

Intellectual property controversy in the XIX century: a comparative analysis between Proudhon and Walras

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Abstract

Achieving changes occurred in the XVIII century, the industrial revolution constitutes an important moment in the legal recognition of authors and inventors. However the shape of such an institution, namely intellectual property, reveals its high political significance during the XIX century. In France during the second part of the XIX century the discussion about intellectual property rights is organised as follows: On one side the notion of natural rights in immaterial products makes sense to some liberal economists and then advocate for a perpetual intellectual property system. On another side, socialist thinkers claim for the abolition of intellectual property in the name of social justice. Between these two extremes, some economists advocate for a temporary form of intellectual property rights. This paper proposes to focus on two economists, namely Léon Walras and Pierre Joseph Proudhon, who surprisingly converge towards this third solution but from two very distinct conceptions of what political economy and social justice should be. Then the aim of this article is to show how, despite their apparent convergence, Walras and Proudhon actually provide two very opposite analyses of intellectual property that partly overlap the traditional dichotomy between static and dynamic analyses of innovation.

Key words: intellectual property, social justice, Walras (Léon), Proudhon (Pierre-Joseph), cultural economics, patent, copyright, innovation

Classification-JEL: B13, B14, B40

Introduction

Patents and copyrights have been considerably reinforced since the eighties under the leadership of the United-States and TRIPS agreements. Many lawyers and economists provided some theoretical justification to this movement by stating that this extension of the private property to the intangible world would reinforce the efficiency of the market mechanisms and then the level of innovation in the economy (Kitch, 1977; Posner, 2005). It is an understatement to say that this consensus has vanished to leave a room for a big debate about the relevance of such a system (Heller & Eisenberg, 1998; Boldrin & Lévine, 2005).

This discussion is not limited to economic arguments but is also linked to juridical, ethical and philosophical considerations. It has often been described as a confrontation between two opposite points of view about what intellectual property is. On one side, the utilitarian view contends that intellectual property is a legal device aiming to resolve market failures. By contrast the jus naturalist conception states that intellectual property is the manifestation of the singular link that holds the creator on its creation. Alternative theories that try to overtake this traditional dichotomy are slowly emerging in the current academic debate, especially on a legal matter (Van Houweling, 2005; Chon, 2007; Fromer, 2012; Kapczynski, 2012; Liu, 2014) but also in economics (Hess & Ostrom, 2007).

These alternatives show that intellectual property is a multifaceted topic which must be scrutinized into a multidisciplinary approach. One would however be wrong to believe that such discussion is the exclusive result of recent legal or technological changes. In the XIX century the same opposition and the same polemics between economists, lawyers and philosophers already existed in Europe and in United-States. If this debate is now well-known by some historians (Galvez-Behar, 2007, 2008, 2010) and lawyers (Rideau, 2010; Xifaras, 2010), it has been rarely analyzed by economic literature (Malchup & Penrose, 1950, Lemennicier, 1995 ; Sagot-Duvauroux, 2004; Mangolte, 2010 ; Lallement, 2011; Poinso, 2014).

In France this progressive institutionalization of intellectual property has been a very controversial topic among economists. This is due to the fact that French economists of the XIX century provide analytical tools that are embedded with moral and ethical issues (Sigot, 2010). The polemic reaches its climax around the Brussels Congress in 1858 questioning whether authors should benefit from a property right or not. Then in 1878 in the Congress of

Paris the intellectual property device is largely admitted but the dispute shifts toward the question of its duration. On one side, part of French liberals militates for a perpetual intellectual property similar to the landed property regime (Bastiat, 1862; Molinari, 1852, 1855, 1856; Modeste, Paillottet et Passy, 1859). According to them, this strong conception of the proprietary paradigm is fair since it conforms to the natural law principles. In this perspective there is no need to distinguish patent or copyright since both are the result of the creator's labor. French patent law of 1844 endorses such view through an *a priori* acceptance of any patented invention but without any government guarantee. On the other side, several socialists including Louis Blanc (1839) refuse any form of private property on immaterial objects considered as a new and dangerous extension of the capitalist order.

Between these two extremes many economists propose an intermediate solution in favor of a temporary ownership system. Among them Léon Walras and Pierre Joseph Proudhon catch our attention for several reasons. First, Walras and Proudhon share the idea that political economy must overcome the utilitarian point of view in order to solve the tricky question of the fair distribution of wealth while rejecting the rigorist interpretation of natural law made by French liberals. Then they can provide useful insights about the current academic debate insofar as their arguments avoid the traditional opposition between naturalism and utilitarianism. Moreover the position of Walras about intellectual property has been scrutinized only recently (Lallement, 2011). In the same way the theoretical work of Proudhon remains relatively under-researched in economics (Sagot-Duvauroux, 2004) compared to other disciplines such as sociology (Gurvitch, 1955; Ansart, 1967, 1992; Lebrun, 2015) or law (Chambost, 2004; Xifaras, 2012).

Ultimately a comparative analysis of their work is particularly interesting because they support a common normative statement about intellectual property length despite their great antagonisms about social justice. Indeed these two authors have significant methodological differences about how economic analysis should be conducted in regards to moral considerations: while the Walrasian theory of justice is driven by meritocratic principles, Proudhon supports an egalitarian vision of wealth distribution. The aim of this article is to show how, from their opposite conceptions of social justice, Walras and Proudhon provide two very distinct analyses of the intellectual property issue that partly overlap the traditional dichotomy between the static and dynamic analyses of innovation.

This paper is structured as follows. In a first part we restate the apparent convergence of Walras and Proudhon about the intellectual property issue (I). Then we demonstrate how their positions actually diverge from a normative point of view (II). Then in a third section we draw the consequence of these differences by opposing a static Walrasian view against a dynamic Proudhonian view of innovation and we highlight how such dynamic standpoint provide useful insights for the current debate, especially regarding the alternative ways in handling the intellectual property device (III).

Section I: The respective position of Walras and Proudhon: from opposition toward convergence

Léon Walras tackles the question of intellectual property in two main articles. One published in 1859 in which he defends a position in favor of a perpetual intellectual property, the other in 1880 in which he expresses a more balanced opinion by supporting a temporary system of protection (1.1). By contrast Proudhon in his first book *Qu'est-ce que la Propriété ?* published in 1840 seems to be in favor of a public property of immaterial goods while in the *Majorats littéraires* published in 1862 he claims for a temporary exclusive privilege (1.2)

1.1 The position of Walras about intellectual property

According to Walras science can reveal different kinds of truths that the humanity must be complied with in order to reach the ideal society (Dockès, 2005). Political economy is the science dedicated to goods with an exchange value, that is to say goods that are useful and limited in quantity. Walras labels this range of scarce goods as “social wealth”. This scarcity implies two fundamental kinds of economic “truths”: first, economic science is related to justice in order to distribute fairly a certain quantity of wealth (Truth of Justice), but this quantity depends itself on socioeconomic structures that men shape for producing (Truth of Interest).

This dual pattern is regulated through two fundamental principles driven by commutative and distributive justice. Commutative justice "requires that in a race all the runners have a same starting point at the same time." (1896, p. 160) while distributive justice “requires that the runners are rewarded for their agility, that is to say, in the order in which they reached the goal." (p. 160). Thus, justice consists first in ensuring the same initial situation for everybody (equality of conditions) and then in rewarding everybody according to his own merits

(inequality of positions). The fact that merits can be the result of the talent or the social context is not perceived as unfair for Walras¹ since gifts and capabilities are, on the basis of natural law, the property of the individual: "Stating that a man is a legal person, having the right and duty to pursue his own goal, is to state that the personal faculties belong to the individual." (1896, p. 214-215).

Considering this Walrasian framework, immaterial goods such as literary works or inventions raise a fundamental issue. As such, immaterial goods cannot be included in the social wealth definition since they are not limited in quantity though they are useful. A first reasoning would then be to refuse any kind of ownership on these intangible assets. However it could lead to a frontal contradiction with the Truth of Justice as well as the Truth of Interest. Indeed, knowing that their efforts and their works could be freely reproduced by anybody, creators of immaterial goods could forgo to create these goods. Likewise, it could also contradict the naturalist self-property view of Walras about individual merits and talents.

This is why in the article of 1859 Walras argues that intellectual wealth is precisely the one that can be economically captured by talented people; by contrast ideas represent natural wealth which cannot be divided into distinguishable and useful things. In order to consolidate this first distinction, Walras provides some examples from markets in which immaterial wealth are constantly exchanged such as concerts, theaters, book shops etc. Having an exchanged value, these goods are somehow scarce and limited in quantity and can be considered as social wealth.

From this first reasoning, Walras draws another distinction between intellectual products disappearing in the first use and intellectual capital which remains after the first use. Both of them are the "the fruit of the work of our personal abilities" (1859, p. 400) but they have different features of consumption. For example the delivery of an attorney or a doctor is a product while the book of a writer is an intellectual fund remaining over time. This fund is his property by natural right as a capital generating revenues: "[...] the intellectual producer is naturally the owner of the fruit of his work; consequently, he is the owner of the sale price of

¹ According to Walras the unequal distribution of talents is actually one of the main justification of distributive justice : "As they freely perform their destiny in a more or less successful way, or more or less meritorious, it appears that men have differences of abilities, talent, application, perseverance, success which make them unequal; and this inequality is the fact that is based on distributive justice. " (1860, p. 44). This absolute respect of the self-ownership leads some commentators to describe Walras as a precursor of left-libertarianism (Gharbi & Sekerler Richiardi, 2010).

the intellectual incomes” (1859, p. 403). Here Walras follows the same “lockean” inspiration than the majority of the French liberals of his time. Since individual capabilities are fully owned by individuals, they should be, by natural right, perpetual owners of their immaterial work (embodied as a fund) and its revenues (embodied as the sale price of the work).

In 1880, Walras revises his initial position for a temporary solution. As explained by Lallement (2011) this evolution is less a radical change than the achievement of a latent reasoning already here in 1859. Indeed, at the end of his first article, Walras suggests that the state could expropriate the author on the basis of “public utility”. This last consideration demonstrates that Walras is already fully aware of the economic inefficiency of the perpetual system. But on the other hand, Walras cannot renounce to the idea that creators have a natural right over their creation without being in contradiction with his naturalist and meritocratic view of justice.

To fix this problem Walras reconsiders the connection between intellectual and social wealth. He admits now that such equivalence can no longer be hold: “it is the nature of immaterial things to be shared without diminishing, to spread by multiplying”(1880a, p.1). Though intellectual wealth is not a part of social wealth, it can however meet many social needs that are useful and limited in quantity. In this perspective intellectual property is no longer “a special case of the general theory of property” (1880a, p.1) but is a *sui generis* device that must meet collective interest. On one side the interest of the society is to give to artists and inventors incentives to create new immaterial objects. But it is also in the interest of the society to not rarefied unlimited and useful things by monopolistic power. Faced to this dilemma the best solution is therefore a temporary right of ownership.

One can think that in this second article Walras is joining the utilitarian approach: if the rationale of the property is rooted in its economic impact, then we should design this right in such way that it optimized wealth production. In his *L’Etat et le chemin de fer* from 1875 and published in 1897 Walras already seems to defend this position by evoking a fictional convention between inventors and the society. It is likely that Walras has been inspired by an article of Jules Dupuit published in 1861 justifying private property on utilitarian bases. Nevertheless, in his second article, Walras does not limit his demonstration to economic considerations. He adds that such temporary system of ownership also complies with principles of justice. Such claim directly challenges the *sui generis* aspect of his solution loop with the naturalistic foundation of his first article.

Actually this loop is the direct consequence of his conception of science as a non-contradictory range of truths (Dockès, 2005). Indeed, it is worth to remember that Walrasian political economy is conceived as the synthesis between the Truth of Interest and the Truth of Justice. From the Interest point of view it is clear that temporary rights produce a better level of economic efficiency than perpetual rights by limiting the monopoly power of the creator. But such a solution has also to be justified by the Justice point of view in order to be fully validated by his “scientific” method. For that purpose Walras observes that producers of immaterial goods are inspired by former ideas of the society. Consequently the Truth of Justice demands to consider in what extent the "the scientific, artistic, industrial ideas really belong to authors and inventors, and in what extent we owe these ideas to them, and only to them." (1880b, p.1). The fact that part of the immaterial goods comes from the common heritage justifies a temporary ownership. In this way Walras can shift from the perpetual position to the temporary one without sacrificing his naturalistic conception of justice.

1.2 The position of Proudhon about intellectual property

Proudhon has an eschatological view of justice inspired by his understanding of Hegel (Macherey, 2011). In *Qu'est-ce que la Propriété ?* (1840) he reveals this influence by describing human being “into a composed mode” torn by the will of uplift the society but also by the desire to exploit others. This contradiction is materialized by “antinomies”, that is to say by several immanent and opposite forces governing the evolution of society. According to Proudhon humankind is most of the time located between these extremes and tries to solve its dichotomous nature by learning through interactions with others. By raising this point Proudhon wants to take into account the very historical and dynamic aspect of the social progress².

The extension of the proprietary regime over the last centuries is the most paradoxical step of this learning process: private property is simultaneously a factor of progress encouraging the division of labor and individual autonomy, but also an institution that destroys social

² This dialectical dimension of the economic thought of Proudhon culminates in *Systèmes des Contradictions Economiques* (1846). This book is presented as an analysis of various economic mechanisms that works contradictorily. Proudhon starts his demonstration by the category of value, which is central to understanding the functioning of the market and which derives other economic categories such as work and its division, competition and monopoly, etc. In each of these steps, humanity is committed entirely in his effort to "make society", requiring from it a tedious work, thereby the social question is reshaped and its resolution continuously deferred.

cooperation³. Indeed, for Proudhon “Property is theft!” because it constitutes a « droit d’aubaine »⁴ by which the owner captures unduly the exceeding economic value produced by the workers “collective force”:

"A force of a thousand men acting for twenty days has been paid as the force of one for fifty-five years would be; but this strength of thousand made in twenty days that the force of one, repeating his effort over a million centuries, would not accomplish: is the market fair? Again, no " (1840, p. 157).

One freed from this thieving property, society can reach justice by the strict application of commutative principles. However Proudhon does not understand commutative justice in the same manner that Walras does. Indeed thanks to the division of labor Proudhon contends that individuals are conducted towards equality while remaining totally free. He draws this conclusion from a very specific understanding of Smith (Béraud, 2009), thereby he recognizes that nature has given to men different levels of talent, but the society, thanks to division of labor, will restore equality by making them equally complementary.

At his end of his life Proudhon is more skeptical about the existence of a synthesis that can be solved definitely by the use of economic science. The antinomy can only be managed through an equilibration of the two extremes, meaning by selection of the best aspects of the community instinct of the mankind and the selfish tendencies of the individual. In *Théorie de la Propriété* (1866) he provides a balanced view about the private property regime. Ownership is not justified in the name of distributive justice but because of the new French political regime. It is a bulwark against the imperial state autocracy. Thus private property fulfills a social function that can be modified when the political system is also changing and improving.

Proudhon details an original regulation framework that one could describe paradoxically as “anarchistic reformism”⁵: the state is still needed but its power is controlled by the absolutism

³ Here again the Hegelian influence is clear: "Community, the first mode, the first determination of sociability, is the first term of social development, the thesis; Property, the contradictory expression of the community, makes the second term, the antithesis. It remains to discover the third term, the synthesis" (1840, p. 285).

⁴ The french word aubaine is not trivial since it refers etymologically to the idea of "alien" or "elsewhere". In the proudhonian view the landlord is the only economic actor, through the rent and profit, which does not behave as an associate but as a predator. He destroys the balance of the production process and thus generates economic inequality. It is interesting to note that Walras describes the landowner in similar terms: "Let the hands of land to the owners is to perpetuate in the society the indefinite enrichment of a parasitic class; put it in the hands of the state is to spread the result of the social progress for all the community" (1896, p. 411).

of the private property and vice versa. For instance the state must prevent oligopolies, favor access to credit and education, decentralize the administrative system, proceed to a separation of powers, and promote industrial and agricultural associations in order to ensure that the effects of the property on itself creates equality.

The evolution of Proudhon about intellectual property reflects these two main steps of his thought. In *Qu'est ce que la Propriété* (1840) Proudhon rejects categorically any form of intellectual property but recognizes that creators should receive a return. However their income is not linked to capital service but it is a fee bounded in an egalitarian pay system. Of course Proudhon admits that "All works to be performed are not equally easy: there are some that require great superiority of talent and intelligence and this superiority made the price" (1840, p. 224) but he adds that "This physiological condition of genius adds nothing to his social rights [of the creator]" (1840, p. 173).

This egalitarian proposition is based on his holistic view of human fulfillment: individual capabilities are always the result of the social context and then belongs to society⁶. Indeed Proudhon observes that inventors and artists can develop the full potentiality of their competencies only if the society has already generated a critical mass of knowledge and wealth. Then these creative activities are those which are the most accountable to the society:

"If it is glorious to charm and instruct men, it is also honorable to feed them. When, therefore, the society, in accordance to the principle of the division of labor, give a mission of art or science to one of its members, by sparing this one of the common work, the society owes him a compensation for the industrial goods that he can no longer produce, but the society owes no more than that." (1840, p. 177).

This is a particular illustration of the Proudhonian idea of equal complementarity between workers: in order for the talent of a few to grow, some others have to be dedicated to the production of essential goods, meaning that the division of labor has to be pushed forward. In this perspective the most talented people are just like any other producers, and like others, they receive from the "collective force" far more than they can give back. This is why

⁵ The formula is not only an oxymoron, Sophie Chambost (2004) shows how, legally and politically, the regulation scheme designed by Proudhon overturns the notion of social order by articulating different federalist mechanisms of coordination and collaboration.

⁶ Proudhon illustrates this point metaphorically: "Whatever the capacity of a man, as soon as this ability is formed, it no longer belongs to him; liketo the raw material shaping by an industrious hand, it had the potentiality of becoming, the society has made it. The vase he will tell to the potter: I am what I am and I do not owe you anything?" (1840, p. 177)

Proudhon advocates for a return that does not exceed the recovery of cost of production of the immaterial good: "A poem that would cost to his author thirty years of work and 10 000 f of travel expenses, books, etc., must be paid for thirty years of regular worker salary, plus 10,000 f of compensation." (1840, p. 172)

In the *Majorats Littéraires* (1862) Proudhon changes his position⁷ and claims for a temporary privilege system⁸. However Proudhon's book is first focused against the naturalist alternative and does not provide many evidences about why temporary ownership would be better than another solution. This can be explained by the highly controversial context in which Proudhon is writing: in 1861 a special commission created by Napoléon III concluded in favor of perpetual property right. This commission compares literary works with agricultural or industrial products: as the peasant is the natural owner of his agrarian fund enabling to sow and harvest, the writer or the inventor is the owner of his ideas materialized into a book or a technical device. In the line of his writings of 1840 Proudhon states first that there is no link between ownership of labor outcome and ownership of the fund: of course, the potter is the owner of his pot but it does not imply that he is the owner of the fund (the clay, etc.). In the same way the author is the owner of his book but he is not the owner of the fund (the ideas).

This distinction between capital and product is essential because it enables Proudhon to show how unfair intellectual property concept is. Indeed, if intellectual wealth is a product it is then contrary to commutative justice that an individual pays several times for the same thing. This is why Proudhon, unlike Walras, refuses that a researcher benefits from copyright on his writings and lessons otherwise the society will pay twice for the same content. It would be as if the peasants picking some wild strawberries become owners of the wood instead of being the owners of their harvest, or "as if the producer of wheat, meat, wine, etc., declining payment of his goods, wanted to substitute the price with a perpetual annuity." (1862, p.51). Perpetual intellectual property is then a new « droit d'aubaine » damaging the equality of exchange while a temporary privilege system may constitute a good balance between the duty

⁷ On the practical ground, it can be noticed that the remuneration mechanism described in 1840 implies a central social planner able to collect all the relevant information, especially about the production cost of the good. In addition to information asymmetry issues, the existence of such a central system of regulation is explicitly rejected by Proudhon for obvious political reasons. It is highly likely that this is why Proudhon is then inclined to switch to a remuneration system conveyed by market mechanisms through a temporary sales privilege.

⁸ Proudhon insists on the exact terminology that should be used for qualifying the remuneration mechanism. A "priority right" or a "temporary sale privilege" seems more appropriate in order to remove any ambiguity about its legal nature.

to remunerate the creator and the necessity to preserve the common stock of ideas. Symmetrically, the temporary patent system aims to consider equally freedom and genius, competition and monopoly in such a way that they act "one over the other like two cylinders which rotate in opposite directions maintain the work and generate progress." (1862, p. 229).

Section II: The arguments of Walras and Proudhon for temporary ownership, a comparative analysis in the light of their respective theory of justice

For Proudhon perpetual intellectual property distorts the arithmetic equality of commutative justice. By contrast, Walras condemns perpetual intellectual property on the ground of distributive justice because it would excessively reward producers. From this initial opposition we demonstrate that Walras and Proudhon are actually pursuing two different purposes though they support the same temporary solution. While Walras provides a fixed view of justice aiming to reconcile property principles with static efficiency Proudhon develops an aretic view of justice in which temporary system aims to develop virtuous attitudes (2.1). This gap between Walras and Proudhon impact their methodological approach and their conception of what should be economic science, especially regarding the role of social and moral norms (2.2).

2.1 The aretic vs. deontological view of justice, what intellectual property should pursue?

The difference between Walras and Proudhon is less about what intellectual property should be than what intellectual property should achieve. Indeed Proudhon gives to his temporary privilege system a very ambitious goal that exceeds largely economic considerations. Indeed, in the second and third part of the *Majorats*, entitled « *Considérations Morales et Esthétiques* » and « *Conséquences Sociales* », Proudhon explains why artistic objects are non-venal and then should be freely distributed: regarding the demand side, freeness avoids speculation and reinforces the work's aura. Regarding the supply side, it protects the artistic process from futility and greed⁹. Here Proudhon follows the line of Louis

⁹ Because of the process of economic valorization, Proudhon fears that the appropriation of "non-venal" goods increases their exchange value while reducing their use value. Indeed, intellectual property works can be conceived in the perspective of economic valuation and not because of their aesthetic relationship. Therefore,

Blanc (1839) who supports the abolition of intellectual property. Art must keep its autonomy from the economic sphere; otherwise the artistic product may be "corrupted" while it must satisfy a social and political function oriented to the improvement of our faculties¹⁰. This ethical dimension of the artist status explains why Proudhon is so suspicious about market mechanisms:

"It is by reason, law and art together, that man frees himself: how this liberation would take place if the artist would be at the mercy of the tyranny of senses, if he was the courtier of vice, if, to that end, he began to sell him-self and work, as the contractor and the usurer, exclusively for the fortune " (1862, p. 135).

Walras also observes that the majority of literary work has a "*lesser artistic value but a greater market value*" (1880b, p.1). For Proudhon such futile production is a proof of decadence and demonstrates that property could not be granted for artistic activities without corrupting them. On the contrary, Walras takes this market misalignment as a typical feature "from which the property can be recognized to the artist as an artistic property." Regarding greater artistic goods such as "some monuments, some statues, some tables [...] that everybody will can enjoy and be inspired" (1880b, p. 1), Walras contends that they should be considered as "public services". This meets with his definition of moral monopolies that goes beyond the traditional opposition between public and private goods: of course, monuments or statues are not consumed by all in equal quantities but the result that they produce, namely equal opportunities, is consumed by everyone in the same way¹¹.

To put it in another way, Walras remains faithful to his vision of science as one and therefore he does not established any contradiction between aesthetics and economics as he

these works are substantially and formally shaped by economic requirements which decrease the aesthetic public experience. In this sense Proudhon anticipates the criticism formulated by Adorno about "mass culture" as a new form of capitalistic alienation through the extension of market logics in the sphere of cultural productions.

¹⁰ The artist thus plays a predominant role in the dynamic of social and political change imagined by Proudhon. It is reminiscent of Schiller's aesthetic utopia which conceives art as a means of perfectibility for the human being facing a society devoted to utilitarianism and economic rationality. It is against this political and moralizing conception of art that Zola will oppose Proudhon from the posthumous publication of his only work on this question *Du principe de l'art et de sa destination sociale* (1865).

¹¹ Following Beraud (2012), it is possible to illustrate that point by the comparison between Mill and Walras. Mill explains that parents are unaware of the benefits that their children could enjoy from such service. This is why the state has to provide a minimum education for all. Walras excludes this parental error to underline the fact that the individual is not concerned with public goods. He argues that it is important first for the State, not for the individual, that children receive an education that will enable them to pursue their own goals. Here monuments and artistically valuable piece of work fulfil the same objective.

does not see any contradiction between moral and economics. By contrast, the non-venal frontier of the Proudhonian analysis describes a continual tension between the chrematistic aspect of capitalism and ascetic values. In his view, individuals must be intrinsically motivated in order to avoid frivolous or obscene work. As a result, Walras suggests that intellectual property's scope is first a matter of incentive while Proudhon claims the exact opposite statement since, at some point, the higher the level of incentive, the lesser the quality of artistic goods could be.

These conflicting approaches between Walras and Proudhon are linked to their opposite conception of justice. For Walras justice consists first in respecting the principles of natural law leading to efficiency. The market is a machine, thereby everyone try to maximize his own interest in fair conditions (Jaffé, 1983; Berthoud, 1989). Obviously the state plays an important corrective role but its intervention remains an tool for individual's goals. By contrast, Proudhonian justice consists first to fulfill the virtuous attitudes of the humankind, meaning their sense of justice, into an intersubjective scheme. This is why he explains that the difference between artistic goods and other intangible or tangible assets is not a difference of degree but a difference of nature: the evaluation criteria are no longer quantitative but qualitative (artistic excellence) because art must make "an idealist representation of the nature and of ourselves, with a view to physical and moral enhancement of our species" (1865, p.43). The unlimited diffusion of non-venal goods is then a crucial prerequisite for justice; they should be "distributed freely, otherwise the distribution of the work and the repartition of objects of consumption not free would be tainted of servitude and fraud" (1862, p. 141).

One could ask how Proudhon can conciliate his temporary solution which involves profit and restrictive access with this latter and ambitious objective of authentic and free enjoyment of art. Actually the conflict remains largely unresolved. Indeed in the beginning of the *Majorats* Proudhon left this question to market forces and seems to admit the possibility of profit: "if a work is very popular, the author will win big; if it is rejected, he will win nothing" (1862, p. 5). But later Proudhon comes back to his egalitarian view from 1840 since he asserts that the author only benefits from a privilege period of "thirty, forty, sixty years to recover his costs." (1862, p. 49). Actually these hesitating propositions demonstrate the inherent flaws of Proudhon's view of justice based on his ambiguous understanding of economic value.

Commutative principles cannot be achievable through an intellectual property system of any sort since the value of the protected asset depends in itself of the duration of the right¹².

2.2 The status of morals in the intellectual property debate

It appears clearly that Proudhon is torn between two contradictory imperatives, one located on justice considerations and the other referring to a more economic approach. On one hand he is tempted to support the abolition of any appropriation mechanism on non-venal objects, even temporarily. On the other hand, pragmatism forces him to defend legal tools enabling art to survive in market society¹³. Proudhon tries to solve this antinomy by convoking the moral duty of the author to be judge “of his own need and of the necessity in which he have to trade” (1862, p. 143). For instance the rich man of letters should give up his remuneration entitlement: "This seems unjust; it is just. Any author who can live from his heritage, takes a penny from his writings, is in principle guilty of unworthiness." This statement is endorsed by his eschatological view of justice in which he distinguishes three step of “morality”, including a final “equity” step characterized by sympathy and generosity (Proudhon, 1840).

This perspective is typical of his “antinomies method” according to which society is driven by contradictory forces that economic agents must learn to temper morally. On this point Walras explicitly disagrees with Proudhon: “It could not be said, as M. Proudhon does, that justice will be the constant formula of the political economy; it is on the contrary the political economy which should be the constant formula of justice” (1860, p. 37). In the Walrasian framework the different kinds of truths cannot properly be in contradiction and this is why the concept of moral is never autonomous from the concept of science: “it is the moral which should be subordinated to natural sciences” (1860, p. 32).

This cleavage can be clearly illustrated through their respective use of the notion of merit regarding intellectual property issue. As showed before, Walras thinks that economic science can objectively reveal individual merit through price market system. This is why he describes temporary intellectual property as an elegant conciliation between private interest and natural

¹² Intellectual property is a second-best solution because it may create a deadweight loss resulting from monopoly power, that is, according to Proudhon himself, the main source of alteration of commutative justice.

¹³ In *Théorie de la Propriété* (1867) Proudhon is even more ambiguous. First he approves the legislator’s solution setting the monopoly duration thirty years after the death of the author for the benefice of his heirs, while in the *Majorats* Proudhon explicitly rejects such *post mortem* extension. But in the same paragraph he seems to consider the obsolescence cycle of the book, which suggests a much shorter duration setting: “What is the work, which, fifty fifty years after its appearance, if indeed we still talk about it, does not need to be reworked, redesigned, updated and given back to the crucible?” (1867, p. 63).

law: the higher the profit, the higher the creator's merit. In this perspective intellectual property is an *ex ante* incentive as much as an *ex post* reward: the Proudhonian contradiction vanishes because moral meets with market outcome. One might even think that it is thanks to his meritocratic principle of justice that Walras justifies why literary works have a longer duration right compared to patents since "artistic and literary idea is much more personal." (1880b, p. 1).

Nevertheless the very fact that the immaterial outcome of a creator is based on products and ideas from the past is not different from the fact that the productivity defining the worker's wage is based on former economic phenomena such as the division of labor, past experiences, etc. (Chantrel & Prevost, 2002). As Proudhon has noticed, the product of a worker is always the result of a broader social context that largely exceeds his personal contribution¹⁴. For that reason, temporary system cannot be designed according to merit but merit can mitigate the power of intellectual property. Indeed for Proudhon merit is the quality of the talented members of the society expressing generosity and assistance to weakest ones who, in turn, address social recognition and gratitude. Merit is not the result of economic features but the consequence of justice as a virtue; in the Proudhonian justice merit can truly flourish at the final stage of society, namely the equity step¹⁵.

In the Proudhonian framework moral phenomena are then directly described as the result of a relational dynamic between people. They learn progressively moral principles through day-to-day interactions rather than through their scientific revelation. There is an indeterminacy space of "non-knowledge" from where individual subjectivities flourish, inviting Proudhon to analyze the society as being in perpetual evolution. The Proudhonian

¹⁴ Molinari (1856), in his debate with Passy (1855), had also raised this "proudhonian objection": justifying the temporary aspect of the intellectual property on merits basis may indirectly lead to question the foundations of the private property as such since all the wealth that is created in the society is never the exclusive result of individual effort.

¹⁵ In other words society can reach the third level of sociability (equity) only once commutative justice will be restored. This idea is expressed clearly in 1840: "Equity does not change justice: but, taking equity as a basis, it adds esteem and creates in the man a third degree of sociability" (1840, p. 271). On this point Proudhon disagrees strongly with socialists confusing true egalitarian justice with a dangerous planned generosity: "Assuming that the high ability worker may be satisfied of the half his salary for the benefit of the weaker ones, and provide free services and produce, as the people says," for the King of Prussia, "that is to say for this abstraction which is called society, the sovereign, or my brothers, is to build the society on a sentiment, that is not inaccessible to man, but can be, when it is systematically erected in principle, a false virtue, a dangerous hypocrisy [...] Equality is produced between men by the rigorous and inflexible labor law, the proportionality of values, the sincerity of trade and the value of functions; in a word, by the mathematical solution of all antagonisms." (1846, p. 296)

perspective is then fundamentally then aretic: his mutualist ownerships regime (cf. 1.2), as well as his temporary privilege system should promote individual and collective consciousness aiming to handle antinomies.

On the methodological level, the Proudhonian conception of justice implies a much more sociological approach of economic phenomena. For that reason Proudhon is totally unable to reach the rigorous economic reasoning of Walras held into the division between “économie pure”, “économie appliquée” and “économie sociale” (Lallement, 2004). Proudhon is confusingly trying to understand economic facts simultaneously as theoretical categories and social realities. This is necessary because Proudhon, following his Hegelian inspiration, has to think these categories into a historical logic of progress in which intellectual property is merely a step towards human emancipation.

Section III: Walrasian static analysis vs. Proudhonian dynamic analysis of the intellectual property issue

Aiming to conciliate intellectual property rent and individual merit, Walras remains focused on a lockean conception of labor in a static framework. Proudhon, through his eschatological view of justice, provides a dynamic analysis focusing on the long-term effects that intellectual property can have on the society (3.1). For that reason the *Majorats* offers a much more critical attitude about the concept of intellectual property compared to the one made by Walras. Furthermore the Proudhonian emphasis on the very social aspect of any production process offers an original insight of innovation as the result of a dynamic antinomy between collective vs. individual pattern (3.2). As a result we demonstrate in what extent this Proudhonian approach should grab our attention regarding the new tendencies in the economy of today by suggesting a new way of regulation which is not endorsed exclusively by the state or the market (3.3).

3.1 Walras and Proudhon economic arguments: static vs. dynamic analysis

For Walras intellectual property right is a way to solve the traditional trade-off between static and dynamic efficiency. As he notices in his article of 1880, without any intellectual property: “The continuation of industrial inventions, the composition of artistic work and

literature would be strictly abandoned or, at least considerably neglected.” (1880b, p. 1). In other words, intellectual property solves the arrovian dilemma about optimal incentive and optimal level of diffusion of intangible production. Walras’ understanding of innovation processes is then limited to the standard economic view that describes entrepreneurs and artists motives as essentially driven by monetary incentive.

However, Walras considers that appropriation of immaterial wealth may raise specific problems. Actually he does observe that market mechanisms in the intangible world are costly. This is why he supports an examination procedure for patents in order to avoid what the economic literature labels as patent trolling “which consists to take patent randomly and to blackmail the most honest and skilled industrials by intimating them with legal threats.” (1880b, p. 1) This phenomenon creates both a problem of justice and a problem of efficiency since the blackmailer is granted without creating anything and takes economic benefit from legal indeterminacy by obstructing inventive efforts of others¹⁶. According to Walras this situation is mainly due to the French patent system of the XIX^c characterized by the absence of examination procedure, which increases transaction cost since the blackmailed inventor has to wait the outcome of the trial to resume his activities.

Proudhon pushes the reasoning a step forward by suggesting that the problem lies in the appropriation logic itself. Indeed, knowledge cannot be reasonably bounded into clear and unambiguous rules because abstract objects are always socially embedded and intertwined with other immaterial assets. In the *Majorats* Proudhon predicts that the patent system and copyright will be fatally extended by its own exclusionary:

“There are in the world of the arts as many people as in the word of manufacturers. If the law of artistic property is rigorously enforced, it should anticipate all the cases of theft; there will be expert juries, and since the form prevails always to the substance, we will progressively appropriate artistic topics”. (1862, p. 206).

In other words appropriation fails to consider this systemic and cumulative dimension of knowledge since its typical exclusionary nature may affect knowledge simultaneously as an output (the owned-product) and as an input (the process). Thus, intellectual property may contain the seed of its own powerlessness: incentive may theoretically generate dynamic

¹⁶ The economic literature today has generalized this walrasian intuition: the troll is hiding his patent to place the infringer in a hold-up situation. By doing so, the troll is able to capture a much higher share of the value than the intrinsic value of his own title (Lemley and Shapiro, 2007).

efficiency for further innovations but can actually hinder long-term productivity of knowledge. Copyright, on one hand, may prevent the necessary updating of expressions, forms and tastes: "Everything is immobilized by appropriating. Do you understand now how writings which, by themselves, would have not lasted ten years will be imposing during centuries?" (1862, p. 209). Industrial property, on the other, may deter the technical improvement of innovation: "The series of improvements or inventions goes as a line of reasoning: So would you prevent the individual to use his reason?" (1862, p. 236). Taking an agrarian example, Proudhon explains:

"Triptolemus invents the plow; [...] For this tool, Triptolemos gets a patent, with privilege of manufacturing and sales. Later, the imperfection of the plow is recognized. A laborer adds, in front of the plow another piece for cutting vertically the earth [...] A third inventor installs the instrument on two wheels, and adds some detail enhancements. Each of these inventors is patented in turn " (1862, p. 230-231).

Because inventions are not in competition but intertwined, it is therefore in the interest of inventors to join forces for developing a common innovation. However, by doing so inventors increase their monopoly power over agrarian producers and may behave as a true corporation of plow manufacturers limiting access to innovation and alternative improvement. With a perpetual intellectual property, progress is then transformed into a question of who owns and who does not own the intangible "capital". Such strict proprietary regime enforcement would fatally leads to corporatism stopping wider enlightenment for poorest¹⁷ and economic stagnation.

This criticism converges with the recent observations raised in the field of evolutionary economics. This literature emphasizes that innovation proceeds by successive paradigms driving by technological trajectories which it is difficult to deviate (Nelson and Winter, 1982). The initial choice of the path becomes central since it determines the result of the process. Patents can disrupt and prevent the selection of the most appropriate technology and cause a lockdown on certain non-optimal choices. Patenting too "early" may indeed block the patient construction of a common knowledge required for the development of a new paradigm leading to a misallocation of resources (Freyermuth et al., 2012).

¹⁷ Interestingly this follows the line of the liberal American economist Carey claiming that those who are in favors of international copyright "are, to a great extent, disciples in that school in which it is taught that it is an unjust interference with the rights of property to compel the wealthy to contribute to education of the poor" (1853, p. 85).

As we can see, the very specific nature of knowledge is the reason why Proudhon considers, unlike Walras, intangible wealth as a product and not as capital. Knowledge is both an input and an output, meaning that dissemination of knowledge is a prerequisite for further productivity of knowledge itself. Indeed, Proudhon explicitly qualifies it as “consumable” and “perishable”. This point directly meets with his own conception of humankind as being in continual quest of perfectibility: a technical application, an artistic work or even a scientific idea is always imperfect as well as their human’s authors. The novelty aspect of a good is like a cycle that ultimately leads to a new generation of creations.

3.2 The Proudhonian antinomies as analytical framework for explaining economic change

Regarding this cleavage between dynamic vs. static analysis one can be surprised by the fact that Proudhon claims for the same practical solution than Walras. Proudhon’s demonstration left us into a deadlock: on one hand he provides a pioneer diagnostic about many issues raised by intellectual ownership. But on the other hand he seems to think that all these problems would vanish with the instauration of a temporary system rid of its proprietary ideology. It might even be said that Walras appears to be more cautious than Proudhon insofar as he admits in his second article that “in the case where the state would see an advantage to put without further delay the invention in the public domain, it could buy the patent by compensating the inventor” (1880b, p. 1). Though Walras does not specify in which circumstances public intervention should be done, one can think that expropriation procedure should be considered as a useful means to restore dynamic efficiency.

In the Proudhonian framework the state appears as an external disturber of the creative process rather than an accelerator because of his dynamic vision of the economy. Once again the argument is twofold, according to the venal/non-venal nature of intangible goods. In the artistic field, expropriation creates conformism because mediocre authors are encouraged to extol the merits of the Prince for compensation, while subversive ones may be expropriated for censorship. In the industrial field expropriation could disturb the selection of the most enterprising projects. Indeed, the state, by funding innovations, generates inefficient investment because entrepreneurs do no longer assume risks associated with their economic choices.

By contrast, Walras portrays entrepreneurs as simple coordinators between different inputs of production without taking any risk¹⁸. This is why he can give to the state a very extensive role as “unique entrepreneur” of the economy. In this perspective, intellectual property disappears in favor of a kind of centralized *ex ante* funding system handled by public authority. Of course, Walras is aware that state intervention could hinder sectorial progress¹⁹ but the simple fact that he explores such theoretical alternative demonstrates that he is not really concerned about the innovation process in itself.

According to Proudhon such form of regulation ignores the very fact that any creative activity cannot be intended by a central planner. Indeed, assuming that the state could be a “unique entrepreneur” by imitating innovative behavior is like assuming that:

“the society knows in advance what we should precisely discover. Submitting for a preliminary examination entrepreneur projects, it is like prohibit a priori any “movement”. Because, once-again, relatively to the goal that he is pursuing, there is a step in which every industrial man embodies in his person the society itself, see better and further than the other men together, and this occurs often without to be able to understand himself or to be understood.”(1846a, p. 243-244).

Against Louis Blanc, who militates for a system of awards and honors for authors and inventors, Proudhon replies that: “the power, by its initiative force, tends to extinguish any individual initiative, to proscribe the free work.”²⁰ (1846a, p. 233). However, consistent with his vision of social change as the result of antinomic forces, Proudhon is also highly critical against liberal thinkers. As mentioned above (cf. 3.1), knowledge is a dynamic and cognitive tool embedded with social groups and norms. Then the knowledge flow depends itself on

¹⁸ Contrarily to Walras, Proudhon understands the success of entrepreneurs from an evolutionist standpoint in which entrepreneurial activity is intrinsically new and risky. This is why the State intervention is undesirable from the point of view of the society as well as from the point of view of the entrepreneur: “If it was possible to set apart all the products of the human reason, and to put on one side the useful works and on the other side all that has been expended in terms of force, mind, capital and time for error, we will see with dread that the sold of this account over the first one is maybe one billion percent. What would be the society if it should buy out all this liability and sold all these bankrupts? Wat should be in turn the responsibility and the dignity of the worker, if, covered by social guarantee he can, without risk for himself, unleash all the whims of a delirium imagination...” (1846, p. 292).

¹⁹ Walras suggests making a “great experience” in order to decide in what extent competition between entrepreneurs should be preferred to a centralized direction.

²⁰ This statement echoes to the fear of Schumpeter that describes the emergence of the State and corporate bureaucracy in capitalist economy as the antechamber of stagnation: “The bureaucratic method of transacting business and the moral atmosphere it spreads doubtless often exert a depressing influence on the most active minds. Mainly, this is due to the difficulty, inherent in the bureaucratic machine, of reconciling individual initiative with the mechanics of its working. Often the machine gives little scope for initiative and much scope for vicious attempts at smothering it.” (1950, p. 207)

antinomies based on individual features and collective trends²¹. As Proudhon notes in the *Majorats*, the society “is both composite and individual; its thought is collective and also individualized [...] Everything produced within the society derives from this double origin” (1862, p. 198).

From an economic perspective this analysis suggests that the temporary system is less a trade-off about access vs. incentive than a trade-off between individual vs. collective creativity. The Proudhonian framework considers indeed the collective background as animated by its own power of creation. As explained above (cf. 1.2), the main driver of the economic progress in the Proudhonian analysis is the “collective force”: by working together workers are creating much more value than remaining isolated. The central question is then where this surplus actually comes from? In the light of these Proudhonian dynamic intuitions we contend that the surplus is generated precisely through innovation in a broad sense: by working together men create unconsciously a cognitive framework, thereby they share and improve their ideas, their abilities and their practices so that their collective force exceeds impressively the addition of individual ones.

This cognitive break is latent in 1840 since Proudhon reproaches to Smith to reverse the causality of the economic progress: association is first and the division appears only as its consequence since, for allocating tasks rationally, workers must have cooperated together in order to use the talent of everyone in the best possible way. Rules and social norms that appear from this coordination emerged spontaneously so that all members act as one. In *De la Création de l'Ordre dans l'Hummanité* (1843) Proudhon is even more explicit about this cognitive benefit of the group by taking the example of a watches workshop: “It is as if, instead to be fabricated by one individual successively, the diverse parties of the watch have been produced simultaneously by one worker with fifty heads and one hundred arms.” (p.245).

In other words Proudhon underlines the fact that growth and further progress are ontologically different from the atomistic view of liberal economists. In our sense this dynamic analysis conducted in the latter works of Proudhon can be seen as an extension of his

²¹ This dialectic tension between holism and individualism in order to explain economic change echoes to the analytical framework of Schumpeter (Dannequin, 2012). According to Schumpeter the group has also its own existence and its own logic: “In this sense every social class is a special social organism, living, acting, and suffering as such and in need of being understood as such” (1927, p. 105). The social class is the basis from which entrepreneurs take their inspiration and elaborate their social representations, they “absorb them and their families and connections, thereby recruiting and revitalizing itself” (1944, p. 134).

central concept of “collective force” developed in his first writings. Extended to immaterial wealth production, this principle stressed that the group itself possesses its own creativity. Considered properly, this point suggests that wealth, and even more intangible wealth accumulation, cannot be regulated solely based on an exclusivist paradigm.

3.3 The role of the collective force into economic and institutional change: Proudhon as a pioneer of the theory of commons

Despite the relevant observations of Proudhon and Walras, we can see, with the benefit of hindsight, how a temporary exclusion system is far from solving all the negative effects that they anticipate with perpetual intellectual property. Temporary ownership has not avoided the industrialization of the artistic sector. Similarly, the ability of certain actors’ strategies to lock firms and technologies appears as one of the major problems of the current patent system. Finally the propensity of intellectual property to encroach other types of rights is more topical than ever, particularly having regard to social problems caused by seeds protection. Though Proudhon provides little evidence about alternative ways for managing intellectual property, we contend that his dynamic diagnostic could offer a promising normative answer through a synthesis between his first writings and his later dynamic analysis. In many academic fields researchers have provided several insights that show a “come back to the commons” thanks to NTIC (Coriat, 2015; Hess & Ostrom, 2007). Regarding this new tendency, Proudhon can be considered as a pioneer thanks to his concept of “collective force”.

As we have seen the “collective force” concept reveals a wealth creation process that exceeds the atomistic logic. In this perspective the whole economic system can be consider itself as a set of commons emerging spontaneously from social and economic interactions. At the end of his life Proudhon tries to extend this analytical scheme in every aspect of the social life, including politics. His immanent conception of justice leads him to see the civil society as an autonomous manifestation of the collective force that generates a spontaneous order in which market is only one procedure among others. Proudhon has the deep conviction that civil society, and first the working class, is already discovering its own way towards political and economic emancipation:

“below the governmental apparatus, under the shadow of the political institutions, far from the gaze of statesmen and priests, the society was producing slowly and quietly her own organism; she was making a new order, expression of her vitality and autonomy” (1851, p. 251).

According to Proudhon the society is able to generate its own “*Public Reason*” thereby people express a plurality of opinions and deliberate in order to implement rational and fair policies. This is why he tries to act directly on the social norms, habits, and traditions in order to equilibrate the different antinomic trends of society (Laval, 2016). This original insight is most apparent in *Théorie de la Propriété* (1866), in which Proudhon briefly describes how a mutualist system can compensate the intrinsic drawbacks of intellectual property. By gathering their resources, workers associations preserve personal creativity while disseminating knowledge and best practices. They are not intended to:

“replace the individual initiative by the shareholder action, as one could have foolishly thought in 1848, but to ensure for all entrepreneurs of small and middle-size industry, as well as for small landowners, the benefit of discoveries, machines, improvements and procedures usually inaccessible to companies and poor fortunes.” (1866, p. 122).

This pioneer form of patent pool represents the good trade-off between the necessity to let be free the genuine of men and the moral obligation to share with every shareholder. Proudhon thinks that such a system is in long-term the only sustainable one, since every producers, knowing that others are engaged by the same reciprocal obligations, are thus inclined to contribute to the common and then keep improving.

While it may be doubted that such principles can be institutionalized at a global level it should be recognized that Proudhon was right by stressing the relative autonomy of the society from state regulation. Economists, lawyers and historians have exposed how much the industrialization era has also been a moment of experimentation for “hybrid” economic system (Polanyi, 1944; Leroy, 1913; Mauss, 1924). According to Proudhon, these experiences are the empirical proof that the collective force is a source of economic dynamics. It should be the very first ground on which any economic and social science should be based: “it was the responsibility of our century, the positive and precise genius of modern societies, to study the social instinct in its practical development, and to follow it in its speculative, moral and industrial manifestations” (Proudhon, 2010, p. 143-144). In other words, economic science must imply collecting observations about how people do actually produce exchange and work in day-to-day interactions in order to create better organizational schemes.

This socio-economic standpoint has two very important dimensions in the thought of Proudhon:

- First, organizations cannot only proceed from one paradigm since the modalities whereby the collective force emerges depends on many parameters such as the number of men, the quality of their social relations, the nature of their industrial activity, etc. For example little peasants are not constrained by associative principle since they produce mainly their output on their own. In this case the collective force is driven by exchange and competition rather than by collaboration. On the contrary, association appears to be much more adapted for workers. Of course, such a dichotomy might be challenged with innovations; as mentioned above, Proudhon discusses the great advantages that peasants could enjoy from cooperative organizations in terms of technological improvement. Therefore, between private ownership and collective ownership there is a range of intermediate solutions that liberals and socialists opponents are not able to understand.
- Secondly all these procedures, rules and contracts organizing associations are always embedded with moral and social norms that go beyond the *homo economicus* model. Workers become a community of peers and sustain their fruitful collaboration by pursuing a common and shared vision of what is good and fair.

Taken together, these two main points have important implications in terms of economic analysis. As mentioned above individuals never create and enjoy economic goods alone - *a fortiori* knowledge goods, but goods arise necessarily in specific social background. It is then in the light of this background that the question of economic efficiency have to be appreciated. In other words, for Proudhon efficiency is not resolve *ex ante* from the economic properties of goods but has to be tackled regarding the context and the goals expressed by the shareholders.

This is consistent with the new definition of the commons established by the recent institutionalist literature. Indeed, since the publication of the book of Ostrom, *Understanding Knowledge as a Commons* (2007), the notion of commons has started to challenge the samuelsonian classification of goods. Commons are no longer so much defined by their immanent properties (namely rivalry and non excluability) but by the way resources of the commons are regulated (Allaire, 2013; Coriat, 2015; Broca & Coriat, 2015; Harribey, 2011). According to this perspective commons can be characterized through three main criteria (Coriat, 2015) matching with the Proudhonian view: First, they are collectively designed by formal and informal rules embodied by social interactions. Thus the existence of a common implies the existence of a community in which every member has accepted to follow consensual procedures. Secondly, the management of a common implies collective action and

a shared vision of what is the goal of the common in order to prevent “free riding”. Rules are not able to anticipate and detect counterproductive behaviors and individuals themselves have to be broader than their narrow self-interest. Last but not least, commons can be sustained through hybrid mechanisms that can be different according to the use of the resources or the status of the individuals.

Lawrence Lessig, creator of *Creative Commons* license, conceives internet as a “commons of innovation” implying rules, norms and property devices that are not based only on exclusivity or unconditional sharing: it is up to creators, according to circumstances and social context, to contractually choose between several regimes ranging from the less inclusive one to the most open ones. Moreover most of these regimes are characterized by a mutualist logic by which people are engaged to improve the content to the condition that they also share their own contribution freely. All these rules and norms are not necessarily enforced by the State but emerged through interactions and exchanges between peers so that they balance individual freedom and collective creativity. This social innovation can be seen as a step extending the Proudhonian logic of the “collective force” into artistic field. Indeed, Proudhon considers, unlike Walras, artists as workers and not as owners of a capital. Being a worker, artist cannot claim any moral right because this personalist view of control of the work has more to do with private ownership whereas intellectual property should be seen as transfer from whom the work belongs to the public²². The creator has only a right of paternity by which he becomes the author of the work²³.

The logic of commons and the “collective force” of Proudhon share the same anthropological standpoint: creative activity is less the result of demiurgic expression of the creator’s subjectivity than an individual impulsion of a collective process: “once again, this is not the individual who is creating: this is the human industry” (1862, p. 236). In this framework the role of merit is crucial as a mechanism of social recognition from the

²² Historically the proudhonian conception of the creator as an “intellectual worker” rather than an “intellectual owner” has inspired the law proposal of the French minister Jean Zay, in 1936, considering that property concept does not fit the problem because it is used both at the expense of the public and the author. Thus this project advocated for a balance between the interest of the public and the interest of the author by limiting the right of exploitation to ten years after his death, the non-automatic right of heritance, proportional remuneration and collective agreements between producers and creators for each media channel etc.

²³ Again, on this point Walras share the same position but for very different reasons: natural law does not protect the property of the work as such but the property of the economic value of the individual labor. On this point Walras is influenced by his father for whom the property makes sense only on exchangeable things (Lallement, 2011).

community of peers rather than as a means of economic justice. This underlines the methodological contribution of Proudhon which can be seen as a pioneer socio-economical and managerial understanding of economic phenomenon: institutions and collectives entities, like communities, firms or social classes, do matter. They have their own logic (Public Reason) and their own dynamics (collective force), that we should consider a part from individual schemes in order to appreciate economic dynamics and social change.

Conclusion

By analyzing the limits of the commodification of the intangible world, Proudhon and Walras provide useful analytical insights of the market processes. Though Walras remains ambiguous about the intellectual property foundations, these two economists underline the fact that knowledge could not be designed through a unique and traditional paradigm of appropriation. More specifically intellectual property policy should always take into account the fact that broad access is a prerequisite for knowledge productivity.

However the comparative examination of Proudhon and Walras arguments shows that they fail to connect their principles of justice with the specific issues raised by immaterial goods. On one side, the meritocratic vision of the Walrasian justice stumbles on the reality of any economic and social phenomenon, namely that the individual is nothing without others, and what is his own differs from his efforts and talent. Proudhon is somehow confronted to the opposite problem. Since intellectual wealth is neither rare nor limited in quantity it does not have in itself a market value. This value emerges thanks to legal arrangements challenging the equivalent principle of commutative justice.

From an analytical perspective, the normative statement of the intellectual property issue made by Walras appears as more consistent compared to Proudhon's, who is torn between a strict economic reasoning and a moral imperative. However the Proudhonian analysis of humankind progress as a balance between antinomies pushes him to adopt a more dynamic analysis. Indeed by stressing that any social activity is the result of a dialogical tension between the group and the individual, Proudhon is able to provide a framework that exceeds what a standard economic analysis of intellectual property aims to consider.

The benefit of such a comprehensive analysis is to demonstrate that innovation is linked to social cohesion between the members that compose organizations - in the Proudhonian phraseology, the "collective force"- in which sharing procedure and social norms play an

important role. Of course Proudhon deduces from it a whole series of political principles that can be questioned and discussed. But his methodological standpoint reveals an important aspect of the innovation process that should be useful for designing the future of intellectual property rules.

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