

**Working paper FREE-Cahier FREE n°1-2009****Is a Liberal Justice, Totalitarian?****François Régis Mahieu & Augendra Bhukuth**[fmahieu@yahoo.fr](mailto:fmahieu@yahoo.fr) & [augendra@gmail.com](mailto:augendra@gmail.com)**Abstract**

In Social Choice Theory, Pareto-Unanimity is an important rule which is applied to compensation tests and therefore in justice. But, deductive logics show that Pareto- Unanimity implies dictatorship and therefore, Pareto-Unanimity is contradictory with non dictatorship. In the case of compensation, citizens are free and accountable for their own behaviour; the Pareto-unanimity implies perfect information on benefactors. Liberty implies dictatorship and then Pareto-Unanimity. compensation exigencies lead to a totalitarian society, as forwarded by the novel of George Orwell (1984).

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*“Always we shall have the heretic here at our mercy, screaming with pain, broken up, contemptible-and in the utterly penitent, saved from himself, crawling to our feet of his own accord.”* (Lyrics of Inspector Winston with O’Brien Smith) (George Orwell, 1949:155)

## **Introduction**

There is some difficulty to associate Freedom and Justice. Indeed, in a paradox worthy of the “bar room philosophy<sup>1</sup>”, liberalism implies unjust society and, conversely, a just society implies a totalitarian society. John Rawls [23] provides a brilliant solution to this apparent opposition by using a lexicographic principle in the constitution of society<sup>2</sup> and a leximin<sup>3</sup> in the process of redistribution. Does this paradox make sense? Justice, in its liberal economic version consists of repairing a given externality handicap by a social group, with its consent. Not just any agreement, this compensation requires a unanimous social choice and fully informed as possible without manipulation by the beneficiaries.

Thus, in the context of the economic theory of justice, a perfectly free society<sup>4</sup> requires a social watching and the populist requirement of unanimity. “Discipline and Punish” [10] are practices associated with liberal society, it is not surprising that in this context, the “Panopticon”<sup>5</sup> is associated by J. Bentham [3] to freedom: everyone in the circular prison can monitor and obtain information about others. This omniscience, used by totalitarian regimes, allows a justice at all levels and builds social responsibility, it is inherent in economic justice which task is to repair the externalities “freely”.

Inequalities are externalities, such as unequal talents or income inequalities. Thus, Rosenstein Rodan [26] considered poverty as a negative externality and Sen [29] focuses on inequality of capabilities. This basic inequality refers to sex, race and all kinds of discriminations. In the name of justice, these should offset, while respecting freedom of

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<sup>1</sup> We called this paradox, the “café du commerce” paradox in F.M. Jarret and F.R. Mahieu [12].

<sup>2</sup> The society must first be free, then fair and at least efficient.

<sup>3</sup> The redistribution, in the name of freedom must first help the poorest of the poor, then the less poor; the smallest sacrifice of the rich is the biggest benefit of the poor. This maximin is applied to a decreasing order to the poor, hence the term leximin.

<sup>4</sup> Freedom implies the absence of “arbitrary interference” according to the theory of neo-republicanism [21]

<sup>5</sup> Prison (as well as factory, hospital, school) is based on “surveillance without being seen”, hence the circular prisons or ear.

choice and the rule of Pareto Unanimity<sup>6</sup> [1,2,28]. Sen [30] defends this approach on behalf of his theory of freedoms / capabilities.

Externalities and compensation raise the question of social responsibility vis-à-vis this inequity by separating the unjust situation (not as the responsibility of the person, but rather the social responsibility), the situation just considered as the personal responsibility due to efforts or merits of the person. This proposition is especially sensitive, we must return to the intimacy of the person and establish who will have this right, additionally this interference determine rewards and sanctions. Finally, there must be agreement on transfers that will realise the compensation.

Unanimity cannot be established spontaneously on such interference, given the selfishness of individuals, there is a need to reduce discussion costs and facilitate this unanimity by a central power, such as a Ministry of Equal Opportunity Policy. Social compensation is imposed in such a way. Knowing all the details of the lives of interested persons, together with the imposition of a strong central structure characterize totalitarianism which may well be adorned in democracy, as the democratic centralism of some socialist or populist democracy. Our arguments are inspired from the writings of George Orwell, especially "1984". This paradox of democratic totalitarianism appears already in the formalization of logical theorems of social choice.

In this paper we present a way to conceive a just compensation to externalities which requires delimiting social responsibility. A just situation necessitates complete information on beneficiaries in order to evaluate handicaps and merits for avoiding free riders. Such an approach limits social responsibility. A just state requires Pareto- Unanimity condition, a state in which everyone agrees on the compensation. Thus, no one is constrained by the majority decision which is a proof of freeness. Therefore, compensation raises two issues: the interference on individual privacy and a dictatorship situation as a pre-condition of Pareto- Unanimity and a corruption of liberty as formalised in the social choice theory. Dictatorship and social watching are associated to develop totalitarianism in a liberal society.

Thus, our paper is organised as follows, in the first section, Minimal liberalism, as formalised by Sen [28], is closed to dictatorship, a free redistribution applying Pareto-unanimity and then, perfect information on personal characteristics in a totalitarian society. In

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<sup>6</sup> We distinguish an optimal situation (cf. Pareto) of the Pareto-Unanimity (derived from the first). An optimal situation is defined either in terms of differential analysis (marginal) in the terms of the axiomatic analysis. It is, for a given group of agents, a state of rest in the replacement of utilities (hence equal TMS / TTP), is still a favorite at any other. The Pareto Unanimity is a condition on the aggregation of choice .... and that is paradoxical (cf. the criticisms of the Public Choice and the paradoxes of social choice [28]).

the second section we show that dictatorship involves Pareto-unanimity particularly in terms of social compensation which cannot be reached without social responsibility. In section 3, we conclude on this paradox.

## **1. Minimal Liberty and Liberty as dictatorship**

### *1.1. Minimal liberalism*

Since the theorem of impossibility of Arrow suggesting the warn of a dictatorial state; several studies have attempted to verify the possibility of the existence of a rational individual preference binding on all individual preferences (see for instance, [16,18]). In the same framework Mongin [17] shows that dictatorship arises in IIA Arrovian condition. In our analysis we present the existence of dictatorship in a different manner. Dictatorship implies Pareto-Unanimity which, according to Sen [28], is incompatible with a minimal liberalism. Specifically, the case of populism<sup>7</sup> (all for one, one for all) illustrates well the ambiguity of unanimity and that dictatorship implies unanimity and not the contrary. Thus, Pareto-unanimity is accomplished against freedom and characterizes a totalitarian society with a leader who, once in power, decreed unanimously and monitors the deviants. Two examples are used in the economic literature, the social compensation of unequal talent by public transfers [24,25,9] and social compensation in income inequalities in private transfers [6,8]. These are based on the sequence freedom-social constrains, according to the framework of thought of Sen [30]. Free individuals agree to enter into a social process for a better justice, even to bear with the control of an Orwellian institution.

This sequence involves serious risks of a totalitarian coercion. Indeed, we need information, to watch, punish or reward, prior to offset. Let us call this procedure of total watching, T, which falls into the sequence:

Perfect freedom → Total Watching (T) → Dictatorship (D) → Pareto Unanimity-(Pu) → social Compensation (C)

The above sequence can be interpreted as follows: in case of participating in social actions for instance in compensating inequalities individuals must be totally free and it requires complete information on beneficiaries which can only be obtained through total supervision or total watching.

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<sup>7</sup> See populist democracy according to Dahl [7].

Thus, freedom involves close supervision and this sequence illustrates the bad consequences of liberalism associated with social responsibility, in Amartya Sen's design. This sequence reverses the Kantian framework for which the constraint related to responsibility is the condition of freedom of the persons: the responsibility as auto-constraint is the prelude to freedom. We formulate this sequence in the following section.

### 1.2. Freedom implies dictatorship

The proximity of the formalization of freedom with that of the dictatorship appears in the framework of Arrow [1,2] and Sen [28], due to the absence of a specific formalization of normative statements. This formulation  $\forall x, y, \exists i (P_{ixy} \supset P_{cxy})$  means dictatorship in the definition of Arrow with confusion between implication and determination. But Sen formulate minimal liberty in postulating that there exists at least one individual who finds (in the sense of implying) that individual preference in social preference. We assume that a social preference can be established without being directly implied by one's individual preference. This collective rationality is discussed by Arrow [2] in the last lines of his book against Buchanan and Tullock [4] and nominalism: a collective preference may differ from individual preferences; it is not a simple summation. In the framework of Sen [28], the liberal is deeply concerned that his personal freedom is preserved from the interferences with others. Two norms of liberalism can be distinguished: let us note L: Each person has at least one alternative which is decisive in the social choice. L\* (minimum liberalism): there are at least two persons, couple of alternatives (x,y) on which they are decisive.

In all these cases, and in the condition D\* of Sen [28:53], the situation is defined from an existential quantification on a pair of social states (x, y): there are a couple of social states such as in this couple, individual choice implies social choice.

Let us write:  $\forall i \exists x, y (P_{ixy} \supset P_{cxy})$  (1)

In fact,  $P_{ixy} \supset P_{cxy}$  applies to any couple of x, y for which  $P_{ixy} \cdot \neg P_{cxy}$  is false.

$\neg P_{ixy} \vee P_{cxy}$  corresponds to the truth of the implication. This expression holds therefore for any object x which is not  $P_i$  or which is  $P_c$ .

Therefore, our formula means that there are at least a couple (x,y) as it is not  $P_i$  or is  $P_c$ . Also this term is trivial except if  $P_i$  is true for any couple of (x,y) of the universe, and  $P_c$  is true for each. Quine (1972) evokes in this subject to a "fault of beginner" which is to be "discouraged once and for all." Therefore, it is possible to write:

$$\forall i \exists x, y (P_{ixy} \bullet P_{cxy}) \quad (2)$$

Thus freedom of redistribution (the liberality) implies that every citizen "gives" the maximum of information with total watching. Curiously, the minimal liberty in the framework of the formal logic of social choice (Arrow, 1951, 1963, Sen 1970) is equivalent to dictatorship.

## **2. Dictatorship implies Pareto-Unanimity, necessary for a liberal economic justice, particularly to social responsibility**

This implication is normal: once the power obtained, by force if necessary, the dictator imposes unanimity. This unanimity plays an important role in compensating externalities in economics. Indeed, it is derived from the principle of "ophelimity" of Pareto and permits to save on the conditions of choice. A majority choice automatically creates many supplementary conditions that make social choice inconsistent.

### *2.1. The logical implication*

The principle of utilitarianism in Social Theory of Arrow [1,2] receives the following definition:

$$\forall x, y \forall i (Rixy \supset Rcxy) \quad (3)$$

Or, considering only the preference (and therefore a strict partial order):

$$\forall x, y \forall i (Pixy \supset Pcxy) \quad (4)$$

From this expression, we deduce:

$$\forall i \forall x, y (Pixy \supset Pcxy) \quad (5)$$

(5) Is the same formula as (1) representing the dictatorship (which gives reason to the criticism of Rawls: utilitarianism as follows contains the seeds of dictatorship).

Permutation of quantifiers (it is reasonable to infer a universal existential with universal existentially but not the reverse), we deduce the following formula:

$$\forall x, y \forall i (Pixy \supset Pcxy) \quad (6)$$

This formula is equivalent to

$$\forall x, y [\forall i : Pixy \supset Pcxy] \quad (7)$$

(7) Is the criterion of Pareto-Unanimity!

The demonstration of this equivalence, quite classical in the logic of quantification, "in spite of its strangeness" (cf. Quine, 1972) is as follows: for any couple (x,y)

$$\begin{aligned} \exists i(Pixy \supset Pcxy) &\equiv \exists i(\neg Pixy \vee Pcxy) \\ &\equiv (\exists i : \neg Pixy) \vee Pcxy \equiv (\neg \forall i : Pixy) \vee Pcxy \quad (8) \\ &\equiv (\forall i : Pixy) \supset Pcxy \end{aligned}$$

We demonstrate that social utilitarianism (U.S.) implies dictatorship (D) which in turn implies unanimity (Pu). Consider the last implication;  $D \supset Pu$  is equivalent according to the condition of validity of the implication of the material in  $\neg D \vee Pu$ . This disjunction, given the formulas used, must be considered as exclusive. The norms retained by Arrow cannot associate unanimity to the non dictatorship on the risk of being inconsistency. We note that the implication  $D \supset Pu$  is not reversible. Unanimity may create a situation of veto (blocking the unanimous decision because of the abstention or refusal of a person), but does not imply dictatorship.

## 2.2. The possibility of compensation and Pareto-Unanimity

Social responsibility includes perfect information and possibility of compensation. Compensations intend to repair externalities resulting from changing a situation  $y$  to a situation  $x$ . The choice of state  $x$  above the state  $y$  by everybody, results from compensations, even not actually paid. In fact it is a problem of social choice.

The tests of compensation are only the extensions of the principle of Paretian unanimity.

$$\forall x, y [\forall i : P_{ixy}] \supset P_{cxy} \quad (9)$$

Let us call  $S(x)$  the set of all social states that can be achieved by the redistribution from the state  $x$  (the latter belonging itself to  $S(x)$ ).

$$x \in S(x) \quad (10)$$

According to Kaldor [13],  $x$  is superior to  $y$  if it permits to achieve a state  $z$  as  $P_{cxy}$  in accordance with the Pareto criterion such as if there is a change from  $y$  to  $x$ , the winners can compensate losers while maintaining their gains. So, if there is  $P_{cxy}$  then  $P_{cyx}$  is not, contrariwise, the reactionary test of Hicks [11] requires that if not  $P_{cyx}$  keeping their gains, then  $P_{cxy}$  is. Arrow [2] devotes long passages to this principle, or "test". As part of a function of collective choice such as R and P, we consider the relationship  $C_{xy}$  signifying that  $x$  can be deduced from  $y$  with compensatory payments. We introduce the relation Q, a pre-order to unanimity.

Let us assume the relationship

$$\forall i : R_{ixy} \equiv \text{def } Q_{ixy} \quad (11)$$

Let this pre-order (with reflexivity and transitivity) which means according to Sen that:

$$\forall x, y \in X : [P_{cxy}] \equiv \exists z : [z \in S(x) \bullet (\forall i : R_{izy}) \bullet (\exists i : P_{izy})] \quad (12)$$

The fact that  $x$  is socially preferred to  $y$  is equivalent to the fact that if  $z$  belongs to  $Z$ , there is a Pareto unanimity for  $Rizy$  and at least one person has this preference. According to Arrow (1963), the principle of Kaldor can be written:

$$\forall x, y \in X : [Pcxy] \equiv \exists x' (Cx'x \bullet Qx'y \bullet \neg Qyx') \quad (13)$$

According to Scitovsky [27], the test of Kaldor is contradictory with any function of collective preference for any configuration of preference. Let us write with Sen [28] the choice of the functors as Pareto inclusive:  $Ru xy \equiv (\forall i : Rixy)$  and as well,  $Pu$  and  $Iu$ . These Pareto-inclusive choices imply social choice: and thus, if  $Puxy$ , then  $Pcxy$ ; and similarly, if  $Iu xy$  then  $Icxy$ . Thus, there exists  $z$  such as  $[S(x) : Pu zy]$  according to the Pareto criterion and there exists  $w$  such as  $[S(y) : Pu wx]$  according to the same Pareto criterion [28].

We note that compensation occurs in the context of social choice theory<sup>8</sup>, sub-Pareto Unanimity, that is with the risks of the dictatorship, given the proximity between the formal Dictatorship (D) and the Pareto-Unanimity (Pu). This logical risk becomes effective in the case of social offsetting of inequalities of talent and income.

Pareto-Unanimity is also required on the existence whether or not of a social responsibility. If a group member is forced to accept redistribution, the solution is not viable. Unanimity is not consensus but the consequences of the two previous conditions. Thus, we need a Panopticon and a “Ministry of Love” which characterises a totalitarian society; this society is dictatorial and requires unanimity. Social responsibility, coupled with a consensus is invoked by Sen [30] and many authors, but it is not immune to the dilemma that has been exposed. This shows that in terms of positive ethics the responsibility is not good in itself and depends on the context. The theory of social responsibility is not morally tenable because dictatorship raises the issue of interference.

### 3. Conclusion

Many institutions are "in reverse" of their mission, a ministry of peace manages the war, a Ministry of freedom is responsible for monitoring the people, a ministry of integration to expel immigrants, a ministry of Women's Affairs to better “assist” women. Orwell [20] had imagined and the Ministries of Love, of Truth, Peace, Abundance<sup>9</sup>. The policy of individual freedom may well conceal the worst watching society. What are the first inequalities? The

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<sup>8</sup> Ronald Coase [5] prefers the compensation through the market and criticizes the economy of well-being which will proceed necessarily by laws to charge taxes as compensatory.

<sup>9</sup> Their names [20], in Newspeak, were Miniver, Minipax, Miniamour, Miniplein.



liberal policy of compensation may apply in addition to the cases mentioned above, to women, immigrants, and animals. But isn't it an ambiguity to consider women for instance as an exploited class or inferior at the beginning point to seek for Pareto unanimity compensation?<sup>10</sup> In summary, the compensation is an extension of the Pareto-Unanimity and may cause a situation of social constraint. Indeed, for the reasons of information, it is necessary to know the best "type" of each beneficiary in order to detach the disability from the merit. This implies a social watching to ascertain the exact handicaps of each person and a central planning for compensation. Freedom involves making social watching of the Ministry of Equal Opportunity Policy, a planner, a "Big Brother" or a soviet. Wittgenstein [1961] argues that the reality is the shadow of the grammar. In the case of this paradox, the theory shows that freedom involves social watching and dictatorship. And finally, the dictatorship implies Pareto unanimity. Historically, liberal individualism has produced in many circumstances, complete control, a dictatorship<sup>11</sup>, which later will require unanimity. We must be able to appreciate "the democracy of others" [31] as if it can reveal dictatorial forms, particularly during major crises.

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<sup>10</sup> We see all the ambiguity of the liberal feminism with Nussbaum [19].

<sup>11</sup> Thus, the Weimar Nazi Republic produced according to this method, so the Italy mussolinian. These schemes were established on the basis of social compensation, it was the final solution.

## **Annexe**

### **Logical Ingredients**

The logical formalization is Polish notation, also known as “prefix notation”, invented by Jan Lukasiewicz around 1920; it is inspired in our case by Georges Kalinowski [15] works. Its distinguishing features are:

- That it places operators to the left of their operands The linked variables are nominal (i,j) and actions alternatives (x,y,z). The place of the nominal variables is a fundamental choice, about the person status, contested by Von Wright about norms
- These variables must be fixed for an operator such that P for preference. So, if  $P_i xy$  is used, for an individual preference, we must use a variable c to express social choice and then  $P_c x,y i$ . So in all the cases, P is a three side predicate and cannot be, simultaneously, a two and three sides operators.
- Specific predicates must be used to formalise norms, to avoid the current error which uses alethic forms (there is or not a dictator), this signifies than norms are automatically verified....
- The rules are the standard rules of logics, especially about Well Written Formulas (wwf). In the case of Sen [28], to use an existential quantifier on an implication to formalize freedom is incorrect.

#### **The main logical ingredients of the economic theory of social choice**

The starting point of this theory is to formalize on one hand the relationship of existing choice between individuals or the social, and on the other hand the alternative social states.

For this purpose, it uses atomic symbols and expressions Molecular which should be defined beforehand.

#### **Atomic symbols**

Necessary for the formation of well formed formula, these are variables of functors (or predicates), connectors, quantifiers and brackets, parentheses and points.

#### **The variables**

- The nominal variables x, y, z represent alternative social states.
- The nominal individual variable i refers to individuals, and c refers to the community.
- The universes selected by these variables are defined by a semantic set:

- The different social states  $(x, y, z)$  belong to a matrix of choices, represented by a set  $X$  which we can be isolated into sub-sets such that  $S$ ;

-Different individuals  $i$  belonging to the finite set of individuals in the society, or  $H$ , broken down into sub-groups such as  $G$ .

### **Functors relating to processes of choice**

The relationship of choice on a couple of alternative social state is expressed by the functor  $R$ . The strict preference and indifference are expressed by the functors  $P$  and  $I$ .

Each of these functors respectively implies a logical order (eg  $R$  for a complete order,  $P$  for strict order and  $I$  as a preorder) to meet specific properties data, in particular the transitivity.

### **The main connectors of the classical logic**

- Negation,  $\neg$ , as a propositional functor to a propositional argument.

- Negation,  $\neg$ , as a nominal functor to a nominal argument.

-The conjunction,  $\bullet$ , the disjunction,  $\vee$ , the implication,  $\supset$  the double implication or biconditional,  $\equiv$ , these four connectors being propositional functors to two propositional arguments. The implication will be noted  $\supset$  rather than  $\Rightarrow$ , because it is only a conditional coupling (If .. then) of two facts without relation of causal effects or determination; the latter interpretation being unfortunately suggested by the use of the sign  $\Rightarrow$ .

### **Quantifiers**

The existential quantifier:  $\exists$

The universal quantifier:  $\forall$

Brackets  $[]$ , parentheses  $()$  and points: to clarify the scope of quantifiers.

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