"Everybody to count for one, nobody for more than one". The Principle of Equal Consideration of Interests from Bentham to Pigou

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The paper explores the meaning of the principle of equal consideration of interests as expressed by the famous dictum that John Stuart Mill attributed to Jeremy Bentham: "everybody to count for one, nobody for more than one". It examines the contributions of these two authors and the comments by Henry Sidgwick, Stanley W. Jevons, Francis Y. Edgeworth and Arthur C. Pigou. The hedonistic and cardinalistic assumptions that these authors shared made the question of how to weigh the happiness of different individuals crucial for the application of utilitarian ethics, since the distribution of happiness and the distribution of the means of happiness were strictly related in this perspective. In particular, the hedonistic approach suggested to Edgeworth a strong argument in favour of inequality, and a comparison of his conclusions with those of his predecessors – and with those of Pigou after him – is essential to understand the limits of the egalitarian implications of utilitarian ethics.

> After all, it would be of no much use to have all babies born from good stocks, if, generation after generation, they were made to grow up into bad men and women. A world of well-born, but physically and morally perverted, adults is not attractive.
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> S. Webb, *Eugenics Review*, Nov. 1910, p. 236

In chapter 5 of *Utilitarianism*, John Stuart Mill argued that the principle of utility "is a mere form of words without rational signification, unless one person's happiness, supposed equal in degree [...], is counted for exactly as much as another's. Those conditions being supplied, Bentham's dictum, 'everybody to count for one, nobody for more than one' might be written under the principle of utility as an explanatory commentary".[144] The principle implied in this statement, often emancipated from its hedonistic attributes, is the principle of *impartiality*, or "the principle of equal consideration of interests".[145]

This paper aims at improving our understanding of the meaning and implications of this principle by studying its changing definitions from the age of Bentham to that in which the discussion on utilitarian ethics was turning the page from Henry Sidgwick's *Methods of Ethics* to George E. Moore's *Principia Ethica*, while at the same time economic debate was dominated by Francis Y. Edgeworth, Alfred Marshall and Arthur Cecil Pigou. Such a description of the chronology reveals two essential characteristics of the paper: first, it waves between the history of moral philosophy and the history of economics; and second, it considers a period in which utilitarian ethics and economics were both strictly based on hedonistic and cardinalistic assumptions.[146] The reason of this choice may be easily explained: the question of how to weigh the happiness of different individuals was crucial for both moral philosophers and economists who aimed at testing the validity of utilitarian ethics with a view to legal, political and economic

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[144] Mill 1861a, p. 257.
[145] Singer 1993, p. 21.
[146] In other words, the authors herewith examined were convinced that the "greatest happiness" or "utility principle" required to maximise the total net amount of pleasure over pain of all people (or rather sentient beings) in society, and that pleasures and pains were homogeneously measurable quantities and could be aggregated across individuals.

applications, since there are essential connections, albeit not complete overlapping, between the distribution of *happiness* and the distribution of the *means of happiness*.[147] But even the abandonment of hedonism – a question which is outside the scope of my inquiry – was the joint work of economists and philosophers, a fact which may reveal that distributive issues are at the core of utilitarian ethics.

It is my contention that the questions raised in the paper are still appealing for contemporary debate regardless of the fact that we accept or reject cardinalism and hedonism as bases for utilitarian judgments.[148]

But there is a special reason why the point of view of the authors mentioned above may regard our contemporary debate: as a matter of fact, the hedonistic approach suggested a strong argument in favour of serious limitations to the meaning and scope of the principle of equal consideration of interests, and the reasons provided to reject this argument may still be considered as valid grounds for an egalitarian interpretation of utilitarian ethics.

As for the division of the paper, section 1 examines the case for an equal consideration of interests made by Bentham, Mill and Sidgwick, while section 2 discusses Edgeworth's proposal of an inegalitarian version of utilitarianism; section 3 briefly reviews some reactions to this proposals, and the conclusions try to highlight some legacies of this evolution for contemporary debate.

1. A Question of Taste: Egalitarian Hedonism

There are reasons to trust John Stuart Mill for attributing to Bentham the "dictum" in its literal phrasing After all, the Solitary of Queen's Square Place had been responsible for a large part of Mill's intellectual education.[149] But, as shown by Crimmins,[150] the only passage in which the rule of impartiality is formulated in similar terms is in *Rationale of Judicial Evidence*, a work edited by young John Stuart under Bentham's guidance.[151] None the less, the rule as such is clearly implied in Bentham's most known formulations of the Greatest Happiness Principle.[152]

However, there is a manuscript written at the outburst of the French Revolution and partially published by Elie Halévy in 1901 under the title *Essai sur la représentation*,[153] in which Bentham discussed this topic formulating an explicit rule of equal consideration of interests.

Here Bentham, as he did elsewhere, introduces some "axioms", *i.e.* "sort[s] of rule[s], of which by certain properties, the combination of which is peculiar to it, the usefulness is pre-eminent in comparison with other rules".[154] The first of these "axioms" sounds like follows:

> I. Chacun a un droit égal à tout le bonheur dont sa nature est capable.

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[147] Sidgwick 1962, p. 417n.

[148] The most known contemporary version of cardinalist utilitarianism is that propounded by John C. Harsanyi. See especially Harsanyi (1979). However, leaving aside other essential methodological and conceptual specificities, Harsanyi's utilitarian criterion differs from classical utilitarianism on two essential points: it is rule-utilitarian rather than act-utilitarian, and it aims at maximising average rather than total utility. See also Adriani (2003). For a defence of classical hedonistic utilitarianism see Pontara (1998).

[149] A similar fate was reserved to another "dictum" quoted in his article on *Bentham* originally written in 1838: "quantity of pleasure being equal, push-pin is as good as poetry" (Mill 1838, p. 113).

[150] Crimmins, 2006.

[151] See Mill 1924, pp. 116-19.

[152] See, *e.g.*, Bentham (1789a: ch. I, pp. 1-7; ch. IV, pp. 38-40); (1814-1831: ch. I.3, pp. 131-1).

[153] Bentham 1789b.

[154] Bentham 1838-1843, p. 215. More specifically, an "axiom of mental pathology" is defined as an empirical rule concerning behaviour, whose evidence is immediate and universal: "By an axiom of mental pathology, considered as a ground for a legislative arrangement, understand a proposition expressive of the consequences in respect of pleasure or pain, or both, found by experience to result from certain sorts of occurrences, and in particular from such in which human agency bears a part: in other words, expressive of the connexion between such occurrences as are continually taking place, or liable to take place, and the pleasures and pains which are respectively the result of them" (Bentham 1838-1843, p. 224).

> Ou, pour dire la même chose en d'autres mots, et pour éviter l'obscurité qui s'attache à l'idée de droit, donné un assemblage quelconque d'hommes, un être indépendant supérieur quelconque, qui aurait assez de bonté pour s'intéresser à leur sort, pour trouver du plaisir dans l'idée de leur bien être sans avoir aucun intérêt personnel qui le porteroit à préférer quelqu'un d'entre eux à un autre, trouveroi [*sic*] naturellement un plaisir égal à contribuer au bonheur d'un quelconque entr'eux que d'un autre: le bonheur d'un quelconque entr'eux ne vaudroit pas mieux à ses yeux que le bonheur égal d'un autre quelconque: cependant un bonheur quelconque plus grand à recueillir par un quelconque entre eux vaudroit plus, à proportion de sa grandeur, qu'un bonheur moins grand à recueillir par un autre quelconque.[155]

The (qualified) use of the natural rights paradigm is quite unusual in Bentham and must be explained as a rhetorical strategy to persuade an audience that overindulged in that language. More interesting, and less isolated, is Bentham's attempt to translate these statements into utilitarian standards *via* the adoption of a Smithian "impartial spectator" or, in Bentham's terminology, "observant bystander".[156] As Mill[157] and Sidgwick[158] later explained, the existence of moral sentiments – even in the more universal and reflexive version attributed to an ideal sympathetic spectator – is not a sufficient "proof" of the ethical principles incorporated in these sentiments.[159] There is no reason to believe that Bentham was endeavouring to provide a meta-ethical foundation of moral judgments. More probably, this was a further metaphorical expedient meant to stress the "axiomatic" or universal normative status of the principle of equal consideration of interests and its connection with the felicific calculus.

More specifically, the passage quoted above stresses two important points:

1. impartiality must be intended as anonymity or impersonality:[160] in evaluating the happiness of different individuals it is not morally significant *whose* this happiness is; in other words, if it belongs to this or that individual;[161]

2. impartiality also implies equal weight[162] or equiproportionality: to equal needs or happiness equal consideration, to quantitatively different needs or happiness equiproportional consideration.

The importance of this distinction is immediately revealed by Bentham's second "axiom". It is evident that a random inequality in *particular* states of happiness or unhappiness may depend on special external circumstances. To give an example, unequal thirst may depend on the actual

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[155] Bentham 1879b, p. 315. Translation: "Every man has an equal right to all the happiness that his nature is capable of.

Or to say the same thing in other words and to evade the obscurity which is attached to the idea of right: given any assemblage of men, any independent superior being who is benevolent enough to interest himself in their condition, and to find pleasure in the idea of their well-being without having any personal interest which would lead him to prefer one among them to another, will naturally find an equal pleasure in contributing to the happiness of any one among them as well as another. The happiness of any of them has no more value in his eyes than the equal happiness of any other. Nevertheless, any greater happiness obtained by any one among them has more value, in proportion to its quantity, than a lesser happiness obtained by another". This and the following translations are based on Mack (1962, pp. 448-53) but modified where there was room for some improvement. The quoted passage is on p. 449.

[156] Bentham 1814-1831, p. 151n.

[157] Mill 1861a, p. 249.

[158] Sigwick 1962, pp. 463-4.

[159] See Skorupski 1989, p. 285ff.

[160] Harsanyi 1977, p. 48.

[161] There is an obvious connection between anonymity and agent-neutrality, *i.e.* "the principle that a person's good is, as it might be put, *agent-neutrally* good: that there is reason for everyone to promote it whether or not it is part of *their* good" (Skorupski 1989, p. 309). As Mill states in chapter 2 of *Utilitarianism*, " [...] the happiness which forms the utilitarian standard of what is right in conduct, is not the agent's own happiness, but that of all concerned. As between his own happiness and that of others, utilitarianism requires him to be as strictly impartial as a disinterested and benevolent spectator" Mill equates impartiality as agent-neutrality to "the golden rule of Jesus of Nazareth" (Mill 1861a, p. 218).

[162] *Ibid.*

(temporary or permanent) condition of different individuals on earth. In this case the utility principle, as specified by the impartiality rule, prescribes to give priority to those who are more thirsty. But what if there is a *general* inequality in individual capacities for pleasure? Bentham's answer to this question is the following:

> II. Faute de pouvoir déterminer le degré relatif de bonheur dont differens individus sont susceptibles, il faut partir de la supposition que ce degré est le même pour tous. Cette supposition, si elle n'est pas exactement vraie, approchera au moins autant de la vérité, que toute autre supposition générale que l'on pourroit mettre à sa place.[163]

The interpretation of this rule requires a preliminary explanation. Since according to the Greatest Happiness Principle a moral act is the one which maximises the happiness of all concerned sentient beings, the *normative* validity of the impartiality principle depends upon the truth of a *descriptive* statement about the capacity for pleasure of different individuals. This being granted, Bentham seems intentioned to ground the equal consideration of interests on a double assumption:

1. it is difficult, if not impossible, to prove by consistent empirical evidence that different individuals or classes of individuals have unequal capacities for pleasure;
2. (Occam's razor): the supposition of equal capacity for pleasure is the simplest one and the best approximation to reality.[164]

The second argument contains a clue to explaining Bentham's crucial assumption on the equality of capacities. There is more than scepticism or pragmatism in it. In the manuscripts on the felicific calculus of the early 1780s partially published by Halévy,[165] then integrally transcribed by David Baumgardt,[166] and later in the chapter on "Circumstances influencing sensibility" of *An Introduction to the Principles of Morals and Legislation*,[167] Bentham underscores how different contexts affect the way in which individuals react to pleasures and pains of different kinds. This implies that some individuals are more sensible to pleasures and pains of certain qualities and others to pleasures and pains of other qualities.[168] Applying Bentham's theory of "dimensions", this means that the intensity of pleasures and pains of different kinds varies from individual to individual, a notion that modern economics describes as subjectivity of tastes or heterogeneity of preferences. It is known that Bentham was acquainted with probability calculus but even though he did not express his contention employing the "Law of large numbers", he considered that the best approximation to truth was to assume that sum for sum interpersonal qualitative differences balance out, so that the average intensity tends to be the same for all individuals. Therefore,

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[163] Bentham 1789b, p. 315. Translation: "Lacking the power to determine the relative degree of happiness that different individuals are susceptible of, it is necessary to start with the assumption that the degree is the same for all. This assumption, if it is not exactly true, will more nearly approach the truth than any other general supposition which can be put in its place" (Mack 1962, p. 449).

[164] This second element is made clearer in a second formulation of the same axiom that is provided some lines below: "Chacun a un désir égal de bonheur: ou, bien qu'il se trouve à cet égard quelques différences, ces différences n'étant susceptibles d'aucune preuve ou mesure, ne sauroient se mettre en ligne de compte: et en tout cas, cette proposition générale se trouve plus approchante de la vérité qu'aucune autre que l'on pourroit mettre à sa place" (Bentham 1789b : 316). Translation: "Each has an equal desire of happiness. Or, although some differences were found in this respect, these differences, not being susceptible of any proof or measure [...] [cannot be drawn up in an account]. In any case, this general proposition is found approaching closer to the truth than any other which can be put in its place" (Mack 1962, p. 450).

[165] Halévy [1901-1903] 1995, I, p. 300-8.

[166] David Baumgardt 1952, p. 554-66. The manuscripts transcribed by Halévy and Baumgardt are in University College, London, *Bentham Papers* (hereinafter U.C.) XXVII, pp. 29-40. Douglas Long (1995) has demonstrated that they belong to an early unpublished work on 'Critical Jurisprudence' composed before IPML.

[167] Bentham 1789a, pp. 51-2.

[168] See Bentham (1814-1831, p. 130): "Quantity depends upon *general* sensibility, sensibility to pleasure and pain in general; quality upon *particular* sensibility: upon a man's being more sensible to pleasure or pain from this or that source, than to ditto from this or that other".

Bentham's argument in favour of equality of capacities was based in the last resort on the hypothesis of indefinitely variable tastes.

Not only did Bentham consider it difficult to prove and measure interpersonal differences in the "desire of happiness", but he also based this view on the more radical complexity of understanding what is conducive to the well-being of different persons. In *Deontology* this point is stressed at length: while one's own sensibility to diverse species of pleasure and pain can be known by introspection,[169] at an interpersonal level there is no direct evidence of the quality of sensibility: there are only indirect signals offered by "countenance, gesture, deportment, contemporary conduct", and, to a lesser but more deceiving extent, by "verbal account".[170] No exact conclusion on one's pleasure can be drawn by analogy with what is pleasant to the observer, and no judgement on the propriety of another's acts can be inferred from the psychological or preferential structure of the spectator.[171] Thus Bentham is led to conclude that "every man is a better judge of what is conducive to his own well-being than any other man can be",[172] and also "the only proper judge".[173]

This might sound as a declaration of faith in ordinal utility, except that Bentham always insisted on the feasibility of hedonistic arithmetic. But a limitation did he introduce, and this was not dissimilar from what Mill would later affirm in *On Liberty*:[174] it was an "absurdity", claimed Bentham, "'[...] in a case in which the agent himself were the only person whose well-being were in question, [... to] prescribe exactly the same line of conduct to be observed by every man".[175] The felicific calculus should only be applied to "extra-regarding" matters, where it was necessary to solve essential social problems.

This might adumbrate another practical reason for assuming equal capacities for pleasure: variability of tastes being given and impenetrable, assuming equality in this domain was the most straightforward way of reconciling utility with justice: every distribution of means should be made *as if* it affected every individual's happiness in the same way. The burden of proof was then shifted on those who wanted to suggest another criterion. This point is clearly stated in a passage of the *Principles of the Civil Code*:

> *General observation.* – When the effect of a portion of wealth upon happiness is spoken of, it is always without reference to the sensibility of the particular individual, and the exterior circumstances, in which he may be placed. Difference of character is inscrutable; and there are no two individuals whose circumstances are alike. If these two considerations were not laid on one side, it would be impossible to form a single general proposition: but though each of these propositions may be found false or inexact in each particular case, it will neither militate against their speculative correctness, nor their practical utility. It is sufficient, – *1ˢᵗ*, If they approach more nearly to the truth than any others which can be substituted for them; and, *2ⁿᵈˡʸ*, If they may be employed by the legislator, as the foundation of his labours, with less inconvenience than any others.[176]

To sum up, we are left with three arguments in favour of equal consideration of interests:
1. difficulty of ascertaining hedonic differences;
2. simplicity and approximation to truth;
3. feasibility and practical necessity of felicific calculus.

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[169] "[...] it may be known by the most impressive and infallible of all direct evidence, the evidence of a man's own senses" (Bentham 1814-1831, p. 130).
[170] Bentham 1814-1831, p. 130.
[171] *Ibid.*, pp. 150-1. This might sound as a criticism of Smith's mechanism of interpersonal knowledge based on sympathy.
[172] *Ibid.*, p. 131.
[173] *Ibid.*, p. 150.
[174] Mill, *On Liberty* (1859).
[175] *Ibid.*, p. 131.
[176] Bentham 1801, p. 305.

Moreover, as the last quotation reveals, there is an evident connection between equal consideration of happiness and the distribution of the means of happiness. This connection is already intimated in *Essai sur la représentation*. Here Bentham discusses three typical problems that were at the core of the utilitarian debate for the two centuries to come: 1. how to evaluate alternative distributions yielding the same total utility; 2. the optimum population according to utilitarian ethics;[177] and 3. the relationship between decreasing marginal utility and distributive equality.[178]

These questions are also discussed in chapter six of *Principles of the Civil Code*, devoted to "Propositions of pathology upon which the advantage of equality is founded", and in a later text entitled *Pannomial Fragments*.[179] Using a language that was not Bentham's, his arguments in favour of equality might be expressed as follows:

1. preferences are continuous: "Each portion of wealth is connected with a corresponding portion of happiness".[180]
2. preferences are additive or monotonic, and interpersonally comparable: "Of two individuals, possessed of unequal fortunes, he who possesses the greatest wealth will possess the greatest happiness".[181]
3. utility is decreasing at the margin: "The excess of happiness on the part of the most wealthy will not be so great as the excess of his wealth".[182]
4. maximum total utility corresponds to perfect equality of distribution: "The more nearly the actual proportion approaches to equality, the greater will be the total mass of happiness".[183]

However, there is an important difference between the case in which equal distribution is spontaneously attained and another in which artificial re-distributions are performed. Dealing with the latter case, Bentham starts considering the case of equal fortunes: in such a situation, the distribution that leaves the *status quo* unchanged is the one which maximises happiness. This in turn depends on three distinct axioms, which could be formulated as follows:

5. given decreasing marginal utility, modifying an equal distribution diminishes total utility. This fact is simply due to the slope of the utility curve: "The sum lost, bearing a greater proportion to the reduced fortune than to the increased fortune, the diminution of happiness for the one will be greater than the increase of happiness to the other".[184]

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[177] The example made by Bentham is the following: ten units of pleasure distributed over ten individuals are equal to the same ten units divided between five individuals: "autant vaudroit prendre le sort pour arbitre, que de décider de toute autre manière" (Bentham 1789b, p. 316). Translation: "It is as valuable to take chance as an arbiter, as to decide in any other way" (Mack 1962, p. 450). We see how the elements of the so-called "repugnant conclusion" are already implicit in this reasoning.

[178] "Mais, dans la production de bonheur, de quelle cause qu'il s'agisse (*sic*), la quantité de l'effet n'est guère proportionnelle à celle de la cause: une quantité double de la cause de bonheur ne produira pas une quantité double de bonheur, mais beaucoup moins" (*Ibid.*). Translation : "But in the production of happiness, whatever is the cause in question, the quantity of the effect is never proportional to the cause: a double quantity of the cause of happiness will not produce a double quantity of happiness, but much less".

[179] Bentham 1838-1843. On these aspects of Bentham's thought see Parekh (1970), Griffin-Collart (1974, pp. 44-92) and Kelly (1990).

[180] Bentham 1801, p. 305.

[181] *Ibid.*

[182] *Ibid.* See also Bentham 1838-1843, pp. 228-9.

[183] *Ibid.* Interestingly, Bentham remarks that these propositions should be intended in probabilistic terms. For example: "We have said, each portion of wealth is connected with a corresponding portion of happiness: strictly speaking, it should have been, has a certain chance of being so connected. The efficacy of any cause of happiness is always precarious; in other words, a cause of happiness may not produce its ordinary effect; nor the same effect upon every individual. It is here that it is necessary to apply what has been said with respect to particular sensibility and character, and the variety of circumstances in which they may be found" (Bentham 1801, p. 305). The last part of this quotation strengthens my interpretation that Bentham had a probabilistic view of the idea that interpersonal qualitative differences in intensity balance out.

[184] *Ibid.*, p. 307.

6. a distinct pain of disappointment is added to the direct loss of happiness: "The loser experiences the pain of disappointed expectation: the other is simply in the condition of not having gained. But the negative evil of not having gained, is not equal to the positive evil of having lost".[185]

7. finally, for equal amounts, sensibility to pain is higher than sensibility to pleasure: "Mankind in general appear to be more sensible of grief than pleasure from an equal cause. For example a loss which would diminish the fortune of an individual by one quarter, would take more from his happiness than would probably be added by a gain which should double it".[186]

The case of unequal distribution – if the loser is the richer – is obviously more controversial since the positive effects on total utility generated by re-distribution may compensate or not the pain of disappointment connected to the loss of wealth.[187] Moreover, two additional evils, defined "of second" and "third order", regularly add themselves to the pain of disappointment: the "fear of loss" (elsewhere called "alarm"), and the "destruction of industry",[188] *i.e.* the negative incentive on laboriousness and entrepreneurship generated by fear. These are the reasons why security of person and property has a priority over equality as a "subordinate end of government" in Bentham's thought.[189]

Since a state of perfect equality cannot be attained, Bentham claims that the goal of government should be a society "in which, while the fortune of the richest – of him whose situation is at the top of the scale, is greatest, the degrees between the fortune of the least rich and that of the most rich are most numerous, – in other words, the gradation is most regular and insensible".[190] In such a situation, if some redistributions of wealth are required by extraordinary circumstances, the relatively high income of a large middle class affords a substantial reserve from which resources can be drawn, and at the same time there are less poor families to be

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[185] *Ibid.*

[186] *Ibid.* It may be noticed that this third axiom is dropped in *Pannomial Fragment* and in other formulations of the "axioms of mental pathology" (see Bentham 1838-1843, pp. 229-30). An explanation might be that this seem an *ad hoc* hypothesis difficult to justify with empirical evidence. Another explanation is that Bentham wants to avoid the pessimistic conclusions that are connected to such an asymmetry. This is made clear by a footnote immediately following the last quotation: "It does not follow that the sum of evil is greater than that of good. Not only is evil more rare, but it is accidental: it does not arise, like good, from constant and necessary causes. Up to a certain point, also, it is in our power to repulse evil from, and attract good to, ourselves. There is also in human nature a feeling of confidence in happiness, which prevails over the fear of its loss: this is evidenced by the success of lotteries" (Bentham 1801, p. 307n.).

[187] *Ibid.* It is interesting to observe that the whole reasoning rests upon a rigorous theory of value based on *subjective* utility that is at odds with Smith's and Ricardo's labour approach. This theory is explicitly stated in the *Pannomial fragments*, where Bentham, after repeating Smith's distinction between use "value in the way of *exchange*" (also called "general value") and "value in the way of *use*" (also defined "special, or say idiosyncratical" value) (Bentham 1838-1843, p. 226), not only ground value on utility ("Note, that the value of the thing in the way of exchange arises out of, and depends altogether upon, and is proportioned to, its value in the way of use", *Ibid.*), but also specifies that he is referring to a subjective notion of utility ("Be the modification of the matter of prosperity what it may, by losing it without an equivalent, a man suffers according to, and in proportion to, the value of it *in his estimation – the value by him put upon it*", *Ibid.* our italics). This is consistent with is assumption that individuals are the only judges of the preferences they have (consumer's sovereignty). Significantly, in this context subjectivity is connected to an implicit Marshallian notion of "consumer's rent" based on disposition to pay, expressed in the traditional way of a distinction between average price and individual surplus price: "But value in the way of use may be distinguished into *general*, which has place so far as, and no further than, the thing is of use to persons in general – and *special* or idiosyncratical, which has place insofar as, in the case of this or that person in particular, the thing has a value in the way of use over and above the value which it has in the case of persons in general: of which use, that of the *pretium affectionis*, the *value of affection*, is an example" (*Ibid.*).

[188] *Ibid.*, p. 310.

[189] *Ibid.*, pp. 307-8; Bentham 1838-1843, pp. 225-7. These limitations are underscored by Sidgwick, who argues that distributive equality would be "fatal to the other factor of the utilitarian end, quantity of wealth". See Edgeworth (1891b, p. 17).

[190] Bentham 1838-1843, p. 230.

nourished.[191] We see that, applying the felicific calculus to equality, Bentham comes close to a rigorous mathematical measure of inequality.

To conclude with, Bentham distinguishes between equal consideration of happiness and equality of the means of happiness, but it is important to remember that the utilitarian *ceteris paribus* case for distributive equality entirely relies on the assumption of equal capacity for happiness. Only under this assumption, equality maximises happiness. Indeed, the case of unequal distribution of wealth is a clear example of the property of equiprotionality, as in this case the needs of the relatively poor count proportionally *more* than those of the relatively rich.

But distributive equality is just one of the inferences derived from the principle of equal consideration of interests. In *Essai sur la représentation* Bentham deals with the problem of the extent of suffrage. In Bentham's own words:

> Ainsi, dût-il ne s'agir que de s'en rapporter au degré de désir, si la capacité de juger de la tendance d'une opération d'ajouter au bonheur étoit dans tous égale à leur désir, la question de la meilleure forme de gouvernement serait une affaire bien simple. Il ne s'agiroit que de donner [...] à chaque individu de cette société un vote.[192]

The rest of the essay discusses the limitations to this rule concerning minors, the insane and, though with some hesitation, women.[193] But limitations concern the capacity *to judge about* one's own happiness, not the capacity for happiness, which by assumption is the same in all. Therefore, exceptions excepted, the rule to give to every person one vote derives from the assumption of (probabilistic) equal sensibility to pleasure and pain.

Such an enlarged view of the principle of impartiality is also revealed by Bentham's doctrine of the "subordinate ends of legislation", *i.e.*, security, subsistence, abundance and equality.[194] Bentham remarks that there are many objects of distributive justice, including not only the matter of wealth, but also power, reputation, and condition in life.[195] Additionally, he bases the axioms concerning the most important end of government, security, on the properties of anonymity and equiproportionality. Most of the hedonistic asymmetries introduced to this effect[196] – some of which actually amount to *ad hoc* assumptions – are indeed required to establish a just proportion between punishment and offence. The general rule to which this matter must be subjected is the following:

> For justification of the legislative arrangements necessary to afford security against maleficent acts affecting the person, what it is necessary to show is, that by them pain will not be produced in such quantity as will cause it to outweigh the pleasure that would have been produced by the maleficent acts so prevented.[197]

Bentham, with Beccaria in mind, is here fixing a principle similar to what Gary Becker later put at the centre of his economic theory of punishment: from the point of view of social welfare, "'[o]ptimal' decisions are interpreted to mean decisions that minimize the social loss in

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[191] Here, however, the goal of redistributive policies is subsistence – another of Bentham's "subordinate ends of government – rather than equality".

[192] Bentham 1879b, p. 316. Translation: "Thus, were it only a question of the degree of desire and if the capacity of judging the tendency of an addition to happiness were in all men equal to their desire, the question of the best form of government would be a very simple affair. It would only be a matter of giving each individual in this society a vote" (Mack 1962, p. 450).

[193] See Campos Boralevi (1984), ch. 2.

[194] As it is known, they are subordinate *vis-à-vis* the general end, the greatest happiness of all.

[195] Bentham 1838-1843, p. 225.

[196] They concern, for example, the difference between pains of disappointment and of personal physical and mental sufferings, pains connected to reputation and condition in life, on one hand, and pleasures of acquisition, of antipathy or revenge, of sexual satisfaction, etc., on the other (Bentham 1838-1843, p. 226).

[197] *Ibid.*, p. 226.

income from offenses. This loss is the sum of damages, costs of apprehension and conviction, and costs of carrying out the punishments imposed".[198]

The axioms concerning security raise a final question concerning Bentham's approach to impartiality. If the asymmetries between certain kinds of pleasure were universal, then it could happen that some groups of population (the criminals in particular) are less capable of pleasure than others. Consider the case of a sexual maniac who takes pleasure exclusively from harassing and raping women. If Bentham's axioms are statements about facts, this implies that a maniac is constitutionally less capable of pleasure than "ordinary" people. A possible explanation is that since sexual mania is a form of insanity, if an individual affected by it could be cured, he would enjoy a happier life than at present. However the same cannot be said of any kind of criminal acts, most of which are deliberately carried out by perfectly rational persons and occupy a primary place in their life. Therefore, while, as stated above, ordinary subjective differences in sensibility to certain types of pleasures and pains compensate themselves overall, producing an equal capability of happiness, some types of pleasure are axiomatically inferior, and those who systematically cultivate them are *de facto* less capable of happiness than others. Bentham seems to realise that this assumption is problematic, as he immediately adds that it is not necessary to postulate unequal sensibilities: rather, "in order to complete the proof, and render it objection-proof, in certain cases, it will be necessary to take into account not only the evil of the first order, but the evil of the second and likewise".[199] But so far as some axioms postulate a general difference of intensity, the contradiction cannot be eliminated. The only possible explanation is that these axioms are implicitly normative and postulate that social and semi-social ways of life should count more from an utilitarian point of view than anti-social ones. There are some similarities between this interpretation and the way in which Harsanyi (1986) excludes anti-social preferences from his social welfare function.

Let us now turn to John Stuart Mill. His analysis of the rule of impartiality is developed in a chapter of *Utilitarianism* devoted to the "Connection between Justice and Utility". Differently from Bentham, who insists that the only clear definition of rights, and correspondingly of justice, is the legal one,[200] Mill tries to provide a more general definition consistent with utilitarian ethics. Mill moves from the question of what distinguishes justice from other provinces of morality, and the answer is provided by adopting the scholastic distinction between perfect and imperfect rights.[201] Both are *moral* rights, but the former refer to assignable persons to which a definite action is due, whereas the latter are not exactly defined in terms of persons concerned and time of execution. Therefore "the idea of justice supposes two things; a rule of conduct, and a sentiment which sanctions the rule [...] There is involved, in addition, the conception of some definite person who suffers by the infringement; whose rights [...] are violated by it".[202]

But a consistent justification of the moral duty of justice is only provided by the Greatest Happiness Principle. "To have a right, then, is, I conceive, to have something which society

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[198] Becker 1968, p. 207.

[199] *Ibid.*

[200] See for example the following passages: "What is true is, that from the beginning of things it has always been desirable that rights should exist – and *that* because they do not exist; since, so long as there are no rights, there can only be misery upon the earth – no sources of political happiness, no security for person, for abundance, for subsistence, for equality" (Bentham 1838-1843, p. 219). And again: "Rights are, then, the fruits of the law, and of the law alone. There are no rights without law – no rights contrary to the law – no rights anterior to the law. Before the existence of laws there may be reasons for wishing that there were laws – and doubtless such reasons cannot be wanting, and those of the strongest kind; - but a reason for wishing that we possessed a law, does not constitute a right. To confound the existence of a reason for wishing that we possessed a right, with the existence of the right itself, is to confound the existence of a want with the means of relieving it. It is the same as if one should say, *everybody is subject to hunger, therefore everybody has something to eat*" (*Ibid.*, p. 221).

[201] Donner 1991.

[202] Mill 1861a, p. 249-50.

ought to defend me in the possession of. If the objector goes on to ask, why it ought? I can give him no other reason than general utility".[203] However, from an utilitarian point of view, justice is by far the principal part of morality:

> While I dispute the pretensions of any theory which sets up an imaginary standard of justice not grounded on utility, I account the justice which is grounded on utility to be the chief part, and incomparably the most sacred and binding part, of all morality. Justice is a name for certain classes of moral rules, which concern the essentials of human well-being more nearly, and are therefore of more absolute obligation, than any other rules for the guidance of life.[204]

Then Mill proceeds to prove that all definitions of justice that had been given up to then – justice as legal right, moral right, desert, impartiality, equality – can only be made consistent by applying the utilitarian standard. As to impartiality, arguing that it is insufficient to definite justice, Mill remarks that it is not independent but instrumental to other, more fundamental duties,[205] and that there are cases in which it is right to violate it. "Impartiality, in short, as an obligation of justice, may be said to mean, being exclusively influenced by the considerations which it is supposed ought to influence the particular case in hand; and resisting the solicitation of any motives which prompt to conduct different from what those considerations would dictate".[206] When he comes to define impartiality in terms of utility, however, Mill proceeds in a sort of *crescendo*, arguing first that it is *instrumental* to other duties – such as to protect an individual against "wrongful aggression" and "wrongfully withholding from him something which is his due", or to do to each according to his or her desert[207] – then that it is a *corollary* to the more fundamental rules of justice, and finally that it is "the *highest abstract standard* of social and distributive justice" (ibid.: 257, our italics). So far, impartiality is an attribute of that province of morality that Mill defines as justice.

Following an ascending line, however, Mill then adds that "this great moral duty rests upon a still deeper foundation, being a direct emanation from the first principle of morals, and not a mere logical corollary from secondary or derivative doctrines. It is involved in the very meaning of Utility, or the Greatest Happiness Principle".[208] This implies that impartiality becomes a rule of *morality* in general, applied to duties of both perfect and imperfect obligation: every application of the Utility Principle must then be submitted to it.

> It is at this point that appears the passage quoted at the beginning of this paper:
> That principle is a mere form of words without rational signification, unless one person's happiness, supposed equal in degree (with the proper allowance made for kind), is counted for exactly as much as another's.[209]

With one notable exception, this definition reminds that of Bentham:

1. the argument that "*one person's* happiness [...] is counted for exactly as much as *another's*" expresses the property of anonymity. This property is considered by Mill, who quotes Kant (Mill 1861a: 249), a prerequisite of the universal character of a moral rule.

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[203] *Ibid.*, p. 250.
[204] *Ibid.*, p. 255.
[205] See Crisp 1997, p. 161.
[206] *Ibid.*, p. 243.
[207] "If it is a duty to do to each according to his deserts, returning good for good as well as repressing evil by evil, it necessarily follows that we should treat all equally well (when no higher duty forbids) who have deserved equally well of us, and that society should treat all equally well who have deserved equally well of it, that is, who have deserved equally well absolutely" (Mill 1861a, p. 257).
[208] *Ibid.*
[209] *Ibid.*

2. The proviso 'supposed equal in degree' introduces the characteristic of equiproportionality.

3. Only the third element is absent in Bentham: Mill adds that "proper allowance" must be made also "for kind". This introduces into the definition of equal consideration of interests Mill's distinction between pleasures of different qualities. Consideration of this distinction implies that between equal pleasures the rule of consideration is equality, whereas between pleasures of different quality a rule of hierarchy must be imposed. It may be observed that in Mill's careful definition the "proper allowance made for kind" is a specification of the rule of equiproportionality, stipulating that where there are qualitative discontinuities, the proportion between the quantitative *intensity* of pleasures is no longer a valid criterion of assessment.

The problems raised by Mill's qualitative approach to pleasures and pains have recently been the subject of a lively debate.[210] As known, the question is discussed in chapter 2 of *Utilitarianism*, where Mill maintains that: "It is quite compatible with the principle of utility to recognise the fact, that some kinds of pleasure are more desirable and more valuable than others".[211] Among these pleasures, Mill mentions "the pleasures of the intellect, of the feelings and imagination, and of the moral sentiments".[212] The following is the explanation of what constitutes a superior pleasure according to Mill:

> If I am asked, what I mean by difference of quality in pleasures, or what makes one pleasure more valuable than another, merely as a pleasure, except its being greater in amount, there is but one possible answer. Of two pleasures, if there be one to which all or almost all who have experience of both give a decided preference, irrespective of any feeling of moral obligation to prefer it, that is the more desirable pleasure. If one of the two is, by those who are competently acquainted with both, placed so far above the other that they prefer it, even though knowing it to be attended with a greater amount of discontent, and would not resign it for any quantity of the other pleasure which their nature is capable of, we are justified in ascribing to the preferred enjoyment a superiority in quality, so far outweighing quantity as to render it, in comparison, of small account.[213]

The competent judges of the value of these "superiorities" are those who have experienced both kinds of pleasures.[214]

It is known that Mill did not identify those who are able to enjoy superior pleasures with a privileged elite, and his social and political vision aimed at promoting the self-development of humanity throughout society by means of popular education[215] and liberal-democratic institutions.[216] Nevertheless, if we take the principle of equal consideration from a static point of view, the quality-quantity distinction leaves only the property of anonymity untouched. Other things being equal, those who enjoy higher pleasures must be more considered by the utilitarian spectator. But the question is just how far other things may be equal, at least if we take the standard interpretation that higher pleasures are *incommensurably* superior to lower pleasures: from relative, the preference for those who feel higher pleasures becomes then absolute. Mill never falls in such a pitfall, and it would be an error to see the contemporary proposal of plural vote, advanced in *Considerations on Representative Government*,[217] as an application of an elitist conception.

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[210] See Donner (1991); Long (1992); Riley (1993); Scarre (1997); Riley (1999); Ryberg (2002); Rabinowicz (2003); Arrhenius and Rabinowicz (2005); Jensen (2006).

[211] Mill 1861a, p. 211.

[212] *Ibid.*

[213] *Ibid.*

[214] *Ibid.*

[215] See Mill 1848, IV.iv.

[216] See Mill 1861b.

[217] See Mill 1861b, ch. 8.

But the question of the theoretical consistency between impartiality and "Millian superiorities" still remains unsettled.

Moreover, like Bentham, Mill insists that the principle of impartiality, restated in utilitarian terms, necessarily implies "an equal claim to all the means of happiness, except in so far as the inevitable conditions of human life, and the general interest, in which that of every individual is included, set limits to the maxim; and those limits ought to be strictly construed".[218] Strangely enough, however, Mill reverts to define this "claim" as a "maxim of justice", instead of considering it, as Bentham had done, a more general "subordinate end" applicable to all branches of utilitarian morality, including beneficence and welfare policies. This however is the only passage in which Mill discusses the connection between equal consideration and substantive equality. In *Utilitarianism* there is no extended analysis of the relationship between the Greatest Happiness Principle and equality that may be compared to the one Bentham had developed.[219] Conversely, both authors stress in similar ways the limitations that the security of person and property sets to the applicability of redistributive actions.

A final question discussed by Mill is whether the principle of equal consideration of interests represents an independent moral rule or, as he expresses himself, an "explanatory commentary" to the Greatest Happiness Principle. In a footnote he criticises Spencer for having argued that the Utility Principle is an insufficient foundation of morality since it presupposes the anterior norm "that everybody has an equal right to happiness". Mill objects that impartiality is implicit in the Greatest Happiness Principle, and consequently the rule is one:[220]

> It may be more correctly described as supposing that equal amounts of happiness are equally desirable, whether felt by the same or by different persons. This, however, is not a presupposition; not a premise needful to support the principle of utility, but the very principle itself; for what is the principle of utility, if it be not that "happiness" and "desirable" are synonymous terms?[221]

It is worth observing, in the light of what will follow, that the pseudo-Benthamite dictum "everybody to count for one, nobody for more than one" is equivalent for Mill to the statement that "equal amounts of happiness are equally desirable", independently from their actual carriers. A limit of Mill's analysis compared to Bentham is that he does not take a clear stand on the question whether there exist different capacities for pleasure. But there are no reasons to think that he agreed with such a supposition. Nevertheless, a clear statement in favour of equal capacities would have helped, since assuming Mill's qualitative approach this kind of inequalities cannot be *a priori* discarded. What is less clear, in this case, is how far the principle that everybody should count for one can be entirely deduced from the principle of utility instead of representing an independent (or additional) normative assumption stipulating that, whatever differences in capacity may arise, they *must not* be taken into account.

The nature of the principle of impartiality is also examined in book 4, chapter 1 of Henry Sidgwick's *Methods of Ethics* (1st edition 1874)[222], which is considered the most sophisticated systematisation of classical hedonistic utilitarianism. After defining utilitarian ethics as "universalistic hedonism", and distinguishing it from "egoistic hedonism", Sidgwick discusses two classical questions raised by the Greatest Happiness Principle. The first is the question of

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[218] Mill 1861a, p. 258.
[219] Griffin-Collart 1974, p. 137-40.
[220] This point is stressed by Dryer (1969, xciv-xcv).
[221] Mill 1861a, p. 258n.
[222] We will quote here from the 7th edition of 1962, which is identical to the 6th edition, the last published by the author.

optimum population. Avoiding the problem of the so-called "repugnant conclusion",[223] Sidgwick argues that: "Assuming then, that the average happiness of human beings is a positive quantity, it seems clear that, supposing the average happiness enjoyed remains undiminished, Utilitarianism directs us to make the number enjoying it as great as possible".[224]

Then Sidgwick discusses the question of the 'distribution of happiness", distinguishing it, as mentioned above, from the distribution of the "means of happiness". His interpretation recalls Spencer's argument criticised by Mill: instead of considering the principle of equal consideration of interests as a consequence of the Utility Principle, Sidgwick sees it as one of its limitations. "It is evident", he says, "that there may be many different ways of distributing the same quantum of happiness among the same number of persons".[225] And such a case is not infrequent because – as Sidgwick argues in book 2, chapters 2 and 3 – it is often impossible to measure happiness in an exact way and we use approximations in which small differences fade away. Formulated in this way, the question cannot be answered from within the utilitarian principle, which only prescribes to maximise total utility independently of its distribution. Then Sidgwick concludes that "at least we have to supplement the principle of seeking the greatest happiness on the whole by some principle of Just or Right distribution of this happiness".[226] But what principle should be adopted? Sidgwick answers as follows:

> The principle which most Utilitarians have either tacitly or expressly adopted is that of pure equality – as given in Bentham's formula, "everybody to count for one, and nobody for more than one". And this principle seems the only one which does not need a special justification; for, as we saw, it must be reasonable to treat any one man in the same way as any other, if there be no reason apparent for treating him differently.[227]

Here Sidgwick relies on the simplicity argument already adopted by Bentham. In his case, however, it is not the factual statement about the equal capacity for pleasure that is concerned, but the normative principle of the equal consideration of interests as such. To the question whether there are two principles or only one, Sidgwick answers then in favour of the first alternative, thus advocating a sort of "extended utilitarianism".[228]

However, in chapter 3 Sidgwick provides a less clear-cut account of the principle of impartiality. The problem considered here is that of the "distribution of beneficence". Sidgwick reacts to Grote's (1870) critique of the Utility Principle, charged of "rigid impartiality" for equating the duty of assisting friends and relatives to that of relieving a stranger.[229] According to Sidgwick, there is an essential distinction between the "ultimate end" and the "the rules of conduct by which this end will be attained": the latter may prescribe in some cases an unequal treatment of different persons. But what interests us is the definition of the rule of impartiality that follows:

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[223] Parfit 1984.

[224] Sidgwick 1962, p. 415. More precisely the rule to apply is the following: "So that, strictly conceived, the point up to which, on Utilitarian principles, population ought to be encouraged to increase, is not that at which average happiness is the greatest possible, – as appears to be often assumed by political economists of the school of Malthus – but that at which the product formed by multiplying the number of persons living into the amount of average happiness reaches its maximum" (Sidgwick 1962, pp. 415-16). See Edgeworth (1891b, pp. 18-19) for a sympathetic comment to this doctrine.

[225] *Ibid.*, p. 416.

[226] *Ibid.*, pp. 416-17. This point of view is shared by Crisp (1997, pp. 167-71), who argues that the Utility Principle should be integrated by a principle of fairness.

[227] *Ibid.*, p. 417.

[228] Brandt 1959, pp. 403-5 and 429-31; Hospers 1951, pp. 426-9; Raphael 1981, pp. 47-56.

[229] On the problem of integrity and the separateness of persons implied in this objection see Crisp (1997, ch. 6).

[...] Bentham's dictum may be understood merely as making the conception of the ultimate end precise – laying down that one person's happiness is to be counted for as much as another's (supposed equal in degree) *as an element of the general happiness* – not as directly prescribing the rules of conduct by which this end will be attained.[230]

This definition, besides containing the properties of anonymity and equiproportionality, subordinates the principle of impartiality to the Utility Principle. However, subordinating does not imply establishing an identity between the two principles, and Sidgwick does not say how such a subordination should be established or, in other words, what is the rule that connects the two principles in an unequivocal way.[231]

Moreover, it is reasonable to contend that this conclusion strictly depends on the peculiar way in which Sidgwick formulates the question. And this formulation reveals how difficult it is, from an utilitarian point of view, to keep the analysis of the distribution of happiness separated from that of the means of happiness. Let us start from Sidgwick's case: the total amount of happiness is given and can be distributed in different ways, and that the number of individuals is fixed. Let us also assume that the capacity for pleasure is equal in all persons.[232] Finally, the Greatest Happiness Principle is the principle we adopt to guide our actions. Under these assumptions, only the amounts of total utility which maximise it are significant. Let us consider one of these amounts: this was generated by a redistribution of the means of happiness with a view to maximising utility. If the means were equally distributed, the degrees of happiness were already equal and no redistribution was required. If they were unequally distributed, the degrees of happiness were also unequal ad the redistribution not only maximises happiness but it also equalizes it. Therefore, *ceteris paribus*, any general equilibrium consistent with the Utility Principle is generated by redistributing the means of happiness until happiness is equally distributed. If the capacity for pleasure is the same in all individuals, it is then impossible to reach a maximum total utility that does not correspond to equal distribution of happiness. Mill was therefore right in arguing that the principle of equal consideration of interests descends from the Greatest Happiness Principle and is not an additional rule of justice.

It is true that, as Sidgwick argues, a given amount of happiness can be differently distributed among the same number of individuals, but only one of the following alternatives is available: either these distributions are is justified adopting another rule than general happiness, or there exist observable psychological conditions that justify an unequal distribution of happiness. This, as we shall see, is the solution chosen by Edgeworth assuming unequal capacities for pleasure.

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[230] Sidgwick 1962, p. 432, our italics.

[231] See Pontara 1998, pp. 172-4.

[232] Sidgwick does not even mention this question either in book 4 or in book 2. In the latter, especially in chapter 3, he refers to the heterogeneity of preferences as a source of errors in interpersonal comparisons. These are necessary to the "egoistic hedonist" to evaluate the value of future states of happiness of which he or she has no direct experience. However, "we have sufficient evidence of the striking differences between the feelings produced in different men by similar causes" (Sidgwick 1962, p. 148). According to Sidgwick, however, it is impossible to prove that the fact of preferring certain kinds of pleasure reveals a higher capacity for pleasure, or that a life devoted to certain kinds of pleasures is happier than another. Different preferences may result in equal happiness or unequal happiness according to cases, but no lifestyle is an undisputable sign of a happier condition. Here the question mixes with Mill's qualitative approach. Significantly, Sidgwick attacks Plato in order to reveal a weakness of Mill's argument: "On this ground Plato's reason for claiming that the life of the Philosopher has more pleasure than that of the Sensualist is palpably inadequate. The philosopher, he argues, has tried both kinds of pleasure, sensual as well as intellectual, and prefers the delights of philosophic life; the sensualist ought therefore to trust his decision and follow his example. But who can tell that the philosopher's constitution is not such as to render the enjoyments oc the senses, in his case, comparatively feeble? while on the other hand the sensualist's mind may not be able to attain more than a thin shadow of the philosopher's delights" (*Ibid.*).

2. Inegalitarian Hedonism and the Road to Eugenics

From many points of view, the economist Francis Ysidro Edgeworth provides in *New and Old Methods of Ethics* (1877) and *Mathematical Psychics* (1881)[233] the most sophisticated account of the hedonistic-utilitarian calculus before the "ordinal utility revolution" introduced by the works of Pareto (1906; 1909) and Slutsky (1915). Edgeworth builds on the tradition going from Bentham to Mill, Sidgwick and Jevons (1971). From the latter, in particular, he derives the tools of marginalist analysis, but he does not limit his study to the "economic calculus": he also examines the elements of the "utilitarian calculus" enshrined in the Greatest Happiness Principle. The latter is defined in *Mathematical Psychics* in the most enlarged way as "the greatest possible sum-total of pleasure summed through all time over all sentience".[234]

But the main novelty of Edgeworth's contribution is not the application of a rigorous mathematical apparatus to the "felicific calculus". As highlighted by David Levy and Sandra Peart (2004), Edgeworth was instrumental to introducing into economics and ethics the inegalitarian and eugenic implications of evolutionary theory. Indeed, as underscored by a review of *New and Old Methods of Ethics* (Anonymous 1878), his attempt consisted more precisely in trying to reconcile Alfred Barratt's (1877, 1878) case for egoism and "struggle for existence" with Sidgwick's universalistic hedonism.

The aim of Edgeworth's effort is unmistakably stated in the Preface of *Mathematical Psychics*:

> Mathematical reasonings are employed partly to confirm Mr. Sidgwick's proof that Greatest Happiness is the *end* of right action; partly to deduce middle axioms, *means* conducive to that end. This deduction is of a very abstract, perhaps only negative, character; negativing the assumption that *Equality* is necessarily implied in Utilitarianism. For, if sentients differ in *Capacity for happiness* – under similar circumstances some classes of sentients experiencing on an average more pleasure (*e.g.* of imagination and sympathy) and less pain (*e.g.* of fatigue) than others – there is no presumption that equality of circumstances is the most felicific arrangement; especially when account is taken of the interest of posterity.[235]

The case against distributive equality is based on the assumption of unequal capacity for pleasure not only among different species, but also within the human species. Coupled with this assumption, impartiality then requires unequal distribution of the means of happiness.

Let us briefly state the essential passages of Edgeworth's argumentation. The quantitative approach expounded by Bentham in chapter IV of the *Introduction* and restated by Jevons[236] in marginalist terms is here repeated: "Utility, as Professor Jevons says, has two dimensions, *intensity* and *time*. The unit in each dimension is the just perceivable increment".[237]

The next problem is represented by intra-personal and interpersonal comparisons of happiness. As to intra-personal comparisons, which are common in individual or 'economical calculus', Edgeworth – quoting Laplace – adopts the probabilistic approach later rediscovered by Harsanyi.

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[233] See also Edgeworth (1879).

[234] Edgeworth 1881, vi.

[235] Edgeworth 1881, vii.

[236] 1871, ch. 2 and 3.

[237] Edgeworth 1881, 7. Bentham's definition of the unit of pleasures and pains is similarly based on the four "dimensions" of intensity, duration, remoteness and probability. Reasoning in arithmetic rather than infinitesimal terms, he first examines the divisibility of intensity. "The limit of the quantity of a pleasure in respect of intensity on the (var.: this) side of diminution – he argues – is a state of indifference (var.: insensibility)". He then defines as "unity" such a "degree of intensity possessed by that pleasure which is the faintest of any that can be distinguished to be pleasure" (Baumgardt 1952, p. 555). Higher numbers represent higher degrees of intensity. He then repeats the same reasoning for duration and states that the limits of probability and remoteness are represented by certainty and presence respectively, pointing out that "the degrees of intensity and duration must be express'd by whole numbers: that of proximity and that of certainty by fractions" (*Ibid.*, p. 556).

> The implied equation to each other of each *minimum sensible* is a first principle incapable of proof. It resembles the equation to each other of undistinguishable events or cases, which constitutes the first principle of the mathematical calculus of *belief*. It is doubtless a principle acquired in the course of evolution. The implied equatability of time-intensity units, irrespective of distance in time and kind of pleasure, is still imperfectly evolved. Such is the unit of *economical* calculus.[238]

Considering then the interpersonal comparisons required by the "moral calculus", Edgeworth introduces the principle of equal consideration of interests:

> In virtue of what *unit* is such comparison possible? It is here submitted: Any individual experiencing a unit of pleasure-intensity during a unit of time is to "count for one". Utility, then, has *three* dimensions; a mass of utility, "lot of pleasure" is greater than another when it has more *intensity-time-number* units. The third dimension is doubtless an evolutional acquisition; and is still far from perfectly evolved.[239]

There is no difference at this level between Bentham and Mill on one side and Edgeworth on the other. For him too, impartiality means anonymity and equiproportionality. The principle takes here the following shape: every individual who experiences a unit of intensity times a unit of duration counts for one and no more than one; those who experience multiples of these units count in proportion to the quantities they feel. Moreover, impartiality is considered a consequence of the utilitarian rule. When Edgeworth refers to evolution in the passage above quoted, he means that the human species is spontaneously evolving towards Sidgwick's "universal hedonism", gradually learning to transcend self-preference. The present state of "impure utilitarianism" is placed halfway between the pure universalistic method and pure egoism: a state in which "the happiness of others as compared by the agent (in a calm moment) with his own, neither counts for nothing, nor yet 'counts for one', but *counts for a fraction*".[240]

There is however an important discontinuity in Edgeworth's analysis: impartiality concerns the equality between "atoms of pleasure"[241] but does not presuppose an equal capacity for pleasure. The importance of this distinction is revealed by the rest of Edgeworth's reasoning. After examining competitive market equilibriums as "settlements" between utility-maximising egoistic individuals, the author considers the evolution of market society: the increasing number of combinations, monopolies and cooperatives, reducing the number of competitors, amplifies the indeterminateness of market settlements and produces a decline in the "reverence for competition".[242] In such a situation: "There would arise a general demand for a *principle of arbitration*".[243] Edgeworth imagines that individuals would unsatisfactorily try different arbitrary principles of justice until they "agree to commute their chance of any of the arrangements for the certainty of one of them, which has certainly distinguishing features and peculiar attractions as above described – the utilitarian arrangement".[244] Remarkably, utilitarian ethics is presented as a consequence of rational choice.

This reasoning introduces to the second part of *Mathematical Psychics* devoted to the "Utilitarian Calculus". This part examines the distribution of the means of happiness deriving from the Greatest Happiness Principle and the assumption of unequal capacity for happiness. Some definitions provide the framework of analysis:

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[238] *Ibid.*: 7. See also *Ibid.*, p. 60.
[239] *Ibid.*, p. 8.
[240] *Ibid.*, p. 16.
[241] *Ibid.*, p. 8.
[242] *Ibid.*, p. 50.
[243] *Ibid.*, p. 51.
[244] *Ibid.*, p. 55.

a. The hedonistic approach is precisely defined: "*Pleasure* is used for 'preferable feeling' in general", and "The term includes absence of pain. *Greatest possible happiness* is the greatest possible integral of the differential 'Number of enjoyers X duration of enjoyment X degree thereof'".[245]

b. The means of happiness are "wealth as destined for consumption and (what is conceivable if not usual in civilisation) the unpurchased command of unproductive labour".[246]

c. There are different capacities for happiness: "An individual has greater *capacity for happiness* than another, when for the same amount whatsoever of means he obtains a greater amount of pleasure, *and also* for the same increment (to the same amount) whatsoever of means a greater increment of pleasure".[247] The first condition, constantly higher average utility, stipulates that the utility curves of two individuals never cross.[248] The second condition, higher marginal utility, is essential to assess the distribution of the means of happiness, as explained below (see Appendix, Figure 1).

Edgeworth is aware of an objection based on Bentham's argument of the heterogeneity of preferences: an individual may have a higher desire of certain pleasures, but a lower desire of other pleasures. This seems to be the general case. However, Edgeworth assumes that *general* differences of capacity are not impossible: "But if one individual has the advantages in respect of most and the greatest pleasures, he may be treated as having more capacity for pleasure in general".[249]

Barratt had raised a second objection. Ignoring that the source of Millian "superior pleasures" is a spiritual one, he had examined the relationship between material means in general and these pleasures, concluding that there is no proportionality, "so that the problem as stated is only a small portion of the real problem of producing a total maximum surplus of pleasure".[250] Comparing the relation to the same material means of a person enjoying superior pleasures (Mill's "Socrates") and of another enjoying only the pleasures deriving from *these* means (Mills' "fool"), Edgeworth acknowledged that their marginal utility could be higher for the latter than for the former and that, paradoxically, the "fool" should receive more in their distribution (see Appendix, Figure 3).[251] But again, Edgeworth concludes that the solution is more complex but not impossible.

More in general, Edgeworth uses superior pleasures to prove that different capacities for happiness exist, can be empirically ascertained, and must be appropriately weighed in the felicific calculus. Replying to Lesilie Stephen, who had argued that if we adopt a moral principle according to which "we have no more reason for assigning special importance to the judgment of one man than to that of any other, or of preferring the estimate of the saint to the estimate of the sinner, the standard which results from the average judgment must be an inferior or debasing

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[245] *Ibid*., pp. 56-7.

[246] *Ibid*., p. 57.

[247] *Ibid*.

[248] Edgeworth is conscious that this condition is highly unrealistic, although he believes that it can positively become valid with evolution: "This 'definition of a thing' is doubtless (like Euclid's) imperfectly realised. One imperfection is that some individuals may enjoy the advantages not for *any* amount of means, but only for values above a certain amount. This may be the case with the higher orders of evolution" (Edgeworth 1881, p. 57). See Appendix, Figure 2.

[249] *Ibid*.

[250] Barratt 1878, p. 282n.

[251] "If 'the higher pleasures, such as those of affection and virtue, can hardly be said to come from pleasure-stuff at all' (as Mr Barratt says in his able note in "Mind X.", often cited below), it is possible (though not probable?) that the enjoyers of the higher pleasures should derive from the zero, or rather a certain minimum, of means (and *à fortiori* for all superior values) an amount of pleasure greater than another class of enjoyers, say the sensual, can obtain for any amount whatsoever of means; *while at the same time* the sensual obtain grater increments of pleasure for the same increment of means (above the minimum)" (*Ibid*., pp. 57-8).

standard",[252] he argues:

> But it is no part of the utilitarian first principle that the happiness of each sentient shall "count for one" irrespective of that tendency to be reproduced and multiplied and spread which is the attribute of "refined" pleasures. The feeling of the brute, like the opinion of the fool, should count indeed, but count for little.[253]

Thus Edgeworth answers the objection that Bentham had raised about the practical impossibility of demonstrating the existence of different dispositions to pleasure and pain.

Referring to contemporary psychological research, he enthusiastically concludes that "greater precision might be attainable by improved examinations and hedonimetry".[254] As to William Thompson's objection that different capacities are the result of unequal distribution, his answer is clear-cut: "The second objection, William Thompson's, would hardly now be maintained in face of what is known about heredity".[255] In contrast to Mill, Edgeworth connects the ability to enjoy superior pleasures to heredity rather than to education and social development.

Further definitions are the following:

d. There are different capacities for work, *i.e.* different abilities to resist fatigue.[256]
e. "Pleasure is measurable, and all pleasures are commensurable".[257]
f. The units of pleasure are identical in all individuals
g. Marginal utility is decreasing.

Under these assumptions, Edgeworth proposes to solve the following problem:

> PROBLEM. – To find (α) the distribution of means and (β) of labour, the (γ) quality and (δ) number of population, so that there may be the greatest possible happiness.[258]

Avoiding technicalities, the solution to this problem can be reduced to four elements:

1. Assuming that every individual does the same quantity of work, that everybody already possesses the quantity of means corresponding to the degree zero of happiness, and that this quantity is the same for all, every successive unit of a *distribuendum* will be allocated to the individual who receives the higher utility from it; therefore the first one to an individual belonging to the class with higher capacity for pleasure, then the second one to another individual of the same class, etc. Further doses will be distributed to members of "inferior" classes only when the marginal utility of those going to the superior classes falls below theirs. The conclusion is clearly inegalitarian: "Thus *the distribution of means as between the equally capable of pleasure is equality; and generally is such that the more capable of pleasure shall have more means and more pleasure*". [259]

2. As to the distribution of labour, it "is deduced by a parity of reason from the parallel *second axiom*: that the rate of increase of fatigue increases as the work done increases".[260]

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[252] Stephen 1882, p. 358.

[253] Edgeworth 1882, pp. 446-7.

[254] Edgeworth 1881, p. 58.

[255] *Ibid.*, p. 59.

[256] *Ibid.*

[257] *Ibid.*

[258] *Ibid.*, p. 56.

[259] *Ibid.*, p. 64. Edgeworth (1891b, pp. 16-17) criticises Mill for affirming, rather demonstrating, that equality derives from the principle of equal consideration of interests. He praises instead Bentham and Sidgwick (1891) for "deducting the equal distribution of wealth from the principle of greatest happiness combined with the law of diminishing utility, to use Jevons' phrase; or what Bentham calls, in a passage quoted by Dr. Sidgwick, the 'pathological propositions upon which the good of equality is founded'" Edgeworth 1891b, p. 17).

[260] *Ibid.*, p. 65. Edgeworth acknowledges Barratt for calling attention to this point. In Edgeworth (1878) only the distribution of means of happiness was contemplated. In his review article, Barratt had indeed suggested that " [...]

Therefore: "Who shall do the first increment of work? Of course, one of the most capable of work. And so on. *The distribution of labour as between the equally capable of work is equality, and generally is such that the most capable of work shall do more work* – so much more work, as to suffer more fatigue".[261] Also the distribution of labour is unequal. The consequences of this postulate are more vividly explained by Barratt: high and low capacities for pleasure and pain generally go together. Higher resistance to fatigue is the same as low capacity for pain. Therefore, "the answer to the problem, supposing the capacity for pleasure and pain to be constant, would be that the labour must be concentrated as much as possible, or at least up to a certain limit, and the means of pleasure applied first in alleviating the pain of labour, and then equally divided; and supposing the capacity to vary, those who have the least capacity should be made to do the work, and the pleasure-stuff after paying a certain amount of wages to the workers, should go to those who have the greatest capacity for pleasure".[262]

3. Unequal distribution is not only limited to satisfaction of actual wants. It must also promote the quality of population through selective education: given that "capacity for pleasure and capacity for work generally go together; [and] that they both rise with evolution", it ensues that: "The *quality of population should be the highest possible evolution*".[263] Scarce means of education must be allocated in the most efficient way: "For it is probable that the highest in the order of evolution are most *capable of education* and improvement. In the general advance, the most advanced should advance most".[264] It may be observed that in this passage Edgeworth unawares shifts from different capacities for happiness to different capacities for understanding.

4. Assuming then the Malthusian principle of population and the increasing scarcity of means of subsistence, two further postulates are added, suggesting that eugenic practices maximise the well-being of future generations: "The *fifth postulate* appropriate to this case is that to substitute in one generation for any number of parents an equal number each superior in capacity (evolution) is beneficial for the next generation. This being granted [...] it is deduced that the average issue shall be as large as possible for all sections above a determinate degree of capacity, but zero for all sections below that degree".[265] And the "*sixth postulate* might be: To substitute in one generation for any number of parents and equal number each superior in capacity (evolution) is beneficial for all time. This postulate being granted, *if possible* let the most beneficial selection be not *total*. Then a total selection can be arranged more beneficial!".[266] Among the "mitigations" envisaged for the "not selected", Edgeworth mentions Galton's "celibate monasteries" and "emigration from Utopia to some unprogressive country where the prospect of happiness might be comparatively zero".[267]

Concluding his analysis, Edgeworth concedes that:

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pain-stuff, or labour, as well as pleasure-stuff, must be included in the distribuend". But he had added that "if the problem as modified be 'to make such a distribution as to produce a maximum surplus of pleasure over pain', the conclusion reached is favourable to Egoism", which Barratt equates to "struggle for existence" (Barratt 1878, p. 282).

[261] *Ibid.*, p. 66.

[262] Barratt 1878, p. 282.

[263] Edgeworth 1881, p. 68.

[264] *Ibid.*

[265] *Ibid.*, p. 70

[266] *Ibid.*, p. 71.

[267] *Ibid.*, p. 72.

In fact, the happiness of some of the lower classes may be sacrificed to that of the higher classes. And, again, the happiness of part of the second generation may be sacrificed to that of the succeeding generations.[268]

The only certitude is that:

[...] the required limit is above the starving point; both because in the neighbourhood of that point there would be no work done, and, – before that consideration should come into force and above it – because the pleasures of the most favoured could not weigh much against the privations of the least favoured.[269]

Edgeworth demonstrates that assuming unequal capacities for happiness in a hedonistic framework and applying to ethical evaluations the Greatest Happiness Principle, inequality is recommended as such, *i.e.* as a direct means to maximise total utility, not as an expedient instrumentally necessary to generate happiness – for example by increasing security, as Bentham had suggested.[270] He then concludes:

The end of action being defined as above, The Jacobin ideal "All equal and rude", J.S. Mill's ideal "All equal and cultivated", are not necessarily desirable, not paramount ends to be sought by revolution or the more tedious method of depopulation. Pending a scientific hedonimetry, the principle "Every man, and every woman, to count for one", should be very cautiously applied. In communistic association (if such should be) the distribution of produce should be rather upon the principle of Fourier than of Owen. Universal equal suffrage is less likely to be approved than plural votes conferred not only (as Mill thought) upon sagacity, but also upon capacity for happiness.[271]

In a single passage, Bentham's democratic ideal is discarded reversing the argument he had employed, Mill's plural vote, and more generally his "qualitative hedonism", receive an inegalitarian interpretation that Mill himself would have repudiated, and finally, substantive equality is radically separated from impartiality and discarded as a means to increase the general and perspective happiness of societies.

Thus, if the principle of equal consideration of individual happiness is combined with the assumption of unequal capacity for happiness, it implies only an equal consideration of the units of pleasure and pain in different individuals, not that of their overall happiness. According to Mill, Bentham's dictum, "everybody to count for one, nobody for more than one" was tantamount to arguing that "equal amounts of happiness are equally desirable".[272] Edgeworth suggests instead that:

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[268] *Ibid.*, p. 74.

[269] *Ibid.*, p. 75.

[270] Equality "is deducible from the practical principle of exact Utilitarianism combined with the simple laws of sentience [...] But Equality is not the whole of distributive justice. There may be needed an αξία for unequal distribution. Now inequalities of fortune – abstracted the cases of governor and general and every species of trustee for the advantage of others – are generally explained by utilitarians as the consequence of conventions clear and fixed and preventing confusion and encouraging production, but not otherwise desirable, or rather of which the necessity is regretted. Yet in the minds of many good men among the moderns and the wisest of the ancient, there appears a deeper sentiment in favour of aristocratical privilege – the privilege of man above brute, of civilised above savage, of birth, of talent, and of the male sex. This sentiment of right has a ground of utilitarianism in supposed differences of *capacity*. Capacity for pleasure is a property of evolution an essential attribute of civilisation" (Edgeworth 1881, p. 77).

[271] *Ibid.*, p. 81.

[272] Mill 1861a, p. 258n.

Not "everybody to count for one," but "every just perceivable increment of pleasure to count for one," or some such definition of the pleasure unit, is the utilitarian principle of distribution.[273]

3. The Embarrassment of Differences

Edgeworth's *Mathematical Psychics* was reviewed by the two major British economists of the time, Jevons and Marshall.

Jevons, ignoring the economic arguments discussed in the first part of that work, entirely focuses on the part devoted to "Utilitarian Calculus". His analysis, however, is quite disappointing. Jevons limits himself to summarising Edgeworth's arguments and adds no comment. He stresses "such empirical bases as Fechner's law, Wundt's curve of pleasure and pain, or Delboeuf's formulae",[274] and repeats the inegalitarian conclusions derived by Edgeworth. The reticence of his account is well illustrated by the following diplomatic comment: "The general tendency of Mr. Edgeworth's philosophy is towards a hierarchy of social ranks rather than rigid equality".[275] More than on theoretical arguments, which might appear embarrassing to him, Jevons concentrates on the practical corollaries that Edgeworth derives from his analysis, such as the defence of inequality between sexes, the defence of the institution of marriage etc. the unaware reader is not able to understand whether these corollaries are based on original arguments or on traditional instrumental arguments about inequality.

As to Marshall, his review is known especially for the remarks on economic methodology that the founder of the Cambridge school develops in it. He is especially interested in Edgeworth's extensive use of mathematics, insisting that mathematical language should be translated "in language that is understanded of the people".[276] Concerning the part on utilitarian calculus, Marshall limits himself to some remarks on the link between different capacities for happiness and the Greatest Happiness Principle. The conclusion is sibylline: "Perhaps the problem which he attacks is incapable of a complete solution; but it may be safely that no one can read his discussion of it without profit".[277]

To find a careful discussion of the distributive problems related to the assumption of different capacities for happiness we must turn to a work written more than twenty years later by one of Marshall's disciples, Arthur Cecil Pigou: this book is *Wealth and Welfare* (1912), a work that originated the branch of economic science known as Welfare Economics. Although the book makes frequent references to Edgeworth, the editor of *The Economic Journal* is not mentioned on this subject.

Pigou's book can be conceived as an attempt to provide an answer to Moore's theory of "organic unities". Pigou argues that his book is not on welfare in general but on economic welfare only, and that his attempt is based on the probabilistic assumption that an increase in the economic welfare of some members of society contributes to increasing general welfare. His theory is based on a series of "propositions" that recall Bentham's "axioms of mental pathology". The first proposition states "that, if a cause is introduced, which makes for an increase in the aggregate size of the dividend, provided that the absolute share of no group of members, in terms of the commodities which that group is accustomed chiefly to consume, decreases, the economic welfare of the community as a whole is likely to be augmented".[278] The second proposition introduces to the re-distribution of wealth with a view to increasing total welfare: "The most abstract form of it affirms that economic welfare is likely to be augmented by anything that, leaving other things unaltered, renders the distribution of the national dividend less

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[273] Edgeworth 1881, p. 122.
[274] Jevons 1881, p. 581.
[275] *Ibid.*, p. 582.
[276] Marshall 1881, p. 266.
[277] *Ibid.*, p. 268.
[278] Pigou 1912, p. 20.

unequal".[279] Pigou immediately adds that this proposition rely on the assumption of "equal temperament" among all individuals. Under, this assumption, the case made by Bentham is shown to be limited to the case of two individuals only. Then, distributive equality is so generalised:

> If we assume all members of the community to be of equal temperament, and if these members are only two in number, it is easily shown that any transference from the richer to the poorer of the two, since it enables more intense wants to be satisfied at the expense of less intense wants, must increase the aggregate sum of satisfaction. In a community consisting of more than two members, the meaning of "rendering the distribution of the dividend less unequal" is ambiguous. On the assumption, however, of similarity of temperament among the members, it can be shown that a diminution in the inequality of distribution, in the sense of a diminution in the mean square deviation from the mean income, probably increases satisfaction [280]

From a theoretical viewpoint, Pigou accepts that if differences were *always* the result of unequal capacities for happiness they would be justified as a means to attain maximum total utility. His objections are of a factual kind:

1. it can be hardly demonstrated that present inequalities are the result of unequal capacities for happiness rather than random results of social and historical conditions;[281]
2. it is impossible to consider different capacities as the result of nature and heredity only, or even principally. Most of them are the result of education and capacities can be improved.[282] Both Mill and Marshall[283] are Pigou's obvious sources of inspiration for this argument.

It is therefore the generality of the argument that different capacities are innate that is challenged. If this assumption is removed, it can no longer be demonstrated that the four steps imagined by Edgeworth generate long-term maximisation of happiness. The educational and eugenic implications would be especially meaningless.

This question is discussed more in details in Part I, Chapter IV, "The National Dividend and the Quality of the People". What "Biometicians and Mendelians" object to welfare economics, argues Pigou, is that "Economists, it is said, in discussing, as I have done, the direct effect of the circumstances of the dividend upon welfare, are wasting their energies. The direct effect of these circumstances is of no significance; it is only their indirect effect on the size of the families of good and bad stocks respectively that really matters".[284]

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[279] *Ibid.*, p. 24.

[280] *Ibid.*, p. 24-5. There is a third proposition that should be considered for completeness sake. "This may be expressed roughly by saying that, if a cause is introduced which diminishes the variability, or inequality in time, of the dividend, and especially of that part of it which accrues to the poorer classes, the economic welfare of the community as a whole is likely to be augmented" (Pigou 1912, p. 32). This proposition has obvious implications for anti-cyclical economic policies which are discussed in Part IV of the book.

[281] "Extreme poverty is, no doubt, often the result of feckless character, physical infirmity, and other 'bad' qualities of finished persons. But, these themselves are generally correlated with bad environment; and it is ridiculous to treat as unworthy of argument the suggestion that the 'bad' qualities are mainly the result, not of bad original property, but of bad original environment" (*Ibid.*, p. 64).

[282] "No doubt, the inequalities which this proposition condemns are random inequalities. The condemnation would not hold good, if such inequalities of income as existed were always arranged in accordance with capacity for obtaining enjoyment from economic resources. This consideration may not impossibly justify the claim that *certain specified inequalities* between races or groups ought not to be abolished; though it must be remembered even here that, since capacity for enjoyment depends largely upon education in it, groups or races of little capacity under present conditions are not thereby proved to be inherently of little capacity" (*Ibid.*, p. 26).

[283] Marshall's notion of "standard of life" – "that standard of which the rise implies an 'increase of intelligence, and energy, and self-respect'" – is cautiously mentioned by Edgeworth (1891a, p. 14), as one of the elements of a "cheerful doctrine" which claims that "improved organisation tends to diminish or even ovverride any increased resistance which Nature may offer to raising increased amount of raw produce".

[284] Pigou 1912, p. 52.

Pigou's reply is composed of three parts. Firstly, he argues that Eugenic policies cannot be carried too far, since it is impossible to measure all differences of capacity. He agrees however that for extreme defects (such as insanity and particular criminal attitudes) they could be justified. However, this has nothing to do with economics.

Secondly, quoting Sidney Webb's argument put at the beginning of this paper, he contends that 'too exclusive attention to the biological aspect of social problems' would be an error,[285] for the natural quality of people forms only a part, if one, of what is necessary to produce a happy society. His criticism, however, goes deeper than this. Considering again the objection that working on social and economic conditions "affect the persons immediately subjected to them", but cannot "influence the inborn quality of succeeding generations", he replies that

> [...] the environment of one generation *can* produce a lasting result, because it can affect the environment of future generations. Environments, in short, as well as people, have children. Though education and so forth cannot influence new births in the physical world, they can influence them in the world of ideas; and ideas, once produced or once accepted by a particular generation, whether or not they can be materialised into mechanical inventions, may remodel from its very base the environment which succeeding generations enjoy. In this way a permanent change of environment is brought about, and, since environment is admitted to have an important influence on persons actually subjected to it, such a change may obviously produce enduring consequences.[286]

This notion of society as an institutional and historical construction through the objectification and "accumulation"[287] of knowledge and inventions is again indebted to Mill and Marshall. "Progress", concludes Pigou, "not merely permanent but growing, *can* be brought about by causes with which breeding and gametes have nothing to do".[288]

Thirdly, and finally, Pigou discusses the argument that redistributive policies, improving the condition of the poor, may in the long run favour the survival of the "bad stock". His reply consists of two arguments: firstly, if weakness is accidental, the children of the weak may be strong; and secondly, improving economic welfare "also removes influences that make for the weakening of the fit. The total effect of this twofold action may well be beneficial rather than injurious".[289]

The interest of Pigou's contribution lies therefore in the fact that he never sceptically assumes equal capacities for happiness, like Bentham and implicitly Mill had done, nor, like Edgeworth, does he enthusiastically believe in the scientific demonstrability of genetic differences in capacity. He admits the possibility of natural inequalities and in some extreme cases he even recommends eugenic policies, but he argues that there are many other solid reasons in favour of an equal consideration of individual interests and of a more equal distribution of the means of happiness and education.[290]

The principle of equal consideration of interests, both in the meaning of equal consideration of the most important human interests[291] and in the equiprobability approach suggested by Harsanyi, continues to be considered a pillar of utilitarian ethics. Though "a purely

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[285] *Ibid.*, p. 58.

[286] *Ibid.*, pp. 58-9.

[287] The notion of progress as "scientific accumulation" had been developed by the Italian economist Melchiorre Gioja, whose contribution is acknowledged by Charles Babbage in *On the Economy of Machinery and Manufactures*. See Guidi (2005).

[288] *Ibid.*, p. 61.

[289] *Ibid.*, p. 62.

[290] Significantly, but quite paradoxically, Pigou's cautious acceptance of the *possibility* of different capacities is taken by Edgeworth as a confirmation of his inegalitarian theory. See Edgeworth (1913, p. 181-2).

[291] Singer 1993, p. 23.

formal principle",[292] it is generally used to underpin the *ceteris paribus* favourable view that utilitarians have of substantive equality.

The study of classical utilitarianism from Bentham to Pigou, who grounded utilitarianism on a hedonistic foundation, has revealed many implications of this principle that may still be considered in contemporary debate.

Firstly, this principle cannot be inferred from statements of fact and has the nature of a true ethical principle.

Secondly, it is strictly connected to the Utility Principle, not because it lacks an independent ethical content, but because the Greatest Happiness Principle implies it in its nature of universalistic rule of action.

Thirdly, this principle only requires that "equal amounts of happiness (or interests in a broader sense) are equally desirable". It does not necessarily imply an equal distribution of the "means of happiness". In order to pass from equal consideration of interests to distributive equality we have to make stronger assumptions. In a hedonistic framework the simplest required assumption is equal capacity for happiness. But also in non-hedonistic forms of utilitarianism the problem of different capacities, either genetic or acquired, has to be carefully assessed.[293]

Fourthly, the answers that utilitarian philosophers and economists gave to the hypothesis of different capacities for happiness reveal many important arguments in favour of equality: the heterogeneity of human qualities and desires and the impossibility of ranking them along a single scale of capacity, the practical unfeasibility of separating hereditary from acquired diversities, the cumulative benefits resulting from social institutions that favour equality and enhance the "standard of life" of all, the importance of education.
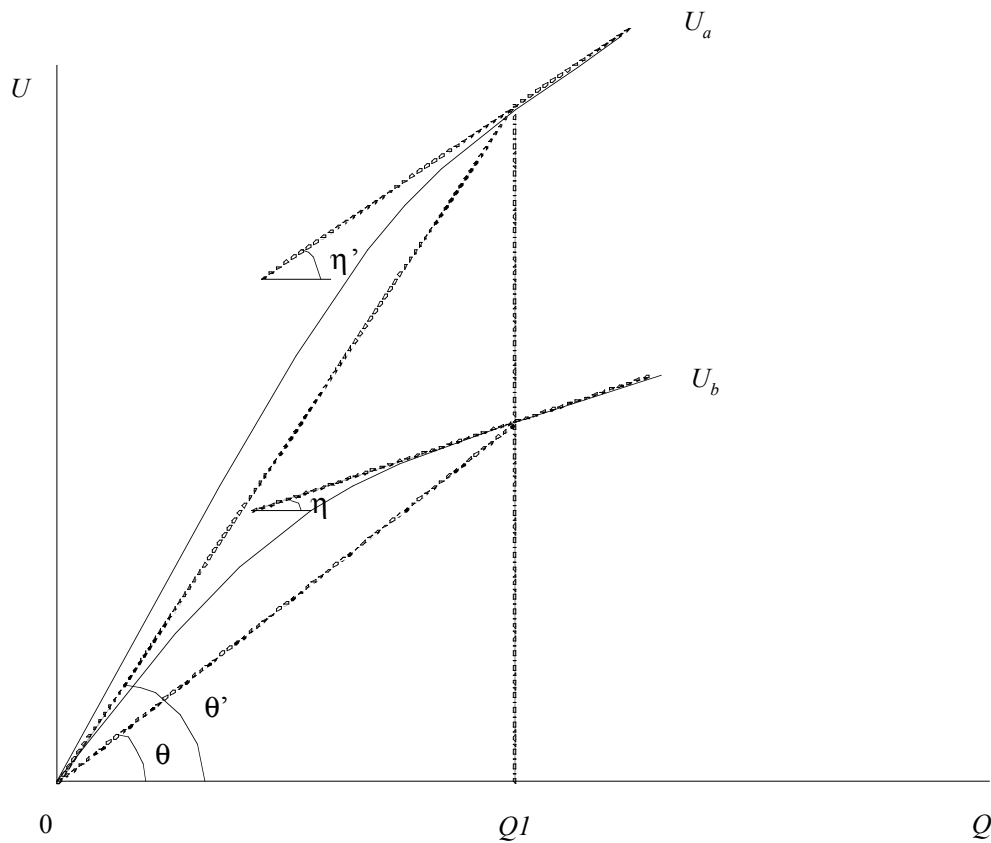

[292] *Ibid.*, p. 22.
[293] *Ibid.*, p. 26-38.

Appendix

The figures traced below try to provide a representation of Edgeworth's arguments about the unequal distribution of capacities for happiness.

Figure 1. *Utility curves of individuals with absolute different capacities for pleasure*


This graph represents the utility functions of two individuals A and B, respectively U_a e U_b. We observe that for *whatever* point on U_a, both average utility (tgθ') and marginal utility (tgη') are higher. The slope of U_a is higher than that U_b. This implies that A's saturation point is reached for a higher quantity than B's.

Figure 2. *Utility curves of individuals with limited different capacities for pleasure*
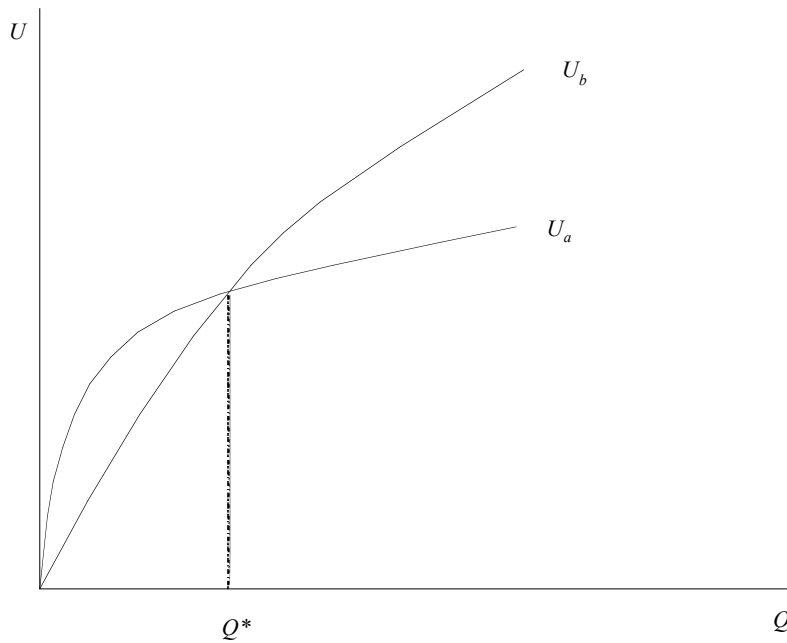
In this case, for quantities lower than Q*, both B's average and marginal utilities are higher than A's, and *vice versa* for quantities higher than Q*.

Figure 3. *Utility curves of an individual enjoying superior pleasures and of another individual enjoying only inferior pleasures*
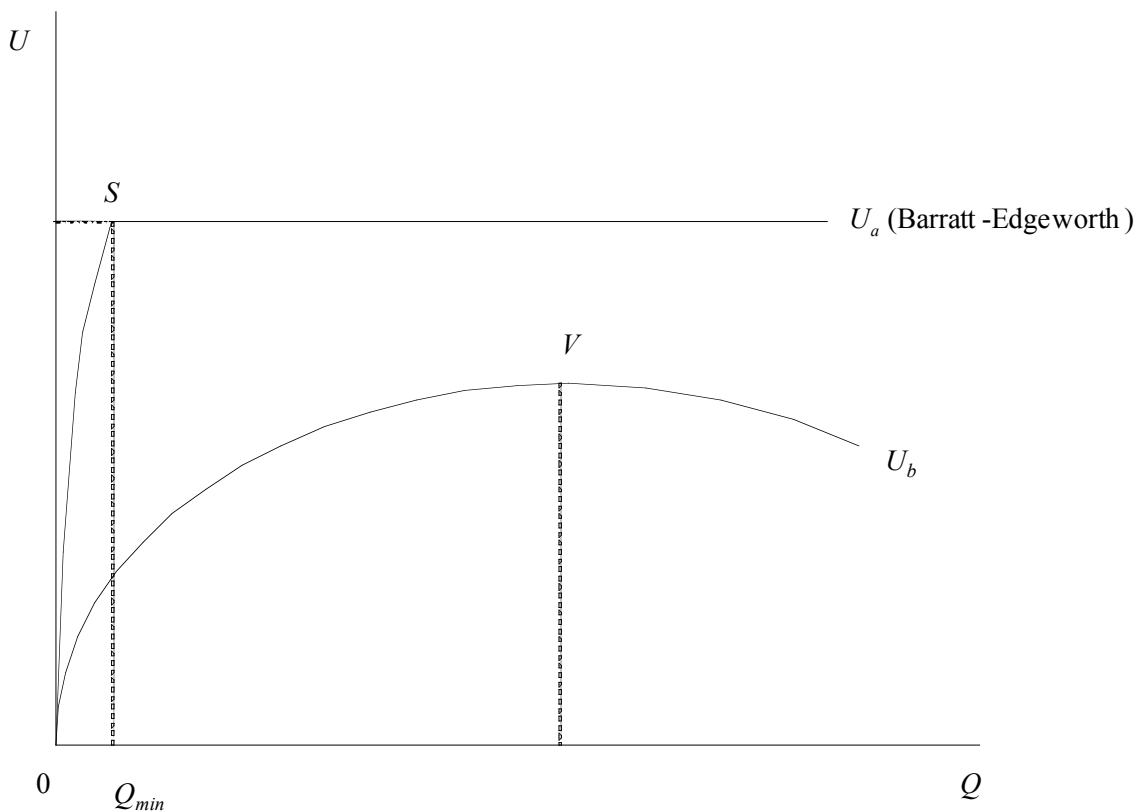
This graph describes the case made by Edgeworth. Superior and inferior pleasures are analysed as a function of the same material good. This good generates an inferior pleasure in individual B and a superior pleasure in individual A. This may be explained by a sort of complementarity between this material good and the source of the superior pleasure. Suppose that Socrates takes superior pleasure by teaching philosophy to his disciples. To do this, he needs minimum food and shelter. But he is content with little, for he does not care for these goods for their own sake but only as means to obtain the superior pleasure. At the same time, "to be content with little" means that small quantities of food and shelter give him high pleasure, since they allow him to teach philosophy.

Consistently with Mill, Edgeworth assumes that superior pleasures are higher than the pleasures deriving from whatever quantity of sources of inferior pleasures. As clarified by Arrhenius and Rabinowicz (2005), this implies that satiety (V) is reached for a level of utility that is lower than that produced by superior pleasures. After a "certain minimum" Q_{min}, however, and until V, the marginal utility that individual B obtains from inferior pleasures is higher than that enjoyed by A. Socrates is satisfied with a small amount of material means, since his mind is only interested in superior pleasures, while the pig is eager of having more of these material means.

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