual's natural right.»<sup>17</sup> It is then necessary to determine the individual prerogatives and the extent of State intervention<sup>18</sup>.

The first problem concerns *order* and it consists in establishing in which cases man must follow his destiny individually (freely) and when collectively (respecting the authority of the State). As for Walras, man should act alone when he follows his own interest, whereas he should act with the rest of the community when the aim to reach concerns general social conditions.

The second problem concerns *justice* and it treats the question of the attribution of the part of wealth which have been obtained by efforts of the individual as well as of the community. The individual will benefit from the results of his own efforts, whereas the result of the labour of an entire community will be claimed by the State, that is to say, by the community itself.

Ainsi, par conséquent, vous arriverez partout et toujours à cette loi supérieure d'accomplissement des destinées humaines dans la société morale: recherche, obtention et conservation *par l'individu*, et *au profit de l'individu*, des *positions personnelles particulières*; établissement, maintien et amélioration *par l'État*, et *au profit de l'État*, des *conditions sociales générales*. (Walras 1868; 1990, p. 135)

Both problems find a solution on the one hand in the search of the individual achievement and preservation its position; and, on the other hand, in the search for the achievement and preservation of the general social conditions on the part of the State.

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<sup>17</sup> «[L]e droit naturel de l'État vaut le droit naturel de l'individu.» (Walras 1868; 1990, p. 137).

<sup>18</sup> Walras does not understand the meaning and the importance of the hypothesis of the «state of nature» as an argumentative device of the (self-imposed) limits to individual freedom, and he opposes against it the banal historic argument and the inexistence of a material social contract (Walras 1868; 1990, p. 132).

In such a context<sup>19</sup>, Walras' assertion about the natural character of the production factor called 'land' immediately leads to the distributive proposal of the community property of the land. It is now easier to understand Walras' emphasis on the fact that the land, which is a natural good, has an intrinsic value and the origin and growth of its income is due to the rise of the population, to the opportunity of new markets for agricultural products (1873; 1990, p. 382) and to the shifting from an agricultural regime to an industrial one (1881; 1990, p. 302).

The product that comes from the effort of a community will belong to the community as a whole, where all people equally benefit from it, and for that reason it will be free. On the contrary, what comes from the individual effort will be exclusively owned by the person who has produced it: everybody will be repaid according to the quantity and the quality of his labour. The product that comes from the individual's effort belongs by right to who has produced it and any income tax is an iniquitous and arbitrary act on the part of the State.

From a practical point of view, Walras will do some apparent concession. For instance, if the land tax were not enough, the State could impose a tax, and all the members of the community would pay the same amount:

les services de l'État sont ou tout au moins devraient être ceux intéressant également tous les citoyens, et [...] en conséquence tous les citoyens doivent contribuer pour une part égale aux dépenses publiques. (Walras 1861a; 1990, p. 340 and p. 342)

In 1896 Walras will accept the graduated taxes as well to lighten the fiscal burden of the needy classes, in expectation of the nationalisation of the land and the measures necessary to it. From the justice point of view, Walras claims his substantial opposition to the policy of redistribution, which he considers as a consequence to the abandonment of reason for sentiment as well as of science for empiricism (Walras 1896e; 1990, p. 402). The redistribution of the income is then an antagonist act to Socialism and a conforming act to Radicalism.

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<sup>19</sup> For Walras' distributive proposals we need to start from the question of justice, putting off to later the analysis of the question of order. It is a question of determining «la sphère de la jouissance en commun ou collective, qui est celle de l'égalité, et la sphère de la jouissance individuelle, qui est celle de l'inégalité.» (Walras 1868; 1990, p. 139)

Ce qui distingue en effet le *socialisme* du *radicalisme*, c'est que le premier, ayant reconnu l'injustice sociale, prétend la supprimer pour faire régner la justice, tandis que l'autre la laisse subsister en s'efforçant de la compenser par une injustice en sens contraire. (Walras 1896e; 1990, p. 402)

On the contrary, Walras' final aim is the rational society where «thanks to the commutative justice and the equality of opportunity, the State may subsist on land taxes and where, thanks to distributive justice and the inequality of the positions, the individual may fully enjoy the results of his labour.»<sup>20</sup> It is towards this social ideal that one must tend, the same ideal towards which society historically tends.

Walras' main suggestions about the property are clear: collective property of land and any income tax. In spite of such radical opinion, Walras was during the sixties quite active in the cooperative movement<sup>21</sup>, but the function of the cooperative societies is in Walras' estimation, neither propaedeutic to the reversal of the economic as well as political order, nor palliative<sup>22</sup>. However, in a recent paper, Bourdeau (2004) convincingly argues that because of Léon Walras republican and democratic values, his conception of cooperatives societies should be seen as a fulfilment of "égalité des conditions" since he imagines that everybody would become worker as well as capitalist. Cooperative associations are a modality by which individuals can freely and willingly apply in the following of their proper aims. Incidentally, Walras takes part of a credit co-operative (and not a consumer's co-operative): the intent is to put together the scarce individual saving of the workers and to invest them in yielding projects<sup>23</sup>, so that the credit meets the straits that a thrift on the wage may cause. Then the aim will be to offer the possibility to improve, in the long term, the conditions of the enterprising individuals.

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<sup>20</sup> «Grâce à la justice commutative et à l'égalité des conditions, l'État subsisterait sur la rente foncière, et où, grâce à la justice distributive et à l'inégalité des positions, l'individu demeurerait en pleine et entière possession des fruits de son travail.» (Walras 1896e; 1990, p. 404).

<sup>21</sup> On this subject, see (Boson 1963; Demoustier 1988; Hébert 1988; Potier 1990; Dockès 1996, pp. 174-180; Nakakubo 2000).

<sup>22</sup> «Chercher la réforme sociale dans l'association coopérative, c'est exactement comme si on la cherchait dans la charité ou dans la philanthropie, comme si on la cherchait dans l'assurance mutuelle. C'est à la fois diminuer sinon méconnaître la réforme sociale, et exagérer, pour la compromettre, l'association coopérative.» (Walras 1868; 1990, p. 66)

<sup>23</sup> For monetary and financial questions in the writings of the young Walras see (Baranzini 2000).

c) A singular Socialism

Though Walras' socialism, as far as the distributive and fiscal proposal is concerned, is very singular<sup>24</sup>, Walras goes on defining himself a socialist. Some important figures of the French socialism were very critical<sup>25</sup>, whereas other critics saw in him as a genuine socialist figure. As for Walras, he does his share of caustic criticism. The criticism he directed to the Liberal party, especially to the orthodox economists' school, are well known (Potier 1988; Zylberberg 1990). They often come from the resentment provoked by the ostracism of which he was a victim in France, but they have a theoretical foundation as well in the decisive accusation to the unconditioned faith in the *laissez faire, laissez passer*. The criticism Walras directed to the socialist doctrines (CES 1996, leçons 36-40), usually less virulent than the attacks against *les économistes*, are principally two: on the one hand there is the formal criticism concerning the presumed incoherence of such theories<sup>26</sup>; on the other hand, there is the essential criticism concerning the idealisation of the human nature that some of those theories imply<sup>27</sup>. Walras rebukes to Marxism (1896d; 1990, pp. 195-206) its starting point, that is to say, the labour theory of value<sup>28</sup>, but on the other hand he recognises its coherence and certain pertinence as well.

In short, it is not easy to place Walras in the politic panorama of the end XIX<sup>th</sup> century: he is considered a socialist by liberals and a liberal by the socialists<sup>29</sup>. To the liberals' dogmatism and defeatism, to the ingenuousness and incoherence of the «empirical socialist», Walras opposes a scientific project which is genuinely socialist<sup>30</sup>.

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<sup>24</sup> For a list of 'oddities', see (Dockès 1996, c. 4).

<sup>25</sup> For instance (Flürscheim 1891; Winiarski 1896; Sorel 1896; in Bridel et Baranzini 1996; 1899).

<sup>26</sup> He speaks ill of Proudhon (Walras 1860a) and of other authors too (Victor Considérant, for instance) who are considered incoherent.

<sup>27</sup> Explicitly, Walras refers to Louis Blanc and Etienne Cabet, to Fourier and the Saint Simonians, too.

<sup>28</sup> Confusing it with the «théorie de la valeur-valeur du travail» (Dockès 1996, p. 193). See also Dockès' note in (Walras 1990, p. 448, n. 14). On the reception of Marx' *Das Kapital* in France, see Arena (1995).

<sup>29</sup> (Boson 1950, p. 312 ssg.). There were few 'good classifications', in particular of pure economics (Renard 1893; Péguy 1897; Pic 1902; in Bridel et Baranzini 1996).

<sup>30</sup> If 'scientific socialism' is a pleonasm (Jolink 1996, p. 32), 'empirical socialism' is an antinomy: in opposition to liberalism, the scientific, perfect and ideal character is typical to socialism. This is the most fundamental way to understand Walras' socialism.

## 2. *Socialism as science of Reform*

Perfectibilité ou perfection, libéralisme ou socialisme, telle est l'alternative et la question qui s'agite. C'est en réalité la grande, je dirais volontiers la seule et unique question de notre époque (Walras 1866; 1990, p. 10)

Indeed, for Walras, “scientific socialism” is not just a distributive *proposal*, a solution to the social question, but the belief in the very existence of a perfect, absolute and scientific solution with a possibility of reaching it. In this sense, since the science deals with ideas, with perfection, Walras considers himself «scientifically a socialist»<sup>31</sup>. Nevertheless, in the realisation of the (pure and applied) theories, he remains politically liberal.

Following what he considers the most advanced modern philosophy<sup>32</sup>, Walras thinks that the ideal constitutes the object of scientific theories. The ideal, as such, refers to perfection, which on the one hand represents the constitutive principle of science and, on the other hand, the referential model to both perfectibility and the becoming perfect of society (Berthoud 1988a; Dockès 1999; Baranzini 1999; Baranzini et Tatti 2002). Symmetrically, the world of facts is the object of experience, which cannot be perfect, but can be improved thanks to a practice directed by the social ideal. Precisely,

S'il est un point qui distingue le socialisme du libéralisme, c'est bien le pouvoir de l'homme d'agir par la raison sur l'organisation sociale. (Denizet 1981, p. 6)

As early as the XVIII<sup>th</sup> century, the awareness arises that society is neither a divine creation nor constituted by chance or necessity, and that society is a human product, as institutions are. For that reason society can be understood and changed: here sociology and socialism have the same origin which has been incidentally noticed by Walras when he affirms that defining liberalism and socialism as he did offers the possibility to debate the question of the existence of a social science (1872; 1896c; 1990, p. 155; 2000).

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<sup>31</sup> «[S]cientifiquement tout à fait socialiste» (Walras 1866; 1990, p. 19; also 1896c).

<sup>32</sup> Walras refers to Etienne Vacherot of whom he declares to be a devoted follower (Walras 1866; 1990, p. 16). For a detailed analysis of the influence of the French philosopher on the Walrasian epistemology, see (Tatti 2000).

On the contrary, liberalism objects to both the possibility and the desire of any influence on the part of man on the social organisation, and it denies the «social question and social truth»<sup>33</sup>.

Nevertheless, Walras is not only a socialist and the assertion of the contrary would imply the neglecting of his pages and his arguments on the synthetic method.

En chaque matière controversée, elle [la méthode synthétique] s'efforce d'abord d'introduire une distinction de point de vue; puis, par une critique motivée, elle donne alors respectivement raison ou tort à chacun des systèmes en présence, à l'un ou à l'autre de ces points de vue; enfin, elle conclut en opérant le rejet des parties fausses et la synthèse des parties vraies. (Walras 1872; 1896c; 1990, p. 152; 2000)

In the case in point, Walras works according to the synthetic method<sup>34</sup>: he introduces two points of view (science and reality) and he then compares them to the two concurring systems (Socialism and Liberalism). Socialism has every reason in debating the Social question and in the looking for a solution to it. It is wrong when it wants to find it quickly and when it imposes it through the authority of the State. Liberalism, on its turn, is wrong when it denies the Social question, whereas it is right when it rejects the authority that wants to be a substitute to a free going towards a rational solution. (Walras 1868; 1990, p. 160).

Walras' synthesis consists in defining himself a socialist *as a man of science*<sup>35</sup> and in giving *political credit* to liberalism. On the one hand this means the claiming of the existence of the economic and social science that can define society as well as the ideal economy and indicate the reforms, which are necessary to reach them. On the other hand, as could be expected of a strong advocate of individual freedom, it means the refusal of the authoritarian interventions of the State and the confidence in history and in the patient advancing of man towards the accomplishment of his destiny (Walras 1874a; 1988, p. 62).

In this context, the content of the pure economics constitutes the economic ideal. But in Walras' opinion the pure moral science, where we have tried to find the basis of the applied theories of distribution, has the same scientific dignity than any other pure science, pure economics in particular

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<sup>33</sup> «[L]a question sociale et la vérité sociale» (Walras 1868; 1990, p. 155).

<sup>34</sup> To be exact, the opposition itself between liberalism and socialism is one of the points of views (that of the social morality) of a more fundamental synthesis between empiricism and idealism (Walras 1868; 1990, p. 154).

<sup>35</sup> Walras' criticisms to socialists are turned to the failure and not to the attempt to catch the absolute.

(Walras 1879; 1987, p. 414). For that reason the general economic equilibrium cannot be blamed for the mechanisms that are incompatible with the principles of justice<sup>36</sup>.

Une économie politique qui dirait obstinément: Oui, alors que la justice dirait avec évidence: Non, serait une détestable économie politique; disons mieux, *ce ne serait pas de l'économie politique*. (Walras 1860b, p. 206. Italic added)

The theory of the social wealth and the theory of distribution are two different but united aspects of the Walrasian political and social economy: it is therefore unthinkable that the foundations of the two theories turn out to be contradictory. Thus, «the solution of the justice problem: *equality of conditions, inequality of positions*»<sup>37</sup> has some indirect repercussions on the formulation of the Walrasian economic theory<sup>38</sup>.

## II. ...and Marginalism

The exchange –the central concept of pure economics– depends on Walras' theory of distributive justice. Not only is the exchange which is based on the model of the Jevonsian barter compatible with the justice of exchange *a posteriori* (Jaffé 1977, p. 375; Walker 1983, p. 330) corresponding for that reason to the right of property (Walras 1896d; 1990), but the Jevonsian barter represents the ideal type<sup>39</sup> of exchange *a priori* (Baranzini et Tatti 2002). In other words, the crucial point of articulation between pure economics and pure moral science is that exchange is not allowed to modify the «positions» legitimately acquired by individuals, that is why it should not have any impact on income distribution.

### 1. *Pure economics, or rather the economic ideal*

From the point of view of the classification of the sciences (Potier 1994), the role that pure economics has within the Walrasian political and social economics, is to determine the value of social wealth that

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<sup>36</sup> «A political economy that would firmly say: Yes, whereas the justice would say: No, would be a hateful political economy; or in other words, it wouldn't be political economy at all.»

<sup>37</sup> «La solution du problème de la justice: *Égalité des conditions, inégalité des positions*» (Walras 1868; 1990, p. 129).

<sup>38</sup> Rebeyrol (1999, p. 32) affirms that eventually pure economics «n'est tout entière qu'un gigantesque lemme de la théorie de la propriété.»

<sup>39</sup> On the question of 'ideal types', see (Berthoud 1988a; Baranzini 1993; Dockès 1999; Tatti 2000).

exchange makes objective<sup>40</sup> (Lotter 1985; Baranzini et Tatti 2002), whereas the question of distribution, that is to say, the [*première*] *question sociale*, is assumed by social economics which has appropriate concepts ( like 'property', 'justice') to do the job. Walras believes that the distinction between the theory of the value of wealth and the theory of distribution is essential. On this subject Walras (1868, II lesson.) points out two current mistakes of empiricism. On the one hand the spiritualists, who consider the question of the value within the question of justice, provoke «the annihilation of both political economy and social science on behalf of individual morality»<sup>41</sup>. On the other hand, the materialists, who include within the theory of value (of exchange) the theory of distribution, make an opposite mistake. From Walras point of view, one must look for the principles that support the right distribution of wealth within the principles of natural law. Pure economics also helps<sup>42</sup> in showing

comment les processus économiques, [...] peuvent et doivent se dérouler d'une façon qui ne remette pas en cause la justice de la répartition déterminée par le droit naturel. (Rebeyrol 1999, pp. 32-33)

Thus, such mechanisms<sup>43</sup> must be neutral towards the criterion of justice. The same Walrasian systematic demands the distributive neutrality of exchange, but this necessity finds a justification in the theory of justice, at least according to two arguments.

Starting from the notion of individual freedom and within a traditional Cartesian scheme<sup>44</sup>, Berthoud points out the incommensurability of the subjects in terms that everyone owes himself what he considers to be his position. This implies that,

toute relation entre les individus n'engage rien d'eux-mêmes ou rien qui puisse les lier les uns aux autres sous la forme d'une dette réciproque ou d'un accord en commun. (Berthoud 1988b, p. 73)

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<sup>40</sup> «Phantasmagorical representation of a relation among things...» (Marx 1980, p. 104).

<sup>41</sup> «[L'] anéantissement de l'économie politique et de la science sociale au profit de la morale individuelle» (Walras 1868; 1990, p. 78).

<sup>42</sup> Walras is aware that he cannot elaborate a theory of the distribution of social wealth without explaining before the nature and the laws of social wealth.

<sup>43</sup> The term 'mechanism' is here preferred to the term 'process' since we make reference to the timeless part of the general economic equilibrium, subscribing to the interpretation of *tâtonnement* in terms of an abstract algorithm (Bridel 1997; Lendjel 1998; Bridel et Huck 2002).

<sup>44</sup> Berthoud (1988b, § 4.2) adopts a 'systematic' more than a philological reconstruction. The reference to the Cartesian tradition, also studied by (Koppl 1992) does not seem to find a confirmation.

The exchange must be neutral, being a relation that does not involve any personal feature of the individual.

We reach the same conclusion if we consider, together with the principle of distributive justice –*égalité des conditions, inégalité des positions* [equity of conditions and inequality of positions]–, the fact that labour is the unique basis of individual property (Walras 1860a, p. xlvi; 2001) and, for that reason, the only justification to the differentiation among positions. Exchange is not a productive activity since it does not imply any personal capacity. Briefly, the nature of exchange does not involve any type of labour and consequently it cannot be the legitimate source of income, since it can neither modify the inequality among individual conditions which correspond to different efforts nor introduce differences among identical «positions».

There is a second ethical constraint on pure exchange: the agents should act freely. This means that the exchange should take place willingly and the decision to exchange or not should be taken without any type of pressure on the agent. We need a mechanism that on the one hand guarantees the commutative justice during the exchange, and on the other hand, protects individuals' freedom; in other words, a mechanism that assures the achievement of the agent's *destinées*.

S'il n'y avait qu'un seul homme sur la terre, il serait maître de toutes les choses. Mais il n'en est pas ainsi, et tous ceux qui y sont, étant des personnes au même titre les uns que les autres, sont également responsables de la poursuite de leur fin, de l'accomplissement de leur destinée. Toutes ces fins, toutes ces destinées doivent se *coordonner* les unes avec les autres. (Walras 1874a; 1988, p. 41)

This second ethic requirement to which exchange is faced, finds its achievement in the absolute free competition, which represents the context where exchange happens following fair procedures (Baranzini 1993) leads to a just end (a single price which corresponds to production costs).

## ***2. Analytic difficulties within pure economics***

For epistemological reasons and for reasons that are inherent to the theory of justice, the exchange within pure economics cannot involve distributive effects. Which are the logical constraints that such requirement introduces within pure economics?

### a) Trade out of equilibrium

First of all, the fair outcome implies that the goods are exchanged only at the price of equilibrium, reason for which the exchanges at prices that are not of equilibrium cannot figure in pure economics. From this point of view there is no place for exchanges which are out of equilibrium since generically they would contradict the single price condition of justice (Walras 1896d; 1990, p. 184), and also because, more precisely, Walras was aware of their distributive implication as it follows from the analysis of the theorem of equivalent redistributions of commodity holdings (Huck 1999, pp. 106-109). In 1885, for the first time explicitly, Walras assumes the suspension of exchanges till the achievement of the prices of equilibrium. Answering to the critic that Joseph Bertrand arose in his review to the *Théorie mathématique de la richesse sociale* (Walras 1883) and according to which the equilibrium is indeterminate since it depends on the *path* (Bertrand 1883; in Bridel et Baranzini 1996, pp. 200-201), Walras writes:

Je réponds à cela que, sur le marché théorique, en cas d'excédent de la demande sur l'offre ou de l'offre sur la demande, on ne satisfait personne, mais que l'échange demeure suspendu jusqu'à ce que la hausse ou la baisse ait amené l'égalité entre l'offre et la demande; après quoi on satisfait tout le monde. Le prix courant théorique est essentiellement un prix unique résultant, à un moment donné, d'un échange général. (Walras 1885a; 1990, p. 312)

Unequivocally in the exchange of (not produced) goods, transactions occur only when the prices reached are those of the general equilibrium. Nevertheless, in the case that the exchanged goods are produced, the question of *tâtonnement* has no simple solution. Indeed, until the *tâtonnement* on prices of the factors of production may occur it is necessary that the prices of goods be established. But the demands in excess depend on the income that, on its turn, depends on the price of the factors of production. The problem of the impact of the *tâtonnement* on the prices of the factors of production on the distribution will worry Walras until the fourth edition of the *Éléments*, in which the introduction of the *tâtonnement sur bons* will offer a satisfactory theoretical solution (Bridel et Huck 2002). Yet from the exchange of goods not produced to the exchange of goods that are produced follows a second type of difficulty.

## b) Marginal productivity and distribution of income

The introduction of the productive phenomenon, in the determination of the value of exchange of social wealth, introduces a new problem: *le bénéfice*. For the exchange to be neutral from the point of view of distribution, benefits are allowed to the extent that they are the legitimate retribution of personal faculties. Generally speaking, it is the theory of the remuneration of the factors of production that is problematic. In the *Éléments*<sup>45</sup>, the coefficients of production are fixed and the prices of goods correspond to their cost of production. The entrepreneurs have neither benefits nor losses (1877; 1988, p. 284) and there are no distributive implications. In the seventh Part, Walras examines explicitly the theory of marginal productivity. What is important here<sup>46</sup>, is that Walras, after some hesitations, finally leaves it out, limiting the theory of marginal productivity to the role that he had attributed to it from the beginning<sup>47</sup>: the choice of the production techniques.<sup>48</sup>

Analysing the pure economics from the point of view of the place that the classification of sciences ascribes to it within the political and social economics, it is easy to explain the reason of such «dramatic restriction»<sup>49</sup> of the use of the theory of the marginal productivity. The theory of the value of exchange of social wealth precedes the theory of division and it must be independent from it: a theory of the wealth implying a distribution would lead to a misleading materialism<sup>50</sup> and would make social science redundant or contradictory.

Walras thus understood the distributive implication of the theory of marginal productivity, but he could not use it without altering the relations between the components of political and social economics, and when he refers pure economics to moral sciences (Walras 1898b)<sup>51</sup>, he meets eventually an insurmountable obstacle. The remuneration according to marginal productivity corresponds to

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<sup>45</sup> Except Part VII, of course. See definitive edition (Walras 1926).

<sup>46</sup> The vicissitudes are too many and too intricate to be treated here. See (Jaffé 1964; De Roten 1997; Legris 1997; Rebeyrol 1999, pp. 54-65).

<sup>47</sup> De Roten points out that in the controversy between Walras and Wicksteed, «L'un s'occupe de la distribution et l'autre de la production.» (De Roten 1997, p. 23)

<sup>48</sup> «Il n'en reste pas moins que Walras, par une quasi-provocation, voulait limiter le rôle de cette théorie à la seule place qu'il lui avait toujours assignée, le choix des techniques de production.» (Rebeyrol 1999, p. 59).

<sup>49</sup> (Rebeyrol 1999, p. 59).

<sup>50</sup> (Walras 1868; 1990). Symmetrically, a moral theory that would want to decide the value of exchange of goods would represent an inappropriate spiritualism. See *supra*.

<sup>51</sup> Anyway, that same new elaboration from the classification of sciences has no consequences (Potier 1994, p. 277), since it is too fundamental and late towards the theoretical work.

Walrasian justice *only* in the case of constant returns. Otherwise, if the returns were decreasing, remuneration based on the productivity of the marginal worker, would offer to the entrepreneur the difference between the marginal productivity of the other workers and wages<sup>52</sup>.

From the point of view of the history of economic analysis, Walras links the distribution, the exchange and the production in a classics' rather than a neo-classics' way. He Refuses the integration of the theory of general economic equilibrium of the functional distribution of the income on the basis of the marginal productivity of labour. Undoubtedly, Walras' position is uncomfortable: on the one hand the distribution of income is lead by the principles which lie outside the pure economics, on the other hand pure economics could provide an endogenous distribution. In the end what prevails is the point of view of the disciplinary division of political and social economy: distribution is regulated by the principles of pure social economics and, at least chronologically, precedes the pure theory of exchange and production, which, on its turn, should not (and does not) have any influence on the distribution.

### c) Instability of the value of money<sup>53</sup>

2° *L'intervention de la monnaie* ne trouble pas non plus les conditions de justice de l'échange, si la monnaie ne change pas de valeur entre le moment où on la reçoit et le moment où on la donne. La fixité ou la régularité de variation de la valeur de la monnaie d'un point à un autre au même moment, et surtout d'un moment à un autre sur un même point, est donc essentielle à l'exercice du droit de propriété. (Walras 1896d; 1990, p. 184)

The introduction of money potentially hampers commutative justice since a variation of its value in time leads to changes in the prices of goods; it generates losses and benefits unrelated to individual faculties and modifies in this way the distributive asset, that is to say, the individual positions<sup>54</sup>. Nevertheless, to the extent that such changes concern the nominal prices only, they do not influence individual real endowment in money, the commutative justice is maintained as time goes by. In other words, the neutrality of money would allow the money exchange to conform to the precepts of

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<sup>52</sup> In the *Théorie de la propriété*, Walras analyses the question from the costs side: «3° La condition *que les produits soient fabriqués au meilleur marché possible* est, elle aussi, conforme à la justice» [«3° The condition *that the products are as cheaply produced as possible* is in conformity with justice» (Walras 1896d; 1990, p. 185).

<sup>53</sup> As for Walras' monetary theory till the 1886 see (Baranzini 2005; 2000); for the following period see (Bridel 1997).

<sup>54</sup>The difference of value in the space within a same monetary area is theoretically less interesting.

distributive justice.

In the first edition of the *Éléments* the chapter dedicated to the value of money (Walras 1874a, Lesson 30) sanctions the proportionality towards the quantity in circulation. Although the discussion of the problem introduces notable critical intuition –as that turned to the Humean formulation of the quantity theory of money, significantly concerning an eventual redistribution effect– the conclusion still conventional. The money is neutral, even if at the end of lesson 33 the definitive judgement is put off to when the credit will be analysed.

However, the study concerning the issue of the bank note (Walras 1880b) denies this result, showing how the variation of the quantity of money causes crises which have effects on the real aspects and on the distribution of income. Notwithstanding, the neutrality of money ‘demonstrated’ in the first edition of the *Éléments* (1874a) is upheld in the following editions (1889; 1896a; 1900; 1926). How are to be reconciled these two contradictory affirmations within the same theoretic framework?

The answer is the particular epistemological status attributed to pure science that compels Walras to turn out the facts that are incompatible with the scientific ideal of the rational organisation of economy (De Caro 1985; 1988; 1991; Baranzini 1999). The results obtained (or put off) in applied economics are the ‘realistic’ side of the results of pure economics, which are ideal relations that can work as a scientific base for the organisation of the economy. In the case in point, they are the quantity theory of money and the comparative stability of bimetallism.

Thus, Walras is worried about the stability of the value of money, and he tries to fix in pure economics the laws that allow, in applied economics, the establishment of an ideal monetary system in which the price level is not affected by the composition of money supply (fully metallic or mixed currency). In a perspective which is conform to the *currency school*, the money which are not metallic must not change the real quantity of money, for that reason the (net) issue of the bank notes must be prohibited. Indeed, only when the value of money is approximately proportional to its quantity, that is, when the quantity theory works, does the State have the possibility to guarantee the money stability acting on the “*billon d'argent régulateur*”. It allows in this way, finally, the exercise of the right of property.

To sum up: in order that the value of exchange does not contradict the principle of justice, first the

exchange must not influence the position of the individuals and, second, must respect their freedom. The first requisite is related to the questions of the stability of the value of money and of the production of goods; the second implies free competition. The convergence towards the equilibrium cannot be a process if only because it would violate the justice allowing exchanges at prices that influence the value of individual endowment. In the case of barter with no manufactured goods, there is an hypothesis that allows the mechanism to give the guarantees wished for, the introduction of money and production of goods change the conditions of the equilibrium and end by rendering more intricate the links among the different components of the political and social economy<sup>55</sup>.

### *3. Applied theory, or the realisation of the ideal*

The Walrasian economic theory is not limited to pure economics, but involves applied economics too, or at least those parts essential to understand the meaning of general equilibrium (Baranzini 1999; 2005). Pure economics, as economic ideal, involves applied economics as a theory of reform. We have already shown the implications of Walras' socialism or rather the implications of the specific exigency of neutral exchange in pure economics. Now we see the economic policy proposals which are connected to this same exigency and which have their direct basis in pure economics<sup>56</sup>: in Walrasian language it is the domain of applied theories; in modern terms, of economic (and social) policy<sup>57</sup>.

#### a) Monetary policy

The monetary question certainly is one of the most complex aspects of the theory of the general economic equilibrium and the object of Walras' numerous considerations. For us, it is the neutrality of money, which has an important role in the fulfilment of the theory of property, as a necessary condition to the fairness of exchange. But in his studies concerning the monetary phenomenon, Walras achieves unexpected results that invalidate it. Nevertheless, the statute of pure economics is such that only the relations compatible (that is, not contradictory) with the pure moral science remain within the

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<sup>55</sup>In a sense, Walras in his late text on property (Walras 1896d) prepares himself against such difficulties, excluding them explicitly during the phase that starts from the barter to economic exchange of produced goods.

<sup>56</sup>We will thus omit the distributive proposals that we have already seen in the previous chapter.

<sup>57</sup>'Politics', in Walrasian terms, refers to practice and for that reason it does not concern the man of science.

general economic equilibrium. Anyway, Walras tries to arrive at ideal money which has a constant real value or, at least, which could be maintained as such. Indeed, since he realises that there are no spontaneous forces which could guarantee it, he tries to find a monetary system that would allow a major stability and the results of this search are recorded in lessons 34 and 35 of the *Elements* (1889). But he is not satisfied yet and in order to reduce to the minimum the variations of the value of money, he needs a wary monetary policy, which could on the one hand be based on the quantity theory of money and, on the other hand, be an effective instrument of intervention.

The *Théorie de la monnaie* (Walras 1886) confirms the theoretic possibility of a monetary policy of price stabilisation, but the conditions of its working are many. From the point of view of financial organisation, the net issue of the bank notes must be abolished and the short-term credit must correspond to the operations of discount whereas that of long-term needs that the stock exchange is organised to avoid the uncovered speculations. In both cases, the credit must be accorded to finance productive activities only. From the point of view of the monetary organisation, a monometallic gold system should be set up, to which a silver bullion should be added, with a fixed equity, it would be the instrument through which the State could, varying the quantity in circulation, ensure the level of the prices. The quantity theory of money that is a part of the pure economics is then the *condition*, institutionally granted and theoretically hypothesised, of the neutrality of money and not its description (Baranzini 2005).

An appropriate organisation of the monetary and financial system and the wary policy of stabilisation protect the general economic equilibrium from crisis and, eventually, from the redistributive effects. The organisation of competition, «preventing some entrepreneurs from doing benefits out of normal conditions of free competition»<sup>58</sup>, prevents an unfair exchange.

#### b) The limits of competition and the interventions of the State<sup>59</sup>

In the dynamic of the applied economics, the entrepreneur's benefits are accepted to the extent that they correspond to some particular faculties (whereas in pure economics they are null); nevertheless

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<sup>58</sup>«[E]n empêchant certains entrepreneurs de faire des bénéfices autrement que dans les conditions normales de la libre concurrence» (Walras 1898a, p. 475; 1992, p. 425).

<sup>59</sup>This section is inspired by Potier (1998, c. III e c. V; 1999b, c. III e c. IV).

they must arise accordingly to the principle of free competition and they must not to come from dominant positions, from the violation of the buyers' rights.

In his analysis on (private) monopolies, Walras points out two specific problems. The presence of only one private supplier does not allow the reaching of a 'natural' price of equilibrium that would correspond to the cost of production.

Or, c'est précisément cette circonstance [le monopole] qui est ici d'une importance capitale parce qu'elle détruit ces deux conditions de la production libre: que le prix de vente des produits soit égal à leur prix de revient, et que ce prix soit un sur le marché. (Walras 1877, p. 377; 1988, p. 660)

The absence of a single price corresponds to the possibility of the monopolist to modulate the quantity in function of the demand. The implicit determination of the price on the part of the monopolist is incompatible with the idea of the co-ordination of wills but it represents the subordination of the will of the buyers: the monopoly thus violates the freedom of the latter. The modality of the exchange is unfair.

The discrepancy between the price of sale and the price of production is condemned from the point of view of justice and not from the point of view of allocation. Walras criticises not the fact that production does not occur minimising the cost of production but the fact that it does not correspond to selling price, which implies an illegitimate benefit on the part of the monopolist:

dans le second cas [monopole], les entrepreneurs interviennent, non seulement pour combiner les services producteurs en produits, mais pour prélever à leur profit une certaine portion de la richesse échangée. (Walras 1877, p. 377; 1988, p. 663; CEA, 1996, p. 486)

The price of exchange that follows is thus unfair.

The private monopolies are therefore admitted only in very particular cases, for instance when they correspond to intellectual property (inventions, patents ...), in other cases, the State must get involved (Walras 1880a).

First of all, the State should produce goods of public interest, and often must supply them freely (Walras 1897a; 1992, p. 189). 'Moral monopolies', according to the Walrasian terminology, regard those goods that have a collective consumption and/or those of which the individuals do not correctly

perceive the need. (Dockès 1996, p. 209). It concerns some governmental activities (administration, justice, police, national defence), the infrastructures, the education, the progress of the arts, and so on.

The State is responsible for productions that can be made under monopolistic conditions (*les monopoles économiques* or *naturels*) and that cannot, on that account, be left to economic freedom. In this case the State itself can both assume the production of the good in question or let it out. In both cases, the price must not be null as in the case of the moral monopolies, but «it would be enough if the products were sold at cost price and not at the price of maximum benefit»<sup>60</sup>.

Particular attention is given to the question of railways, which for Walras involves the two aspects just quoted: as part of the social conditions the railway is a moral monopoly and, at the same time, from the point of view of the conditions of productions and exploitation is a perfect example of natural monopoly (Walras 1897a; 1992, pp. 207-208).

Or les principes, en ce qui touche à l'industrie des chemins de fer, sont que cette industrie échappe complètement à la règle du *laissez faire, laissez passer*, d'abord parce que le service de transport d'intérêt public est un service public, et ensuite parce que le service de transport d'intérêt privé est un monopole naturel et nécessaire; que les chemins de fer doivent donc être construits et exploités dans les conditions des monopoles économiques, soit à prix de revient, soit au prix de bénéfice maximum, soit par l'État lui-même, soit, pour le compte de l'État, par des compagnies concessionnaires. En dehors de ces principes, il n'y a qu'erreur, confusion, désordre (Walras 1898a, p. 232; 1992, p. 214).

Walras' opinion is clear: railway cannot be left to competition; it cannot work and one cannot permit the enrichment of «a parasite class of speculators whose gain are without correlation with the risks they have taken»<sup>61</sup>.

Walras gives a detailed analysis of these two types of monopolies (moral and natural), which are part of that modern economists call market failures. Nevertheless the type of monopoly that interests us

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<sup>60</sup> «[I]l suffit que les produits soient livrés aux prix de revient et non à ceux de bénéfice maximum.» (Walras 1898a, p. 201; 1992, p. 189).

<sup>61</sup> «[U]ne classe parasite de spéculateurs de qui les gains sont sans nulle corrélation avec les chances qu'ils ont courues.» (Walras 1897a; 1992, p. 211; similarly CEA 1996, p. 510).

most is the one that follows from ...competition itself. Since the 1890s, Walras appreciates the self-destructive potential of competition.

Quant à moi, je m'occupe principalement d'économie politique pure c'est-à-dire de l'analyse du mécanisme de la libre concurrence considéré en lui-même. Mais il est bien certain que cette étude poursuivie pendant de longues années sans aucun parti pris m'a convaincu que ce mécanisme est bien loin d'être toujours absolument automoteur et autorégulateur comme le soutiennent les économistes de l'école officielle et orthodoxe. Il m'est au contraire parfaitement démontré que la libre concurrence dans beaucoup de cas, a une tendance naturelle à aboutir aux monopoles. (Jaffé 1965, II, p. 478, l. 1042, 7.02.1892 to H. Blabed)

Competition, the self-driven and self-regulating mechanism that appeared in the writings of the 1870s and in all the editions of the *Éléments*, may now be self-destructive. Monopoly may thus be 'inherent'. This is «perfectly proved» in the study on the pure economics (Walras 1892), and (though it would not be necessary) it is confirmed by the study of applied economics. A result of pure science holds a character of necessity and that is why every attempt to evade it is illusory<sup>62</sup>. Possibly, that is why Walras is not worried about the legislative proposals to restore free competition, such as the *Sherman Act* of 1890; when there is a position of monopoly, the institutional answer cannot avoid the fact that against monopolies (whether moral, natural or 'inherent') there is no sense proposing laws that try to establish an impossible multiplicity of suppliers, whereas it is necessary to favour the phenomenon by assuming collectively the role of the monopolist<sup>63</sup>.

What is important for Walras is not the structure of the market, but free competition as a fair mechanism that achieves a just price. For that reason, free competition (the mechanism) and the monopoly (the structure of the market) are not in contradiction since they are on different levels<sup>64</sup>.

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<sup>62</sup> (Baranzini 1993). See Jaffé's note in (Walras 1954, p. 497), in which he refers to Francis Bacon's maxim to which Walras often inspires himself «*Naturae enim non imperatum, nisi parendo.*»

<sup>63</sup> In this context little importance is given whether the State will chose to produce itself, to remit production but under strict control, etc.

<sup>64</sup> In the fourth edition of the *Elements*, Walras adds two references to atomicity: «libre concurrence des entrepreneurs» (1900; 1988, p. 11, n. 1) and «multiplicité des entreprises» (1900; 1988, p. 284). Then Potier is right (1998, p. 391; 1999b, p. 69) when he emphasises these additions, even if it does not seem correct the metonymy which leads him to interpret them as part of the definition of free competition. In fact, in both cases Walras makes clear the difference between mechanism and market structure. See above.

#### 4. *An atypical Marginalism*

The habit of considering the economic theory as a toolbox involves an historical perspective where it is difficult to place Walras. On the one hand, Walras uses tools that are not part of what modern economists consider the toolbox: the epistemological, ethical and political reflections are integrated in his economic and social theory. On the other hand, some typical concepts of the economic theory (the quantity theory of money, free competition, ...) have an unconventional meaning and function.

As Walras himself declares, he invents, at the same time but independently of Jevons and Menger, the concept of *rareté*, marginal utility in today's terminology. Nevertheless, a careful study of the architecture of the three theories, the «*knowledge-structures*»<sup>65</sup>, shows some important differences. In particular, as Jaffé had already rapidly pointed out in a 1972 article, «His [Walras' s] whole attention was focused on market phenomena and not on consumption.»<sup>66</sup> Chronologically, interaction among the markets precedes the application of the *rareté* to the solution of the system of equations. (Jaffé 1976, p. 513; Walker 1983, p. 313). Therefore Schumpeter (Schumpeter 1954, p. 918) is wrong<sup>67</sup> when he affirms that «marginal utility was the ladder by which Walras climbed to the level of his general equilibrium system». Whereas the marginal utility allows Walras to reach two results. On the one hand, the theorem of proportionality of the *rareté* to the market prices opens the way to the determination of the individual excess demands, and then of the prices of equilibrium under the same conditions of absolute free competition. On the other hand, the *rareté* serves to show that under the ideal conditions of equilibrium, the agents may have the highest satisfaction. Walras' theory of general economic equilibrium does not deal with the behaviour of the individual, but the with functioning of a particular mechanism: free competition.

It cannot be emphasized enough that what Walras was after was the completion of his competitive market model, and *not* the elaboration of a theory of subjective valuation in consumption. (Jaffé 1976, p. 515; Walker 1983, p. 315)

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<sup>65</sup> (Jaffé 1976, p. 512; Walker 1983, p. 312).

<sup>66</sup> (Jaffé 1972, p. 384; Walker 1983, p. 293).

<sup>67</sup> In 1938, Pirou had already pointed out the radical difference between Walras' formulation and that of Jevons and Menger (Pirou 1938, pp. 281-287).

Unlike the two other authors of the marginal revolution and of the neo-classical economics, Walras' formulation of the general economic equilibrium is not based on the analysis of individual behaviours but on the mechanism of absolute free competition; and, on these terms, he avoids the typical psychology of the theories of individual choices<sup>68</sup>. Obviously he needs the *rareté*, but the mechanism of free competition is independent from the number of the agents to the extent that it depends to their character (individual or collective).

Finally, we have seen that the distributive aspect is different (but not separated) from the theory of exchange and production. After the manner of the classics, Walras tries in every way –even abandoning the theory of marginal productivity– to avoid including the theory of (functional) distribution of income in the theory of social wealth, the pure economics.

### **III. From spontaneous equilibrium to the unique entrepreneur**

#### *1. From spontaneous equilibrium to spontaneous crises*

Another particularity of Walras is the progressive lack of confidence in the mechanisms of market. Indeed, his trust in the spontaneous forces of market was strongly shaken towards the end of the century<sup>69</sup>. The abandon of economic optimism<sup>70</sup> is progressive and well summed up in the change in his concept of 'crisis'. In his first writings, he refers to the contingent «acute indispositions that a society can have»<sup>71</sup>; the accidental nature of the crises is connected to faith in the self-driven forces of the economy. As Bridel sums up,

Perfectly in line with the century-old Classical tradition, and of course with the other marginal contributions to cycle theory (notably those by Jevons, Marshall, and Menger), a crisis is considered as a short-run, temporary oscillation around a long-run 'natural' equilibrium determined by 'real' variables only. (Bridel 1997, p. 49)

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<sup>68</sup> General speaking, Walras' opposition to (methodological) individualism is clear (1868; 1990, pp. 82-83) and, as we have already seen, he considers the minimisation of the costs of production and not the profit maximisation.

<sup>69</sup> (De Caro 1988; 1989; Baranzini 1993, pp. 386-388).

<sup>70</sup> A more radical abandonment than the one noticed by Rist (1904, pp. 660-662; 1907).

<sup>71</sup> «[I]ndispositions aiguës qu'une société peut avoir» (Walras 1871, p. 323; 2000).

During the following period the concept of crisis changes and the confidence in the self-regulating faculties of economy diminishes.

That is why Part X of the *Cours d'économie appliquée* (1996), where Walras defends the spontaneous re-absorption of financial and industrial crisis, is taught only until 1879<sup>72</sup>. Since it includes the study concerning the issue of the bank notes and identifies the mechanism of forced savings (Walras 1880b), the section is abandoned, and section VIII on banking is completely changed. (Walras 1996, pp. 636-647).

The crisis is no more a mere accident, an unpleasant circumstance, but is now an event that is inherent in the spontaneous functioning of the system (monetary in particular). The mechanism alone does not work, and it does not have automatic correctives that guarantee a long-term equilibrium: «free competition does not exist by itself but it needs an exterior force to maintain it. In the applied economics I will draw the consequences of this truth concerning pure economics.»<sup>73</sup>

Moreover, this leads Walras (1898b) to reconsider the question of the division between political and social economy and brings him to change the content of applied economics. Having lost faith in the aptness of the economics towards spontaneous progress and more rational assets, he now believes that the task of the applied economics is to determine the extent and the form of State interventions.

C'en est assez pour montrer que la théorie appliquée de l'industrie est bien loin de pouvoir se réduire aux quatre mots: *Laissez faire, laissez passer*, et qu'elle comporte, tout au contraire, une longue série d'études relatives au partage des attributions entre l'État et l'individu dans la production de la richesse. Après quoi viendra une longue série d'études de réformes pratiques en vue de réaliser l'idéal de la science. (Walras 1898b; 1992, p. 427)

In this context, what is Walras' theoretical position of concerning what would nowadays be called the question of the relations between the State and the market?

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<sup>72</sup> See the presentation of the *Cours* (Walras 1996, p. 439). It is probably Jolink's disregard of this fact that explains his different conclusion (1994, pp. 193-195).

<sup>73</sup> «La libre concurrence ne subsiste pas par elle-même; et il faut une puissance extérieure qui la maintienne. Je m'engage à tirer en économie politique appliquée les conséquences de cette vérité d'économie politique pure.» (Jaffé 1965, vol. II, p. 467, n. 7 to the letter number 1027 of the 18.09.1891 to Borkiewicz).

## 2. L'entrepreneur unique: *beyond the failures of the market*

We have already seen how and why the State should assure the stabilisation of the value of money: through a careful control of the prices through the variation of the silver bullion ("*billon d'argent régulateur*") but also by prohibiting the issue of bank notes and by reabsorbing those that have been put into circulation, the State should warrant that the right of property is respected. This is an intervention that in the context of the XIX<sup>th</sup> century could with difficulty be considered as a mere corrective to the strengths of the market, but it is in the field of organisation of production that Walras is the most radical.

His peculiar definition of free competition gives Walras a major theoretical flexibility, and indeed he can propose a market structure in which, at least, the offer is assured by a single producer, the State, that nevertheless adopts a competing behaviour, both in the purchase of the producing services and in the selling of the products. Walras' free competition does not imply atomicity on supply side. In the fourth edition of the *Éléments*, Walras adds:

Remarquons toutefois que, si la multiplicité des entreprises amène l'équilibre de la production, elle n'est pas théoriquement le seul moyen d'atteindre ce but, et qu'un entrepreneur unique qui demanderait les services à l'enchère et offrirait les produits au rabais, et qui, en outre, restreindrait toujours sa production en cas de perte et la développerait toujours en cas de bénéfice, obtiendrait le même résultat. (Walras 1900; 1988, p. 284)

From this point of view it is possible to understand the fact that Walras continues in affirming that free competition is a natural trend in spite of the fact that the monopolies are on the increase<sup>74</sup>. Whether free competition is the result of an atomistic structure or of the *entrepreneur unique* is of little importance as it represents the ideal mechanism that coincides with the inevitable historical evolution. If concentrations are more and more important, the State should interfere in the organisation of competition and that means to assume the integrity of production in one or more sectors.

Pourquoi nourrir un parti pris? S'il en fallait un absolument, ce ne serait pas à l'individualisme exclusif qu'il faudrait s'arrêter. Toutes les entreprises pourraient, à la rigueur, être supposées collectives, tandis que toutes ne sauraient être supposées individuelles. Le collectivisme de la production est matériellement possible et

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<sup>74</sup> That seems contradictory to Potier (1998, p. 390; 1999b, p. 68).

n'aurait, à la rigueur, rien de contraire ni à la liberté ni à l'égalité, ni à l'ordre ni à la justice; il n'y a là qu'une simple question d'utilité sociale. (Walras 1897b; 1992, p. 251)

It is certain that the individual initiative is not enough. The collective one could be sufficient: anyway it is necessary since it could be exclusive without offending against moral principle. The question of opportunity remains opened and its answer is in the applied economics, in the attribution to the State and to the individual initiative of the respective roles, which are in accordance with the criteria of the income of the social interest. Anyway, the applied economics does not seem able to find a definitive answer, even if the original tenor<sup>75</sup> of the quotation above is clearer:

Le collectivisme de la production est peut-être la formule de l'avenir. Il n'y a là rien de contraire ni à la liberté ni à l'égalité, ni à l'ordre ni à la justice; il n'y a là qu'une simple question d'utilité sociale. (Walras 1897b, p. 6 of the manuscript; 1992, p. 481, n. 18).

So the question remains open and for once the theory cannot solve it. On the other hand, a practical experience is surprisingly<sup>76</sup> proposed to establish which productions must be attributed to the State and which own to the private initiative.

Entre l'initiative individuelle et l'intervention de l'État, rien n'empêche d'instituer, dans des conditions aussi sérieuses que possible, une grande expérience. (Walras 1898a, p. 272; 1992, p. 251)

Walras seems to be inclined to arrange to the private initiative the innovative sectors and to the State the more traditional ones, but he does not develop the subject. The conclusion is that the State intervention should not be limited to the correction of the failures of the market. Some contemporary critics of Walras had correctly interpreted the importance of the proposal<sup>77</sup>:

M. W[alras] admet ainsi parfaitement la possibilité d'un collectivisme où l'État serait entrepreneur unique. Mais là où il se sépare du communisme, c'est quand il soutient que dans ce collectivisme même le salariat doit

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<sup>75</sup> The manuscript is kept at the Fonds Walras of Lausanne IS 1927 V /08 /11 /4.

<sup>76</sup> To the author's knowledge, this is the unique case in Walras' work.

<sup>77</sup> Some recent judgements concerning Walras' opinion towards the interference of the State are more surprising. Cirillo thinks, probably on the basis of an 'oversight' of Jaffé (1971, p. 273; Walker 1983, p. 273) later corrected, that the Walras' compromise concerns social reforms on the side of distribution, «but promote[s] *laisser-faire* in the production of goods and services.» (Cirillo 1980, p. 295; but also 1976).

subsister –le salariat dont les conditions d'existence seraient très modifiées, il est vrai, par l'intervention de l'État. (Palante 1899, p. 103)

As Sorel points out, for Walras the State (the ideal State, that of the pure science) embodies the guarantee of rationality –«L'État que rêve M. Walras, est un Dieu rationnel et mathématicien»– which reminds to the 'minister of production' of the first decade literature (Barone 1908)<sup>78</sup>. In the long introductory essay to the translation of the Walrasian money writings (Walras 1985), Gaspare De Caro treats the question (1985, part. pp. 118-158) rightly stressing the major difference between Pareto (and Barone) for whom the *communisme complet* is «just a methodological hypothesis»<sup>79</sup> and Walras for whom the collectivism of the production is stated as «a scientifically supported solution against the 'general crisis' of the capitalism.»<sup>80</sup>

That is to say that the scientific organisation, useful and good, of the economy, may be collectivist to the extent that, paradoxically, *collectivism of production* allows the mechanism of absolute free competition to work.

#### **IV. Is this liberal critic to free-market?**

Walras has gained the reputation of a socialist from his writings on the collective property of the land and on the abolition of the income. Nevertheless, the basis on which these proposals are formulated betrays values that are essentially liberal. Notwithstanding, Walras' socialism is effective and it is founded on his will of reform and in his confidence in the social and economic ideal, ideal that he tries to formulate. But his Socialism is scientific, or is not socialism at all<sup>81</sup>, so that his economic theory cannot be based on foundations incompatible with those of another science, the pure moral science for instance. Since the latter precedes chronologically pure economics, the ideal types of the general economic equilibrium are compatible or independent from the moral ones. In particular, the exchange is compatible with the distributive justice to the extent that it does not change the value of the initial agents' endowments and that it respects individual freedom. The pure economics as science respects these requirements: to what leads a theorisation so bound? It leads to an economic organisation

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<sup>78</sup> Also interesting are Walras' allusions to a «*calculateur*» (1874b; 1987, p. 270) and (1875; 1876; 1987, p. 316).

<sup>79</sup> «[M]era ipotesi metodologica» (De Caro 1985, p. 136).

<sup>80</sup> «[C]ome soluzione scientificamente autorizzata della 'crisi generale' del capitalismo.» (De Caro 1985, p. 136).

<sup>81</sup> In this term the expression 'scientific socialism' is indeed pleonastic (Jolink 1996, p. 32).

characterised by metallic money and by a narrow money policy managed by the State that likewise must produce public goods and supervise the natural monopolies. But, overall, because of the self-destructive trend of competition, it leads to an economic organisation where the State is charged with a growing number of productions. It may lead to all this things, but from the ethical point of view we need to see whether it is useful from the point of view of social utility. Walras proposal is to try.

The synthesis<sup>82</sup> between (politic) liberalism and (scientific) socialism thus obliged Walras to advance a State with a substantial and necessary economic role. What is amazing is that Walras is socialist since he is reformist, the ethic principles that lead him are liberal but the theoretic result is diametrically opposed to the free-market economics.

In other words, an economy which respects two fundamental principles of Liberalism –same starting opportunities but the results are different according to the merits; incommensurability of individual freedom– is from the point of view of the Walrasian economic and social science such that not only the collective land but collectivism of production must be generalised.

Through starting from liberal values, Walras' general economic equilibrium represents a definitive criticism of free-market economics, of real economy<sup>83</sup>, of the Capitalism of the end of XIX century<sup>84</sup>, of the *économistes* (and their theories) who can only dogmatically defend the *laissez faire*.

«Je ne suis pas un économiste. Je suis un socialiste...»<sup>85</sup>

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<sup>82</sup> The temptation to classify Walras among the liberal-socialists is very strong, also because he himself uses the expression «socialisme libéral» (Walras 1896b; 1990, p. 172). Moreover, he knows Charles Renouvier, one of the first and most important figure of the French Liberal-Socialism (Cavallari 1994) and he is linked to the *Revue socialiste*. But it seems to us that Walras' socialism and liberalism are eccentric enough to advise caution.

<sup>83</sup> That he knew well, see Walker (2000).

<sup>84</sup> Walras' pure economics is more a criticism of capitalism than its description (Morishima 1977; 1980; Jaffé 1978; 1980).

<sup>85</sup> Eventually, the recent polemic –see (Bridel 1999; Potier 1999a; Walker 1999a; 1999b)– on Walras' *note d'humeur* quoted at the beginning of this paper could find a solution.

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