WHEN MACHINE DISCIPLINE AND POPULAR DISCONTENT DO (OR DO NOT) CHANGE INSTITUTIONS IN THE VEBLENIAN PERSPECTIVE: AN INTEGRATION OF WALKER'S INTERPRETATION

By

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Abstract.

The present paper is an extension of Donald Walker's thesis on the Veblenian process of institutional evolution. In his *Thorstein Veblen's Economic System* of 1977 Walker stresses that the greater the workers' contact with machine discipline the higher their critical attitude towards the *status quo*; moreover, this contact is satisfactory for generating a mechanism of overthrowing the existing institutional order. The originality of Walker's interpretation concerns the defence of the active role of workers in the process of institutional evolution, unlike a great deal of literature that confines its interpretation only to the active role of technicians. However at the same time Walker's interpretation appears to be incomplete; in fact mechanisms of worker/technology 'contact' are certainly necessary to generate change in institutions but they are not sufficient since they also require mechanisms of moral delegitimation of the waste caused by the compression of the real wage. Actually Walker incidentally anticipates this argument but he does not provide a complete discussion of it. As in Walker, the rereading of Veblen proposed here is addressed to defining the ways workers change institutions. The aim is to expand Walker's arguments by referring to Veblen's thought on popular discontent. Moreover, and contrary to Walker, the focus will be on those principles and modalities recognized by Veblen as inefficacious for a change in institutions.

1. Introduction

Veblen's studies dealt with various phenomena: human behaviour, production, consumption, distribution, growth, development, cycle etc, and he was so innovative in his methodology and his theories that modern economists – such as Sweezy (1957, p.112) – recognized that: "[scholars of modern capitalism] will find more inspiration and guidance in [Veblen's ideas] than in all the rest of American social science put together" (see also Mitchell, 1936; Hobson, 1937).

The theory of institutions and their evolution is certainty the main point investigated by Veblen just as it is constantly present in a great deal of historical, sociological and economic literature (see for example Edgell, 1975; 2001; Hodgson, 1994; Sanderson, 1994). It could be argued that the

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extraordinariness of his thought is not just in the originality of his ideas as regards the economic theories of his time but also in the wide interpretative openings that allow continuous rereading of his works. With particular reference to the evolution of institutions his thought does not seem as obvious as might be argued. It's true that technology is one of the grounds on which the author tries to explain how institutions change, but it is reductive to limit the interpretation of Veblen to this point. The interpretative literature is rich when it deals with mechanisms of change guided by technology and technicians (see for example Spengler, 1972; Diggins, 1977; Stabile, 1987, 1988; Waller, 1988) but it is often lacking in dealing with the role of the "underlying population" in this process and the mechanisms that do not favor institutional evolution (see for example Mayberry, 1969; Hunt, 1979; Rutherford, 1984, 1992; Tilman, 1999; Forges Davanzati 2006)¹.

In detail there is a topic that constantly interested Veblen in studying how institutions can evolve; this argument revolves around the popular discontent aroused by an intolerable income distribution. Popular opinion on the income levels of the social classes is assessed as a potential tool in the hands of the population for critically discussing the *status quo*. Actually what interests Veblen is – at the same time – investigating the nature and the aim of popular judgment since the successful possibility of an institutional change will in fact depend on the original traits of the this opinion and on its direction. Consequently, the aim of this paper is to emphasize the role of popular discontent in the Veblenian process of institutional evolution by a rational reconstruction of the nature and aim of popular judgment *via* the identification of those causes that do or do not favour change.

In detail, the present article is an extension of Walker's interpretation of Veblenian thought. Briefly, Walker (1977) stresses that the higher the workers' contact with machine discipline, the higher their critical attitude towards the *status quo*; moreover, this contact is satisfactory for generating a mechanism of overthrowing the existing institutional order. The originality of Walker's interpretation concerns the defence of the workers' active role in the process of institutional evolution unlike a great deal of literature that confines its interpretation only to the active role of technicians. However at the same time Walker's interpretation appears to be incomplete; in fact mechanisms of worker/technology 'contact' are certainly necessary to generate change in institutions but they are not sufficient since they also need mechanisms of moral delegitimation of the waste caused by the compression of real wage. Actually Walker incidentally anticipates this argument but he does not provide a complete discussion of it.

As in Walker, the rereading of Veblen proposed here is addressed to defining the ways workers change institutions. The aim is to expand Walker's arguments by referring to Veblen's thought on

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¹ Notice that the words workers, underlying population, population, individuals, people and common men will be used indifferently as synonyms.

popular discontent. Moreover, and contrary to Walker, the focus will be on those principles and modalities recognized by Veblen as inefficacious for a change in institutions.

The paper is organized as follows. Section 2 shows how Veblen discusses machine discipline in the process of institutional evolution. Section 3 emphasizes that Walker explains the association between technicians' habits and changes in the population's habits. Section 4 extends Walker's interpretation, showing the effective variables that do or do not favour the population-driven institutional evolution. Finally section 5 offers some general conclusions.

2. Machine discipline in the evolutionary process of institutions

There are at least three ways of looking at Veblenian institutions: a) as habits of thought, b) as habits of life and c) as "habitual methods of carrying on the life process of the community in contact with the material environment in which it lives" (Veblen, 1975 [1899a], p.190). Moreover, different aspects characterize them: a) institutions are outcomes of minds that found materialization in instruments, behaviours and styles (see Weed, 1972)²; b) not all habits become institutions but only those able to discipline – whether by coercion or otherwise – the collectivity of habits (see Harris, 1953; Edgell, 1975); c) institutions lead choices and actions within an environment in which individuals compete with themselves, with others and with nature; d) they are the evolutionary outcome of instincts and institutions "[...] that prevailed at the time of [their] formation" (Rutherford, 1992, p.126)³; e) finally they are the basis for the genesis of the new ways of thinking and acting that necessarily remove the previous ones, bringing about new institutions.

In detail, institutional change is the result – a priori not foreseeable – of the conflict between divergent institutions (see Harris, 1953). Consequently, change is endogenously determined (see Jennings and Waller 1994) by the process of selective adaptation of habits under the stress of the circumstances of associated life (Veblen, 1975 [1899a], p.213; italics added)⁴. Veblen thus writes

² Think for instance of the social habits of dressing, playing, drinking, praying or of economic habits of business, ownership, industry, income, credit and money.

The methods of livelihood concern means of life which are managed and affected by material, technological and economic matters (see Rutherford, 1984). Notice that on the instinctual nature Veblen writes: "a genetic inquiry into institutions will address itself to the [cumulative] growth of habits and conventions, as conditioned [..] by the innate and persistent propensities of human nature; and for these propensities [..] no better designation than the time-worn "instinct" is available" (Veblen, 1922 [1914], pp.2-3). On the other hand Veblen also argues that institutions are "habitual methods of carrying on the life process of the community in contact with the material environment in which it lives" (Veblen, 1975 [1899a], p.193).

⁴ As we know, Veblen wrote his theories in a time characterized by a profound reflection of the nature and evolution of species. The evolution of species was a characteristic trait both for natural sciences – think for instance of Jean-Baptiste Lamarck's *Histoire naturelle des Animaux sans vertebras* (1815) and Charles Darwin's *On the origin of species* (1859) – and for social science, for example Herbert Spencer's *First Principles* (1862). For a long time naturalists thought that each specie was immutable, being a divine creation. Lamarck started to present a different perception on the nature of species arguing that each present organism is the result of a continuous process of transformation that started in the past and is under the pressure of environmental conditions. Lamarck's ideas were further investigated by Darwin who stressed that populations of organisms, rather then the single organism, are subject to evolution by a process of natural

"[..] *The law of natural selection*, as applied to human institutions, gives the axiom: "Whatever is, is wrong". Not that the institutions of to-day are wholly wrong for the purposes of the life of to-day, but they are, always and in the nature of things, wrong to some extent. They are the result of a more or less inadequate adjustment of the methods of living to a situation which prevailed at some point in the past development; and they are therefore wrong by something more than the interval which separates the present situation from that of the past" (Veblen, 1975 [1899a], p.207; italics added)⁵.

Institutional evolution depends on basic principles and mechanisms of inducing change. As will be explained in more depth below, basic principles appear to be the simultaneous presence of machine discipline and of moral delegitimation of waste while the main change-inducing mechanism appears to be the 'contagion' of different habits *via* 'contact'. Contrary to what could be argued, while the basic principles underlying institutional evolution are well identified in Veblen, the effects of 'contagion' between habits are not so certain and unidirectional.

The most important Veblenian principle – widely recognized by the interpretative literature – of institutional change is *machine discipline*. Inspired by the theories of natural selection of his time, Veblen develops his theory of machine discipline in terms of a necessary institution to "enhance human life on the whole" (Veblen, 1975 [1899a], p.99; italics added), therefore as a necessary condition for guaranteeing the social evolution of the human species in unfriendly contexts (see Veblen, 1899b).

Machine discipline is a mental aptitude – a particular problem-solving process (see Bush, 1987; Samuels, 1990) – oriented to efficiency and to the "[creation of a] new thing, with a new purpose

selection. As we know, according to Darwin the environment 'chooses' the species that adapts itself to the environment so nature selects those genes that are best suited to its characteristics, erasing those that are useless for this purpose (cf. the Veblenian theory on "good" and "bad" instincts). Unlike Lamarck and Darwin, Spencer develops a theory of the evolution of social organisms arguing that – like other organisms – social organization increases its size and interrelation amongst its single components, changes its structure and survives the death of its components. Different aspects of the above theories interested Veblen in his studies. The Lamarckian interpretation of hereditary characters and their transmission from generation to generation was borrowed by Veblen in his theory of 'characters' such as the character of creativity, excellence and docility of individuals (see for example Veblen, 1922 [1914]). The fact that Darwin entrusted evolution to the group, rather than to the single organism, is borrowed by Veblen in his theory of instincts – predation, salesmanship, pugnacity, workmanship, idle curiosity, survival, parental bent, solidarity and sympathy – as traits of

social classes – leisure class, undertakers, engineers, workers – rather then traits of individuals (think for instance of his *The Theory of the Leisure Class*) (see also Edgell and Tilman, 1989). At the same time Spencer's theory of the evolution of organizations is borrowed by Veblen in the *Theory of Business Enterprise* and in other works in which the author stresses the natural tendency of firms to increase their size by continuous processes of capitalization economically motivated by achieving "economies of production, superior management [and] economies of scale" (Veblen, 1905, p.463).

⁵ Cummings (1899, pp.437-438) in his famous critique on the evolutionary theory of institutions stresses that Veblen is wrong when he writes "whatever is, is wrong", stressing that it might be better to say "whatever is, is imperfect". Cummings remarks that whatever is, is not wrong, it is just imperfect because if it were wrong then the whole cumulative process of development would be wrong too. So what is now right as regards what has been until now but it is wrong – or rather it is imperfect – as regards what will be from now onwards. The imperfection of current institutions is connected to the imperfection of knowledge and experience as regards current conditions; in other words, in Cummings, knowledge and experience are aimed at improving the present condition not at destroying it. So the existing protected institutions at a given time are the best result of what the society has known from the beginning of evolution until now, but they are imperfect as regards what society will know from now onwards.

given it by the fashioning hand of its maker out of passive ("brute") material" (Veblen, 1975 [1899a], p.12). Veblen comments:

"In the workmanlike apprehension [..] the nature of things is twofold: a) what can be done with them as raw material for use under the creative hand of the workman who makes things, and b) what they will do as entities acting in their own right and working out their own ends" (Veblen, 1922 [1914], p.54).

Machine discipline shows itself in terms of *a*) creativity, *b*) proficiency and *c*) "[the] technological mastery of facts" (Veblen, 1922 [1914], p.33). It is thus a "matter of fact[s]" and "matter of imputation" by which each event is observed in terms of evidence and "objective knowledge" (Veblen, 1922 [1914], p.55-56). As for other institutions, it is depicted by tangibility and intangibility. In fact it manifests itself by thought and then by material outcomes of technology and industry.

The thought underlying machine discipline needs logic, that is a mental process that learns, evaluates and enhances facts in terms of measurable relations and following a precise and standardized process (see Veblen, 1904, ch.4). It calls for the existence of a pre-established system of impersonal sequential rules of cause and effect whatever the goal is. A rule working under the regime of machine discipline has an elementary structure based on the concatenation of dependent operations and "mechanical effects" (Veblen, 1905, p.310) of the following kind: 'given A, do B if, to get C'. The elementary instruction can be additionally divided into two sequential sub instructions: check and then act. In both cases instruction needs time, since instructions are sequential, and information, since it is necessary to know what must be checked, how to check it and how to act.

In view of the above machine discipline calls for two essential categories of rules: *a)* checking rules and *b)* action rules (cf. Waller, 1988). A way of thinking that works on this plane and is widespread in society is able to generate a cultural patrimony based on elements of realism, scepticism and materialism (see Veblen, 1904, ch. 9), fundamental elements for apprehending facts for what they objectively are (*imputation*) or for what they will objectively become (*derivation*).

It is interesting to notice that to Veblen's mind, machine discipline is a broad concept. Veblen does not limit such discipline to the mere mechanical and technical plane: it is first of all a matter of mental disposition of reasoning on evidence and facts. The central point on which machine discipline depends is the current state of matter-of-fact logic rather than the materialistic state of things. If facts are interpreted by the above method then the machine discipline forms an aptitude for change, for the evolution of thought and knowledge; consequently, this method of interpretation of facts can be considered to be at the basis of *reformist attitudes* (see ch. 3; see also Veblen, 1904, ch.9).

Notice that machine discipline cannot work without at least a decision-maker and an individual who is receptive to rules. In Veblen, the one who decides the rules underlying machine discipline is

the technician. On the other hand the receptive individual may be the technician him/herself and in particular conditions (see below), the worker. Veblenian technicians choose the rules underlying machine discipline starting from the collective wealth of cumulatively transmitted information and thanks their natural proclivities: "workmanship" and "idle curiosity". Technicians are also able to materialize outcomes of machine discipline and the material expression of their ability is technology (see also Brinkman, 1981).

3. Donald Walker's contribution to the interpretation of Veblenian institutional evolution

Donald Walker's contribution (see Walker, 1977) to the interpretation of Veblen's thought is fundamentally represented by his effort to understand in what circumstances Veblen's underlying population can be the driving force of institutional evolution. The idea underlying his interpretation revolves around the effects of workers' training under the push of machine discipline. In detail he rightly makes reference to the universal 'contagion' of worker's habits generated by their contact with technicians and machine discipline. This contagion manifests itself on two levels: a) a direct effect generated by the contact of industrial workers with technicians and b) the subsequent one generated by the contact of industrial workers with the rest of the population. On this point it is fundamental to remember what Walker refers to ch.9 and 10 of Veblen's *The Theory of Business Enterprise (TBE)*:

"[..] participation of workers [in mechanical operations] induces them by occupational conditioning to think in the impersonal terms of causal sequences, and leads them to adopt scientific impersonality and mechanistic criteria in evaluating propositions. [Like technicians] workers begin to question the traditional metaphysical basis of justification of economics institutions. They become critical of specific economic and social arrangements, such as the distribution of income, the existence of privileged classes, the economic and legal domination of businessmen, thrift and even the family.

⁶ Workmanship and idle curiosity are two of the numerous instincts elaborated by Veblen. In detail instincts are 'hereditary traits' of social classes and are classified in: *a*) predation, *b*) salesmanship, *c*) workmanship and idle curiosity, *d*) docility, *e*) parental bent and *f*) solidarity and sympathy (see Veblen, 1975 [1899a]). Predation, that is to say the propensity to inflict "injury by force and stratagem" pushes the behaviour of the upper classes towards the exploitation of underlings. Exploitation consists of "[..] conversion to [the agent's ends] of energies previously directed to some other end by another agent" (Veblen, 1975 [1899a], p.12). Assuming the "material conversion of energies" amongst upper and lower classes is in concrete terms equal to saying that the upper classes earn a free income obtained without directly contributing to the production. Salesmanship pushes the behaviour of the businessman to produce in order to maximise money profits via the 'monopolization of markets' (see Sweezy, 1957; Arrow, 1975). On the other hand while workmanship pushes the behaviour of technicians to produce in order to obtain a surplus, docility pushes the underlying population to work in order to survive. Parental bent, solidarity and sympathy denote an altruistic proclivity of individual; they reveal aptitude for the well-being of other individuals on the part of the agent. The formal difference is that while the parental bent is the specific attitude to the well-being of family and descendants (see Veblen, 1922 [1914], p.48) solidarity and sympathy is the specific attitude to "charity, [to] social good-fellowship, or conviviality" (Veblen, 1975 [1899a], p.333) that is, to the welfare of non-parental individuals or groups.

[So] economic conflict in the modern era is therefore generated between the workers, who have new habits of thought, and owners and businessmen, who have older habits of thought" (Walker, 1977, pp.230-231).

Accepted machine discipline as a basic principle in institutional evolution, Walker limits his interpretation to the automatism that machine discipline produces in the habits of workers incidentally skimming also over the subject of popular discontent. As he remarks:

"The technicians also adopt the new habits of thought, but they do not experience the additional element of economic deprivation that would bring them into opposition with the wealthy classes" (Walker, 1977, p.231)

Precisely in Walker's thesis the effect of the universal 'contagious' of machine discipline is a new human reasoning naturally conformed to the legitimation of efficiency and symmetrically conformed to the delegitimation of waste. Note that the moral delegitimation of waste does not concern processes of valuations based on principles and ideas abstractly, metaphysically or conventionally defined but on processes of mechanistic evaluation of their causes and consequences. As stated:

"the machine process gives no insight into questions of good and evil, merit and demerit, except in point of material causation [..]. The machine technology takes no cognizance of conventionally established rules of precedence; it knows neither manners nor breeding and can make no use of any of the attributes of worth" (Veblen, 1904, p.311).

In conclusion Walker's interpretation centres on the following logical concatenation of facts: machine discipline leads to technical changes which in turn lead to new institutional changes; the first step of institutional change is connected to changes in "problem solving processes", which is a matter for technicians; when the new problem solving is embodied into new technology then the same technology changes the problem solving process of those that are directly or indirectly involved in the use of such technology⁷; as a consequence new institutions can prevail over the older ones if the 'tank' of users of new technology is enlarged, therefore if a large part of the underlying population absorbs the habits of technicians directly by contacts with technicians, particularly in the field of work, and indirectly by the use of the outcomes of technicians⁸.

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⁷ This argument has also been reconsidered by Bush (1987, p.1087) who remarks: "the problem-solving processes of the community generate innovations in the ways of bringing material things to account, thereby changing the industrial environment in which the community works and this changed environment produces further changes in prevalent habits of thought about how to conduct the community's affairs".

⁸ Notice that on the economic plane, technological development has also a positive effect on economic growth in Veblen's view. Accumulation of capital does not depend on the accumulation of saving nor on the variation of aggregate demand. Accumulation of capital is the accumulation of technical knowledge – "industrial art" (Veblen, 2001 [1921], p.19) – and the full utilization of industrial capital which is the expression of the materialization of technical knowledge. Since

4. Natures and goals of popular judgment: the impact of popular discontent on the evolutionary process of institutions

4.1 Some preliminary considerations

As we know, Veblen devoted a large part of his writings to the role of machine discipline in the process of institutional change and scholars have always been attracted by it. It is necessary also to acknowledge that his theory of machine discipline was strongly influenced by the historical circumstances of his times (see Edgell, 2001)⁹. However it cannot be denied that another argument interested Veblen in the analysis of institutional evolution. The argument revolves around the points of strength and weakness of *popular discontent*. It is true that unlike machine discipline, the question of popular discontent is not continuous in the thought of the author. However, this does not mean it is unimportant to take the opportunity to 'rationally' reconstruct his thought on the topic, in part because this reflects some important changes in the economic structure, namely the growing power of unions, well explored in the *TBE* and *EPS*. For the sake of our argument, the focus will be on Veblen's later works, where this topic is extensively explored.

Moreover, there are in fact different reasons that justify the intent to supplement the Veblenian theory of institutional evolution by popular discontent: *a*) contrary to what could be argued, the matter of popular discontent finds an emphasis in his writings; *b*) it seems difficult to see a specific intent in Veblen to 'label' machine discipline as the necessary and sufficient condition for changing

accumulation of technical knowledge is an expression of the evolution of the instinct of workmanship, then economic growth in concrete terms depends on technicians' freedom to fully use industrial capital in production.

⁹ Veblen lived in a time of great change in the United States. Historians (see for example Cameron, 1993, ch.9-12) recognize the United States as an extraordinary example of the rapid economic growth of the 1800s. The population was about forty million in 1870 and about a hundred million in 1915; such an increase was both the result of European immigration and also of internal development; one element that helped the population increase was the increase in wages due to the scarcity of the labour force compared to other resources and to the availability of land. There are two main reasons for the rapid growth of the United States: *a)* technological development, *b)* regional specialization where the use of industrial equipment was strongly stimulated by the high cost of labour. Moreover, the expanse of the United States – combined with the differentiation of climate and of resources – led the country to a marked regional differentiation of production. These combined aspects allowed both industry and agriculture to be constantly involved in technological innovations, along with the fact that they were always oriented to the market. As a result, the nation saw the development and spread of industrial activities and of industrial employment on the one hand and the spread and development of business activities and of business employment on the other. The consequence of the parallel development of industrial and business employment was the development of two parallel classes: the class of technicians and the class of businessmen, exactly those social categories to which Veblen devoted his main studies.

institutions, but only as the necessary one. It seems that the hypothesis of worker/technology contact – the main path taken for the interpretation of his thought, which is not however denied here – needs some additions on the logical plane in order to gain a better understanding of the terms in which Veblen, directly or indirectly, supplies a theory of institutional change.

Let us come to the point: for the purposes of institutional change the effect of machine discipline on the workers logically requires the latter to conceive the existing state of things as immoral, recognizing it – thanks to the discipline itself and to the contact with technicians – as wasteful and inefficient. Actually Veblen does not concretely develop this logical consequentiality but at the same time this can be fully rationalized by a reflection on the traits and the working of "imbecile institutions" (Veblen, 1922 [1914], p.25). It could in fact be argued that only the additional reflection on these institutions helps us to clearly understand the circumstances which do or do not underlie a realistic change of institutions in Veblen. More specifically, the expansion of Walker's thesis is motivated by a series of interpretative doubts:

Walker the answer should be positive but rereading Veblen the answer can be simultaneously positive and negative and the positiveness depends on the different points of view he expresses on the argument. In fact Veblen uses a normative and a positive approach to the matter. In detail, when he links the moral delegitimation of waste to popular discontent then he wants to recognize that institutional change is automatic every time waste is generated (normative vision of Veblen). On the contrary when he divides the matter of moral delegitimation of waste from popular discontent then this can mean two things: a) institutional change depends on something unspecified or b) there are other conditions and circumstances – the imbecile institutions – that hamper the 'normal' process of change (positive vision of Veblen). Veblen's normative vision, that is the concomitant presence of machine discipline and moral waste delegitimation, can be explained with the following inductive reasoning: if Veblen observes that there are some conditions opposed to the change of institutions, thus legitimating waste, then the corresponding opposing condition, i.e. waste delegitimation, becomes the sufficient condition subordinated to machine discipline for a concrete change in institutions.

2) What does Veblen think realistically of popular discontent? Is it perhaps a reaction induced by machine discipline? According to Walker the answer should be positive but as remarked by Veblen "[machine discipline] does not serve to explain popular discounter, because the popular opinion, in which the discontent resides, does notoriously not favour that view" (Veblen, 1891, p.389) and also:

"[..] in no case and with no class does the discipline of the machine process mould the habits of life and of thought fully into its own image. There is present in the human nature of all classes too large a residue of the propensities and aptitudes carried over from the past and working to a different result" (Veblen, 1904, p.310).

If popular discontent can be explained by other factors then worker/technician contact is not in itself a necessary and sufficient condition for the change.

3) If worker/technician contact is fundamental for any institutional change then we have to admit that technicians are always a *pro*-social development class, but could technicians – the keepers of machine discipline – act contrary to the interest of society? Following Walker's argument, the answer should still be negative but in Veblen there is the possibility that this may happen. As we know, technicians can be "well fed" (Veblen, 2001 [1921], p.83) by businessmen so they may not have an interest in opposing the upper classes. It is thus understandable that mere worker/technician contact, even though continuous, may not lead to one habit overtaking another.

One could object that these observations however leave out his explicit reference to the "memorandum on a practicable soviet of technicians" (see Veblen, 2001 [1921]) to highlight that workers cannot change institutions without a technocratic organization. Others might say that Veblen constantly thinks that the underlying reasons for the change in workers' habits must be sought simply in the new industrial-occupational disciplines (see Veblen, 1894). There are at least three ways to rebut such possible objections:

1) It is not denied here that machine discipline is a potential cause of institutional evolution. As argued:

"[machine discipline] furnishes the new terms in which the revised scheme of economic life takes form. The revision of the scheme [..] runs, not in terms of natural liberty, individual property rights, individual discretion, but in terms of standardized livelihood and mechanical necessity, - it is formulated, not in terms of business expediency, but in terms of industrial, technological standard units and standard relations (Veblen, 1904, p.335).

But at the same time it is stressed here that machine discipline is not sufficient. In addition technicians' organization cannot be a *pre* condition for institutional change unless it is recognized that "[the] *solidarity of sentiment* between the technicians and the working force" (Veblen, 2001 [1921], p.103; italics added) is a necessary consequence of the contact between them but it is obvious that such solidarity may not continue to exist.

2) Is Veblen not perhaps sceptical of the real possibility of – as Layton (1962, pp.70-71) says – an "engineering of society"? On this point let us remember that institutional *inertia* would however be

possible also in – to use the words of Edgell (2001, p.139) – a "society of engineers" ¹⁰. Veblen himself gives us a concrete negative example of institutional *inertia* in the presence of machine discipline, and this *inertia* is well described by him in reference to the actual management of the "Federation of Organized Trade and Labor Unions", a union of technicians created in 1881 in Pittsburgh ¹¹. Describing, among other things, the management of this union Veblen remarks that society lost an opportunity for change since the Federation was characterized by speculative conduct. Its leadership was entrusted to bargaining technicians rather than to production technicians. The organization in fact was a business organization and its actions were mainly aimed at obtaining high gains by defeating employers. It acted exactly as businessmen do since its main object *was to sell its products at a high price*: that is it acted precisely to keep technicians' wages high in the same way as businessmen act to keep the prices of their products high. The consequent favouritism of its members went against the interests of the community (see Veblen, 2001 [1921], ch.IV). The negative experience of the social role of such organizations makes Veblen lay down possible lines of conduct for technicians for the correct changing of the institutional order.

3) Finally, the simultaneous revision of the machine discipline and popular discontent is the best way to look at the Veblen's to critically arguing the institutional evolution. In fact Veblen does not want simply to structure a 'mechanical' process of institutional evolution but he mainly wants to stress the impossibility of knowing exactly *if* and *when* institutions change because of the concomitant presence of variables that favour and of those that hinder the evolution of institutions.

So starting from the above considerations let us try to expand Walker's thesis of the 'contact' of workers with machine discipline and the simultaneous presence of popular discontent, stressing that their co-presence does not necessarily produce a change in habits of thought. In particular it will be argued below that Veblen at the same time identifies two groups of causes: a) those that allow institutional change (machine discipline and moral delegitimation of waste) and b) those that do not allow this process. Within point b Veblen identifies two additional categories of causes: b_1) those that unconsciously legitimate waste (culture, politics, etc.) and b_2) those that consciously legitimate waste (emulation, envy, etc.). Before looking deeper at popular discontent let us briefly consider the Veblenian theory of the social structure of income categories and of waste that appear to be useful to the present study.

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¹⁰ On the biographical and historical circumstances that affected the author's general scepticism see Edgell (1996).

It is important to notice that Veblen does not deal directly with the Federation of Organized Trade and Labor Unions; he discusses the American Federation of Labor (A.F.L.). However in the Italian edition of Veblen's *Engineers and the Price System* edited by Francesco De Domenico (1969, p.961, footnote 1) the author clarifies that the A.F.L. was in fact the same organization which was born using the name of Federation of Organized Trade and Labor Unions but then changed its name to the American Federation of Labor.

1) The Veblenian society. Veblen thinks of society as a structure formed by four main social classes hierarchically subordinated and in continuous evolution: a) leisure class, b) businessmen, c) technicians, d) workers. Workers are the component of society engaged in industrial activity but unlike technicians "they supplement the machine process rather than make use of it" (Veblen, 1922 [1914], p.307). They are economically dependent on businessmen and technically dependent on technicians. They represent the "people" (Veblen, 1899a, p.187), the "inferior class" (Veblen, 1975 [1899a], p.8), "common men" (Veblen, 1975 [1899a], p.8), the "underlying population" (Veblen, 2001 [1921], p.72). They are numerous in the community and work to earn a livelihood, (see Veblen, 1964 [1919a], p.162) highlighting "[a] conventional antipathy to work" (Veblen, 1898, p.190). Finally they are the identifiable "impecunious class" (Veblen, 1975 [1899a], p.26) since they consume the whole of the income received 12. In contrast to them, technicians see their own work as a tool for the improvement of knowledge and skills, while the leisure class and businessmen are engaged in other more honorific and/or profitable activities which do not call for a particular physical or mental effort "[getting however] something for nothing" (Veblen, 1964 [1919a], p.162).

2) The Veblenian theory of income categories. The author divides income into three parts (rent, profits and wages) whose level and attribution to social classes does not reflect their contribution to production. Such categories are opponents and they are distributed merely on the basis of a *formal* and *institutional* recognition of contribution of inputs to the production; the formalization is a purely institutional matter and is mainly related to the legal possession of a production factor. So as he stresses "any legally defensible receipt of income is a sure sign of productive work done" (Veblen, 2001 [1921], p.21); he also remarks that an effective factor of production does not concretely receive the due income if it lacks the possibility of being owned. As he argues:

"The principles and practise of the distribution of wealth vary with [..] the [..] cultural changes [..]; but it is probably safe to assume that [..] the consensus of habitual opinion as to what is right and good in the distribution of product [..] have always been such as to give one person or class something of a settled preference above another (Veblen 1908, p.113, italics added). Principles (habits of thought) countenancing some forms of class or personal preference in the distribution of income are to be found incorporated in the *moral code* of all known civilizations and embodied in some form of institution" (Veblen, 1908, pp.112-113, italics added).

Notice that the author is particularly interested to the measure of income categories in the following terms: a) income categories are in continuous evolution in terms of measure and social awarding; b)

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As Veblen remarks: "in the ideal case [..] the output of production should be held to such a volume that the resulting price of the limited output will take up the entire purchasing power of the underlying population" (Veblen, 1967 [1923], p.67).

benchmark of each income category is measured in relative terms, comparing different categories at the time t, the same categories as regards different collectors or variations of the same categories over time; finally and more importantly c) individuals quantify their target income on a moral basis. On these points it is easy to remember what he writes:

"The existing system has not made, and does not tend to make, the industrious poor poorer as measured absolutely in means of livelihood; but it does tend to make them relatively poorer, in their own eyes, as measured in terms of comparative economic importance, and, curious as it may seem at first sight, that is what seems to count" (Veblen, 1891, p.392).

Let us see in detail the income categories: a) amongst the others Veblen is particularly interested in financial rent in the specific form of interest on bonds and dividends. Veblenian rent is not a residual economic category; it derives from the action of the leisure class and businessmen since they speculate on financial market and control the State's fiscal policy (see Hunt, 1979b)¹³. b) Profits are measured in terms of monetary surplus on financial investments in productive activities and they have the nature of rent, due to businessmen's tendency to generate monopolies¹⁴. c) Finally Veblen does not consistently discuss the issue of wages¹⁵. However there are some interesting aspects that deserve to be considered: c_1) wages are paid in advance, c_2) wages are anticipated by monetary capital, c_3) wages are subjected to detailed bargaining but, important point, they do not correspond to labour productivity (see Veblen, 1892).

3) Waste. On the concept of waste, Veblen highlights:

"it is here called waste because the expenditure does not serve human life or human well-being on the whole, not because it is waste or misdirection of effort or expenditure as viewed from the standpoint of the individual consumer who chooses it" (Veblen, 1975 [1899a], pp.97-98; italics added).

Notice that waste is not criticisable at a microeconomic level. From the micro point of view he calls the utility of consumption, which is subjective and not censurable, "relative utility" (Veblen, 1975 [1899a], p.98). He remarks that waste "has utility to [the individual] by virtue of his preference" (Veblen, 1975 [1899a], p.98) so it cannot imply "deprecation of the motives or of ends sought by the consumer under this canon of [..] waste" (Veblen, 1975 [1899a], p.98). On the other hand, on the

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¹³ Such typology of control is possible since Government is recognized by Veblen as a "department of the business organization and is guided by the advice of the business men" (Veblen, 1904, pp.286-287).

¹⁴ In detail the Veblenian monopolies are endogenously generated by *a*) continuous capitalizations and recapitalizations and *b*) investments in "intangible assets".

¹⁵ Probably Veblen's best work in which some general considerations on wages can be found is *Böhm-Bawerk's Definition* of Capital and The Source of Wages (1892). The trigger for his analysis came from the wages-fund doctrine, not in its original version by John Stuart Mill in his *Principles of Political Economy* (1848) but mainly in Böhm-Bawerk's subsequent reconsideration for his theory of capital.

macro plane he replaces the idea of relative utility with "the test of impersonal usefulness" (Veblen 1975 [1899a], p.98). Accordingly, Veblen would seem to see society not as an aggregation of individuals but as an autonomous and impersonal entity whose only reference for conduct is human life of the whole, that is to say the "point of view of the generically human". So from the point of view of society, waste "does not serve" collectivity since the use of social resources for "invidious [..] comparisons" limits "enhanc[ing] human life on the whole" (Veblen, 1975 [1899a], p.99). Veblen then clearly identifies four categories of waste, grouped by Rutherford (2001, p.175) into four main classes: "monopoly restrictions, business cycle, unemployment, and competitive advertising" which are grouped by the author in the following terms:

"(a) Unemployment of material resources, equipment and manpower, in whole or in part, deliberately of through ignorance; (b) Salesmanship (includes, e.g. needless multiplication of merchants and shops, wholesale and retail, newspaper advertising and bill-board, sales-exhibits, sales-agents, fancy packages and labels, adulteration, multiplication of brands and proprietary articles); (c) Production (and sales-cost) of superfluities and spurious goods; (d) Systematic dislocation, sabotage and duplication, due in part to businesslike strategy, in part to businesslike ignorance of industrial requirements (includes, e.g. such things as cross-freights, monopolization of resources, withholding of facilities and information from business rivals whom it is thought wise to hinder or defeat)" (Veblen, 2001 [1921], p.68).

4.2 Income distribution, waste and moral judgements

As anticipated, contrary to Walker's interpretation Veblen seems to look at workers in critical terms in the sense that he is not convinced that machine discipline alone pushes workers to react to changing institutions, not because machine discipline does not work but since it does not produce effects if it is not associated to a moral delegitimation of waste subsequent to a unequal income distribution. It could be argued that the iconoclastic effect of machine discipline does not appear by the pure and simple manifestation of the same discipline. It needs something else. As Vebeln remarked:

"There is [..] no warrant [..] for asserting *a priori* that the class interest of the working class will bring them to take a stand against the propertied class. *It may as well be* that their training in subservience to their employers will bring them again to realize the equity and excellence of the established system of subjection and unequal distribution of wealth (Veblen, 1907, pp.441-442; italics added)".

In order to have changes in institutions (*Veblenian normative vision*) workers primarily have to receive training by machine discipline but then they have to assess the income distribution in terms of relative comparison of some form of 'useful effort' supplied in exchange for the income received. In schematic terms *B* considers the income received by *A* unfair if

$$\frac{\text{income}_{A}}{\text{income}_{B}} - \frac{\text{product of labour}_{A}}{\text{product of labour}_{B}} > X$$

where *X* shows the limit of acceptability for *B* of the discrepancy between the rate of income and the rate of product. This difference can be seen as a logical representation of Veblen's "limit of tolerance" (Veblen 2001 [1921], p.12; italics added).

In short, Veblen sees the limit of tolerance as a given condition of endurance of the state of things beyond which popular discontent emerges. As he writes:

"[The] evolution of society is substantially a process of mental adaptation on the part of individuals under the stress of circumstances which will no longer tolerate habits of thought formed under and conforming to a different set of circumstances in the past" (Veblen, 1975 [1899a], p.192).

Here it is clear that machine discipline cannot produce changes in institutions if it is not also associated to a moral evaluation of the existing set-up. Certainly the criteria by which the underlying population assesses what is right and wrong is open to discussion, but it cannot be denied that machine discipline needs such an assessment. In the specific form of machine discipline, institutions can change not only because workers are in contact with this discipline but also because they judge to be right what is efficient and wrong what is wasteful. It is only in this case that the limit of tolerance is reached and institutional evolution then occurs.

Notice however that the limit of tolerance is realistically difficult to quantify since it is "[is] a hazardous topic of speculation" (Veblen, 2001 [1921], p.76) and, in addition, it might not be reached. For the limit of tolerance to be reached, at least two conditions are needed: *a*) a continuous falling of the workers' subsistence level, *b*) the permanent indifference of upper classes. There are reasons for thinking that such conditions can reciprocally exist just as there are reasons that deny them. The possibility that the limit of tolerance is reached can be explained as follows. Businessmen are involved in continuous processes of monopolization of markets. As a result, the higher the degree of monopoly, the higher the prices and the higher the prices, the lower the real wages. It would be interesting to know if businessmen are concerned in changing their strategy, but the change appears extremely complicated:

"In the *ideal case* [..] the output of production should be held to such a volume that [..] *the livelihood which the owners* allow their working force [of] workmen is held down to the "subsistence minimum" (Veblen, 1967 [1923], p.67; italics added).

The same thing applies to technicians. In fact it is true that *workmanship* and *idle curiosity* are "group-regarding instincts" (Edgell, 2001, p.80; see also Ayres, 1958; Dugger, 1984; Edgell, 1975; Hunt, 1979a; Tilman, 1996; Watkins, 1958; O'Hara, 1993), but technicians would directly operate in favour of workers only if they were not corruptible (see Diggins, 1977). Unfortunately instead the technicians' corruptibility is widely recognized by Veblen:

"by settled habit the technicians, the engineers and industrial experts, are a harmless and docile sort, well fed on the whole, and somewhat placidly content with the "full dinner-pail" which the lieutenants of the Vested Interests habitually allow them" (Veblen, 2001 [1921], p.83; italics added).

As a result, due to the continuous reduction of real wages and due to the 'passivity' of technicians the limit of tolerance could be reached. At the same time however the upper classes could take away the spectrum of the limit of tolerance by sharpening the efficacy and the weight of the following tools: *a*) the political control of the State (see Veblen, 1904, ch.8), *b*) philanthropic deeds (see Veblen, 1904, p.376) and *b*) "cultural discipline" (Veblen, 1904, p.391; see also Veblen, 1918). These are in fact the causes named here as unconsciously legitimating waste and it is easy to understand why. These aim to indoctrinate a sense of uncritical obedience in the population and for this they indirectly aim to inculcate the acceptation of the *status quo*. Actually here popular obedience is educated, 'bought' or imposed. The quotations below are extremely important for understanding how the upper classes can adjust the degree of intolerance of the underlying population:

"The objectively poor and all those persons whose energies are entirely absorbed by the *struggle for daily sustenance* are *conservative* because they cannot afford the effort of taking thought for the day after to-morrow" (Veblen, 1975 [1899a], pp.203-204; italics added).

Workers' passivity is first of all a consequence of their conditions of life: the lower the subsistence the lower their critical attitude. In this case the effectiveness of machine discipline is mitigated if not ruined. If income is low workers have to work hard for cover their needs; so they have neither time nor energy to react to their condition. In Veblen's vision workers are so passive because they are entirely engaged in their "daily sustenance". On the educative pressure of the upper classes the following quotations appear to be very interesting:

"The largest and most promising factor of cultural discipline [..] over which business principles rule is national politics [..]. Business interests urge an aggressive national policy and business men direct it. Such a policy is warlike as well as patriotic. The direct cultural value of a warlike business policy is unequivocal. It makes for a conservative animus on the part of the populace". During war time, and within the military organization at all times, under martial law, civil rights are

in abeyance; and the more warfare and armament the more abeyance. Military training is a training in ceremonial precedence, arbitrary command, and unquestioning obedience. A military organization is essentially a servile organization. Insubordination is the deadly sin. The more consistent and the more comprehensive this military training, the more effectually will the members of the community be trained into habits of subordination and away from that growing propensity to make light of personal authority that is the chief infirmity of democracy. This applies first and most decidedly, of course, to the soldiery, but it applies only in a less degree to the rest of the population. They learn to think in warlike terms of rank, authority, and subordination, and so grow progressively more patient of encroachments upon their civil rights (Veblen, 1904, pp.391-392; italics added).

"[..] At the same [cultural discipline] direct[s] the popular interest to other, nobler, institutionally less hazardous matters than the *unequal distribution of wealth* or of creature comforts" (Veblen, 1904, p.393; italics added)¹⁶.

In view of this, when the difference between the rate of income and the rate of productivity is higher than X then waste has a value but it cannot be predicted if such a value is combined with the process of delegitimating waste. In other words machine discipline can produce institutional change when it pushes workers to delegitimate waste that is to say when it is certain that "[..] agent [..] has [the] sense of the merit of serviceability or efficiency and of the demerit of futility, waste or incapacity (Veblen, 1975 [1899a], ch. I). Thus, only if machine discipline – using the words of Tilman (1999, p.94) - "illuminate[s] issues of morality in terms of material causation" then popular discontent becomes the additional variable that affects the process of modification of habits of thought.

Actually things are more complicated than might be expected since in Veblen the automatic nature of results is not certain (see Pluta and Leathers, 1978). In fact nothing sure could be generated¹⁷.

So a rigid schema of institutional evolution does not exist. It certainly can be outlined in its normative traits (see i.e. Bush, 1999) but this must be done if the mechanism of institutional evolution is not affected by ambiguity. In spite of this contamination of habits is constantly a trait of human action in Veblen¹⁸ so we are not able to predict if and when such modification will occur as its weight and efficacy will depend much more on the weight of opposing variables. In Veblen there are in fact

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¹⁶ See also Veblen, 1917, ch.7.

Even if is impossible to know exactly *if* and *when* institutions change, Veblen argues that a simple observation of the state of things could help a social scholar to understand if a process of modification of habits is in progress. Unfortunately according to the author, his times were still far from a possible institutional evolution. In fact as he writes: "this sentimental deference of the American people to the sagacity of its business men is massive, profound, and alert. So much so that it will take harsh and protracted experience to remove it, or to divert it sufficiently for the purpose of any revolutionary diversion. And more particularly, popular sentiment in this country will not tolerate the assumption of responsibility by the technicians, who are in the popular apprehension conceived to be a somewhat fantastic brotherhood of over-specialized cranks, not to be trusted out of sight except under the restraining hand of safe and sane business men. Nor are the technicians themselves in the habit of taking a greatly different view of their own case. They still feel themselves, in the nature of things, to fall into place as employées of those enterprising business men who are, in the nature of things, elected to get something for nothing. Absentee ownership is secure, just yet. In time, with sufficient provocation, this popular frame of mind may change, of course; but it is in any case a matter of an appreciable lapse of time" (Veblen, 2001 [1921], ch.VI).

¹⁸ On the Veblenian contamination of instincts see Diggins (1977).

variables that can numb the strength of moral delegitimation of waste (*Veblenian positive vision*). Paradoxically Veblen often highlights how opposing variables can co-exist very well with machine discipline because of the deep complexity of human nature for which nothing is certain¹⁹.

So far the causes that produce institutional evolution and those that unconsciously legitimate waste have been discussed. It is important to look now at the causes which, in spite of the presence of machine discipline and the overcoming of the limit of tolerance, do not allow the modification of institutions. These are the causes that produce a conscious moral legitimation of waste. As Veblen remarks:

"There is a *naive*, *unquestioning* persuasion abroad among *the body of the people* to the effect that, *in some occult way*, the material interests of the populace coincide with the pecuniary interests of those business men [..]. This persuasion is an *article of popular metaphysics*, in that it rests on an *uncritically* assumed solidarity of interests, rather than on an insight into the relation of business enterprise to the material welfare of those classes who are not primarily business men" (Veblen, 1904, pp.286-287; italics added).

In Veblen' thought there are factors that favour popular discontent and that do not aim to change institutions. They are only addressed to a "levelling policy" (Veblen, 1891, p.389) that will change the mechanism of income distribution *if* and *when* judged incongruous for the purpose of emulating upper class behaviour²⁰. Here popular dissatisfaction simply concerns the intolerability of the level of income received as regards the institutionalized needs, but no-one wants to discuss the opportunity and validity of waste critically. This is the reason why these factors are indicated here as those that consciously legitimate waste. More specifically, it is thus also by the institutionalized dimension of sustenance that Veblen argues that institutional *inertia* can consciously or unconsciously prevail in the sense that as long as the culturally accepted standard of living does not change, habits will remain the same. The following quotations can help us to understand the question better:

Let us remember that in Veblen human action is not easy to explain (see Edgell and Townshend, 1993). Human action seems mainly to be the outcome of sentiments which are the result of some form of reflective judgment. Reflective judgement in Veblen has the same characteristics as reflective judgement in Kant, being a human cognitive faculty regulating actions under unknown or unforeseeable conditions. From Veblen's standpoint any uncertain situation requires action guided by reflective judgement whose "office is to systematise [..] things to intelligent orders". An "intelligent order" of things requires that the same reflective judgement is subject to a guiding principle, which Veblen calls the "principle of adaptation". He explains this guiding principle thus: "In order to find what is the cause of a given effect [..] we need a principle of search. That is what is afforded by this principle of adaptation [..]. The principle of adaptation says that [..] things must be conceived as adapted to one another so as to form a systematic totality [..] and the mind goes to make its knowledge of reality conform to its own normal activity [..]. What the principle of adaptation does for us is, therefore, in the first place, that it makes us guess, and that it guides our guessing" (Veblen, 1884; cf. Mayberry, 1969).

As well stated by Edgell (1992a, p.209; see also Edgell and Tilman, 1991): "in fact Veblen claimed that the norm of conspicuous consumption is mandatory for all classes".

"Under modern conditions the struggle for existence has, in a very appreciable degree, been transformed into a struggle to keep up appearances" (Veblen, 1891, p.399).

"The leisure class stands at the head of the social structure in point of reputability; and its manner of life and its standards of worth therefore afford the norm of reputability for the community. The observance of these standards, in some degree of approximation, becomes incumbent upon all classes lower in the scale" (Veblen, 1975 [1899a], p.84).

"the cause of discontent must be sought elsewhere than in any increased difficulty in obtaining the means of subsistence" (Veblen, 1891, p.393). [The cause] is the craving of everybody to compare favourably with his neighbour" (Veblen, 1891, p.397)

In addition let us see at the following quotations:

"To sustain one's dignity – and to sustain one's self-respect – under the eyes of people who are not socially one's immediate neighbours, it is necessary to display the token of economic worth, which practically coincides pretty closely with economic success. A person may be well-born and virtuous, but those attributes will not bring respect to the bearer from people who are not aware of his possessing them, and these are ninety-nine out of every one hundred that one meets" (Veblen, 1891, p.393).

"The wider [..] the personal contact if each with his fellowmen, and the greater the opportunity of each to compare notes with his fellows, the greater will be the preponderance of economic success as a means of emulation and the greater the straining after economic respectability" (Veblen, 1891, p.396)

"In order to stand well in the eyes of the community, it is necessary to come up to a certain, somewhat indefinite, conventional standard of wealth [..]. Those members of the community who fall short of this [..], suffer also in their own esteem, since the usual basis of self-respect is the respect accorded by one's neighbours' (Veblen, 1975 [1899a], p.30; italics added).

"The norm of reputation imposed by the upper class extends its coercive influence with but slight hindrance down through the social structure to the lowest strata. The result is that the members of each stratum accept as their ideal of decency the scheme of life in vogue in the *next higher stratum*, and bend their *energies* to live up to that ideal" (Veblen, 1975 [1899a], p.84; italics added).

From the above quotations it can be concluded that there are at least four conscious causes of moral legitimation of waste: a) recognition, b) self-esteem, c) envy and emulation. These in fact are variables aimed to compete to obtain a relative increase in income. In short, what is important here is simply to have more then others; waste is not delegitimated here. This does not mean that moral judgment is lacking in the society but simply that worthy behaviour is that which honours the prevailing institutions. Here what is sought is simply an 'equal distribution of waste' and not its elimination. Habits are the same and no-one is interested in modifying them. Since the aim of these

variables is simply the 'fair distribution of waste', not its elimination, they are not well liked by Veblen; to them in fact he gives the appellative of "imbecile institutions" (Veblen, 1922 [1914], p.25) always and however present:

"Human culture in all ages presents too many imbecile usages and principles of conduct to let anyone overlook the fact that disserviceable institutions easily arise and continue to hold their place in spite of the disapproval of native common sense" (Veblen, 1922 [1914] p.49).

5. Concluding remarks

The arguments put forward in this essay are addressed to supplementing the interpretation of the Veblenian process of institutional evolution induced by the population, elaborated by Donald Walker in 1972. The population seems to show opposition to the status quo simply thanks to the mental training produced by industrial occupation and by workers' contact with technicians. This interpretation has here been judged insufficient for a better understanding of how the population changes institutions in Veblen. What must be said is that the population not only has to endogenize the habits of technicians but also that they have to critically judge the status quo. More specifically, machine discipline is certainly the necessary condition for a change in institutions but it cannot be assumed to also be sufficient because it requires a moral delegitimation of waste and, at the same time, a moral legitimation of efficiency. This process has been called here the Veblenian normative vision in order to highlight what Veblen thinks should be. At the same time, however, it has been shown how the observation of facts leads Veblen to recognize that there are several reasons for thinking that in spite of the presence of machine discipline and of worker/technician contact, institutions may not change. This is presented here as the Veblenian positive vision so as to highlight what Veblen thinks is in fact in operation. Looking at this positive vision, institutional inertia prevails when popular judgment is simply addressed to a levelling policy of incomes without the corresponding moral delegitiamation of waste (conscious legitimation of waste) or when popular judgment is weakened by a direct control by the upper classes (unconscious legitimation of waste).

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