ALTRUISM IN ECONOMIC THOUGHT

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Why?

I received an invitation to provide "a main presentation in one of the main conference sessions on the topic of Altruism in Economic thought". I accepted because of the interest in the participants and of the topic. Yet, I do not know why I was invited and therefore what exactly is expected. I can only presume. My work is probably little known both in the economic spheres of the University of Chicago (it used to be in sociology and my work in the US has been restricted to the sea-side coasts) and in the Catholic world in North America. It is different in Europe. I participated to several conferences and volumes for the Pontifical Academy of social sciences and for Latran University. For the Academy's conference and volume on The Human Person in Social Sciences, I was assigned the part about Normative Economics. Yet, given the literature I focused on distributive justice, which is not altruism but requires it if one considers other people's interest. I have also been co-editor of the North-Holland Elsevier Handbook of the Economics of Giving, Altruism and Reciprocity and of a collective volume of the International Economic Association about the Economics of Reciprocity, Giving and Altruism, and in both cases I wrote the general Introduction and the chapter on Reciprocity. The Introduction of the Handbook is to be considered as an extra part of the present text. I co-organized corresponding conferences, one under the auspices of the International Economic Association. I also published two different books on Reciprocity, one in French in 1984 at the Presses Universitaires de France and a later one in English at Cambridge University Press. Let me add that I am fully illiterate in Theology and that my

work concerning Spirituality is restricted to the analysis and development of Buddhist psychological philosophy (volume *Happiness-Freedom*, Deep Buddhism and Modernity, Paris, Presses Universitaires de France, 1982-94, in French).

1 - SELFISHNESS: ASSUMED, SUSPECTED, PRAISED, DEFINITIONAL

1.1 - The dismal science

Economists have a reputation. It is not all rosy.

In particular, economists' worldview has a reputation. It used to be called "the dismal science" (in part because of Malthus' forecasts and in part because of its view of the human person). A main reproach addressed to it concerns its conception of mankind. In particular, it is accused to consider that individuals are only selfish. Is it true? (Both "do they do this?" and "are they right or wrong to?"). The full answer turns out to be highly ambivalent. Actually, on the one hand, the economists' view is worse than just assuming general self-interest since this motive tends to be the favoured suspected explanation of all acts, it is even sometimes praised and advocated, and it has sometimes been taken as simply defining the field of the economy. On the other hand, however, economists have also always studied altruism intensely, from the very beginning of the discipline to elaborate analyses in present times.

1.2 - Realistic egoism? Universal suspicion

Undoubtedly, the basic and core model of elementary economics describes selfinterested individuals. And this still is the case in most economic studies. The case is in fact much worse than that for two reasons, suspicion and the praise of selfishness.

Actually, acts of helping, generosity and even self-sacrifice obviously exist; but explaining such acts by some kind of actual self-interest, possibly indirect or hidden, or just seeking publicity or fame, is likely to be particularly popular in economists' circles. Any claim of moral behaviour is a priori suspected of pharisianism. This completes the image in the favoured direction: the human being is not only selfish but also, in addition, a hypocrite.

Several examples can be found in the issues under consideration.-One is the theory of the "warm glow" discussed shortly. It also shows in the chosen terminology. For instance some economists labelled "reciprocity" *self-interested sequential exchanges* (one yields in order that the process continues), whereas reciprocity, in social science and for long, means a set of inter-related *gifts* (the most simple and basic is the classical gift/return-gift relationship,

with two acts only). They had to label "strong reciprocity" what everybody else calls reciprocity. They also wanted to include and emphasize the cases of "negative reciprocity" of answering harm with harm (revenge or deterrence). Yet, they also recognized that classical reciprocity and just giving also exist and considered this to be a blow to the economists' prejudiced *ethos*.

Actually, when some economists wanted to convince their colleagues of the limitations of this *doxa* and of the existence (not even the actual importance) of non-purely self-interested acts, they had to resort to some laboratory experiments – by now rather numerous – of a very simplistic kind such as "dictator" or "ultimatum" "games" (revealing in fact motives of fairness in sharing), etc., which largely show what each can just obviously observe, at least qualitatively, in the great experiment of one's life (not only the too hastily rejected "introspection", but the behaviour of innumerable actors that we think we can "understand" in the *verstehen* empathic sense). For altruism, moreover, laboratory experiments are little appropriate for the two main social manifestations of this sentiment: families because they constitute a network of inter-related lasting intense affections and repeated actions between closely related individuals, and the relief of poverty because this is jointly favoured by a very large number of people – practically everybody.

1.3 - In praise of selfishness

Second, not only do they assume selfish individuals but, in addition, they often find this to be very good. Even if people were not that egoistic, at least they should be – and, for choosing policy, knowing what should be may be at least as important as knowing what is. They think they prove that a population of selfish individuals in relations of exchange leads to a situation such that no other possible one can make everybody better off. This result is doubtlessly a necessary condition for the quality of society even though not a sufficient one (it does not rule out starvation for many). This has nevertheless led a few notable economists to argue that economic agents have only one duty: to pursue eagerly their own self-interest (e.g. Milton Friedman and, with embroideries, Maurice Allais). This is the descent of Adam Smith's famous wise remark in the *Wealth of Nations* that you have better expect your bread from your baker's self-interest rather than from her benevolence or altruism. But also of Bernard de Mandeville's cynical *Fable of the Bees* explaining that "private vices create public benefits and thus are public virtues" (most kinds of vices can boost the economy) and the hive dies when the "bees" amend and turn virtuous.

The novelist André Gide wrote "one does not make good literature with good sentiments". Correspondingly, can one make good economics, or a good economy, only with bad sentiments?

There are, however, two answers in defense.

1.4 - Market morality

The main field of economic studies concerns markets, and in these activities the assumption of purely self-interested agents does not a priori seem outrageous. Yet, even there it would not be complete: people respect other persons and their property, their own promises, and – often – truth – all conditions necessary to the functioning of markets – not only because of others' self-defense and for fear of private or public retaliation or punishment, and they sometimes prefer a "fair deal" to a "good deal". Even if "*l'occasion fait le larron*" (the opportunity makes the swindler), probably not all economic actors are potential Enrons or Madoffs. This market morality is useful and even necessary for the functioning of many markets and certainly of the market system as a whole. Relying only on the police, courts, complete contracts, detailed checking, and self-defense would be exceedingly costly and doubtlessly impossible in the end. And this market morality can be seen as a kind of altruism. More generally, this kind of social respect is necessary for the existence of any peaceful society.

1.5 – Economists' studies of altruism.

In fact, economists have also studied altruism, abundantly and for very long. Actually, all historical great economists have studied altruism, although often in separate works (such as books devoted to it) which shows that even when they acknowledge altruism and its importance, they often tend to exclude it from the domain of economics (several referred to "sociology") (the term "historical" means "of the past" and intends to take care of the case in which there would be in the room some great economist who has not yet studied altruism: he should hurry up to this field to secure his standing in the eyes of posterity). Some of the most striking examples will be noted.

2 - CHARITABLE AND CLASSICAL ALTRUISMS

2.1 - Philanthropic "impure altruism": Veritas in Caritate

Tax crowds gift out

Presently, moreover, one of the most active fields of economic studies concerns philanthropy. Yet, a problem was met. In our present civilization, vast amounts of aid are transferred from non-poor people to the needy. But this is done in two a priori competing ways: private free transfers in philanthropy and public transfers from taxation, which are substitutes of one another for both the payer's and the receiver's incomes. If the government gives me my bread and imposes on me a tax equal to the price of the bread, I just stop buying bread. If what it gives me is less than my preferred diet, I buy the complement only. This government care is said to "crowd out" my purchase of bread (totally or partially). Similarly, as an altruistic giving agent's tax to supply the poor's income or welfare is increased, for given others' gifts and taxes, she normally diminishes her freely chosen gift by the same amount, if this can be done. The tax tends to crowd out the gift. Then, either there remains a gift and the tax cannot be justified nor its optimum amount determined, or this is not the case and the observed gifts cannot be explained. The straightforward way out of this conundrum consists in considering that people have preferences not only about the poor's income or welfare, but, or but also, more directly about their own gifts. This was done but, noticeably, mainly with different explaining philosophies on both sides of the Atlantic.

Strong "warm-glow"

On this side, most economists were faithful to their disciplinary reputation by taking a grim view of human motivations. This is the "impure altruism" theory of the "warm glow" (Andreoni, etc.): the giver likes her own gift because it makes her feel praiseworthy which gives her an agreeable feeling of "warm glow" (there were also mentions of prestige, reputation, wealth-signaling, conspicuous "impact", joy of giving and proximity to a norm of gift). However, the warm-glow conception is, in a sense, contradictory and inconsistent. Certainly, the gift helps the poor. But this is not its objective. The giver's motive, the search for the "warm glow", has nothing praiseworthy in itself and, hence, so is the giver's personality. It can even be associated with vanity, vainglory, and sentiments of superiority over receivers or other givers, which are standard vices. Yet this is not to deny that this motive and act can exist, that people can live with this moral contradiction and inconsistency, and even that it may not be illegitimate to write the benefactor's name in gold letters to improve the needy's benefit by playing on this sentiment.

Weak "warm-glow" and praise

Moreover, although warm-glow basically honours a moral personality – which, therefore, it cannot motivate –, there may be a lower kind of warm-glow, attached only to the actor of a useful or helpful act. In particular, a gift, and hence the givers' act, and the giver as simply actor, are a priori valued by the beneficiaries and by all more or less "pure" altruists (possibly including also the giver herself). This can in particular lead to praise, or abstaining from blame, which the giver may appreciate, and gratitude or altruism towards these altruists can reinforce this effect. This may lead to giving and non-crowd out of gifts in various cases depending on the structure and intensities of these sentiments (section 4-5). This is the lower warm-glow for behaviour whereas the full one is for conduct – that is, including the motives.

The theory of action, duty, norm

The other approach started from the classical philosophical theory of action which divides actions in two categories according to their motives: "consequentialism" and so-called "deontology", according as the action is wanted for its consequences or "in itself". While this dichotomy is logically flawed because each case can be seen as a particular case of the other (you may want the consequence of having acted, and have the duty to want any specific consequence), it is nevertheless very important. "Deontology" comes from "duty", and one may act (here give) because it is a duty and/or to follow a norm. This may be a social norm or, or or also, a moral norm (if you want to know of what kind a norm is, violate it: you will feel shame if it is social and guilt if it is moral). There may, or may also, but need not, be a "warm glow" for abiding by duty or norm. The needy's welfare or income is a consequence. A "warm glow" is also a consequence, and resorting to it showed how difficult it is for some economists to leave consequentialism. The norm can be just social as with a habit or a tradition. The norm or the duty can be moral and this is how religions intervene although some also demand compassion or love for the suffering in addition to aid (for instance Christianity and Buddhism, I do not know for the others; for instance, Islam requires alms; does it also demand more?). The Buddhist conceptual world is particularly rich concerning altruism, as shown by its vocabulary such as, in sanskrit, sila (non-noxiousness to others, right behaviour), metta (a subtle kind of reciprocal fellow-feeling, from which "amity"), the essential karuna (an elaborate kind of compassion for facing others' dukkha - suffering -, that induces helping but not suffering from the other's pain), and *mudhita* (pleasure that you derive from someone else's pleasure that you have created, a crucial concept for explaining giftgiving), etc., with still more emphasis in mahayana Buddhism and the models of its primarily altruistic bodhisatvas. Moreover, the gifts of various givers may be related, with some

cooperative solution which may appear in the giver's psychology as social norms or duties of some form (the needy's welfare or income is a public good for the many people who want to improve it) – and there are various such solutions noted below (sections 5 and 6.3) –, and the norm or duty can also result from "putative reciprocity" – also noted below (section 6.2). A duty can be more or less determined by reason (sections 5, 6.2, 6.3).

2.2 - Léon Walras and Henri Poincaré

The founders of classical economics wondered about the properties of the functions they assumed individuals were maximizing, what is now called the "utility function", both their formal properties and their psychological meaning.

Léon Walras sent his equations to the mathematician Henri Poincaré who replied "all you need is a function defined up to an arbitrary increasing function", thus defining an ordinal utility, and added "you assume that people have perfect foresight and are perfectly selfish; perfect foresight is a mistake, but perfect selfishness is worse: a calumny". Walras answered that he would introduce imperfect foresight, but that non-selfishness would better be studied in separate works, which he did. In application, however, he developed not philanthropy, for instance, but what is sometimes called the social economy advocated by the "solidarism" (or "associationism") movement of the IIIrd Republic, such as by the economist Charles Gide (uncle of André) and the political leader Léon Bourgeois, with the issue of stable and efficient cooperatives and his vast study of workers' associations.

2.3 - The Pareto tradition: universal altruistic utility

Vilfredo Pareto also independently characterized ordinal utility, the same year in the same city (Paris, where he was invited as visitor for a year), although he also used cardinal utility for other purposes, and directly differential forms which make ordinal be a kind of cardinal. But his most interesting contribution concerns the meaning of these functions and its consequences, for which he took a different way.

Students who take their first course in economics usually hear "individuals have a function (in the mathematical sense), their "utility function" ".

In contrast, I heard "each individual has two functions".

I was taught economics by a student of Pareto, François Divisia (the one of the index and of many other things, co-founder of the Econometric Society with Frisch and Tinbergen). These were Pareto's words. The two functions are the *utility* function and the *ophelimity* function. Ophelimity means welfare in the strict sense, depending on the individual's consumption and situation, and the ophelimity function is what is now called the utility function in the most elementary sense. Then, each individual's utility function in Pareto's sense is an increasing function of all individuals' ophelimities (including that of the same individual). This describes universal altruism. People seek to maximize their ophelimity in the "sphere of the economy" and their utility in the sphere of "sociology". Formally, a Pareto utility is what is now commonly called a preference-respecting "social welfare function", but there is a specific one for describing the judgment of each individual citizen. Y. Edgeworth also had considered such a structure, for two individuals and linear such "utility" functions. If one likes the satisfaction that each other derives from others' satisfaction (as assumed by J. Bentham, for instance), one should write an individual's utility as function of her ophelimity or consumption and of other individuals' utilities. But this, under some formal conditions, can be reduced to the initial Pareto's formulation (and he was a specialist of this kind of equilibrium resolution).

A consequence of Pareto's duality is that there are two types of so-called Paretoefficiency. One with ophelimities (the classical one), and one with utilities. Since an increase in all ophelimities (with possible constancy of some but not all) augments all utilities, utility Pareto-efficiency requires (hence implies) ophelimity Pareto-efficiency (Edgeworth called this "the shrinking of the contract curve", not to be confused with a classical similar expression referring to the number of participants, a totally different question). But the converse is not true: there may be ophelimity Pareto-efficiency without utility Paretoefficiency. And perfect markets secure ophelimity efficiency only (Pareto's market theory), that is, the lower, more restricted and selfish efficiency, rather than the higher, more general, efficiency with altruism. This can be seen as a kind of overall and primary "market failure". This may require another kind of cooperative solution than the decentralized market system, certainly in addition to, and cooperation with, it rather than as a substitute. At any rate, individuals' political actions (for instance their votes) are chosen by their higher, overall Pareto-utility maximand. What would then certainly be required and done is aid to people with particularly low ophelimity (assuming some comparability, which is common and is in particular in actual welfare policies). This would be a role of cooperative politics (at least its

rules – the constitution – would be unanimously accepted) and of its public economy. The fiscal funding does not necessarily interfere with the efficiency of the market since it can be based on inelastic characteristics (for instance individual productive capacities with the exemption from the labour income tax of overtime labour income over a rather low labour duration benchmark, recently applied in France).

2.4 - Adam Smith's universal impartial empathy and Sophie's sympathy

Where did Pareto find his idea of universal altruism? Probably just from insightful intuitive observation (at least there is no word such as "*schadenfreude*" in the languages he knew). Possibly also from some reading such as Adam Smith's classical *Theory of Moral Sentiments*, his first book about society (he had previously written one on astronomy) based on the assumption that every human enjoys every other's happiness, a feeling reinforced by the judgment of the "impartial spectator" each harbours "in one's breast" (impartiality between one's satisfaction and any other's). (The term "empathy" was coined only later, in early 20th century). Actually, the first lines of the first chapter of the first book about society of the "founding father" of economics is one of the best known and most often quoted of all texts:

Chap. 1

Of Sympathy

How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it. Of this kind is pity or compassion, the emotion which we feel for the misery of others, when we either see it, or are made to conceive it in a very lively manner. That we often derive sorrow from the sorrow of others, is a matter of fact too obvious to require any instances to prove it; for this sentiment, like all the other original passions of human nature, is by no means confined to the virtuous and humane, though they perhaps may feel it with the most exquisite sensibility. The greatest ruffian, the most hardened violator of the laws of society, is not altogether without it.

(The Theory of Moral Sentiments, 1759, Part 1, Section 1, Chapter 1.)

Pareto certainly read this work in French, which is advised because the French translation has one chapter more than the English original. This is the second French translation, by the outstanding thinker marchioness (later citizen) Sophie de Condorcet (the great Condorcet, wife of the not so small other). The extra chapter is her work and consists of "8 Letters on Sympathy". She thought this was necessary to correct Smith's work and make it complete. Sophie reproaches Adam Smith on several counts, the two most important being that his topic is explaining moral sentiments from empathy but he does not explain empathy, and he forgets the intervention of reason when empathy induces actions of giving and helping or even the propensity to such actions in sympathy. Sophie explains empathy from a theory of sensations. A cause of pain would arouse two sensations of pain. A specific one, focused on the cause, and a more general one, unfocused and milder. Different specific pains similar in nature and intensity induce the same general sensation. Remembering pain or observing it in some other person arouses the general sensation only. Pleasure and happiness give rise to a similar structure although with lower intensities. With our present-day information, the most tempting way to make sense of Sophie's dual theory is to relate it to effects of the mirror-neurons and of the VEN (von Economo neurons).

2.5 - Auguste Comte and John Stuart Mill's "altruism" dispute: heroic versus impartial altruism

The term "altruism" was coined by the Parisian sociologist (he also coined this term) Auguste Comte. An altruist was defined exactingly as someone who is ready to benefit someone else at a cost for herself higher than the other's benefit. This was praised as a virtue. Comte's friend John Stuart Mill disagreed. The virtue was not sacrificial heroism, but valuing and weighting equally all benefits and costs, whomever they occur, that is, being a moral Bentham "utilitarian". That is, each one should have an impartial additive Paretian utility. Comte replied that this would not prevent that impecunious useful philosophers should be helped (he could not find a job): could Mill do something? Mill turned to two wealthy friends of his, who complied. But Comte soon reiterated his remark. I first wrote this on a café table Place de la Sorbonne, in front of Auguste Comte's majestic statue deservedly crowned by a disrespectful pigeon.

2.6 - Focused altruisms and non-tuism

The apparent contradiction between the two views of Adam Smith – that Germans used to call *Das Adam Smith Problem* – may be easily solved by remarking that people are not equally altruistic or selfish towards all others. They are altruistic about their families, their friends, members of their communities, and the needy and suffering people in general, but generally not or little about others, notably others they are in relation with in exchanges or markets. They are selfish or altruistic depending on their counterparts, the situation and type of relation, and, as John Stuart Mill and Léon Walras emphasized, their state of mind. These authors assume that they are altruistic in their moments of "calm reflection", although actually

they are rather often in times of individual or collective excitement when choosing a constitution, in crucial votes, or in situations of collective danger. This reveals two sources of altruism, rational impartiality and justice on the one hand, and emotional empathy (often related to indignation against injustice when this is relevant) on the other hand; these are the two sources present in Adam Smith's Theory of Moral Sentiments, empathy and the "Impartial Spectator", as well as in the sentiments of "reciprocity" (cf. section 6.1).

Theories of exchange usually assume that participants do not care about their counterparts' welfare. The most subtle of British economists, the methodist clergyman Philip Wicksteed, also a profound commentator of Comte and Pareto, remarked that this does not imply that they are egoistic but only that they do not care for these others in this activity, which he called *non-tuism*. They may want profit to give to their family or to the poor. For him, there is no economic man in the classical sense, but only economic relations. "What makes it an economic transaction is that I am not considering you except as a link in the chain, or considering your desires except as a means by which I may gratify those of someone else – not necessarily myself. The economic relation does not exclude from my mind everyone but me, it potentially includes everyone but you" (emphasis added). However, we have pointed out that peaceful relations, in particular in exchange, usually require some respect for the others and their property, which can be seen as a basic kind of altruistic attitude and mentality. Some sentiments of respect, fairness, reciprocity and moral duty are often present, and are often necessary or important ingredients in the successes of the market. Thanks to them, many "market failures" due to imperfection and costs in information, transaction costs, etc., which are potentially present, and would be actualized by purely selfish behaviour, fail to actualize.

Nevertheless, as a result, altruism in economics focused on two domains: family economics and the alleviation of poverty by philanthropy or the public sector.

3 - FAMILIES

3.1 - The family as reciprocity.

Families are the institutions for love, altruism and giving. Even economists have families: they could not fail to notice it. However, some modelled it as a reciprocity (see section 6), others as an exchange (marriage is also a contract) and still others as an autocratic *pater familias*. Families are hubs and, in the small, networks of intense relations of affection,

altruism, aid and giving (and also "bad sentiments", permitting good Mauriac-like literature, and the place of most crimes). But each relation is not isolated. Most are mutual (both ways), often reciprocal (interacting), and they are often joint, from several persons to one, and from one to several (Victor Hugo provided the best definition of a public good about "the heart of a mother": "It is like a bread that a God divides and multiplies: each has her share of it and all have the whole"). These relations often influence one another. In particular, a family is a dense network of reciprocities of all types. This includes basic intertemporal intergenerational direct, extended and reverse reciprocities (section 6.1) in which people take care of their children and of their aged parents (possibly also through intergenerational models are present, although in proportions that depend on the specific family and on the type of family in each specific society.

3.2 - Retrogifts

The multiplicity of relations affects some standard results. For instance, someone wants to leave some bequest to his grand-son, but the grand-son also wants his grand-father to have lived a comfortable life, especially since later generations are commonly richer than former ones due to general economic progress and inheritance (and the grand-father has been so kind and generous) – I wish that my grand-parents, who lived during the crisis of the 1930's and two world wars with participation, restrictions, and a drastic and spoliatory foreign military occupation had been better-off. The grand-father and fiscal policy should take account of this foreseeable common sentiment of upstream altruism(and of the similar intergenerational equity), correct the giving "failure" due to the "arrow of time", and implement the corresponding "*retrogift*" by adjusting bequest and thanks to the public debt (public aid with debt redeemed by taxes on later generations).

4 - THE STRUCTURES OF PHILANTHROPIC GIVING AND ALTRUISMS: VERITAS IN CARITATE CONTINUED

4.1 - Helpful sacrifice and responsibility

Philanthropy is the other main field of altruistic economic studies. We have noted the problem raised by the crowding out of "purely" altruistic private gifts by public fiscal transfers, and possible solutions such as the so-called "warm glows" of giving and duties or norms of various possible origins. However, these latter sentiments may have to be about the

individual's *contribution* to the alleviation of poverty, that is her gift plus her *distributive tax* which is the part of her taxes which is used for this distributive public expenditure. Indeed, her contribution by gift or by tax constitutes a *sacrifice* of the individual *that helps the poor*. But the crowding out found in pure altruism only comes from the fact that the gift and the distributive tax are perfect substitutes both in the poor's and in the giver's incomes. And they also are perfect substitutes in the contribution (their sum) which is now (possibly also) a directly preferred variable. Therefore, the crowding out again plays fully with this extra preference for "helpful sacrifice" value. However, there is a difference between the distributive tax and the gift, which is that the tax is a priori imposed to the payer whereas the gift is freely chosen by her. Both are a sacrifice of hers that helps the poor, but she is directly *responsible* for the gift and not for the tax. The duty, norm-following or "warm glow" can attach only or also to this responsibility, and this provides a possible solution for explaining the gift even in the presence of justifiable redistributive taxation.

The actuality of the responsibility effect has been proven by neurological experiments. Some of the individual's income is transferred to a free food stand. In one case, it is taken away from her. In the other case, this is a free gift from her. Electromagnetic imagery shows that the individual's reward system is much more excited in the latter gift case than in the former tax-like case (Burghart, Harbaugh and Mayr).

4.2 - Others' preference for lower contribution

An individual's gift, which can be explained by this individual preferring her *gift* to be *higher*, can also be explained by *other* individuals preferring this individual's *contribution* to be *lower*. This "external preference" can result from comparative sentiments of these others, comparing the individual's contribution with a norm or with those of others, including themselves, and sentiments of envy, jealousy, equality, inferiority or superiority. Then, indeed, these sentiments induce the policy sensitive to people's preferences to choose a lower distributive tax of the individual (which is a part of her contribution) and this in turn may induce the altruistic individual to give more or to give at all (a crowd-in effect). Hence others' preferences about the individual's gift alone have no such effect.

4.3 - Laundering immoral sentiments away

A government's fiscal policy should respect its constituency's preferences. However, if some preferences are immoral or inadequate, it may have to discard their effects on policy

(politics may prevent this, but people may also enjoy that their "bad" preferences are discarded by the political authority since the regretted weakness of their will prevents them from amending themselves and others' preferences are at stake too – as with the case of generally accepted safety regulations). This may be the case for sentiments of warm-glow and associated vainglory (and envy with respect to other contributors or superiority over them or over receivers) and for the nosy (externality) aspect of caring directly about others' contributions or gifts.

The policy tool is the distributive tax. It is a part of a contribution but not of a gift. It does not affect gifts directly and by itself; hence such laundering away of sentiments raised by responsibility for helpful sacrifice has no effect. By contrast, the tax affects the contributions. Hence if there are such sentiments raised by praising helpful sacrifice by itself (warm glow, superiority, vainglory) this laundering leads to a lower tax (even though these sentiments, by themselves, do not lead to actual gifts because of the crowding out). And the lower tax may induce the giver to give more or to give at all, thus maintaining the effect that one wanted to avoid. Hence warm-glow for responsibility fosters giving but discarding the causing sentiment does not affect it, and warm-glow for helpful sacrifice by itself (contribution) does not foster giving (because of crowd out) but discarding the causing sentiment may foster giving in the end (by a crowding in).

By contrast, the effects of discarding the effects of others' preferences for a lower contribution (section 4.2) are straightforward: it suffices to omit the corresponding lowering of the tax.

4.4 - Universal joint altruism. The 3 types of large societies: *selfish*, *egalitarian* or with gifts from *additive logarithmic altruists*

Another problem for understanding or explaining altruistic philanthropy is raised by the fact that the number of altruists is very large. Indeed, everyone wants the poor to be betteroff no matter how much she is ready to pay for it (everybody is a large number). This is quasi-Paretian altruism. By contrast, family altruism is usually between a small number of persons (except if one considers long lines of descent, or family-like relations extended to communities). Even though the gifts to the needy are basically triggered by the more direct preferences about them, people value the relief of poverty. There are altruists who do not give or who pay an arbitrary tax, and warm-glow and duty to act do not crowd out pity or compassion (the human bag of sentiments has some extensibility). Then, for each optimal tax

transfer, its marginal private cost (from lower income, partially compensated by the duty or warm-glow value of helpful sacrifice if any), should be equal to a weighted sum of the marginal altruisms. This amount is limited because the diminished income is that of a nonpoor person who is not starving by definition. Then this large number of altruists requires (implies) that the average marginal altruism vanishes, hence that almost all non-poor think that the poor have enough, which is counterfactual. More precisely, however, this weighted sum should be positive and finite as the private cost is. There are three possible cases, corresponding to three types of large society, and depending on the behaviour of the average contribution, or of the "average" poor's income per non-poor when the number of non-poor becomes very large.

1) If this value tends to zero, that is the poor's income grows more slowly than the population, the average contribution vanishes, hence almost nobody contributes, that is, the set of people who actually contribute is a vanishing fraction of the population. This is the case of *a selfish society*.

2) The average contribution increases limitlessly, the poor's income tends to increase faster than the population. Then some (ultimately all) non-poor tend to see all their extra income or wealth transferred. This can be described as *an egalitarian society*.

3) The average contribution and the poor's income per non-poor tend to a finite positive value. The poor's income tends to grow as the population does. Then, the marginal altruisms of a non-vanishing fraction of non-poor tend to be inversely proportional to the poor's income (this is the case for all or most non-poor if their population is sufficiently homogeneous). That is, their altruism tends to be sensitive not to absolute variations of the poor's income but to its relative variations (not to 100 dollars more but to a 1% increase), it depends on the poor's income through its logarithm (multiplied by the limit of the relative sensitivity). Moreover, altruism becomes separable (additively) from self-interest and warm-glow or duty. This is the case of *additive logarithmic altruism* (see the essay *Veritas in Caritate*, 2013). "Pure" and "impure" altruisms are *additive (independent)* and *pure is logarithmic*. This implies that the choice of the gift does not depend on the poor's income or welfare and that the pure altruistic sentiments depend on the relative variation of the poor's income rather than on its absolute variation. Actually, there are many cases of large non-egalitarian societies with important transfers (present-day "welfare states" for instance) and large philanthropic organizations with a fair number of important gifts. Actually, it seems that the larger the organisation the larger

the fraction of important gifts. This structure can be explained by a Weber-Fechner law of altruism or by the giver's assumption that the poor's welfare is a logarithmic function of the poor's income (possibly explained by a Weber-Fechner law of destitution). However, when the large population also applies to the poor, this structure implies that the extra poor creates less compassion than the existing ones, which is rather immoral (but can be explained by a psychological impossibility of limitless universal empathy).

These possibilities and overall structure are that of a case of a public good (collective concern) with a large number of beneficiaries. Indeed, the poor's income is a public good for all altruists caring about it, and, actually, everybody wants harmful poverty to be lower. The poor's income is a universal moral public good (the "moral" aspect relates to the virtue of altruism and to the foregoing duty or norm motive for giving). There are other such cases in the fields of the environment, culture, collective heritage, medical research, and more specific aspects of economic misfortune).

4.5 – Altruism warm-glows for giving, self and praise

Even though warm-glow a priori distinguishes a personality so honoured for acts with a moral motivation which excludes warm-glow seeking (the contradiction), gifts to the needy, and hence the responsible giver, are valued and praised by the receivers and by all altruists, possibly the giver herself and all others. The giver may be sensitive to this praise (or restrain from blame) and this may motivate her gift. This praise may be actual or just imagined by the giver (in particular, she may consider their praise "if they knew"). The same analysis can include appreciated gratitude and "second-degree altruism" (altruism towards the altruists, who may be represented by some "general opinion").

The effects of praises on the gift crucially depend on the intensity and on the structure of the sensitivity of the giver to the praises. In particular, she may be sensitive to some "average praise", or she may also be sensitive to the number of praisers and consider some kind of total praise (she may also be sensitive to the specific nature of praisers, e.g. some moral authority or someone in relation with her). The relevant case of a large number of altruists leads again to consider the cases of absolute or relative altruisms (sensitive to a variation or only a relative variation of the poor's income, respectively).

Two cases provide neat results. Self and average praise altruism warm-glows with absolute altruisms do not suffice to prevent the crowding out of gifts when the number of

altruists is sufficiently large. In contrast, total praise altruism warm-glow with relative altruism may induce actual giving. In the other cases, the result depends on the sensitivity of the (weak) warm-glow for just giving to the altruisms and the praises. But in the case of absolute altruism and total praise warm-glow, in order to induce actual giving the sensitivity has to be particularly high to some praises (role of moral or relational authority).

4.6 – Impotent incentive policies

Common policies have tried to help the needy more or at a lower fiscal cost by taking the form of incentives to private giving, such as grants-in-aid, subsidies or tax rebates: each gift triggers a public transfer which is an increasing function of it, to the receivers as a complement to the gift or to the giver as a partial reimbursement of the gift – then often in the form of a tax rebate. However, it turns out that such policies have no effect if (1) an alternative to this public transfer is to directly transfer the funds to the needy, that is, the incentive money is or can be seen as withdrawn from direct public aid, and (2) the whole structure is perfectly perceived by the agents, for all the types of giving motives that have been considered.

5 - COOPERATIVE ALTRUISMS

5.1 - A public good

This public good aspect suggests that solutions can be found in cooperative solutions. The theory of the core for public goods provides possible solutions (the correct theory: a dissenting coalition creates a piece of the public good – here income transferred to the poor – which is also appreciated by the other individuals, its members in turn enjoy quantities produced by other individuals or coalitions, and it interacts non-cooperatively with the others which can form various coalition structures from none (the "splintering core") to reacting collectively (the "dichotomous core")). However, the large number hampers direct contacts and agreements between the concerned contributors (information and transaction costs). But politics, political morality and philosophies, and ideologies provide possible solutions. They act at the level of individual psychology by creating duties or norms of giving or for the acceptance of – or vote for – distributive taxes. Economics' tools and concepts have been used to analyze the classical philosophical solutions such as the social contract, the general will, ruled contributions and Kant's categorical imperative. Applications of reciprocitarian

sentiments also provide solutions (lateral reciprocity or fair matching, and putative reciprocity).

5.2 - A social contract of generosity

A "social contract" is an implicit and putative general agreement, here about contributions to the relief of poverty. This compact is implemented by gifts or by taxes, and the political system which imposes the taxes also helps to determine the agreement. Each individual may not comply with her due by not giving or by avoiding her taxes, in part or in full, when she can, that is, free riding. This gives her a private benefit, including the cost saved, but taking account of possible reactions by other people. If a moral sense of duty overcomes these benefits, there is no free riding and the social contract can be implemented in a free and decentralized way. This benefit is usually the smaller the smaller the contribution, hence in important cases (case 1 of section 4.4) the larger the number of contributors, and this tends to make large otherwise selfish populations favourable to such social contract solutions (thus compensating the loss of face to face relations favourable to small populations).

5.3 - General Will altruism

When Sophie's husband, the other Condorcet, investigated the derivation of a Rousseauan General Will from the votes of an Assembly, he looked for the transitivity of choices. That is, he spontaneously assumed, without questioning, that the General Will has the structure of an ordering, hence, practically, that it consists in maximizing some function. This may also be taken as the "common good". Moreover, it is a function of the world through individuals' utility functions (or Pareto's ophelimity functions, depending on whether Condorcet's voters vote according to their moral view including their altruism or to their welfare interest). In both cases, its maximization secures the corresponding Pareto efficiency. With ophelimities, it is what is now called a classical Social Welfare Function. With Paretian utilities, such a function was also considered by Pareto, but not explicitly as a General Will.

In "general will" cooperative solutions, all individuals seek to maximize the same such function. Such a society thus is a "team" (in Roy Radner's sense). For social altruism, this amounts to all individuals having the same Paretian utility function. Each individual chooses her own action (gift) assuming that others' actions (gifts) are given for her (a Cournot-Nash general will implementation which maximizes the GW function). These individual

contributions are indeed independent variables (resulting from independent indivividual freedom of action), contrary to the structure of the following solution.

5.4 - Rule altruism

Contributing to the relief of poverty according to a consistent social rule means that each non-poor's contribution is a function of each other, with consistency between these functions (closed chain identity, implying symmetry and transitivity) and identity for contributors who have the same relevant characteristics. Equivalently, each contribution is a function of the total aid and of characteristics (a priori any) of the contributor. Then, each contributor has a preferred level for the total (and hence for each contribution, including her own). If this preferred total level is the same for all (a unanimous choice under the constraints of the rule), then, when this is achieved, no other set of contributions, whatever they are, can make everybody better-off. This is the efficiency of a rule-governed society. But it does not determine by itself which rule should be chosen, hence the corresponding contributions. This is a moral choice in the sphere of distributive justice.

A choice of contributions from which there is no unanimously preferred *ruled deviation* is also Pareto-efficient.

5.5 - Generalization rational altruism, and the limit of Kant

Kant thought a solution can be found in generalization rationality. His "categorical imperative" says: "follow the rule such that, if everybody followed it, you could want the result". This is a principle of equality of duty. Actually, a kind of "folk Kantianism" is a common motivation, for social actions; for instance, when people are asked why they vote in large elections in which their own ballot makes no actual difference, the most common answer is: "what if nobody voted?" (suggesting that the result might be painful chaos or an odious dictator). A similar answer is obtained when they are asked why they freely abstain from polluting the environment (when they do). In such cases, the costs of individual compliance are small. Hence this may a priori be a possibility for large otherwise "selfish" societies.

However, Kant's view suffers from lack of precision about the nature of the rule (would it be a gift, or a gift as a function of characteristics of the giver or of the beneficiary?) and about the meaning of "you could want the result". Yet he gives one example for the latter issue which concerns precisely helping: you may want helping to be a general rule because

you may yourself need help sometimes; but how much should one give or receive? A general form is a more general structure of satisfaction. Then Kant's theory is in fact contradictory when applied with the necessary precision. Indeed, what a Kantian individual actually chooses is the "rule" or "maxim" to be applied assuming all other individuals apply it too. But since different persons a priori have different preferences about the assumed resulting end-state, their preferred Kantian rules are a priori also different. Then each person chooses her preferred universal rule (and finally her action) assuming that others act in a way in which they do not actually act, notably if they all follow Kant's general principle. Hence, the Kantian general principle, or imperative, does not apply to itself, it cannot validate itself, a serious contradiction or inconsistency for a moral doctrine. Kant did not see this because he considered choices between very broad categories of alternatives only, as would be "lie or do not lie", "help or do not help", "vote or do not vote", rather than precise alternatives such as, for instance, how much to give. (And Jean-Jacques Laffont's theory of a Kantian provision of public goods assumes identical individuals in preferences and income).

6 - RECIPROCITIES

6.1 - Reciprocity

Two other solutions rest on applications of reciprocitarian sentiments, applied respectively putatively and between several givers.

Reciprocity is the classical name for the fact that if someone has given you something, you feel like giving her something "in return": this is the gift/return-gift relationship. In achieved "reciprocity equilibrium", the gift can be the return-gift of the return-gift. A sharp analysis of the motives shows that they can be of two kinds (not exclusive). In "balance or matching reciprocity", the return-gift tends to present some equality in some kind of value with the gift, possibly in relation with the situations, needs or means of the participants. This is a concept in the family of justice or fairness (of local justice). In "liking reciprocity", having received a gift induces you to like the giver, and this sentiment, in turn, induces you to give to her. Then the initial gift is a cause of some altruism from you. These two causes are another instance of the noted two sources of giving or altruism, reason and emotion.

This is completely different from self-interested "sequential exchanges" in which each yields in order to maintain the sequence of alternate transfers both ways. Yet, purely self-interested sequential exchanges cannot explain the last transfer and this regressively destroys

the whole expected chain of "free" alternate transfers, and one reason why this may not occur is that some reciprocitarian sentiments and motives also intervene, at least at the end of the process.

The reciprocity sentiments and relations extend in "generalized reciprocity". This includes "extended reciprocity" when the fact that you have been helped induces you to help someone different from the initial giver, "reverse reciprocity" in which people tend to help people who have helped some other people (noted for instance by René Descartes and Adam Smith), and "general reciprocity" in which people who have been helped tend to give in return to society in general (perhaps the "generalized other" of G.H. Mead).

Reciprocitarian sentiments are the basis of two ways of solving the public-good conundrum of joint giving.

6.2 - Putative reciprocity

During the tsunami episode in South-East Asia a few years ago, a young girl told me: "we should help them because they would have helped us if this had happened to us" (which was very counterfactual given the place she was living in, the Alps; but there could be avalanches and landslides). Finally, there was an excess of gifts which was kept for years and was used for other reliefs.

Putative reciprocity is "I should help her because she would have helped me if our situations were reversed", and imagining the equilibrium solution, or because I would have been helped by other people or she would have helped other people (direct, extended and reverse putative reciprocity respectively).

This induces a preference about one's own gift rather than for, or only for, the public good of the beneficiary's situation (welfare, income, etc.) – although it may also depend on what the beneficiary receives from other sources.

6.3 - Lateral reciprocity or matching

This is reciprocity between givers rather than with the beneficiary: given that the other contributors do their share, I choose to do mine. This can be a way of implementing the ruled contributions of section 5.4. And the other givers may have the same sentiment and reaction.

Yet, how can one be sure that the others actually contribute? This can be in an open, public process of simultaneous collective giving in which each helps and sees others helping at the same time. This can also be in an iterative process: I give something because I have seen others giving something, and they do the same next time. The motive can also include (or even be) giving in order that they give next time either in reciprocity or because they want the sequence of gifts to continue (or both), but the motive of the desire for the whole transfers is altruism rather than self-interest. Another way of each being persuaded that the others actually contribute is that all these transfers are forced, imposed. Then, however, they are no longer gifts in the strict sense. But people are forced to yield exactly what they want to, given others' contributions. That is, the act seems to be constrained, but the constraint, although it is reached and respected, is not actually binding. This seems to be a main structure of the cases of accepted taxation (another motive for these cases is a strong belief in the legitimacy and quality of the political process).

7 - EFFICIENT SOLIDARITIES, VIRTUES, THE NORMATIVE INVERSE CONDUCT PROBLEM

7.1 - Economic efficiency and solidarity

Societies have to find ways of associating economic efficiency and solidarity sufficient to secure the satisfaction of basic needs. Roughly, modern societies have followed two models (ideal types) for that, and each favours one although the other is also present. English-speaking societies have favoured liberalisms with largely free markets and philanthropy. Continental Europe has emphasized more public intervention in the economy and public redistribution. Both models are in crisis. The liberal one from the general economic crisis cooked by financiarization, deregulation and globalization. The other one from the problems of public regulation and debt.

Among the solutions is "solidarism" 's "social economy" (a left movement opposed to state socialism) with more emphasis on the "social" and "third sector" economy including various types of cooperatives, "social firms", local solidarities, "fair trade", the "economy of communion", "microfinance", and less inequality in the primary income distribution and in power in general. From the classical values of the Enlightenment, the market and philanthropy emphasized liberty, public redistribution focused on equality, whereas the presently most needed one may be fraternity.

However one need not start from utopias, whose attempted implementation has so often failed in the long run during the last two centuries. One may start from existing economic forms and take a different view of them which amends them in the right direction. For instance, Karl Polanyi, in The Great Transformation, distinguished three types of economic systems: "exchange" (markets), "redistribution" in which a political center imposes forced transfers between agents, and "reciprocity". Seeing vices in the first two ones leads one to focus on reciprocity. However, this term is also sometimes used more broadly, emphasizing voluntariness and mutual benefit, and thus also including market exchange. Indeed, market exchanges can also be lived as more cooperative than hostile and competitive, they may be enjoyed also for the relation and for the pleasure to satisfy the other and not only oneself, notably in standard reciprocity since the other also yields something to oneself, possibly with some "tuism" in Wicksteed's sense, and this may lead to a more acceptable system on relational and distributive grounds while keeping or even improving the informational virtue of the price system (improvement can come from sincerity, truth-telling about costs and utility, promise-keeping, etc.). Note that a by now classical theory such as that of the "efficiency wages" (George Akerlof) assumes that employees adjust their productivity in reciprocity in the strict basic sense to their wages; the relation would become a standard reciprocity if the employer chooses the wage levels with a similar symmetrical mentality.

7.2 – Economizing on altruism depletes it

Economists' advice based on the hypothesis of self-interested agents is also sometimes justified not only for its realism or for its role of efficiency in market exchanges, but also because resorting to it "economizes on love" (Robertson) and on altruism which are appreciated in themselves and are virtues. However, as Aristotle points out, virtues are particular resources which are more augmented than eroded by their use, and such that the more they are used, the more there is of them, because they are perfected by training and habit. Alfred Marshall, the classical guru of British economics, was on this line when, after noticing that "men are capable of more unselfish service than they generally render", he adds: "the supreme aim of an economist is to discover how this latent asset can be developed more quickly and turned to account more wisely".

7.3 - The normative inverse behavioural or conduct problem

Finally, whatever its type, the stable solution to the distributive and relational economic problem is likely to require more than policies and institutions: some change in

motivations towards more altruism, benevolence and duty or norm-following. Determining the necessary forms would require the expertise of economics in the "behavioural" or rather "conduct problem" (conduct is behaviour plus its motivations), that is, the analysis of the relations between individual motivations and the resulting acts and states of society. The problem has a couple of aspects. The direct problem consists in deriving acts and states resulting from specific motivations, such as economic studies of the effects of self-interest or altruisms. The inverse problem asks which motivations are likely to produce given, for instance observed, acts and results, as with the explanations of giving. The normative inverse problem is the latter one for a priori desired economic results and types of relations and of agents. This would determine which possible values are required, what should be the role and place of self-interest, etc. This is beyond, and deeper than, the usual economists' search for "incentives".

This permits one to derive the proper agenda for education of all kinds (child and adult).

What is, in the end, the correct assumption about human nature and possibilities? By answering "I'homme n'est ni ange ni bête, et qui veut faire l'ange fait la bête", Blaise Pascal may have both deserved, in addition to his multifaceted wisdom, some status of honorary economist, and proposed an early perceptive critique of the logic of "warm-glow" giving.

References and short bibliography

Please see the *Handbook of the Economics of Giving, Altruism and Reciprocity*, edited by Serge-Christophe Kolm and Jean Mercier Ythier, 2006, Amsterdam, North Holland Elsevier, 2 volumes.

Abrams, B. A. and M.D. Schmitz. 1978. "The 'crowding-out effect of governmental transfers on private charitable contributions", *Public Choice* 33 (1):28-40.

Akerlof, G. 1982. "Labor contract as partial gift exchange", *Quarterly Journal of Economics* 97:543-569.

Alesina, A. and Glaeser, E. 2004. *Fighting Poverty in the US and in Europe. A World of Difference*, Oxford University Press, Oxford.

Amegashie, J.A. 2006. Economics, gratitude and warm-glow. Mimeo. University of Guelph.

Andreoni, J. 1988. "Privately provided public goods in a large economy: the limits of altruism". *Journal of Public Economics*, 35: 57-73.

Andreoni, J. 1989. "Giving with impure altruism: Applications to charity and Ricardian equivalence", *Journal of Political Economy* 97:1447-1458.

Andreoni, J. 1990. "Impure altruism and donations to public goods: a theory of warm-glow giving", *Economic Journal* 100:464-477.

Andreoni, J., and T. Bergstrom. 1996. "Do government subsidies increase the private supply of public goods?", *Public Choice*: 88, 295-308.

Archibald, G.C. and D. Donaldson. 1976. "Non-paternalism and the basic theorems of welfare economics", *Canadian Journal of Economics* 9:492-507.

Aristotle. 1972. Ethique à Nicomaque. Vrin, Paris.

Arrow, K.J. 1972. "Gifts and Exchanges", Philosophy and Public Affairs, 4: 343-62.

Arrow, K.J. 1981. "Optimal and voluntary income distribution". In: *Economic Welfare and the Economics of Soviet Socialism: Essays in Honor of Abram Bergson*, Cambridge University Press, Cambridge, 267-288.

Barro, R.J. 1974. "Are government bonds net wealth?", *Journal of Political Economy* 82 (6):1095-1117.

Becker, G.S. 1961. "Notes on an Economic Analysis of Philanthropy", *National Bureau of Economic Research*.

Becker, G.S. 1974. "A theory of social interaction", Journal of Political Economy 82 (6):1063-1093.

Becker, G.S. 1976. "Altruism, egoism and genetic fitness: Economics and sociobiology", *Journal of Economic Literature* 14:817-826.

Becker, G.S. 1976. *The Economic Approach to Human Behavior*, University of Chicago Press, Chicago, London.

Becker, G.S. 1978. "A positive theory of the redistribution of income". University of Chicago, Center for the Study of the Economy and the State, Working Paper 006.

Becker, G.S. 1981. "Altruism in the family and selfishness in the market place", *Econometrica* 48:1-15.

Becker, G.S. 1981. A Treatise on the Family. Harvard University Press, Cambridge, MA.

Becker, H. 1956. "Empathy, sympathy and Scheler", International Journal of Sociometry 1.

Bentham, J. 1952-1954. "The Philosophy of Economic Science". In: *Jeremy Bentham's Economic Writings*, ed. by W. Stark. 3 vols. Franklin, New York.

Berg, J., J. Dickhaut and K. McCabe. 1995. "Trust, reciprocity and social history", *Games and Economic Behavior* 10:122-142.

Bergson, A. 1966. Essays in Normative Economics. Harvard University Press, Cambridge, MA.

Bergstom, T.C. 1999. "Systems of benevolent utility functions", Journal of Public Theory 1:71-100.

Bergstrom, T.C. 1970. "A "Scandinavian consensus" solution for efficient income distribution among non-malevolent consumers", *Journal of Economic Theory* 2:383-398.

Bergstrom, T.C., L. Blume, and H. Varian. 1986. "On the private provision of public goods". *Journal of Public Economics*, 29: 25-49.

Berkowitz, L. 1970. "The self, selfishness and altruism". In: J Macaulay and L. Berkowitz (eds.), *Altruism and Helping Behavior*, Academic Press, New York.

Berkowitz, L. 1971. Social norms, feelings and other factors affecting helping behavior and altruism. Unpublished manuscript, University of Wisconsin.

Bernheim, D. 1986. "On the voluntary and involuntary provision of public goods", *American Economic Review*, 76 (4): 789-93.

Bilodeau, M., and R. Steinberg. 2006. "Donative non-profit organization." In: *Handbook in the Economics of Giving, Altruism, and Reciprocity*, ed. by S.-Ch. Kolm and J. Mercier Ythier, Amsterdam: Elsevier North-Holland, 1271-1333.

Boadway, R., P. Pestieau, and D. Wildasin. 1989. "Tax-transfer policies and the voluntary provision of public goods", *Journal of Public Economics*, 39: 157-76.

Boorman, S. A. and P.R. Levitt. 1980. The Genetics of Altruism. Academic Press, New York.

Bordignon, M. 1990. "Was Kant right? Voluntary provision of public goods under the principle of unconditional commitment", *Economic Notes*, 3: 342-72.

Boudon, R. 1979. La logique du social. Hachette, Paris.

Boulding, K. 1962. "Notes on a theory of philanthropy". In: *Conflict and Defense. A General Theory*. Harper, New York.

Boulding, K. 1973. *The Economics of Love and Fear, A Preface to Grants Economics*. Wadsworth, Belmont, CA.

Brekke, K., S. Kverndokk, and K. Nyborg. 2003. "An economic model of moral motivation", *Journal of Public Economics*, 87: 1967-83.

Bruni, L. and S. Zamagni (eds.), 2013. *Handbook on the Economics of Reciprocity and Social Enterprise*, Edward Elgar, Cheltenham.

Buchanan, J.M. 1975. "The Samaritan dilemma". In: E.S. Phelps (ed.), *Altruism, Morality and Economic Theory*.

Burghart, D.R., W.T. Harbaugh and U. Mayr. 2007. "Neural responses to taxation and voluntary giving reveal motives for charitable donation", *Science* 316 (5831), 1622-1625.

Clotfelter, C. 1980. "Tax incentives and charitable giving: Evidence from a panel of taxpayers", *Empirical Economics*, Springer, 13(3): 319-40.

Collard, D. 1975. "Edgeworth's proposition on altruism". *Economic Journal* 85, 355-360. Reprinted in: S. Zamagni (ed.), 1995.

Collard, D. 1978. *Altruism and the Economy. A Study in Non-Selfish Economics*, Martin Robertson, Oxford.

Condorcet, Sophie de Grouchy de. [1793] 1994. *Lettres sur la sympathie*, ed. by J.-P. de Lagrave, L'Etincelle éditeur, Montréal, Paris.

Coricelli, G., K. McCabe and V. Smith. 2000. "Theory of mind mechanism in personal exchange". In: G. Hotano, N. Okada and H. Tanabe (eds.), *Affective Minds*, Elsevier, Amsterdam.

Cornes, R. and T. Sandler. 1984a. "Easy riders, joint production and public goods". *Economic Journal*, 94: 580-98.

Cornes, R. and T. Sandler. 1984b. "The comparative static property of the impure public good model". *Journal of Public Economics*, 54: 403-21.

Cornres, R. and T. Sandler. 1986. *The Theory of Externalities, Public Goods and Club Goods*. Cambridge University Press, Cambridge.

Duncan, B. 2004. "A theory of impact philanthropy", Journal of Public Economics, 88: 2159-2180.

Edgeworth, F.Y. 1888. *Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences*, London School of Economics (reeditions 1932, 1967, 1981).

Finn, D.K. (Ed.). 2010. *The True Wealth of Nations: Catholic Social Thought and Economic Life*. Oxford U.P., NY.

Finn, D.K. (Ed.). 2012. The Moral Dynamics of Economic Life: An Extension and Critique of Caritas in Veritate. Oxford U.P., NY.

Finn, D.K. 2013. Christian Economic Ethics: History and Implications. Fortress Press, Minneapolis.

Frank, R.H. 1990. "A theory of moral sentiments". In: J. Mansbridge (ed.), *Beyond Self-Interest*. University of Chicago Press, Chicago, 71-96.

Frey, B 1997. Not Just for the Money – An Economic Theory of Personal Motivation. Edward Elgar, Cheltenham.

Friedman, M. 1962. Capitalism and Freedom, Chicago University Press, Chicago IL.

Friedrichs, R.W. 1960. "Alter versus ego: An exploratory assessment of altruism". *American Sociological Review* 25, 496-508.

Gächter, S. and Falk, A. 2002. "Reputation or reciprocity? An experimental investigation", *Scandinavian Journal of Econometrics* 24.

Gérard-Varet, L.-A., S.-Ch. Kolm, and J. Mercier Ythier (eds.) 2000. *The Economics of Reciprocity, Altruism, and Giving*, MacMillan, London.

Gide, C. 1905. *Economie sociale*, Librairie de la Société du Recueil général des lois et des arrêts, Paris.

Glazer, A., and K. Konrad. 1996. "A signaling explanation for charity", *American Economic Review*, 86: 1019-28.

Gui, B. 2000. "Beyond transactions: On the interpersonal dimension of economic reality", *Annals of Public and Cooperative Economics* 71 (2):139-168.

Hammond, P. 1975. "Charity: altruism or egoism ?". In: E. Phelps, (ed.), *Altruism, Morality, and Economic Theory*, Russel Sage Foundation, New York.

Harbaugh, W. 1998a. "The prestige motive for making charitable transfers", *American Economic Review (Papers and Proceedings)*, 88: 277-82.

Harbaugh, W. 1998b. "What do donations buy? A model of philanthropy based on prestige and warm glow", *Journal of Public Economics*, 67: 269-84.

Hochman, H.M. and J.D. Rodgers 1969. "Pareto optimal redistribution", *American Economic Review* 59:542-557.

Holländer, H. 1990. "A social exchange approach to voluntary cooperation". *American Economic Review*, 80: 1157-67.

Kahneman, D., and J. Knetsch. 1992. "Valuing public goods: the purchase of moral satisfaction". *Journal of Environmental Economics and Management*, 22: 57-70.

Kahneman, D., Knetsch, J.L., and Thaler, R.H.1986. "Fairness and the assumption of economics", *Journal of Business* 59, S285-S300.

Kant, I. [1785] 1907. *Fundamental Principles of the Metaphysics of Ethics*. 3rd ed. London: Longmans, (English Translation by T.K. Abott).

Kant, I. [1797] 1991. *The Metaphysics of Morals*, translated by M.J. Gregor, Cambridge University Press, Cambridge.

Kant, I. 1980. Fondements de la métaphysique des mœurs. Delagrave, Paris.

Kennett, D. A. 1980. "Altruism and economic behaviour", *American Journal of Economics and Sociology* 39 (2).

Kolm, S.-Ch. 1966. "The optimal production of social justice". In: International Economic Association Conference on Public Economics, Biarritz. Proceedings ed. by H. Guitton and J. Margolis. *Economie Publique* (CNRS, Paris), 1968, 109-77. *Public Economics* (MacMillan, London), 1969, 145-200. Reprinted in: *Landmark Papers in General Equilibrium Theory, Social Choice and Welfare, The Foundations of 20th Century Economics*, selected by K.J. Arrow and G. Debreu, 2001, Edward Elgar, Cheltenham, 606-653.

Kolm, S.-Ch. 1970. La Valeur Publique. CNRS-Dunod, Paris.

Kolm, S.-Ch. 1971. Le Service des masses. CNRS-Dunod, Paris.

Kolm, S.-Ch. 1973. La théorie de la réciprocité. CEPREMAP, Paris.

Kolm, S.-Ch. 1981a. "Altruisme et efficacité: le sophisme de Rousseau", *Social Science Information* 20:293-344.

Kolm, S.-Ch. 1981b. "Efficacité et altruisme: le sophisme de Mandeville, Smith et Pareto", *Revue Economique* 32:5-31.

Kolm, S.-Ch. 1983. "Altruism and efficiency", *Ethics* 94: 18-65. Reprinted in: S. Zamagni (ed.), *The Economics of Altruism*, op. cit.

Kolm, S.-Ch. 1984. *La Bonne Economie: La Réciprocité Générale* (General Reciprocity, The Good Economy). Presses Universitaires de France, Paris.

Kolm, S.-Ch. 1985. *Le Contrat Social Libéral* (The Liberal Social Contract). Presses Universitaires de France, Paris.

Kolm, S.-Ch. 1987a. Freedom, cores and public goods. Paris: CERAS, n°66.

Kolm, S.-Ch. 1987b. L'Homme Pluridimensionnel. Albin Michel, Paris.

Kolm, S.-Ch. 1995. "The theory of social sentiments: the case of envy", *The Japanese Economic Review* 1(46):63-87.

Kolm, S.-Ch. 1997. "Introduction to the Economics of Reciprocity, Giving and Altruism", IEA (Marseilles); in: L.-A. Gérard-Varet, S.-Ch. Kolm and J. Mercier Ythier (eds.), *The Economics of Reciprocity, Giving and Altruism*. 2000, MacMillan, London, 1-44.

Kolm, S.-Ch. 1998. "Une introduction à la théorie de la réciprocité et du choix des systèmes économiques". In: F.-R. Mahieu and H. Rapoport (eds.), *Altruisme, Analyses Economiques*, Economica, Paris, 17-50.

Kolm, S.-Ch. 2008a. *Reciprocity, The Economics of Social Relations*. Cambridge: Cambridge University Press.

Kolm, S.-Ch. 2008b. "The paradoxes of the war on poverty". IDEP Working Document.

Kolm, S.-Ch. 2008c. "Giving with subsidy illusion". EHESS Working Document.

Kolm, S.-Ch. 2008d. "The theory of rules and the moral provision of public goods", EHESS Working Document.

Kolm, S.-Ch. 2010. "General presentation". Chapter 2 in: *Kolm's Theory of Macrojustice*, C. Gamel and M. Lubrano (eds.), Springer Verlag, Heidelberg, 35-67.

Kolm, S.-Ch. 2013. *Veritas in Caritate*. The public good of fighting poverty, paradoxes of solidarity. Franqui Conference, Bruxelles; CORE, Louvain-La-Neuve.

Kolm, S.-Ch., 2013. "Gifts and gratuitousness". In: L. Bruni and S. Zamagni (eds.), *Handbook on the Economics of Reciprocity and Social Enterprise*, Edward Elgar, Cheltenham, 179-190.

Kolm, S.-Ch., 2013. "Possible economic transfers". In: S. Mussard (ed.), *Economic Modelling*, Preface, 867-869.

Kolm, S.-Ch., and J. Mercier Ythier (eds.). 2006. *Handbook of the Economics of Giving, Altruism, and Reciprocity*. Amsterdam: Elsevier North-Holland.

Konow, J. 2007. "Mixed feelings: Theories and evidence of warm glow and altruism", MPRA Paper 2727.

Kotlikoff, L. and L. Summers. 1981. "The role of intergenerational transfers in aggregate capital accumulation", *Journal of Political Economy* 89:706-732.

Kranish, L. 1998. "Altruism and efficiency: a welfare analysis of the Walrasian mechanism with transfers", *Journal of Public Economics* 36:369-386.

Kranton, R. 1994. "Reciprocal exchange: a self-sustaining system", *American Economic Review* 86(4): 830-851.

Krebs, D. 1970. "Altruism: An examination of the concept and a review of the literature", *Psychological Bulletin* 73:258-302.

Kropotkin, P. 1927. L'éthique, Stock, Paris.

Kurz, M. 1977. "Altruism as an outcome of social interaction", *American Economic Review* 68:216-222.

Kurz, M. 1978. "Altruism as an outcome of social interaction", *Journal of Public Economics* 36:369-386.

Kurz, M. 1979. "Altruistic equilibrium". In: B. Balassa and R. Nelson (eds.), *Economic Progress, Private Values and Policy*, North-Holland, 177-200.

Leeds, R. 1963. "Altruism and the norm of giving", Merrill-Palmer Quarterly 9:229-240.

Lenrow, P. 1965. "Studies in sympathy". In: S.S. Tomlins and C.E. Izard (eds.), *Affect, Cognition, and Personality: Empirical Studies*, Springer, New York.

Lévi-Strauss, C. "The principle of reciprocity". In: L.A. Coser and G. Rosenberg (eds.), *Sociological Theory*, MacMillan, New York.

Levine, D.K. 1997. "Modelling altruism and spitefulness in experiments", *Review of Economic Dynamics* 1(3), 593-622.

Lindbeck, A. and J. Weibull. 1988. "Altruism and time consistency: the economics of the fait accompli", *Journal of Political Economy* 96:1165-1182.

Macaulay, J. and L. Berkowitz, (Eds.) 1970. *Altruism and Helping Behavior*, Academic Press, New York.

Mahieu, F.-R. and H. Rapoport. 1998. Altruisme, Analyses Economiques, Economica, Paris.

Mandeville, B. 1714. *The Fable of the Bees or Private Vices, Public Benefits*, Clarendon Press, Oxford, 1988.

Margolis, H. 1981. Selfishness, Altruism and Rationality, Cambridge University Press, Cambridge.

Marshall, A. 1890. *Principles of Economics*. An Introductory Volume. New edition, 1920, MacMillan, London.

Masclet, D., M. Willinger, and C. Figuières. 2007. "The economics of telethon: leadership, reciprocity and moral motivation". LAMETA Working Document 2007-08.

Mauss, M. 1924. "Essai sur le don, forme archaïque de l'échange", *Année Sociologique* n.s. 1: 30-186. English translation (1967), *The Gift: Forms and Function of Exchange in Archaic Societies*, Norton, New York.

Mavity, J., Ylvisaker, P. 1975. "Private philanthropy and public affairs", pp. 795-836, in *Research Papers*, vol. 2, Commission on Private Philanthropy and Public Need (Department of Treasury), Washington, DC.

Mead, G.H. 1934. Mind, Self and Society, University of Chicago Press, Chicago.

Mercier Ythier, J. 1993. "Equilibre général de dons individuels", Revue Economique 925-950.

Mercier Ythier, J. 1998. "The distribution of wealth in the liberal social contract", *European Economic Review* 42:329-347.

Mill, J.S. 1898. Correspondance inédite (1828-1871). Alcan, Paris.

Miller, D. 1988. "Altruism and the welfare state". In: J. Donald Moon (ed.), *Responsibility, Rights, and Welfare: The Theory of the Welfare State*, Westview Press, Boulder and London, 163-188.

Musgrave, R.A. 1970. "Pareto optimal redistribution: comment", *American Economic Review* 60: 991-993.

Nagel, T. 1970. The Possibility of Altruism, Oxford University Press, Oxford.

Nicole, P. 1675. Essais de Morale, Paris.

Olson, M. 1965. The Logic of Collective Action. Harvard University Press, Cambridge MA.

Pareto, V. 1913. "Il massimo di utilità per una colletività", *Giornale degli Economisti* 3, 337-341. Reprinted as a long footnote in: *Treatise of General Sociology* (and in: *Mind and Society*).

Pareto, V. 1916. A Treatise on General Sociology, Dover, New York.

Pareto, V. 1966. Manuel d'Economie politique, 1906. In: Oeuvres complètes, vol. 7, Droz, Genève.

Phelps, E.S., (Ed.) 1975. Altruism, Morality, and Economic Theory, Russell Sage, New York.

Rabin, M. 1998. "Psychology and Economics", Journal of Economic Literature 36, 11-46.

Ribar, C.D., and M.O. Wilhelm. 2002. "Altruistic and joy-of-giving motivations in charitable behavior", *Journal of Political Economy*, 110: 425-57.

Rizzolatti, G. and C. Sinigaglia. 2008. Les Neurones miroirs. Odile Jacob, Paris.

Roberts, R.D. 1984. "A positive model of private charity and public transfers", *Journal of Political Economy* 92, 136-148.

Sahlins, M. 1977. *The Use and Abuse of Biology (An Anthropological Critique of Sociobiology)*. Tavistock Publications, London.

Scheler, M. 1971. Natures et formes de la sympathie, Payot, Paris.

Schokkaert, E. 2006. "The empirical analysis of transfer motives." In *Handbook of the Economics of Giving, Altruism, and Reciprocity*, ed. by S.-Ch. Kolm and J. Mercier Ythier, Amsterdam: Elsevier North-Holland, 127-181.

Schokkaert, E., and L. Van Ootegem. 2000. "Preference variation and private donations." In *The Economics of Reciprocity, Giving, and Altruism*, ed. by L.A. Gérard-Varet, S.-Ch. Kolm and J. Mercier Ythier, London: Macmillan, 78-95.

Scott, R.H. 1972. "Avarice, altruism, and second party preferences", *Quarterly Journal of Economics* 86:1-18.

Selten, R. and Ockenfels, A. 1998. "An experimental solidarity game", *Journal of Economic Behavior* and Organization 34(4), 517-539.

Singer, P. 1973. "Altruism and commerce: A defense of Titmuss against Arrow", *Philosophy and Public Affairs* 2.

Smith, A. [1778, 1759]. Year 6 of the Republic. *Théorie des Sentimens (sic) Moraux*. Translated from A. Smith, *The Theory of Moral Sentiments*, by Sophie de Grouchy de Condorcet. With *8 Lettres sur la Sympathie*, vol. II, F. Buisson, Paris.

Smith, A. 1759. The Theory of Social Sentiments. 1966, Kelly, New York.

Smith, A. 1776. *An Inquiry into the Nature and Cause of the Wealth of Nations*. 1937, Random House, New York.

Sorokin, P. A. 1954. Forms and Techniques of Altruistic and Spiritual Growth, Beacon Press, Boston.

Spash, C. 2000. "Ethical motives and charitable contributions in contingent valuation: empirical evidence from social psychology and economics". *Environmental Values*, 9: 453-79.

Steinberg, R. 1986. "Charitable giving as a mixed public/private good: implications for tax policy". *Public Finance Quarterly*, 14: 415-31.

Sugden, R. 1982. "On the economics of philanthropy". Economic Journal, 92: 341-50.

Sugden, R. 1984. "Reciprocity: the supply of public goods through voluntary contributions". *Economic Journal*, 94: 772-87.

Sugden, R. 2002. "Beyond sympathy and empathy: Adam Smith's concept of fellow feeling", *Economics and Philosophy* 18:63-88.

Titmuss, R. M. 1971. The Gift Relationship, Allen and Unwin, London.

Vickrey, W.S. 1962. "One Economist's View of Philanthropy". In: F. Dickinson (ed.), *Philanthropy and Public Policy*, National Bureau of Economic Research, New York.

Walras, L. 1865. *Les Associations populaires de consommation, de production et de crédit*, Ristampa anastatica della prima od. dol 1865, Paris, Dentu, a cura di Oscar Nuccio, Ed. Bizzarri, Roma, 1969.

Warr, P.G. 1982. "Pareto optimal redistribution and private charity", *Journal of Public Economics* 19:131-138.

Weisbrod, B.A. (Ed.). 1977. The Voluntary Non-Profit Sector. Heath, Lexington, MA, DC.

Weisbrod, B.A. 1975. "Towards a theory of the non-profit sector". In: E.S. Phelps (ed.), *Altruism*, *Morality and Economic Theory*.

Weisbrod, B.A. 1988. The Nonprofit Economy, Harvard University Press, Cambridge, MA.

Wicksteed, P.H. 1906. "Review of Professor V. Pareto Manuale di Economia Politica", *Economic Journal* 16:553-557.

Wicksteed, P.H. 1933. The Common Sense of Political Economy, Robbins Edn., London.

Wintrobe, R. 1981. "It pays to do good, but not to do more good than it pays", *Journal of Economic Behavior and Organization* 2:201-213.

Wispe, L. 1968. "Sympathy and empathy". In: D.L. Sills (ed.), *International Encyclopedia of the Social Sciences*, vol. 15, MacMillan, New York.

Woodward, R. 1984. "An empirical analysis of philanthropic motivations". Department of Economics, Middlebury.

Wright, D. 1971. The Psychology of Moral Behaviour, Pelican.

Zamagni, S., (Ed.) 1995. The Economics of Altruism, Edward Elgar, Cheltenham.