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***BENTHAM'S ECONOMICS OF EMULATION***

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## Introduction<sup>1</sup>

In 1825 Bentham published *The Rationale of Reward*<sup>2</sup>, a work containing the English translation by Richard Smith of *Théorie des récompenses* [1811], one of Bentham's works originally published in French and edited by Etienne Dumont. As the editorial introductions to the *Constitutional Code* [1983], to the *First Principles* [1989] and to *Official Aptitude Maximized, Expense Minimized* [1993] reveal, Bentham was working at that time to the major project of the last period of his long existence: the *Code*. In fact, the reflections contained in the *Rationale* anticipate on many issues Bentham's analysis of the organization of the government functions in chapter IX of the *Code*.

For his editorial work, Dumont had relied on two groups of manuscripts written by Bentham in the 1770s and 1780s, most of them being part of the *Projet d'un corps complet de législation pour un pays quelconque*. It is one of the aims of this paper to show that these early reflections were of primary importance for the political views Bentham developed in the latter decades of his life, when he became an influential supporter of the cause of representative democracy.

The issue of reward - and the connected problems of salaries and of an "economic" management of the public service - has been relatively neglected in the studies on Bentham's legal thought<sup>3</sup>. More attention was paid to it by Hume's [1981] and Rosen's [1983] studies on the *Constitutional Code*, while - until recently and only on a single point [Lapidus-Sigot (1996)]- it has never attracted the attention of the historians of economic thought.

By comparing Bentham's pioneering reflections on reward to his works of the 1820s on democracy and on the organization of bureaucracy, this paper aims to study the economic content of Bentham's mature political theory. If one reads Bentham's contribution in the light of the modern economics of organization, this content appears both wide and stimulating. Bentham's methodology of analysis - based on the deliberations of "calculative" individuals who maximize their "profit" under constraints - makes of his "economic approach to politics" more than an anticipation of the modern economic analysis of (private and public)

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<sup>1</sup> This paper is an unsatisfactory preliminary version at least on two accounts: the English is still to be revised, and footnotes and references are not uniform because at this time of the year I could not consult the standard editions not available in my University libraries. When I was preparing this paper, I had the opportunity of discussing its headlines at a seminar of the Dipartimento di Studi Sociali of Brescia University. I wish to thank the participants for their comments.

<sup>2</sup> John and H.L. Hunt, London. The *Rationale* was republished in vol. II of Bowring's edition of Bentham's *Works*.

<sup>3</sup> See for example Hart [1982] and Gérard, Ost and van de Kerchove [1987], where this subject - although not completely absent - is never specifically dealt with. An analysis of Bentham's theory of reward is in Facchi [1994].

institutions. Section 1 studies both the meaning of "economy as applied to office" - as one of the preparatory manuscripts to the *Code* written in 1822 was entitled - and the radical change Bentham introduced in this traditional field of analysis. In section 2, Bentham's "economics of emulation" as developed in *Théorie des récompenses* is examined, and its application to salaries - and more generally to wages - is discussed. Finally, section 3 discusses the radical shift of emphasis introduced by Bentham in the constitutional reflections related to the *Code*. The new focus of Bentham's economic analysis of political institutions is found in a detailed theory of the economic mechanisms of corruption [sect. 3.1], which substantially influences his elaboration of the principles on which the bureaucratic machine of the democratic State should be erected [sect. 3.2 to 3-4]. The strategy based on emulation is not put aside in these writings, although it becomes part of Bentham's suggestion to select a new class of civil servants fundamentally urged by the motive of reputation.

## 1. The economics of organizations in Bentham's constitutional theory

An attempt to analyse Bentham's constitutional theory from an economic viewpoint could appear as a typically retrospective historical approach. In the last decades, this approach has become increasingly unpopular among professional historians of economic and political thought, who have been engaged in the opposite effort of contextualizing the works of past thinkers<sup>4</sup>. Some advantages of retrospective history should however be evaluated more fairly. For instance, an awareness of the results of recent economic theory can help historians to enucleate some theoretical statements which were positively formulated - though often in an implicit way - by the authors they are studying, whereas an excessive attention to contextual debates could induce to miss them. Of course, the historian cannot then avoid the task of explaining the origins and meaning of these statements.

Bentham's early reflections on reward, his later project of a constitution based on representative democracy, and his detailed plan concerning the organization of the public service, are among the best candidates for this kind of retrospective analysis, if one considers the increasing attention contemporary economics has been paying to the analysis of institutions and organizations and to such related problems as corruption and criminality<sup>5</sup>. Game theory [Kreps (1990)], the economics of information<sup>6</sup>, the Principal-Agent approach [Arrow (1985)]<sup>7</sup> and the

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<sup>4</sup> For a review of these methodological issues see Bellanca and Guidi [1997].

<sup>5</sup> On the economics of crime, the classical references are Becker [1968] and Ehrlich [1973]. For more recent approaches see Fiorentini and Peltzman [1995]. On the economics of corruption, the following studies are inspired to the Principal/Agent approach: Banfield [1975]; Franzini [1993]; Klitgaard [1988]; Pizzorno [1992]; Rose-Ackerman [1975; 1978].

<sup>6</sup> See Akerlof [1970]; Rotschild and Stiglitz [1976]; Shapiro and Stiglitz [1984]; Spence [1973].

economic theory of contracts offer a framework of theoretical arguments which are extremely tempting for a historian of classical utilitarianism.

However, I want to argue that, in the case of Bentham, the employment of the concepts of the contemporary economics of organizations is not entirely retrospective. The reasons are at least two: 1. the economic approach - in a sense belonging to the context in which Bentham was writing - is not absent from his constitutional theory; and 2. on many aspects, Bentham's methodology of analysis concerning organizational issues corresponds to that of modern economics. In this sense, Bentham should be looked at as the creator of a language that economists resolved to apply to the analysis of institutions only after recognising the limits of a theory entirely focused on market relationships.

As far as Bentham's economic approach to politics is concerned, recent works have revealed that, during the 18th. and early 19th. century, economic discourse was articulated into different levels, of which standard political economy (or the "analysis of commerce") was only one<sup>8</sup>. Not only did the tradition of *economica* (the economy of the aristocratic household) and the tradition *de re rustica* (rural economy) - in the German area both largely absorbed by the *Hausväterliteratur* - still survive<sup>9</sup>, but a similar "economic" approach, based on the Prince's paternal concern for the material and moral welfare of his subjects, had been applied - especially in central Europe - to the study of the State machine and of the different tasks of government<sup>10</sup>. This shift from the household to the State was obviously related to the effort of centralization and reform provided by the absolutist enlightened monarchies of the Continent<sup>11</sup>. This latter fact explains why, although the canonical model of such a "public" economy can be found in the German cameralist literature, the related meanings of "economy" largely circulated among the authors of the French Enlightenment who - as Montesquieu [1748] - attempted to propose more or less conservative compromises between ancient "republican" liberties and political centralization under enlightened monarchies, or were concerned with the problems of natural rights and the social contract (one should not forget that Rousseau's article on *Political economy* [1755] was largely devoted to the organization of political society). Among the meanings of "economy" which were peculiar to this political language, the most important was the idea that the sovereign should be an *économe*, i.e. the administrator of the patrimony of the State *and* of his subjects, and should be guided by fair rules of distributive justice. Still more important was the idea that

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<sup>7</sup> See also Ross [1973].

<sup>8</sup> J.-C. Perrot, "Les dictionnaires de commerce au XVIIIe siècle", *Revue d'histoire moderne et contemporaine*, 1, 1981, pp.36-67; Id., "Economie politique", in R. Reichart, E. Schmitt (eds), *Handbuch politisch-sozialer Grundbegriffe im Frankreich 1680-1820*, heft 8, R. Oldenbourg V., München 1988; both now in Perrot [1992]; Ugarte Blanco [1987]; Guidi [1995b]; Steiner [1996]. See also Deleule [1979].

<sup>9</sup> See Bianchini, Frigo and Mozzarelli [1985]; Brunner [1968]: ch. 6; Frigo [1995]; Tribe [1978].

<sup>10</sup> See Tribe [1988], Raeff [1983].

<sup>11</sup> See Venturi [1969-90].

economy was a distributive wisdom placed midway between avarice (excessive savings) and prodigality, the two opposed vices condemned by Aristotelian and Scholastic philosophy<sup>12</sup>. Economy was therefore a matter of Aristotelian *juste milieu*.

This spectrum of meanings related to "economy" is - at least from a formal viewpoint - present in Bentham's *Constitutional Code* and in the related writings. Firstly, political economy is considered as one of the sciences that ministers and civil servants should know in order to act properly and responsibly [Bentham (1983): 315]. Secondly, economy as a rule for the legislator in the administration of rewards and punishment - a central concept in the manuscripts of the 1770s-1780s later published by Dumont [1811] - becomes a priority in the approach of the *Constitutional Code*, where the rules of "official aptitude maximization" and "expense minimization" [Bentham (1983): 19] are canonized<sup>13</sup>. Lastly, Dumont's choice to publish Bentham's *Manual of Political Economy* - and parts of other economic writings - as the 4th book of *Théorie des récompenses* was in some sense "authorised" by Bentham<sup>14</sup>, and should be considered as a proof of his awareness of the links between the two levels of economic discourse.

J.L. Hume's book on *Bentham and Bureaucracy* [1981] well illustrated how the *Nakaz* promulgated by Catherine II in 1766 and some works belonging to the cameralist tradition - especially those translated into French - should be considered as an antecedent and as a possible source for Bentham's reflections on the organization of the State machine. The same role was also played by the works of the French *philosophes*. Another important source for Bentham's

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<sup>12</sup> See for example Montesquieu [1748]: I, 194; Rousseau [1755]: 241. For a suggestive analysis of these issues see Starobinski

<sup>13</sup> It should be observed that Bentham's vision of "economy" is not limited to the reduction of the direct costs of the public service (and of the corresponding taxation). Arguments derived from political economy are often added to the analysis of "public economy". An example is the first chapter of *Constitutional Code* [Bentham (1983): 18], where Bentham deals with the problem of the optimal subdivision of the State territory into departments and subdepartments. On the one hand, costs are proportional to the number of divisions, as each on them requires "a set of officers and official residences to be provided for". On the other hand, costs are inversely related to divisions, as inhabitants save the time necessary to travel from home to "the official residence" for their business. "Too apt to be overlooked, but no less real and important, is this latter *item* of expense. In the case of the vast majority, expense in time is expense in money. The expense in officers' pay and official residences is borne proportionably by the opulent few and the unopulent many: the expense in time employed, as above, in journeys, is borne almost exclusively by the unopulent many: by those to whom their time affords no profit, no loss is sustained from the unprofitable expenditure of it". The social cost here considered amounts to the profit loss suffered by the productive class. The reference to the Smithian and Ricardian opposition of productive vs. unproductive labour is the basis for the further conclusion that centralization is discriminatory as far as it favours the *rentier*.

<sup>14</sup> See Bentham to Dumont, 14 dec. 1824, in Bibliothèque Publique et Universitaire, Genève, Ms. Dumont, LXXIV, 48.

reflections on economy as applied to government was obviously the English political debate of the last decades of the 18th. century, exemplified by Burke's "sham Economy Bill" of 1780 [Bentham (1983: 358-59)]<sup>15</sup>. Bentham drew from this debate the emphasis on the problem of corruption. However, he was conscious that most of the proposals introduced into the British Parliament on matters of economy and "retrenchment" masked conservative purposes *vis-à-vis* hierarchical privileges and corruption.

If we contrast Bentham's work with this literature, what strikes us is the deep methodological innovation introduced by him. To the hierarchical and conservative view of economy prevailing even in the reformist literature of the Enlightenment, Bentham substitutes a radically individualistic analysis, based on his sensationalist theory of motives, and especially on the assumption of calculative individuals constantly seeking to maximise their personal welfare. An important complementary assumption, or "axiom" - still implicit in the early manuscripts on reward - is the so-called "self-regard principle", i.e. the statement that, in matters of constitutional and bureaucratic organization, individuals should always be considered as being compelled by egoistic motives [Bentham (1983): 118-20]<sup>16</sup>. Moreover - consistently with these descriptive assumptions and with the normative principles of utilitarianism - the Aristotelian rule of moderation in distributive matters is replaced by a consequentialist rule of optimization, expressed by the joint principles of aptitude-maximization and cost-minimization. This approach has no serious antecedent both in political and in economic literature, and should be also evaluated in opposition to the more rigid conceptions of natural order prevailing even among philosophers who shared with Bentham the sensationalist paradigm (a typical example is the second part of Condillac's *Le commerce et le gouvernement considérés par rapport l'un à l'autre* [1776]).

These innovative aspects of Bentham's political thought are essential for the second argument announced above, as they allow a comparison between Bentham's methodology of inquiry and the theory of choice on which the modern economic analysis of institutions is based. Of course, the analogies should not be overrated. But the individualist and calculative assumptions of Bentham's methodology are not dissimilar in nature from those of standard microeconomic analysis. The hypothesis of egoistic behaviour is another point in common with the latter, especially considering that Bentham does not state it as a factual and

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<sup>15</sup> Bentham discussed at length Burke's Bill in *Defence of Economy against the Right Honourable Edmund Burke* (first printed in January 1817), later inserted into Bentham [1993].

<sup>16</sup> Consistently with his classifications of motives [see Guidi (1996)], Bentham asserts that every human being is compelled both by "self-regard" and by "extra-regard" (sympathy). However, "To give increase to the influence of sympathy for the greater number at the expense of sympathy for the lesser number, - is the constant and arduous task, as of every moralist, so of every legislator who deserves to be so. But, in regard to sympathy, the less the proportion of it, the natural and actual existence of which it assumes as and for the basis of his arrangements, the greater will be the success of whatever endeavours he uses to give increase to it" [Bentham 81983): 119].

universal truth, but - in a Machiavellian and Humean<sup>17</sup> style - as a restrictive hypothesis necessary both to give consistence to the analysis of political institutions and to avoid unrealistic normative conclusions. Moreover, the importance attributed to informational asymmetries confers to Bentham's analysis, as we shall see, a modern flavour. Finally, both Bentham's approach and the modern economics of organizations function both descriptively and normatively [Arrow (1985): 38].

Nevertheless, important differences should be stressed. Firstly, whereas modern economics generally reasons in terms of models based on a purely deductive logic of choice - models which are then to be either verified or falsified by empirical analysis [Blaug (1980)] - Bentham considers sensationalist psychology as an empirical theory - indeed the only consistent empirical theory - concerning human action. Pleasures and pains are the only "real entities" on which moral sciences can build their general statements [Bentham (1818\*): 195-97]. However, once this link with "facts" has been created, Bentham's analysis is not descriptive in a Baconian sense. On the contrary, Bentham is interested in a general theory of human action based on "axioms of mental pathology" and on what Etienne Dumont called a "logique de l'utilité" [Dumont (1801): 13]. As Macaulay reproached both to him and to James Mill [Lively and Rees (1978)], the line which separates this logic of utility from deductive analysis is quite uncertain<sup>18</sup>. Also the language employed by Bentham reveals an effort to fix general principles concerning the rules and constraints of "calculative" individual deliberation, which is not distant from the typical linguistic procedures adopted by contemporary economists.

There is however a second difference. Whereas modern economics generally assumes a *coeteris paribus* clause - according to which statements are valid only relatively to the variables included in the model - Bentham's theory of action is intended as an abstract theory concerning human nature in general. The first step towards a hypothetical model of "economic man" was made only later by J.S. Mill in his well known essay on method<sup>19</sup>. Moreover, in his constitutional works, Bentham was concerned with a general and detailed plan for the reform of government and public service; in this context both descriptive and normative

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<sup>17</sup> See Mill [1835: 280-81]. James Mill was accused by Macaulay for asserting without convincing empirical evidence that it was a general law of human nature that rulers invariably tended to "plunder" their subjects [Lively and Rees (1978): 67]. In fact, Mill's *Essay on Government* suggests another interpretation of this law of nature, according to which a "temptation" to plunder was systematically afforded by institutions which did not provided appropriate checks against corruption. Bentham generally supports the latter interpretation. See Bentham [1983: 20]: "...rulers are by the unalterable constitution of human nature, *disposed* to maximize the application of the matter of good to *themselves*, of the matter of evil to *rulees*" [the first emphasis is mine]. See also Schofield [1996: 224 note], who quotes Bentham [1989: 14-15].

<sup>18</sup> Incidentally, Bentham's sympathy for Beccaria's formulations of felicific calculus is a further proof of these methodological options. See Bianchini [1989].

<sup>19</sup> *On the Definition of Political Economy; and on the Method of Investigation Proper to It*, in Mill [1844].

statements are endowed with universal validity and immediate applicability. Nevertheless, some of the arguments concerning the relationships between "principals" and "agents" are of so specific a nature that the conclusions drawn from them do not differ substantially from those of more abstract modelling.

This paper is concerned with the aspects of Bentham's constitutional theory in which this preference for modelling and general theorization of individual choice is evident, especially inasmuch as Bentham's reflections are explicitly connected with his view of an "economic" organization of political and bureaucratic institutions.

## 2. Incentives and penalties: the economics of emulation

As stated above, Bentham worked to rewards and punishment during the 1770s and 1780s<sup>20</sup>. It is known that his main concern was at that time with the construction of a general theory of legislation, and his reflections on reward and punishment are primarily connected with his analysis of the nature and structure of laws. However, especially in the part devoted to reward, the emphasis is often shifted from legal analysis to a study of incentives and penalties as practical and technical instruments in the hands of sovereigns in order to promote the ends of government. Moreover, book II of *Récompenses* is devoted to salaries, and examines the general problem of the organization of the civil service: among the issues examined by Bentham, I should mention here the difference between salaries and incentives; the association of incentives and penalties as means to increase the efficiency of labour; the relationships between subordinates and "managers" and the mechanisms which can harmonise the latter's agency with the purposes of the Administration (venality of charges, farming vs. State management, etc.). Bentham also states that most of arguments apply not only to public service, but to contractual relationships in the private sector as well [Bentham (1811): 130]. The theory of reward is therefore the focus of Bentham's reflections on institutional organization and rationalization in the light of the "greatest happiness principle".

These reflections are grounded on the general principles of utilitarian "descriptive" ethics elaborated in the same years<sup>21</sup>. Three arguments of Bentham's

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<sup>20</sup> As a textual basis for the study of these reflections I will take Dumont's edition of *Théorie des peines et des récompenses* [1811], after verifying on the corresponding manuscripts that its content - if not the organization of the whole material - is generally very close to what Bentham himself intended to write. Most of the ms. material in French on *Récompenses* is in University College Library, London, Bentham Manuscripts, CXLII, 2-269. The mss. in English on reward are in box CXLIII, 63-145. Richard Smith's editorial *Advertisement in The Rationale of Reward* [1825: iii-iv ] reveals that Dumont made some additions, though of minor importance.

<sup>21</sup> Cfr. Bentham [1996]; Baumgardt [1952]. Doug Long [1994] has demonstrated that the manuscripts on the analysis of pain and pleasure and felicific calculus published by Baumgardt were part of a work on *Elements of Critical Jurisprudence*. Also Bentham's

theory of pleasure, pain and human motives will be mentioned in this place<sup>22</sup>: firstly, humans are calculative beings in every circumstance, even when passions dominate their understanding and will [Bentham (1996): ch. 4]; secondly, a motive is defined as the expectation of future pleasures (or avoided pains) [Bentham (1996): 98-99]; moreover, "pleasures of hope" (or "of expectation") always accompany human action in the pursuit of pleasures [Bentham (1996): 45]; thirdly, and lastly, a fundamental "axiom of mental pathology" - related to the central place attributed to expectations - states that the pain of loss is always greater than the pleasure of acquisition [Bentham (1996): 3 note; (1800-1804): 348).

Bentham's conception of rewards can be understood by considering the distinction between reward and punishment. The first argument introduced by Bentham implicitly refers to the traditional opposition of perfect vs. imperfect duties [see Smith (1762-63): 326-27. Cfr. Haakonssen (1981)]; whereas punishment is required for "negative acts" from the fulfilment of which nobody can be exempted, reward is a better instrument for "positive acts", "qu'il n'est pas nécessaire d'imposer à tous les membres de la société" [Bentham (1811): 142]. However, a further comment introduces an argument of a different nature: in Bentham words, "ces cas sont ceux où l'acte désiré dépend de talents et de dispositions qu'on ne peut point s'assurer d'avance que l'individu possède" [*Ibid.*]. Rewards - and, as we shall see, mixtures of rewards and penalties - are therefore necessary incentives in contracts where informational asymmetries play a central role. So the possibility of reading Bentham's theory of reward from a perspective now known as "Principal/Agent approach" is open.

In fact, a Principal/Agent logic really operates in Bentham's arguments concerning reward and punishment. Bentham often refers to the family context as a comparative case in which informational asymmetries are virtually excluded by the limited number of members and by the possibility of uninterrupted observation<sup>23</sup>. In contrast, in contractual relationships, phenomena of both adverse selection and moral hazard emerge not only because one of the parties can conceal relevant information concerning its capacities *ex ante* or its productivity *ex post*, but also because individuals aiming at maximizing their interest are perfectly rational in doing so<sup>24</sup>. Reward is necessary in order to

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*Introduction*, as he himself states in the preface [Bentham (1996): 1], had been originally conceived of as an introduction to a theory of penal law.

<sup>22</sup> For a more detailed account of these aspects, see Guidi [1996]. The contrast this paper states between Bentham's theory of motives and the Lockean theory of "uneasiness" is detailed in Guidi [1993; 1995].

<sup>23</sup> "Le gouvernement domestique a plus de latitude, à l'égard des peines, que le gouvernement politique, parce que les parents et les instituteurs ont plus de moyens de juger de la capacité de leurs élèves" [Bentham (1811): 142. See also *Ibid.*: 152-53].

<sup>24</sup> "Annoncez une peine en tel ou tel cas, le seul individu qui ne peut manquer de savoir s'il l'a encourue est intéressé à cacher ce qu'il sait: annoncez au contraire une récompense, le même individu se trouve intéressé à produire toutes les preuves nécessaires pour l'obtenir" [Bentham (1811): 135]. See also the following: "Pour tout ce qui requiert des soins et des talents distingués, la peine n'est pas seulement

encourage agents to reveal the relevant information they own. In the chapter devoted to the junction between interest and duty, a constraint known to economists as "incentive compatibility constraint" is clearly foreshadowed. Let us consider a passage like the following: "Le mot intérêt dans cette phrase est donc pris particulièrement pour *plaisir et profit*: on veut exprimer une disposition de la loi, telle que l'accomplissement du devoir soit une source d'avantages qui cessent d'eux-mêmes dès qu'on cesse de le remplir" [Bentham (1811): 136)]. Contracts can therefore include benefits which are greater than the benefit drawn from the concealment of information concerning potential productivity.

The notion of moral hazard is even more clearly stated by a comparison with insurance contracts, which, as is known, have been the first application of the modern theory of information:

Les contrats d'assurance - Bentham states - pourraient nous fournir un autre exemple (...). Un nouveau genre de crime a pris naissance dans ces conventions d'ailleurs si utiles. Des scélérats font assurer une maison ou un vaisseau à une évaluation exorbitante, avec le projet d'incendier la maison ou de faire échouer le vaisseau, pour recevoir le prétendu dédommagement d'une calamité dont ils auront été les auteurs" [Bentham (1811): 147].

Bentham is here concerned with intentional crime, not with relaxed behaviour encouraged by insurance. But the idea that certain contracts may *ex post* involve actions opposed to the interest of the Principal is clearly stated.

The latter quotation is drawn from chapter 8 of *Récompenses*, devoted to "noxious rewards". As a matter of fact, Bentham is conscious that the managing of rewards is not a self-evident matter. The "economics of emulation" indicates the most appropriate strategy in this field.

According to Bentham, the employment of emulation as an incentivating mechanism is related to the powerful motive of "hope", "le plus précieux de tous les biens" [Bentham (1811): 131]<sup>25</sup>. But the role of emulation is explained in chapter 5, devoted to "economy" as applied to reward. Bentham observes that economy should be strictly observed in this field on account of the disproportion between the pleasure of acquisition and the evil of loss. If rewards are of a pecuniary kind, they require a corresponding taxation, and taxes are always an evil. The legislator should therefore demonstrate that the social benefit of the proposed reward is greater than its cost for the community [Bentham (1811): 139]<sup>26</sup>. Implicitly referring to an unfortunate passage of Beccaria's *Of Crimes and*

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inefficace, elle agit en sens contraire. Ai-je à craindre qu'on ne m'impose quelque fardeau extraordinaire à proportion de ma capacité, je me garderai bien de la faire connaître; et si je n'ose la montrer, je n'ai point de motif à l'acquiescer" [*Ibid.*: 142].

<sup>25</sup> In *Defence of Usury* Bentham quoted the proverbial definition "the most precious gift of heaven" [Bentham (1787): 182].

<sup>26</sup> The test proposed by Bentham is very restrictive: "Comparez le montant de cette dépense proposée avec une portion égale du produit de l'impôt le plus onéreux [...] Vous avez à opter entre l'abolition de cet impôt et le nouvel emploi que l'on demande: ce sont deux services rivaux". This argument is repeated in *Constitutional Code*. See Bentham [1983: 20].

*Punishments* [1764: ch. 41]<sup>27</sup>, Bentham adds that the same is true in the case of honours. Costs are this time of a psychological kind, as one cannot favour some individuals without automatically lowering the others. Nonetheless, these costs are as real and painful as the costs of monetary losses [Bentham (1811): 137]. Moreover, prodigality in matter of reward is a premium against real merit and in favour of laziness, intrigue and corruption. Rewards are useful only inasmuch as they encourage competition among individuals for expected scarce prizes.

On peut considérer le superflu en ce genre comme un fonds destiné à une loterie. Avec une dépense comparativement petite, on crée une grande masse d'expectatives, on multiplie dans la société les chances favorables que chacun peut se flatter d'obtenir; et tous les biens, pris ensemble, que sont-ils en comparaison de l'espérance seule? Elle donne la vie et le mouvement au monde moral; elle remplit les jours et les années, dont les plaisirs n'occupent que des instants fugitifs (...). L'espérance active vaut mieux à l'individu lui-même que l'espérance oisive. L'une développe ses talents, l'autre les dégrade; la première s'allie naturellement aux vertus, la seconde aux vices" [Bentham (1811): 138].

Emulation - intended as competition among a large number of individuals for a limited number of rewards - is therefore compatible with economy. The passage just quoted makes it clear that "economy" should be intended in its largest psychological signification: so far as rewards are scarce, they not only avoid the evil of loss to taxpayers and "losers" in the competition for honours. They also create a mass of pleasures larger than the (ephemeral) "pleasure of consumption" enjoyed by the "winner" of the prize(s): the former are the (durable) "pleasures of hope" that every competitor is able to enjoy. Additionally, the latter pleasures activate human talents and productivity, thus contributing to increase the welfare of the community in a dynamic sense. Bentham's theory of expectations is relevant to these analytical results<sup>28</sup>.

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<sup>27</sup> In this chapter, Beccaria explains that honour is an unlimited source of rewards at the disposal of legislators, which can be used to prevent crimes.

<sup>28</sup> Further on, Bentham adds to this balance the "pain of disappointment" suffered by the "losers" after the decision concerning the prize. Now, this pain is generally very powerful in Bentham's thought, as it justifies the primacy of security on equality - among the ends of legislation - in matters of property distribution [Guidi (1996)]. As a matter of fact, however, this pain is in the present case limited in time and can be rapidly erased by the incessant renewal of the strategy of emulation. This explains why Bentham does not consider it a serious objection to the strategy proposed. The relevant passage is the following: "...si après la décision il y a peine d'attente trompée, il y a auparavant plaisir d'expectative. Or, le plaisir est d'une longue durée, il occupe un grand espace dans l'esprit; la peine de l'attente trompée s'efface bientôt, et cède à la première lueur d'un nouvel espoir. S'il est vrai, d'une part, que l'espérance soit le charme de la vie, et, de l'autre, que peu de nos espérances soient complètement réalisées, pour préserver les hommes du mal des attentes trompées, il faudrait donc commencer par leur ôter tout ce qui les rend heureux" [Bentham (1811): 162].

Emulation also involves the management of the opposed motive of fear or "uneasiness" (*inquiétude*)<sup>29</sup>. Bentham's attitude towards this instrument is sometimes ambiguous. In chapter 7, devoted to the balance between punishment and reward, he explains that only hope can stimulate "allegresse", and with it "activity", "attention", "genius" and "invention". On the contrary: "Que la crainte soit le seul mobile de ses efforts, il travaille avec douleur pour s'exempter de la peine; mais il ne fera rien de plus: esclave à la tâche, il n'aspire qu'à la finir" [Bentham (1811): 142]. However, as the latter quotation shows, uneasiness is unfit only when employed isolately and related to penalties. Emulation - if properly managed - involves a combination of both motives. On the one hand, incentives should be numerous enough to keep hope alive. On the other hand, they should be limited enough to allow a combination of uneasiness and expectation. Only in this case the intensity of effort will be maximized<sup>30</sup>. This means that the competition must be open to the largest possible number of individuals<sup>31</sup>. Bentham justifies this combination from the individual Agent's viewpoint, introducing what we might call a "participation constraint": if rewards are promised only to one individual (but the same would be true of a limited number of individuals), "dès qu'il aura fait ce qu'il croit nécessaire pour l'obtenir, le ressort s'arrête, il ne fera rien de plus: tout effort ultérieur serait autant de peine perdue" [Bentham (1811): 161]. It should be clear that "uneasiness", in the case of emulation, does not mean the fear of punishment but simply the apprehension of not gaining the promised (and expected) benefits.

But do penalties play a distinct role as incentives to productivity? One immediate application of the economics of emulation is Bentham's theory of salaries. Bentham's preference goes evidently to piece-work, which is a typical case of emulation. On the contrary, fixed salaries seem to be unfit, as they involve the only motive of fear: "la crainte d'être renvoyé dans le cas d'un degré manifeste et extraordinaire de paresse" [Bentham (1811): 150]. This conclusion seems to imply that such an extreme penalty as dismissal cannot be an adequate incentive to productivity<sup>32</sup>. Among the limits of piece-work, however, Bentham ranges negligence and rashness. Accordingly, this kind of retribution is admitted only inasmuch as quality is not a primary requirement, or where the quality of the work done can be easily detected [*Ibid.*]. Therefore, there are cases in which wages (or

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<sup>29</sup> One should note that the latter term is employed in a different sense from Locke. In Bentham's case, it is not the pain felt for the absence of an object of pleasure but the fear to lose the expected reward. Bentham will later explicit this difference in *Defence of Economy against the Right Honourable Edmund Burke* [1817]. See Bentham [1993: 44-45]. See also Guidi [1996].

<sup>30</sup> Bentham [1811: 150]. See also *Ibid.*: 161: "L'espérance est mêlée à la crainte; il y a *émulation*".

<sup>31</sup> At p. 163 Bentham compares a society in which competition is accepted as a normal procedure to Indou society based on casts. "L'émulation est réduite à son moindre terme, et l'énergie nationale est au plus bas degré". Open social mobility is therefore a precondition of emulation.

<sup>32</sup> See, on this problem, Shapiro and Stiglitz [1984].

at least part of them) must be fixed and anticipated. This is generally the case with skilled labour, both intellectual and manual, as far as a certain degree of constant well-being is necessary to stimulate inventiveness and vigour [Bentham (1811): 170]. Even if Bentham does not draw an explicit conclusion, one might suppose that as far as the expectation of future reward "ne suffirait pas (...) pour électriser ce sentiment de plaisir" [*Ibid.*] - as well as in proportion to the mass of anticipated rewards - the role of penalties and dismissal becomes preponderant. In fact, Bentham suggests that the optimal management consists in a combination of penalties and rewards. This combination "à toute la force de la peine il unit toute la douceur de la récompense" [Bentham (1811): 135].

A conclusion might be that, in the case of labour, an enlarged version of the economics of emulation requires, on the one hand, a competition for limited incentives, while, on the other hand, another part of wages should be represented by minimum fixed wages compatible with effort, and penalties should be threatened in case of non accomplishment of predetermined tasks.

This conclusion opens to Bentham's analysis of salaries in book II of *Récompenses*<sup>33</sup>. Bentham explains here that wages as such are not rewards. Only wages entirely subordinated to the accomplishment of the service required could be considered rewards. Wages should therefore be defined as the opportunity cost of renouncing to other employments of time:

S'il s'agit d'une charge dont l'acceptation fût libre, le salaire est précisément la récompense de cette acceptation. Car cette acceptation a des inconvénients: l'employé aliène sa liberté, il s'expose aux peines attachées aux omissions ou autres malversations dont il pourrait se rendre coupable dans son emploi; l'entreprise de la charge est un service qu'il n'aurait pas rendu sans la récompense [Bentham (1811): 171].

A clear notion of "reserve wage" is expressed in these statements. More specifically, the acceptance of waged labour is subordinated to an individual calculation whose variables are the utility of idleness and the probability of sanctions related to discovered omissions in the contracted tasks<sup>34</sup>. Bentham adds that there is a relation between wages and effort. However, if wages are limited to the "reserve wage" level, productivity cannot be expected too high. The reason is that effort is a disutility for labourers. Moreover, the latter are favoured by information asymmetries *vis-à-vis* their employers, also considering that the

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<sup>33</sup> It is superfluous to repeat that most of Bentham's observations refer to salaries in the civil service but can be applied to wages in general. It must be observed that this book underwent major changes in Richard Smith's English translation of 1825. Bentham was obviously responsible for these changes. Cfr. Facchi [1994]. These modifications are not examined here for reason of shortness. I have preferred to give priority (in next section) to a direct comparison with the major constitutional writings elaborated by Bentham in those years.

<sup>34</sup> Bentham had stated in book I that subsistence wages cannot be considered as rewards as well. See Bentham [1811: 169].

monitoring of performances is not easy<sup>35</sup>, and that collusion may take place between labourers and "inspectors"<sup>36</sup>.

The normative part of Bentham's theory of wages, developed in chapter 2, is a consequence of these arguments. Firstly, minimum wages must be compatible with effort (efficiency wages). Wages should include "tout ce qui est nécessaire, soit pour mettre l'individu en état d'exécuter et de continuer le service, soit pour l'indemniser du sacrifice qu'il fait, en renonçant aux chances avantageuses que d'autres carrières peuvent lui offrir" [Bentham (1811): 176\*]. Secondly, wages should also include the ordinary requirements of social standing for different classes of labourers, also as a guarantee against corruption [Bentham (1811): 180] - Bentham still seems to assume at this time that corruption and wages stand in an inverse ratio. But thirdly, and more importantly, optimum wages should approach as far as possible to rewards and to the standard of emulation. When the duration of labour can be predetermined and delays cannot become causes of vexation and corruption, wages should be paid daily and be subordinated to attendance<sup>37</sup>. Another indicator on which the amount of wages should be fixed *ex post* is the quality of the service<sup>38</sup>. More generally, the largest part of wages should be of a conditional nature and related to effort. Bentham insists that penalties - especially of a fixed nature - cannot be equally efficacious in incentivating productivity [Bentham (1811): 193-74].

To conclude with, Bentham's economics of emulation - as formulated in *Théorie des récompenses* - gives a priority to the expectation of future increases in individual welfare as an incentive to the Agent's effort within organizations. This priority is a consequence of Bentham's theory of motives and to the place made in it for expectations of pleasure. Moreover, Bentham's attention is largely concentrated on monetary incentives, although "honour" is also considered [Bentham (1811): 172]. The threat of dismissal, and other penalties, are only subordinate instruments of management.

Before passing to the constitutional writings of the last decades of Bentham's life, it should be observed that Bentham applied his theory of emulation to a large number of issues in the 1780s and 1790s. The systems of management proposed

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<sup>35</sup> «Au milieu d'un mouvement qui ressemble au travail, on se livre à mille distractions inutiles que l'inspecteur le plus diligent ne saurait noter: l'absence marque, l'oisiveté ne marque pas; la lenteur produite par l'ennui et le dégoût n'a point de caractère qui la distingue de celle qui nait du défaut de capacité ou de la difficulté des travaux" [Bentham (1811): 172].

<sup>36</sup> "Un inspecteur en chef (...) s'il n'a lui-même d'autre motif que le salaire, tout s'arrange aisément; une intelligence secrète s'établit entre le chef et les subalternes, en sorte que plus les choses vont mal, moins le mal paraît" [*Ibid.*]. On this problem, see Ross [1973].

<sup>37</sup> The contrary case is that of the honoraries of judges. Bentham criticizes this practice in *A Protest against Law Taxes* [1793. See *Works*, Bowring ed., vol. 2.

<sup>38</sup> The main application of this rule can be found in *Panopticon* [1791]; see *Works*, Bowring ed., vol. IV, pp. 402). Bentham proposes a reward for every life of prisoners which is saved beyond the average percentage of deaths of the preceding years.

for the *Panopticon* and for the *National Charity Company* are among the most striking examples. Bentham's political economy is possibly another application. In *Récompenses*, he had suggested that market competition for "natural rewards" is an example of the "economics of emulation" [Bentham (1811): 147-48], and the typical "micro-economic" approach he adopted in his economic writings - based on profit-seeking and rent-seeking individuals and on their expectations - is a confirmation of this assertion [see Guidi (1990)].

### 3. A new focus: moral aptitude and responsibility

The continuity between Bentham's early reflections on reward and his analysis of the governmental machine in the material related to the *Constitutional Code* is on many points striking. A common approach is represented by the idea that an efficient management of government and bureaucracy should optimize both the selection of functionaries and the reduction of costs<sup>39</sup>. The new principles of "aptitude-maximization" and "expense-minimization" state more exactly the "economic" character of this approach [Bentham (1983): 350; (1993): 5-6]. Bentham includes in the items of "expenditure (...)" the matter of *punishment*, as well as the matter of *reward*" [Bentham (1983): 19].

However, of the three branches of "aptitude" defined by Bentham (moral, intellectual and "active" [Bentham (1983): 21]), a central place was now attributed to moral aptitude. This shift of emphasis was obviously related to the major changes underwent by Bentham's political attitude during the first decade of the 19th century, and to the support he resolved to give to the cause of representative democracy [Dinwiddy (1975); (1989); Rosen (1983)]. From a modern point of view, this amounts to say that a problem of economics of organizations crossed a problem of economics of corruption. Bentham's solutions were an attempt to resolve the problems raised by this intersection. A simple resort to emulation was insufficient, although the basic assumptions of Bentham's economics of emulation still represented the framework on which he elaborated new suggestions.

#### 3.1 Bentham's economics of corruption

The assumption of calculative individual agents seeking to maximize their profit is the core of Bentham's analysis of corruption, as it was of his theory of reward. Also the Principal/Agent approach is confirmed, and even strengthened in the light of the sinister interest vs. general interest opposition [Schofield (1996)] which distinguishes Bentham's political theory at this epoch. Moreover, the Principal/Agent approach is adapted to the case in question. As recent contributions have stressed, in the case of corruption the opportunist behaviour of the Agent involves a Third party which is interested in the economic decisions of

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<sup>39</sup> One of the manuscripts composing Schofield's edition of *First Principles* [Bentham (1989)], was devoted to *Economy as applied to Office*. For a definition of "expense", see *ibid.*: 5.

the Agent itself [Franzini (1993)]. This inclusion is evident in the two cases of corruption listed by Bentham: extortion and peculation. In the case of extortion, the Agent has, as his only purpose, the "profit to himself", and as means the "oppression and fear thereof", "the victim not having, in any case, any possible means of escaping" [Bentham (1983): 411]. In the case of peculation, the profit of the "trustee" is "at the charge of an *intended Benefitee*" [*Ibid.*: 412] and both share the monetary or real benefits of this "breach of trust"<sup>40</sup>.

The analysis of corruption concentrates on one question: for what reasons (and under what constraints) a self-interested public functionary adopts a corrupted and corruptive behaviour. A complementary question is also that of the reasons why corruption - once it is established and appropriate incentives or checks are not imposed - tends to become systematic<sup>41</sup>.

In answering the first of the two questions just formulated, Bentham states that - in general terms - corruption is an inverse function both of the amount of punishment and of the probability of detection. The choice will depend on individual calculations about the costs and the benefits of the crime: "commit it he will, if in his eyes the benefit of the depredation is greater than the burthen from detection: probability in regard to detection being taken into account" [Bentham (1983): 357]<sup>42</sup>. Among the elements which tend to lower this probability, Bentham ranges the monetary and psychological costs of detecting, denouncing and prosecuting the crime<sup>43</sup>.

But the most important argument introduced by Bentham concerns the relationships between the amount of salaries and the propensity to corruption. This emphasis can be explained with the necessity to answer Burke's argument, according to which high salaries were an appropriate and sufficient incentive against corruption [Bentham (1983): 358-59; (1993): 44 ss\*]. Bentham - who had shared this view in *Théorie des récompenses* - is now convinced of the negative: by high emoluments "attached to the office, the endeavour to commit depredation

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<sup>40</sup> Bentham details four cases: 1. goods bought over their price; 2. goods sold under their price; 3. overrating of a competitor; 4. adjustment of the terms of a competition in favour of a competitor.

<sup>41</sup> This question approaches Bentham's analysis to a "strategic" point of view which has point of contact with the modern analysis of corruption in terms of game theory. See Zamagni [1994].

<sup>42</sup> See also the following statement: "If he were free from apprehension of punishment in any other shape, if the value of the bribe received or expected by him for the breach of trust exceeded in his eyes the net value of his office - power, salary, patronage and all other perquisites put together - an inducement adequate to the production of such breach of trust might without difficulty present itself" [Bentham (1989): 34].

<sup>43</sup> See Bentham (1989): 9-10, where he mentions "the uncertainty of success in the case of prosecution, coupled with the certainty of odium, delay, expence and vexation on the part of the prosecution: the odium not always considerable, the burthen of expence capable of being taken off by compensation: but the uncertainty, delay and vexation still remaining unremovable and incapable of being compensated". For the point of view of contemporary economics, see Franzini (1993): 136-37.

[cannot] be prevented, or at least in an adequate degree improbabilized" [Bentham (1983): 356].

Many arguments are adduced in support of this argument, both of an empirical and of an analytical kind. Among the latter, Bentham argues that it is true that necessity can expose the lowly paid functionaries to corruption [Bentham (1983): 139; 357]. However, necessity might be a motive also for highly paid civil servants, as higher social standing and the rules of patronage introduce new expensive needs. Therefore, necessity as an inducement to corruption is weakly correlated to the level of salaries [Bentham (1983): 357]. On the contrary, the level of income<sup>44</sup> is in a direct ratio of the propensity to corruption:

...as the opulence increases, the value and efficiency of any quantity of punishment professed, or even endeavoured, to be employed in the production of punitive responsibility is diminished: diminished, because, as opulence increases, so does the [facility] of obtaining accessaries before and after the fact - of obtaining accomplices and supporters (Bentham (1983): 23 note).

The reason of this inverse relation is therefore that the "matter of reward" of which functionaries dispose allows collusion and even "organized crime" which, in their turn, lower the probability of punishment [see also Bentham (1983): 358; 417].

Moreover, the efficiency of punishment as a deterrent against corruption depends on the comparative amount of the benefits of corruption *vis-à-vis* the property assets ("opulence") of the functionary. Bentham states that so long as the former is larger than the latter, responsibility is "in a direct ratio of his opulence" [Bentham (1983): 24]. Conversely, once the latter surpass the former, "this effective responsibility is rather in the inverse (...) ratio of it" [Bentham (1983): 25]. Both these functional relationships are intuitively connected to the ability of the corrupted to pay his/her debt to society if their crime is detected [Bentham (1983): 298]. However, the meaning of the two conditions is less easy to interpret than it would seem. In general terms, Bentham insists - as the second condition clearly states - that the "disposition" to corrupted behaviour is a direct function of the individual's income (and patrimony). In the case of Monarchy - where the quantity of resources possessed by the monarch is infinitely high - responsibility is excluded altogether. Nevertheless, the first condition seems to mean that too low levels of income could incentive the irresponsible choice of amounts of corruption exceeding the individual's ability to pay in case of detection. This would amount to a theory of minimum salaries compatible with responsibility (for more details, see the appendix to this section).

Finally, delineating a sort of "sociology of patronage", Bentham suggests that inefficiency and propensity to corruption are high in the case of the "protégés" who received undeserved highly salaried places, both because their "disgust" for their occupation is high, and on account of the high expected utility of the situation in which they would fall if their crime were detected. If dismissed, they would live as idle *rentiers*, benefiting of pensions and other advantages of

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<sup>44</sup> Bentham in these passages reasons in terms of stocks (property assets) rather than flows (income or salary), by referring to the "opulence" of civil servants.

patronage<sup>45</sup>. It should be observed that the utility of unemployment is a key variable in the theory of efficiency wages [Shapiro and Stiglitz (1984)]. Bentham's remarks, inasmuch as are referred to the risk of corruption, apparently go in the opposite direction. This is another aspect on which the opinions expressed in *Théorie des récompenses* changed under the impact of Bentham's reflections on moral aptitude.

Bentham also answered the second question stated at the beginning of this section: under what conditions corruption may become systematic. He often describes a "chain of corruption" going from the highest powers of the State (the Monarchy, where it exists, or the Prime minister) to simple citizens (voters), and passing through the parliament and the lower positions in the civil service [Bentham (1989): 24-26]. The "matter of reward" is the stake of this corruption game, and places and pensions are the main instruments of corruption. If appropriate checks are not enforced, the mechanism of corruption invades the whole field for at least two reasons: the rise and generalization of collusive behaviour, and the necessity also for potentially honest individuals to submit themselves to the rules of the game, if they do not want to be dismissed [Bentham (1983): 76-78; 139]. Such proposals as the "temporary non-relocability" (re-eligibility) of the members of the Legislature are meant as devices for cutting at least some strategic links of this chain [Bentham (1983): 78-79].

This for Bentham's analysis of corruption. From a normative viewpoint, the central problem is that of the institutional constraints required to minimize sinister interest. The term "minimize" is relevant here, as Bentham believes that corruption cannot be extirpated altogether through the mechanisms of the "artificial identification of interests" [see f.i. Bentham (1983): 89]. Bentham's strategy focuses on three devices: 1. "public examination system"; 2. "pecuniary competition system"; 3. "the choice left to the locating functionary" [Bentham (1983): 350], and the "location of subordinates by effectually responsible superordinates" [Bentham (1983): 23].

#### **APPENDIX. More details on the relationship between the propensity to corruption and income**

The two arguments mentioned above - according to which so long as the benefits of corruption are larger than the property assets ("opulence") of the functionary, responsibility is "in a direct ratio of his opulence" [Bentham (1983): 24], and conversely, once the latter surpasses the former, "this effective responsibility is rather in the inverse (...) ratio of it" [Bentham (1983): 25] - can be examined more in depth.

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<sup>45</sup> Bentham (1989): 9: "The utmost degree of subjection and [subordination] produced by dislocability depends on the value of the situation in the eyes of the functionary: it has no value at all, or none but what may be outweighed by the profit which he promises to himself from any such acts as it will be in his power to exercise before his dislocation can have place, the subordination he is in will be but nominal only, not effective and entire"

Let us restate the variables implied. These are five: the amount of the benefits of corruption  $C$ , the assets of the corrupted  $O$ , the "propensity to corruption"  $c$ , (or, alternatively, the degree of responsibility  $r = 1 - c$ ); other variables are the amount of punishment  $P$ , fixed exogenously as a proportion  $d$  of  $C$  (with  $d < 1$ ), and the probability of detection  $p$  (itself an inverse function of  $O$ , but for the sake of the argument we can assume it as invariable). Let us assume also that  $pP = C$ .

In order to avoid the complications connected to the fact that  $O$  represents stock quantities, let us replace this variable with  $Y^* = Y + lO$ , where  $Y$  is the current income (salaries) of the individual and  $lO$  the portion of his/her assets which can be liquidated in the current period in order to pay  $P$ , with  $0 < l < 1$ .

Then, according to Bentham, two conditions alternatively hold:

- (1) for  $C > Y^*$  (or  $C/Y^* > 1$ ),  $c = f(Y^*)$  with  $c/Y^* < 0$ ;  
 (2) for  $C < Y^*$  (or  $C/Y^* < 1$ ),  $c = g(Y^*)$  with  $c/Y^* > 0$ .

Both these functional relationships - as stated above - are intuitively connected to the ability of the corrupted to pay his/her debt to society if the crime is detected. However, whereas condition (2) states that the deterrent function of  $pP$  is lesser and lesser felt as income  $Y^*$  increases, as far as  $C$  is lower than  $Y^*$  (a notion of decreasing marginal utility - not ignored by Bentham [1788: 316] - could explain this relationship), condition (1) seems to state that lower incomes increase the propensity to corruption (and the propensity to the risk of paying  $P$ ), when the amount of the benefits  $C$  is larger than income. This condition is not easy to understand. Necessity could be adduced as a reason for lowly paid civil servants to adopt such a risky behaviour. Even so, this behaviour would appear irrational, and would additionally contradict Bentham's argument that necessity is weakly correlated to income.

An explanation could be that those with very low levels of income have "nothing to lose" if detected, and could have a strong temporal preference for the immediate benefits of corruption *vis-à-vis* the prospect of "extreme indigence" they expect in case of dismissal. This would amount to assume a third condition stating that  $C/Y^*$  is inversely related to income.

- (3)  $C/Y^* = h(Y^*)$  with  $h' < 0$

The graphical representation of this function could be that of *figure 1a*.  $Y_0^*$  is the minimum level of income at which "effectual responsibility" (i.e. the ability to pay  $P$ ) is secured. Consistently with (3), condition (1) and (2) could collapse into a single non monotonic function of  $Y^*$ , with minimum propensity to corruption corresponding to  $Y_0^*$  (*figure 1b*). The latter would amount to an optimum level of income compatible with responsibility.

If one considers that, of the components of  $Y^*$ ,  $O$  is influenced by the current level of income  $Y$ , Bentham's general conclusion could be seen as concerning salaries. Salaries should be high enough to discourage an option for the temporarily limited benefits of corruption, so that "effectual responsibility" be ensured. However, as far as - beyond this minimum level - the "propensity to

corruption" is in a direct ratio of salaries, the latter should not exceed that level. In this sense,  $Y_0^*$  would indicate the optimum level of salaries.

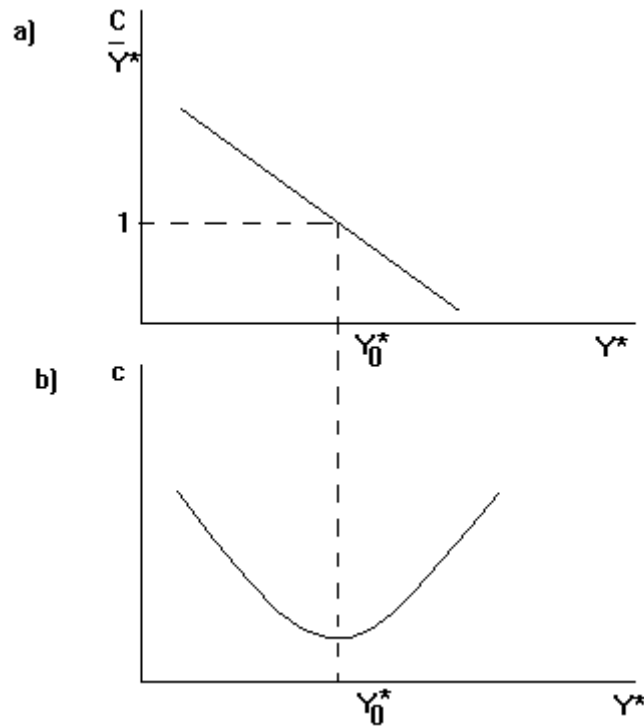


Figure 1

### 3.2 Public examination and the problem of asymmetric information

Bentham deals with the "public examination system" in chapter IX, sect. 16 of *Constitutional Code*<sup>46</sup>. The Prime Minister should select the potentially "locable" functionaries on a list established by a special jury appointed for examining the degree of "aptitude" of candidates [Bentham (1983): 310-11]. The examination of candidates is therefore a judicial procedure, and must be grounded on evidence. Whereas votes are attributed in proportion to the degrees of intellectual and active attitude disclosed by candidates, moral aptitude must be ascertained on a limited list of questions, which notably excludes such self-regarding issues as "sexual appetite". The results of this part of the examination cannot be exactly measured in terms of votes. The jury will report a detailed description of the moral aptitude of the candidate on a "Candidate's Character Book", transmitted to the Prime Minister [Bentham (1983): 322].

<sup>46</sup> It is known that this part was published by Bentham also as a section of his "pasticcio": *Official Aptitude Maximized, Expense Minimized* [1830].

The examination system is conceived of as a device to ascertain the potential disposition to effort and to responsibility of future functionaries. These qualities are not self-evident and must be brought to light. The existence of informational asymmetries is clearly admitted, and the suggestion of a predetermined list of questions on moral attitude reveals that "signals" are relevant for the choice [see Spence (1973)]. Bentham is also aware of the costs relative to this procedure, and suggests a massive employment of lot in order to minimize them, for example in the selection of questions [Bentham 1983]: 329-37]. This confidence in examinations as an instrument of screening may appear naive. However, Bentham is convinced that the monopoly of information and the risks of adverse selection can be minimized (not excluded). As K.J. Arrow has recently stated [1994], information is a good of a special kind: it has a value for Agents so long as it can be concealed but cannot be rationed once it has been brought to light.

However, examinations are not sufficient to this purpose. One of the "subservient" uses of pecuniary competition is to reveal the degree of aptitude of candidates.

### 3.3 Pecuniary competition and the minimization of adverse selection

Section 17 of the chapter IX of *Constitutional Code* introduces the second mechanism for securing aptitude: "pecuniary competition". Once the examining jury has transmitted to the Prime Minister a classification of the applicants, the latter invites the best qualified to take part to a competition. This competition follows the method of auctions, with the Prime Minister fixing a random starting price<sup>47</sup>. Competition can be either "reductional" or "emotional", or a mixture of both ("compound bidding") [Bentham (1983): 338]. More explicitly, competitors can offer either to accept lower salaries, or to pay a sum in order to get the position at the proposed salary. The meaning of "compound bidding" is intuitive. An additional requirement consists in a "pecuniary security" the bidder must provide as a fund to use in a "compensational" way in case of corruption detected [Bentham 1983): 338]. The Prime Minister is invited to "locate" the best bidder, although he/she can select another candidate after evaluating his/her comparative (supposed) aptitude.

Pecuniary competition is a primary instrument of cost minimization [Bentham (1983): 299-311]. However, it does not contradict the purpose of aptitude maximization. Bentham believes that competition is a useful device especially for revealing moral aptitude [Bentham (1983): 298; 346; 353]. His assumptions are that 1. the lesser the accepted salary, the more intense the "relish" for the proposed occupation [Bentham (1983): 345; 353]; and 2. if one accepts even to pay for it, one's "relish" should be considered higher [Bentham (1983): 298].

Among the rigidities of Bentham's approach a notable one is his subscription to the theory of wages prevailing in pre-classical political economy - William Petty is an example [see Hutchinson (1988): 39] - according to which wages are

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<sup>47</sup> In *Théorie des récompenses* - in which this mechanism is already anticipated - a sort of *tâtonnement* is described as the way to establish the definitive level of salaries. See Bentham (1811): 178\*].

in an inverse ratio to productivity. The higher the level of "opulence" - he asserts - the lower are effort and attendance, and the more numerous the opportunities to get favours and collusion [Bentham (1983): 138-39; 298]. He goes up to asserting that "exertion" is in positively correlated to "need" [Bentham (1983): 348-49]. It should also be observed that, on this aspect, Bentham changed of attitude *vis-à-vis* the theory of high wages discussed in *Théorie des récompenses*.

Another problem is represented by his (this time constant) enthusiastic acceptance of venality as a means for obtaining public charges. It is known that venality had been one of the *bêtes noires* of the French *philosophes*. Montesquieu had admitted it for monarchical constitutions, "parce qu'elle fait faire, comme un métier de famille, ce qu'on ne voudrait pas entreprendre par la vertu, qu'elle destine chacun à son devoir et rend les ordres de l'Etat plus permanents" [1748: I, 192]. Montesquieu added two advantages of venality: firstly, it was a means against the corruption of the court (if the King himself supervised it), and, secondly, "la manière de s'avancer par les richesses inspire et entretient l'industrie" [*Ibid.*]. Of contrary opinions was among others Condillac, who classified venality among the "threats to commerce", by comparing it to public debt. Venality was admittedly a resource for the budget of the State. Nonetheless, "elle n'est que momentanée, et il reste chargé à perpétuité d'une dette" [Condillac (1776): 341]. Moreover, Condillac insisted that venality was a means of increasing the number of idle aristocrats and of their costly privileges.

Bentham agreed with Condillac on both objections. However, he insisted that pecuniary competition would place venality on a different standing from that revealed by historical evidence [Bentham (1983): 349-50]. His main argument was very similar to Montesquieu's: especially when "compound bidding" prevailed, venality was a means of minimizing patronage and corruption: "Minimizing the pecuniary value of the situation, it minimizes the quantity of the matter of corruption which the patronage places in the hands of the locating functionary" [Bentham 1983): 354].

Lastly, such a rigid belief in the virtues of free competition can appear naive, in the light of the modern results of the economics of information<sup>48</sup>. As the theory of efficiency wages asserts, those with high productivity might not offer themselves for too low salaries, thus leaving place to phenomena of adverse selection. It must be remembered that "pecuniary competition" is grounded on the results of examinations, and that the auction is established only among potentially "excellent" applicants. However this is not enough, as only competitors know *ex ante* their real level of effort and propensity to corruption. Bentham is aware of these difficulties, though his answer is that - inasmuch as salaries are concerned - pecuniary competition is the most appropriate mechanism for signalling both effort and responsibility.

A more favourable light could be thrown on this "Manchesterian" view, by considering Bentham's general design: his purpose was to allow the emergence of a class of civil servants interested more to their reputation than to the level of their

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<sup>48</sup> Bentham insists that the same reasons for which free-trade is popular even "among the highest of the ruling few" apply also to the determination of optimum salaries. See Bentham [1983: 348].

salary [Bentham (1983): 138]. This assertion requires some explanations. Bentham is not removing here the general assumption of self-interested calculative individuals aiming at maximizing their own welfare. Individuals accept to engage themselves only if their total benefits are greater than the cost they have to pay, including venality and pecuniary securities. However,

...the matter of wealth being but one of divers instruments, by the application of which personal service is engaged; others being *power, reputation, and dignity*, that which results form the *nature* of the *occupation*, with or without *factitious* honour and dignity, superadded; in such sort that instead of receiving money in compensation for the service rendered by him, in taking upon himself the obligation of exercising the functions of the office considered as a *burthen* - a man will be content to give money, for the faculty of exercising those same functions, that same faculty being regarded by him as a *benefit* [Bentham (1983): 350].

Of this large range of motives, to which other could be added (shirking and even "vengeance"), only a part can be admitted from a normative viewpoint. Power, for example, should be strictly limited and defined, in order to avoid abuses and corruption [Bentham (1989): 30-34]. But, above all, Bentham is contrary to every kind of "factitious honour", as distinguished from reputation. Honour - as Hobbes had clearly stated [Hobbes (1640): II, viii, 3] - implies distinction and fixed hierarchical ranking. "In the mass of those honours, or, as they are also called, dignities, which are factitious, - I behold an instrument of undeserved triumph in the hands of those who share them, of unjust depression on the part of all besides" [Bentham (1983): 138]<sup>49</sup>. On the contrary, reputation implies social mobility and incessant individual competition for the "natural rewards" attributed by the "Tribunal of Public Opinion". Benefits, not distinctions are the stake of reputation-seeking activities, and these benefits can consist both in "appropriate sentiments of love and respect", and in "the special good will, good offices, and services, in whatever shape, tangible or intangible, naturally flowing from these sentiments" [Bentham (1983): 301]. These benefits flow to the civil servant only so long as his/her behaviour is approved by public opinion. Moreover, whereas titles and dignities cannot be exactly proportioned to real merit, the "natural reward" of the public is always strictly proportioned to the merit attributed to each individual [Bentham (1883): 304]. Bentham's suggestion of a Public Merit Register in which ascertained facts (merits) are registered (or cancelled) is a means for securing this preference for reputation. It should be observed that competition for reputation is a kind of emulation, as far as the rewards of public opinion are temporary and scarce: this kind of emulation is compatible with responsibility.

As one can easily understand, Bentham has in mind the problem of the incentives which can induce supposedly self-interested individuals to accept services with low remuneration (or even gratuitous) and submitted to a large number of "restraints and constraints" against corruption. Some benefits must accrue to civil servants in order to induce them to work for the general interest,

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<sup>49</sup> This statement is part of the "Legislator's inaugural declaration". See also Bentham [1989: 28].

and the material and immaterial advantages of (limited) power and reputation, so long as they do not trespass the limits of corruption, are among them [Bentham (1983): 89]. Assuming the hypothesis of full employment, Bentham imagines a labour market divided into two sections: on the one hand, those who are disposed to accept a large number of restraints and lower incomes in exchange for (the benefits deriving from) reputation, could be engaged in the public service; on the other hand, those who have a preference for higher monetary incomes would find in the "lucrative" activities of the private sector a more eligible field for their employment [Bentham (1983): 350-52].

Among the self-interested or "semi-social" incentives listed by Bentham, no mention is made of "self actualization", a class of motives on which the behaviourist school of the 1950s insisted, placing them at the top of the ideal scale of incentives [Maslow (1954); McGregor (1960)]. The possibility of career is indeed contemplated by Bentham [1983: 89] but a wider sensibility for the problems of individual self-fulfilment should not be expected from a pre-romantic philosopher as he certainly was. It is known that this aspect was developed by John Stuart Mill both in general ethical terms [Mill (1859): ch. III] and in his political theory. Mill's "development democracy" - as opposed to Bentham's "protective democracy" [Macpherson (1977): 44 ss.] - was an attempt to select a political and administrative *élite* governed by a sincere interest for the improvement of mankind. However, the political solutions suggested by Mill [see f.i. Mill (1861): ch. 8] were incompatible with Bentham's assumptions that, in matters of constitutional law, humans should be considered as knaves. Conversely, Bentham's approach is suggestive inasmuch as - as Arrow [1985] observed - it induces not to focus the analysis of wages and incentives on pecuniary motives. There are reasons - indeed not limited to the public sector - for which this emphasis could be misleading, and corruption is certainly the most important of them.

The social reflections which motivate Bentham's case for pecuniary competition will not be examined here in details. I will only remind that these reasons are of primary importance: Bentham believes that, thanks to open emulation, traditional aristocracy will lose its privileges [Bentham (1983): 348-49], and a new class of "unopulent" and strongly motivated civil servants will emerge [*Ibid.*: 350-52]. Bentham's remarks on competition as a strategy of dynamic equalization of fortunes - developed in his writings on political economy - re-emerge at this point. Such barriers as venality and securities are only temporary - Bentham adds in an optimistic vein - inasmuch as success in private endeavours can represent a step towards the desired public situations [*Ibid.*: 353]. On the other hand, patronage and corruption are insurmountable barriers for the social ascending of the poor.

### **3.4 Responsibility and moral hazard**

Responsibility is the third and last rule for maximizing moral aptitude [Bentham (1983): 21]. In *Fragment on Government* (published in 1775) [Bentham (1977): 485], the same term was already employed among the elements which distinguish "free" from "despotic" governments. "Superordinates" are responsible

not only for the choice of the subordinates, but also for the work done by them [Bentham (1983): 23]. Subordinates, in their turn, must respond to their superiors for their activities. "Dislocation" and legal punishments are the threats impending on everyone, although special mechanisms and warranties are fixed for every degree, in order to avoid arbitrary abuses of power [Bentham (1983): 368; (1989): 8-9].

Bentham is aware of the fact that even in the case in which the "locational" system has selected the most "apt", appropriate incentives must be introduced against moral hazard - the latter consisting not only in shirking, but also, and principally, in corruption. However neither rewards, nor the simple risk of not obtaining the promised rewards, are appropriate instruments to this end. Only punishment can be effectual.

Note that, only by expectation of eventual *evil* (*punishment* included) can responsibility be established: neither by *expectation* of *eventual* good, nor by the *possession* of *good* (*reward* included) can it be established [Bentham (1983): 21].

Bentham makes a distinction between the purpose of "engaging", for which rewards and emulation are useful, and the task "of ensuring the regular and apt fulfilment of (...) obligations", for which only punishment "can be made applicable with effect" [Bentham (1983): 21-22 note]. This is another issue on which Bentham's original attitude toward emulation changed as a result of his reflections on corruption: the place left to punishment is larger than in *Théorie des récompenses*.

However, legal punishment and dismissal are not sufficient incentives, as individuals can rely on the probability of not being detected in their "sinister" behaviour. The motive of reputation is strategic at this point, and the economics of emulation finds a new field of application. As far as the "transparency" of government acts is guaranteed [Bentham (1983): 146]- "the maximum of publicity" compatible with "the maximum of frugality" [Bentham (1983): 163]<sup>50</sup> - individual public servants competing for the benefits of reputation distributed by the Tribunal of Public Opinion<sup>51</sup> will engage in an emulative competition in which both the expectation of "natural rewards" and "uneasiness" [Bentham (1993): 44-45] play a distinct role. Among the "indirect remedies" suggested by Bentham, "deontological codes" and "codes of good manners" for legislators and civil servants rely on the stimulus of reputation: posted in every public establishment, they become rules in the hands of public opinion in order to evaluate the behaviour of functionaries [Bentham (1983): 394-97]<sup>52</sup>.

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<sup>50</sup> As chapter IX, section 26 on "Architectural Arrangements" reveals, the model of *Panopticon* is once again the main "economic" instrument of transparency.

<sup>51</sup> On the functions and component parts of this "tribunal" see Bentham [1983: 35-36; 86-87].

<sup>52</sup> Bentham also calls them "rules of deportment for functionaries", "rules of ethics", or "ethical codes", explaining that they can bear such a name as they prescribe a behaviour which tends to increase "the sum of human happiness" [Bentham (1983): 396].

All that considered, what is left of Bentham's former ideal of wages as far as possible proportional to the work done? In fact, Bentham's opinions did not change on this subject. Daily salaries subordinated to attendance are suggested both for MPs and for ministers and subordinates [Bentham (1983): 49]. Analogously, the remuneration of teachers should be defrayed by their students - says Bentham in a Smithian mood - as fixed salaries are "a premium on negligence" [Bentham (1983): 325-26]. Bentham is nevertheless more prudent on rewards for "extra-merit" [Bentham (1983): 381]. These remunerations should be strictly limited to extraordinary services, and distributed through a "judicial" procedure, ascertaining the appropriate evidence [Bentham (1983): 300-2]. Only this mechanism would secure justice and avoid the sinister interest which inevitably follows from the arbitrary distribution of rewards by ministers and "superordinates" [*Ibid.*: 304-5]. Reward is however risky for "extra-dispatch", "for though on that *one* occasion it is a premium for despatch, it operates as a premium on delay on all others" [Bentham (1983): 423-26].

#### 4. Conclusions

The problem of the economic organization of bureaucratic institutions is central in Bentham's political thought, especially in his later works on democracy. The novelty of Bentham's approach is represented by his method of analysis, based on hedonistic psychology and on an abstract "logic of utility". More specifically, the theoretical interest of Bentham's analysis lies in the problem of the compatibility between salaries and incentives designed to maximize effort - an issue originally viewed by Bentham in terms of emulation - and the economics of corruption.

Many of Bentham's suggestions refer to the public service, although they may be applicable also to private organizations. The links between Bentham's political analysis and the modern economics of institutions seem only indirect. Perhaps John Stuart Mill's negative attitude towards Bentham's and his father's approach to political theory was partially responsible for its setting aside. More important is the fact that economists have discovered the specific problems of organizations only recently, and that they are often reluctant to acknowledge their debt to political science, still more to long-standing theoretical traditions.

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