

# Behind the Market Stage Where Real Societies Exist – Part I: The Role of Public and Private Order Institutions

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*This two-part article is an attempt to clarify the social conditions upon which the viability and efficiency of the market system rest. It strives to show that the 'embeddedness' thesis, that is, an explanation based upon the existence of long-run personal ties involving the use of reputation mechanisms among transactors, cannot fully elucidate the question as to how the problem of trust is solved in market societies. As explained in Part I, there are difficulties of both theoretical and empirical/historical kinds and these explain why the 'market order' needs to be sustained by private and public order institutions.*

*In Part II, the role of generalised morality in backing or supplementing such institutions is discussed in the light of game theory, and particular emphasis is put on the ability of moral norms to sustain honest behaviour by generating the right kind of preferences and establishing trust. The vexed problem of the dynamics of norm emergence and erosion is then addressed with a view to showing that norms of generalised morality – perhaps contrary to moral norms in small groups – cannot be easily created by fiat nor be expected to evolve spontaneously*

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*when they are needed to make economic exchanges viable. Ultimately, the cultural endowment of a society plays a determining role in shaping its specific growth trajectory, and history therefore matters. Finally, to illustrate the theoretical discourse, reference is made to present-day Third World countries. It is argued that economic development is especially difficult in countries where norms of limited-group morality prevail and do not readily give way to generalised morality.*

## INTRODUCTION

It is a striking feature of the current diagnosis about growth failures in Third World and Eastern European countries that government's behaviour and excessive interference with economic activities are considered the source of nearly all the existing troubles. Consequently, the prescribed remedy is to free market forces, to create or strengthen market-supporting institutions, and to drastically reduce the role of the state. The way the recipe is usually presented implies or suggests that the market is a system that can be planted with guaranteed success in any soil at any time. There are admittedly a number of crucial infrastructural conditions that need to be fulfilled for the market mechanism to function adequately: these conditions include the establishment of private property rights; the setting up of a legal framework comprising bankruptcy, contract, and competition laws; and the granting of fundamental liberties such as the freedom to trade or to choose one's occupation. Yet, inasmuch as the possibility or effectiveness of these conditions is not deemed to depend on the social setup in which they operate, there is no place for doubts about the effective transferability of the market system to grounds in which it did not emerge spontaneously.

Such an approach is obviously at odds with the well-known Weberian line of argument according to which the market mechanism can function more or less effectively only if it is embedded into an appropriate social structure.<sup>1</sup> In modern economic parlance, an 'appropriate social structure' can be understood as one that solves the problem of the 'market order' by ensuring low-cost enforcement of the rules of the 'market game', among which honesty in economic dealings is particularly important. Yet, surprisingly enough, it is from sociology rather than from economics (despite the influence of evolutionary economics, largely inspired from biology) that we hear nowadays a growing number of voices that tend to largely dismiss the Weberian problem! This new school of sociology views the market society as essentially self-regulating, its internal order arising from the decentra-

lised initiatives of the various actors and the self-policing mechanisms that operate through the close and continuous relationships among them.

The present article aims at countering this view in the light of some recent achievements of economic theory as well as new evidence on important historical events and processes in European history. More precisely, the article wants to make two central points. The first point is better understood by distinguishing between three types of rules according to whether they can be established and sustained in a spontaneous, completely decentralised way; through conscious coordination efforts; or by resorting to external sanction systems (which presuppose the existence of an authority structure). Note carefully that the word institution is used only with respect to the latter two mechanisms.<sup>2</sup> Now, the first possibility arises when the society finds itself at the 'good' equilibrium (say, the honesty equilibrium) from the beginning. The second one occurs when there are multiple equilibria and there is a need to direct the society from a 'bad' to a 'good' equilibrium. Lastly, the third solution becomes unavoidable when the society is entrapped in an unique 'bad' equilibrium (the dishonesty equilibrium) and a coercive intervention is required to move it out of this awkward position and to create the conditions of a 'good' equilibrium. Given the complexity of informational problems in the large societies which the market needs to deploy its beneficial effects, the first type of rules is not sufficient to support the market order effectively. The second and third types of rules are necessary, and it bears emphasis that the intervention of a third party is required not only for establishing and enforcing effective sanction systems but also to solve coordination problems by setting up self-enforcing mechanisms.

The second central point which this article wants to make is that even institutions are not sufficient to make the market order an effective regulating device. They need to be actually supported by norms of generalised morality aimed at fulfilling the following functions: to reduce the enforcement costs entailed by external sanctioning; to help transform a situation in which recourse to external sanctions is necessary into one in which a 'good' equilibrium (such as that represented by mutual trust) becomes possible and to guide the society towards that position. Such a requirement leads to the conclusion that the social fabric and the culture of human societies matter a great deal and, to the extent that norms and cultural beliefs are rooted in historical processes, history necessarily determines the development trajectories of particular countries. As a matter of fact, there is no obvious way in which moral

norms can be created by fiat and the 'rise of the West' may perhaps be ascribed to a historically-rooted cultural endowment which, among other things, helped generate the appropriate kind of norms. In other words, not only diverse institutional infrastructures but also diverse sets of cultural beliefs place societies on different trajectories of economic growth. As pointed out by North: 'Economic history is overwhelmingly a story of economies that failed to produce a set of economic rules of the game that induce sustained economic growth' [North, 1990: 98]. The present intellectual effort therefore challenges a crude version of the New Institutional Economics (this is the name usually given to the new body of literature which addresses institutional issues from an informational perspective) in which institutions or rules or conventions are seen as evolving more or less spontaneously towards efficient forms under the pressure of relative price changes.<sup>3</sup>

Viewed in this perspective, the market appears as a delicate mechanism which may fail to generate powerful effects (in the sense of giving rise to efficient trade) if it is embedded in an uncongenial cultural fabric. Policy-makers concerned with reforming poor countries' economies entrapped in relative stagnation (at least compared to their 'technical' potential for growth) ought therefore to question the appropriateness of abruptly imposing market mechanisms and rules (for example private property rights) on these countries. Things may indeed turn out as though the latter's social structure would vengefully react to this 'institutional rape' by actually subverting the market and thereby causing significant unintended effects to arise not only on the plane of equity but also on that of efficiency. Also, policy-makers interested in the long-run prospects of economically advanced countries should start to ponder over the possibility that growth in these countries is perhaps not self-sustaining owing to the action of powerful forces that undermine their systems of beliefs and norms.

This article is divided into five sections, the first of which is developed in Part I while the latter four make up Part II. The chief aim of section I is to arrive at a more precise statement of the market order problem. This is going to require a rather lengthy argument starting from the assumption of anonymity and proceeding through a discussion of the issue of trust, first in traditional, precapitalist economies and then in market economies at an early or advanced stage of evolution. It is essentially argued that, contrary to what a growing number of sociologists seem to believe today, the latter economies need to solve the problem of trust in a way that significantly differs from the solution adopted in the former economies. In a nutshell, while this problem can be solved in a largely spontaneous way in traditional agrarian societies

(yet even here the extent of 'spontaneity' ought not to be over-estimated), its solution necessitates the support of (both public and private order) institutions in market societies, a requirement amply borne out by historical evidence. In section II, attention is devoted to the role of norms of generalised morality in backing or supplementing these institutions. More precisely, it is shown that the presence of such norms helps to establish the conditions most conducive to well-sustained honest behaviour. Yet reinforcement mechanisms are needed to make moral norms continuously effective. In section III, the thorny issue of the dynamics of norm emergence and erosion is addressed. The first aspect is examined from the vantage points of both eighteenth-century Scottish philosophy and game theory while the analysis of the second aspect consists of arguing that a self-destructive process of norm erosion might perhaps be at work in advanced market societies. In section IV, the focus is shifted to the developing countries. The perverse effects of an abrupt superimposition of a market mechanism on an uncongenial social matrix are brought to light, first at a rather general level, thereafter with special reference to the operation of the land market. Section V concludes the article.

The issue of the social foundations or preconditions of the market has clearly a multidimensional character calling for a multidisciplinary perspective: no single discipline can honestly claim to have a decisive advantage in resolving it. Special effort is therefore made in this article to integrate important findings or clues drawn not only from economics (the dominant viewpoint adopted here, accounting for the use of game theory as a privileged tool of analysis), but also from anthropology, general sociology, psychology and history. This integration is no doubt highly imperfect; the sheer complexity of the problem added to the author's limited acquaintance with subjects other than economics makes it particularly difficult. The hope is entertained, however, that the present exploratory attempt will stimulate intellectual exchanges among scholars of the various disciplines involved and encourage new research efforts in directions that have so far remained insufficiently investigated.

## I. THE SOCIAL CONDITIONS OF THE MARKET

### *Independence and Freedom of Transactors*

There seems to be a growing recognition today that different types of social relationships are implicit in non-market and market societies. The nature of this difference has been articulated in an

especially cogent manner by Marx and Engels. The market mechanism consists of the free play of *abstract* (supply and demand) forces linking *anonymous* agents together in a decentralised way. Of course, personal or social relations can exist among participants in a market economy, yet these relations have no bearing on economic transactions and terms of exchange: individual identities and social backgrounds do not matter, and this is precisely why (first best) allocative efficiency of the society's available productive resources can be attained. The role of self-interest as a propelling factor in economic exchanges actually conveys the idea of motivational dispositions that do away with any kind of other-regarding considerations: in so far as they are engaged in economic transactions, agents are exclusively driven by what Marx and Engels have suggestively called 'naked interest', that is, by a cool calculating spirit that has banished any idea of chivalrous glory or social commitment [*Marx and Engels, 1969-70*]. According to Hirschman, it is precisely this characteristic that made market transactions so appealing in the eyes of philosophers and social thinkers of the seventeenth and most of the eighteenth century: the sort of methodical, prudential and moderate action implied by interest-guided behaviour was deemed vastly preferable to actions dictated by the violent, wild and destructive passions such as those triggered off by the foolish seeking of social leverage and political clout or by *religious, ethnic, and other kinds of deeply involved feelings* [*Hirschman, 1977; 1982; 1987; added emphasis*].

By explaining how the market represents a specific mode of socialisation that differs radically from the way social existence is produced in preindustrial societies. Marx probably made one of his most important contributions to the field of social science. At least, he succeeded in drawing deep social implications of the market conceived as an impersonal mechanism<sup>4</sup>. In traditional or preindustrial societies, individuals occupy definite positions in the social matrix and the functions which they fulfil are thus determined by an a priori definition of what they socially are (most commonly, from as early as their birth). As a result, the concrete discharge of these functions serves to confirm or manifest their socially differentiated existence rather than generate it. Therefore, an individual is not socially recognised *because* he performs this or that particular task; in fact, he performs it in accordance with an a priori social rule defining his social identity. In such a context, persons matter because everyone is personally dependent upon the social agency (the community, the clan, the guild, the state, the priesthood and so on) which ascribes them from the very beginning to their 'natural place'. In the words of Deleplace, 'it is as a person distinct from all other persons that a man or a woman is integrated into the society and he (she) is

therefore immediately aware that this society is a network of relationships among people' [Deleplace, 1979: 215]. Thus, for example, up until recently in family-based European agriculture, 'the function of the household head was inherited from the family's patrimony and mixed up with it' [Barthez, 1982: 69]. In other words, a man exercised the economic responsibilities attached to that function not because he was comparatively efficient in accomplishing them but because he was the holder of the family's land and other assets on the basis of traditional ascriptive principles.

In the capitalist, market-based society, by contrast, individuals are abstract actors in the sense that they are not socially differentiated before entering into the exchange process. By producing a particular good or service, an individual does not any more manifest his membership of the society since it is not by virtue of an a priori social rule but through a more or less hazardous process that he has come to accomplish such a task. In this society, individuals are a priori free and independent insofar as no order (natural or socially codified) determines *ex ante* the choices they will make in the market place. Laws and rules exist not for the purpose of differentiating individuals in the society but for that of defining the rights and duties of abstract agents considered as strictly equal (their personal histories and the peculiar circumstances of their lives are completely dismissed as irrelevant). How can individuals achieve a social existence in such a society where all are a priori equal and, therefore, socially undifferentiated? Marx's answer is that people can socially exist only *after* having objectified themselves in money values: money 'unifies a society of independent beings' [Deleplace, 1979: 223]. The crux of the matter is that man is socially a number and his socialisation is preconditioned upon his being evaluated (in quantitative terms). As argued in the 1844 Manuscript, 'money is man's alienated self, since it reduces all human qualities to quantitative, interchangeable values devoid of any specific value' [Avineri, 1968: 110]. As a socialiser, money is actually so powerful that it can even invest its possessors with qualities missing in them. 'In this inverted world man's faculties are determined by his money. His personal attributes become a function of his purchasing power and not of his immanent self' [*ibid.*:111].

The main message from Marx's analysis is therefore that the market system has the formidable power to transfigure persons by erasing or concealing their original personal traits and by substituting new qualities acquired with money. Such is the essential meaning of mobility in a world where *anybody* can purchase *anything* he or she wants (within the limits of the budget constraint) since money is used in every transaction and represents a generalised purchasing power. And it is precisely

because personal traits can be so easily reshuffled in the marketplace (to quote Marx's example, an ugly man can become beautiful if he is rich enough since, thanks to his wealth, he can buy the most beautiful girl) that personal identities become devoid of any meaning: personal traits being so volatile and so artificial, one does not know any more who is the individual with whom one is dealing, in fact one only knows his or her superficial traits that can be quantitatively gauged or assessed (he or she is the person of so much income or wealth). Money thus appears as the concrete instrument which enables individuals to abstract or detach themselves from their community background and to meet as impersonal beings.<sup>5</sup> One need not agree with all Marx's statements or positions, yet it is hard to deny that he has forcefully expressed the idea that the market logic deeply affects the way people relate to each other. In particular, the following implication of his analysis is worth bearing in mind: an essential component of the development of increasingly wide and complex markets is the growing ability of individuals to distance themselves socially from the pressures of community life and thereby enlarge their possibilities for intensive self-seeking capital accumulation (freed from customary obligations to redistribute profits with community members) and for corporate business endeavour (which presupposes the substitution of new class-based solidarities for erstwhile community-based loyalties).<sup>6</sup>

*The Problem of Market Order: Is There an Answer from General Equilibrium Theory?*

At this stage, it is useful to address the vexed problem of the possibility of social order in market economies. Indeed we have so far understood that a multitude of individuals independent in Marx's sense are expected to produce (unconsciously) allocative optima at the level of the whole society in so far as their behaviour is free from any social constraint. Yet the question naturally arises as to how the exchange interactions of a large number of free and independent individuals can yield social order and cohesion instead of leading to anarchy and chaos. What is there to prevent a society characterised by the unbridled pursuit of self-interest from flying asunder? The question becomes dramatically pertinent as soon as one stops conceiving transactors as candidly selfish individuals who do not use fraud and deceit to achieve their self-regarding ends.<sup>7</sup>

Standard General Equilibrium (GE) theory in the Walras-Arrow-Debreu tradition has precisely solved the 'social order' problem of the market by making implicitly the convenient assumption that exchange takes place between candidly selfish individuals who are incapable of malevolence. They abstain from any dishonest act, implying that they

do not consider enhancing their selfish interests through violation of the rules of the game. And these rules provide that individuals always meet the obligations they have chosen to undertake, they do not steal or cheat, they do not spend more than their wealth, they 'do not try to walk off without paying after a taxi-ride' [Basu, 1983], etc.<sup>8</sup> There is nevertheless another way of interpreting the strategy of GE theorists: the participants in the market are not necessarily honest egoists, yet this does not really matter (provided that theft is precluded due to costless enforcement of property rights) because the assumption of perfect competition, which includes that of perfect information, has the effect of preventing any *actual* manifestation of fraudulent behaviour. In fact, when agents are perfectly informed about everything which they need to know (namely, the price and nature of goods and services), they have simply no possibility of behaving dishonestly, however intense their desire to so act.

Parametric rationality is the kind of behaviour which obtains in a world of perfect information (prices are unique and exogenous to agents) since no room is left for strategic and conflictual behaviour calling for negotiated or cooperative solutions. Competition makes force or fraud unavailing since it determines the terms of trade in a way that individual traders cannot manipulate [Granovetter, 1985: 484]. De Villé has thus appositely remarked that 'perfect competition turns out, paradoxically, to be the absence of all interaction among individuals', so that 'at this stage, "market" and "competition" as foundations of the social order appear as unfortunate metaphors' [De Villé, 1990: 16]. The exchange process is the unique socialisation process and there is no macro-social structure linking the actors. To sum up, economic theorists in the above tradition have succeeded in demonstrating the logical possibility of the market as a self-ordering system (social order can spontaneously emerge from the pursuit of selfish interests even in the absence of any a priori coordination of such interests), but only at the price of assuming 'a total transparency of the whole economic system for each agent' [Boyer and Orlean, 1991:1], that is, by eliminating the coordination problem altogether.<sup>9</sup> Hahn has frankly conceded the point by stressing that the invisible hand only operates benevolently under conditions that are impossible to meet in the real world [Hahn, 1982]. In virtually all real world economic exchanges the scope for cheating is present if only because there exists a time-lag, however brief, between each agent performing his side of the exchange [Basu, 1986a: 1894].<sup>10</sup> This is especially true when development of specialisation entails the multiplication of agreements across space and time which are difficult and costly to enforce.

During the last decades, awareness of this fundamental difficulty has prompted GE theorists to try to depict the market order on the basis of more realistic assumptions. As rightly pointed out by Shubik, the abstract unreality of the Arrow-Debreu model has provided a sound basis for posing in a precise manner many more questions than it has answered [Shubik, 1986: 9]. Particularly worth stressing in the context of this article is the fact, very much likely to persist, that economic theory has so far not succeeded in proving the possibility for the market system to be produced and reproduced in a totally decentralised way from the free interaction of rational selfish agents. At some point of the logical argument, some (unexplained) rule, institution or supra-individual mechanism must be posited in order to show that a coherent economic disposition of resources can be effectively attained [Field, 1981: 188–96]. This is especially evident when a market auctioneer plays behind the stage to make prices converge towards their equilibrium values. But hidden institutions or norms cannot be avoided by replacing the assumption of parametric rationality by that of strategic rationality (instead of being price-takers, agents determine prices which are specific to them) such as is done, for example, in the work of Fisher [1983]. Indeed, there then arises the difficulty that multiple adjustment paths become possible (thus, arbitrage possibilities are almost infinite when futures' markets are assumed to exist and speculation is allowed for). *Stable order can be produced in the markets only by assuming the existence of social rules or norms constraining individual behaviour.*

Attempts by GE theorists to uncover the foundations of perfect (or imperfect) competition through game modelling are worth mentioning in the context of this discussion. Thus, the important contribution of the theory of cooperative games (in which agents are actively bargaining and able to make binding agreements with each other) is to have shown that, when the number of agents becomes very high in a finite economy, the core converges towards competitive equilibrium [Debreu and Scarf, 1963]. This result, known as the Equivalence Theorem, has also been arrived at by assuming an economy with a continuum of agents [Aumann, 1964]. Therefore, whether we view a market with a large number of participants as a collection of active, bargaining, and haggling individuals or as a collection of passive price-takers coordinated by some price adjustment mechanism makes no difference in terms of the equilibrium outcome [Gravelle and Rees, 1992: 461]. To put the equivalence result in still another way, one can say that in atomless economies where, by definition, each individual participant has a negligible influence, competitive equilibria are the sole possible outcomes of the group decision mechanism underlying the concept of core [Gabszewicz and

*Shitovitz, 1992: 460*].<sup>11</sup> What bears emphasis and is of direct relevance to our enquiry is that a considerable amount of information is required if co-operative games are to be played.<sup>12</sup> The conclusion is therefore again reached that the competitive market order is possibly only if agents are well informed about each other, a condition largely unsatisfied in the real world.

On the other hand, by handling non-co-operative games of a certain kind,<sup>13</sup> GE theorists have succeeded in reproducing the equivalence result obtained in a co-operative game framework (for a survey of major results, see Mas-Colell [1992]). As a matter of fact, in almost all the models belonging to the family of so-called ‘strategic market games’ where agents make strategic decisions about quantities given a price-formation rule that is common knowledge,<sup>14</sup> it has been proven that (1°) equilibrium (of the Cournot-Nash type) exists, and (2°) the set of non-co-operative equilibrium allocations coincide with the set of (Walrasian) competitive allocations when the number of agents becomes very high (or when there is a continuum of agents in a non-finite economy). (The basic reference here is Shapley and Shubik [1977].) Another way of stating this important result is to say that, instead of assuming perfect competition and being content with working out its effects, economists have been able to produce it analytically (through the use of game theory), that is, they have shown that perfect competition can be understood as the logical *outcome* of the strategic behaviours of the individual participants to the market (assuming these participants to be relatively small). Yet, like in the case of co-operative game-theoretical efforts at modelling perfect competition, the informational requirements are tremendous: the extension of the Equivalence Theorem is obtained by using one-performance games *with perfect information* (about the price-formation rule and the payoffs accruing to all other participants depending on the prevailing price).

The analytical framework of strategic market games has also been recently used to construct a theory of money and financial institutions, two central pillars that provide the command and control system of a modern market society. The need for these key institutions is seen to arise from the existence of significant transaction costs generated by the technology of exchange (decisions and contracts utilise time and other economic resources) or by strategic considerations of trust and enforcement (there is a need to write the rules of the game to enforce contract in a world with less than perfect trust).<sup>15</sup> Given such constraints, financial institutions and the minimal conditions required to make them work appear ‘as a logical necessity in any attempt to well define the rules of a strategic market game’ [Shubik, 1986: 12].

Thus, in an economy with cash but no credit, there is the theoretical requirement that an individual's buying commitment never be larger than his cash in hand. Yet *ex ante* there is no way to enforce this budget constraint unless an inspection procedure is instituted [*ibid.*: 18]. If, on the other hand, credit is introduced into the game, default conditions must be part of the rules of this game unless credit is limited in such a way as to enable the debtor to pay back fully even under the worst scenario [*ibid.*: 30]. In a next step in the process of further complicating the model (thereby making it closer to reality), the existence of a money market can be considered. A theoretical possibility is for everyone to be a banker (every individual is able to issue IOU notes which are accepted as a means of payment by all others). However, for this game to be playable, rules are needed concerning the redemption of IOU notes and what happens if there is a failure to redeem. As pointed out by Shubik, 'if there were no punishment for default the incentive to issue IOU notes would be unbounded and would destroy any proposed active equilibrium' [*ibid.*: 35]. This said, it has to be admitted that the institutional arrangement required to make this 'everyone a banker' game playable – there is clearly a need for a clearinghouse as well as a device or referee to report failure to redeem and to enforce a penalty on defaulters – is too costly to be viable [*ibid.*: 37–8: see also *Starr, 1986: 107*].

Another, more realistic model is that in which we find a bank (or a banking system), that is, an agent that buys personal debt and specie, issuing its own notes in payment. If there is no limit to the real value of this note issue, implying in particular that each agent can be issued (in exchange for his personal debt) sufficient notes to finance all of his desired purchases, it is essential that a rule exists to prevent any agent from making purchases in excess of his net worth [*Starr, 1986*]. Finally, when a Central Bank is introduced (to use fiat money with a view to enabling the traders to achieve optimal trade in the markets) and there is no limit to the volume of government credit that is issued, there must be a rule that each agent, at the end of the game, must repay to the government any debt outstanding [*Shubik, 1986: 46–7*].

The considerable research efforts deployed by GE theorists during the last decades to dispense with the standard assumption of parametric rationality seem to lead to the following conclusion: it is impossible to bring out the coherence of the market system without positing fundamental or constitutive rules that constrain the agents' behaviour [*De Villé, 1990: 32; Field, 1984*]. Whatever the analytical path followed to solve the Hobbesian dilemma (and to simultaneously avoid the solution of the Leviathan advocated by Hobbes himself), the problem of insti-

tutions or social norms cannot be evaded. Their major role in a society, as North has stressed, is ‘to reduce uncertainty by establishing a stable (but not necessarily efficient) structure to human interaction’ [North, 1990: 6]. As should now be clear, such a role follows from the costliness of economic exchange that itself results from the costliness of information. So-called transaction costs are precisely ‘the costs of measuring the valuable attributes of what is being exchanged and the costs of protecting rights and policing and enforcing agreements’ [*ibid.*: 27].

To delve further into the question of how market societies can prevent the generalisation of malfeasance in economic exchanges, this section will proceed in the following manner. In the next sub-section, an effort is made to understand how and to what extent traditional, pre-capitalist societies have overcome the problem of fraud and deceit so as to facilitate even the small extent of economic exchanges on which their survival depended. Such analysis of traditional societies naturally leads to the following sub-section which comprises two central steps. In the first step, a solution to the problem of market order is presented that seems to be gaining wider and wider currency among sociologists today; this solution is nothing else than the generalisation of the ‘spontaneous order’ solution presumably at work in traditional societies. A critique is undertaken with a view to showing that the above approach, albeit interesting, is not able to provide a complete answer to the puzzle of the market order, especially if the division of labour is highly developed and exchange is complex. This is essentially done by looking at some important historical material pertaining both to early and advanced stages of modern western market societies. It is thus contended that the market order needs to be supported by institutions of both public and private order kinds, understood as organisations deliberately created which can use coercion to enforce agreements. The ground will then be laid for an analysis of the role of moral norms to be undertaken in Part II.

### *Trust-making in Traditional Societies*

As soon as it is admitted that in the real world (1°) a sufficient number of agents are opportunists (ready to cheat, steal, shirk, renege on their promises) and (2°) information is imperfect, a problem of trust arises and there is a possibility for economic transactions to be seriously impeded. Indeed, if individuals do not trust others to fulfil their terms of an agreement, they will not wish to enter into exchanges with one another – except in so far as exchanges are constituted by spot transactions (as evidenced by the attitude of town-based Chinese traders in Indonesia, as reported in Hayami and Kawagoe [1993: 168]) – and

economic specialisation will not develop. Of course, if the gains of specialisation are high enough, it is in their interests to lay down rules that constrain individual behaviour. None the less, if they are rational actors, it is also in their interests to disobey those rules whenever an individualistic calculus of benefits and costs shows that they will incur a loss by following them. To the extent that monitoring of rule conformance is imperfect and costly, the problem of the possibility of a decentralised economy based on voluntary exchanges therefore remains unsolved.<sup>16</sup> Before delving into this issue in the specific context of market economies, it is useful to consider one more time the situation obtaining in traditional societies.<sup>17</sup>

*Bilateral reputation mechanism:* Such societies are characterised by their restricted size and the highly personalised nature of human relationships. In this setting, where people are in almost continuous interaction with each other, there is at least some theoretical reason to believe that social order can be established and maintained in a spontaneous way. Members of small-scale societies, even if they are potential opportunists, have indeed an incentive to refrain from committing dishonest actions because this would run against their long term interests. Suppose that the problem of social order is represented as a non-co-operative game (binding agreements are not allowed), more specifically as a two-person prisoner's dilemma (PD) game where defection means some cheating while co-operation means abstaining from any fraudulent act. As long as this game is a one-shot or single-period game, we know that the unfortunate result of mutual war (both players cheat) happens with the predictability of an iron law (given the payoff structure of the game): individualistic free riding or non-co-operation is a dominant strategy with the result that both players are worse off than they would have been had they instead chosen to co-operate. It is noteworthy that even if the players could communicate and reach an agreement to co-operate (that is, if pre-play negotiations are permitted), they would still have an incentive to break the agreement and to defect. This is a result of the fact that the equilibrium is a dominant strategy equilibrium implying that the information structure of the game (played once) does not matter.<sup>18</sup>

Fortunately, the 'iron law' ceases to apply as soon as the game is repeated, thereby creating what is called a supergame. In this case, indeed, co-operation may be a (Nash) equilibrium outcome because each player is in a position to punish the other for a non-co-operative act in the past.<sup>19</sup> Thus, using a simulation approach, Axelrod [1984] has shown that, in a version of the PD supergame where invited players were free to choose the strategy of their own liking, the simple tit-for-tat

strategy emerged as the winner.<sup>20</sup> In other words, when the number of rounds is sufficiently high and different strategies are played against one another in a kind of tournament, an ‘adaptive’ behaviour pattern may converge towards a tit-for-tat function which sustains a co-operative equilibrium in the PD game.

The analytical approach has also yielded interesting results that demonstrate the possibility of co-operation in the extended PD game. More precisely, to show that co-operation is possible, the assumption must be made that the game is repeated infinitely or that information is incomplete – there is some uncertainty about the others’ strategies (either because their payoffs or the degree of their rationality are imperfectly known) or about the length of the game (the game horizon is finite but indefinite). The case of uncertainty about the other players is perhaps less straightforward than that of uncertainty about the end of the game (co-operation is possible when both players think that there is a high probability for the game to continue). The most well-known result in connection with the former assumption is that of Kreps and his associates according to which, in a finite game, a suspicion by one party that the other may practice a ‘tit-for-tat’ strategy induces the other to adopt the same and both have then an incentive to co-operate until the other does not [Kreps and Wilson, 1982; Kreps et al., 1982; Kreps, 1990: 536–43; also Friedman, 1990: 190–94].<sup>21</sup> This result (obtained by dropping the assumption of common knowledge) has been recently generalised by Aumann and Sorin [1989].<sup>22</sup> Results achieved by using an evolutionary framework of analysis are also worthy of mention. As shown by Sugden, in games which on average have many rounds and where encounters are pairwise, a convention of brave reciprocity (a family of strategies that comprises tit-for-tat and implies that players are prepared to co-operate in advance of any evidence that the opponent will reciprocate) has a good chance of evolving.<sup>23</sup> In particular, when the probability of meeting an opponent again is fairly high, even if initially the great majority of players defect, the latter may do less well than the small majority who are following strategies of brave reciprocity, and there may then be a self-reinforcing tendency for the minority group to grow. Evolution is also found to favour strategies of brave reciprocity if cautious strategies (one never co-operates unless one’s opponent has previously co-operated at least once) are available in addition to the ‘nasty’ strategy and the strategy of brave reciprocity. Even if initially *almost everyone* defects, cautious reciprocators will gradually emerge and their presence will help to bring about conditions causing brave reciprocators to eventually invade and take over [Sugden, 1986: 116–20].<sup>24</sup>

Stress must however be laid on the fact that the ‘good’ equilibrium

(co-operation and honesty) is only a possibility in repeated games because such games are characterised by a 'profusion' of (Nash) equilibria (to use Krep's vivid expression).<sup>25</sup> In other words, non-co-operative equilibria are as likely as co-operative ones. In particular, as long as everyone follows cautious strategies of one kind or another, all cautious strategies produce the same result: no one ever co-operates [Sugden, 1986: 109]. This said, the point remains that repetition of interactions 'can greatly expand the set of self-enforcing agreements to which the players might come' [Kreps, 1990: 512].<sup>26</sup>

It is now time to connect the above results with the situation obtaining in traditional societies. To the extent that individuals in these societies know one another well, can observe one another's behaviours, and are in continuous interaction, their patterns of relationships approximate a repeated PD game with infinite or indefinite horizon. Under these conditions of perfect information and repeated interactions which characterise small-group settings, any pattern of collective behaviour, including co-operation, can be sustained. It is thus possible that people refrain from behaving dishonestly because they have a strong incentive to consider the more indirect and long-term consequences of their choices instead of paying exclusive attention to immediate costs and benefits: in so far as long-term benefits (duly discounted) exceed the short-term ones they can credibly commit themselves to honesty.<sup>27</sup>

*Multilateral reputation mechanism:* When, as assumed above, there are frequent, long-term bilateral exchanges, the value of the relationship itself may serve 'as an adequate bond to ensure honest behaviour and promote trust between the parties' [Milgrom, North and Weingast, 1990: 3]. Trust arises, as it were, naturally from the repetition of interactions with the same person. What must be stressed now is that 'even if no pair of traders come together frequently, if each individual trades frequently enough within the community of traders, then transferable reputations for honesty can serve as an adequate bond for honest behaviour if members of the trading community can be kept informed about each other's past behaviour' [*ibid.*]. Within the dense network of small communities, this informational condition is easily satisfied with the result that transactors can use a set of credible strategies whereby they refuse to deal with someone who has cheated any other member of the community in the past. In the words of Hayami and Kawagoe [1993: 167]:<sup>28</sup>

In the village community everyone is watching everyone. Gossip about one's misconduct is circulated by word of mouth faster than

any modern means of communication. In such an environment a significant cost would be incurred to a person who would violate a contract with his fellow villager, since not only would he lose benefits from the present contract but the resulting bad reputation would deprive him of future opportunities to enter into contracts with other villagers as well.

In game-theoretical terms, if everyone follows a strategy whereby he or she acts honestly and moreover punishes (say, by cheating or boycotting) any agent who has cheated some member of the group in the past, this strategy of multilateral punishment (according to Greif's appellation) is an equilibrium one and expectations are self-enforcing: believing that all other participants have this strategy, any given individual has an incentive to follow the same and at equilibrium nobody cheats. Greif calls 'collectivist' or 'segregated' these societies where everyone expects everyone else to respond to any act of dishonesty committed in any pairwise encounter within the community space [Greif, 1992*b*]. (This is in contrast to 'individualist' societies where anyone reacts only when his or her own interest has been hurt.) The observed honesty equilibrium is thus the spontaneous outcome of common cultural beliefs of the 'collectivist' type. It reflects a reputation mechanism among self-interested individuals whereby an agent can establish *ex ante* that his or her most profitable course *ex post* is to be honest: in other words, the transactor can credibly commit to honesty [Greif, 1989: 858, 866–7].

A noteworthy feature of the above social system is that participants are incited to follow the multilateral punishment despite the fact that the agent's strategy does not call for punishing agents who violated the collective punishment procedure [Greif, 1993: 535]. The self-enforcing character of collective punishment obtains in so far as a cheater stands to lose nothing (he or she expects anyway to be ostracised in the future) and is therefore inclined to cheat again in new interactions. Others thus do better by avoiding new deals with that individual and, in this way, the second-order public-good problem of sanctioning is solved.<sup>29</sup> This said, the mechanism of collective punishment or ostracisation is not infrequently supported or reinforced by the existence of what Axelrod has called metanorms, that is, rules according to which one must punish not only the defectors but also those who do not punish them [Axelrod, 1986; also Elster, 1989*a*: 132–3; Dasgupta and Mäler, 1990: 16]. A good illustration of this possibility is provided by the caste system in India [Akerlof, 1976; Basu, 1986*b*]. Under conditions where co-operators thus punish anyone who refuses to punish defectors, Axelrod has shown,

with the help of computer simulation techniques, that co-operation (honesty) can be sustained provided that the population starts with a sufficiently high level of vengefulness [Axelrod, 1986; also Basu, 1986a]. Collective punishment mechanisms are also likely to be reinforced by moral norms: when individuals interact frequently, indeed, it seems that moral norms justifying existing patterns of behaviour tend to evolve spontaneously [Homans, 1950; 1958; Greif, 1992b: 5–6, 22–3].<sup>30</sup> It has also been argued, and substantiated empirically, that, when the group is small, people's proneness to 'magical thinking' is likely to increase the likelihood of co-operation (honesty): this is because they often believe (or act as though they believed) that their co-operation can cause others to co-operate *even though such causal relationship is evidently absent* [Elster, 1989a: 195–200].<sup>31</sup>

*Beyond the community space:* The size of the community within which a multilateral reputation mechanism operates is necessarily limited since it is conditioned by the requirement of good information transmission. Yet, if only for reasons of sheer survival, traditional societies may need to develop exchange links outside the dense network of kinship ties of which they typically consist. How they have succeeded in stabilising limited exchanges with non-kin transactors is a fascinating question for which clues may be obtained from the anthropological literature. It appears that to establish and sustain honesty in such dealings *trust is genuinely manufactured* through strategies specifically aimed at cementing close personalised relationships between the transactors. A widespread strategy, well-documented in the above literature, is that of gift exchange [e.g. Polanyi, 1957; Ch.5; Posner, 1981: 147–8; Bourdieu, 1980: 168–82, 216; Etzioni, 1988: 75; Platteau, 1991]. Thus, Belshaw's interpretation of the kula system of gift exchange discovered by Malinowsky [1920; 1922] in the Trobriand islands is that reciprocal gifts between candidate (so-called) 'partners' served to open 'channels of substantial trade and social intercourse'. As a matter of fact, 'persons visiting their partners took advantage of the opportunity to engage in trade' since, after exchanging ceremonial gifts, 'partners would exchange gifts of a trade character'. Moreover, 'the security afforded by the partnership would make it possible for the visitor to make contact with other persons in the village and trade with them'. This latter trade, however, included 'a greater element of bargaining' since the cushion of direct gift-giving was no more present [Belshaw, 1965: 16, 19].

What is actually manufactured through periodical exchanges of gifts is often a genuine bond of identification involving sentimental attachment or what Coleman calls an 'expansion of the object self' [Coleman, 1990:

517–18]. If successful, this identification process – which is often sustained by family-like symbolic relations such as godparenthood ties with a partner's child<sup>32</sup> – leads to 'the dressing of one man in the reputation of another', and the occurrence of something good or bad to one of the partners will induce in the other the same feelings he would have experienced if the thing had happened to himself [Geertz, 1979: 137; Coleman, 1990: 519].<sup>33</sup> As aptly pointed out by Gregory in the spirit of Mauss's analysis of gift systems, 'gift exchange establishes a relationship between the subjects': it is 'an exchange of inalienable things between persons who are in a state of reciprocal dependence'. (This is in stark contrast to commodity exchange which is 'an exchange of alienable things between transactors who are in a state of reciprocal independence', something presupposing that a neat distinction exists between things and persons [Gregory, 1982: 12, 18–19]). It is also worth observing that in traditional economies gift exchange is often surrounded by elaborate rituals in which local authorities may play a role, particularly when different tribes are involved [Polanyi *et al.*, 1957; Polanyi, 1968; McEvoy, 1986: 31].<sup>34</sup> This is additional evidence that, contrary to a simplistic account offered by some writers, there is nothing automatic about the emergence and persistence of honesty (and social order) in such economies.<sup>35</sup>

In societies endowed with an universal religion, a widespread way of enlarging the group size beyond its ethnic basis so as to make it more effective is to require that the new entrants be converted to the group's religion and share its rituals. Trust is thereby created on solid foundations insofar as religious conversion ensures that the new members not only abide by the same codes of behaviour and use the same language as the host community but also identify with it at a deep level by adhering to the same symbolic universe. Thus, in West Africa, for example, long-distance trading communities labelled 'trading diasporas' [Cohen, 1969; 1971] have traditionally shown considerable openness to new entrants on the (obviously restrictive) condition that 'they shared or accepted the essential cultural requirements for participation in the moral community which distinguished the members from the host society: Islam and the appropriate trading language' [Austin, 1993: 115; also Ensminger, 1992: 51, providing evidence in the case of the Orma of southern Ethiopia and northern Kenya]. The non-fulfilment of this condition explains why European (French) merchants failed to make inroads in cattle trade within what is now the republic of Niger: they were unable to participate as equals in indigenous systems of guaranteeing credit and enforcing contracts that emphasise a common religion (Islam) and language (Hausa) [Austin, 1993: 117]. In actual fact,

this connection between long-distance traders or large-scale trading diasporas and conversion to an universal religion seems well established the world over [Cohen, 1971: 277; Ensminger, 1992: 169]. It is worth pointing out that, in the context of groups sufficiently small for information transmission to be effective, religion serves not only to encourage co-operation (honesty) but also to signal or identify members.

Now, when trade takes place with genuine strangers (no personalised tie has been woven), the situation is radically different: exchange is then often equated to stealing or cheating, and to cheat a 'foreigner' may even bring social prestige to the trader [Evans-Pritchard, 1940; Pospisil, 1958: 127; Sahlins, 1968; Bourdieu, 1980: 196-7; Elster, 1989b: 109].<sup>36</sup> The fact of the matter is that purely commercial trade relations (that is, relations unaccompanied by exchanges between subjects) are understood as a kind of interaction akin to the state of war.<sup>37</sup> As a consequence, such relations are eminently unstable and can easily break out into active aggression, a risk which is somewhat mitigated (but at the price of huge transaction costs) by preventing physical encounters between transactors, such as in the ancient practice of silent trade observed in several regions of Africa [Sahlins, 1968; Giri, 1983: 22-3]. Note finally that even personalised relations with non-community members are vulnerable to the risk of serious conflict, if only because severe tensions or suspicions may arise before the identification process is completed or else, because relations between the political entities to which the partners belong are liable to degenerate. Precisely because links with (outsider) partners are much more likely to be disrupted – despite the considerable investment, both material and emotional, that has sometimes been made to establish the underlying trust – than the natural ties borne within the native community's space, the effectiveness of the (bilateral) reputation mechanism is greater with respect to the latter than to the former kind of bilateral relations.

### *Trust-making in Advanced Societies*

Through personalisation and clientisation of their relations with trade partners, members of traditional societies have thus succeeded in establishing and sustaining the trust required for more or less stable economic exchanges to take place. Yet, precisely because of the way followed to solve the trust problem, the scale of these exchanges is necessarily restricted: in other words, limitations on the size of the (natural) community space as well as on the scope of personalised relations with non-community partners (bear in mind the considerable investment

needed to build trust among any pair of such partners) lead to a situation in which only few trade opportunities are captured. Obviously, the division of labour cannot be developed very far in such a context. This is true even though, via partnership links, several community spaces can be connected for trading purposes, but always at some substantial risk of sudden disintegration. As for trade with strangers, we know that, due to their highly unstable character, they cannot form a sound basis for a (new) system of generalised exchange.

*Another impossibility theorem?* In spite of what seems to be an unescapable limitation of the traditional solution to the problem of social order, Granovetter has defended the thesis that dense webs of interpersonal relations are ‘the structure that fulfils the function of sustaining order’ in modern market economies [Granovetter, 1985: 492].<sup>38</sup> For him, indeed, fraud and deceit can be tamed only through the production of trust in economic life and, in generating trust, the role of *concrete* personal relations and structures (or networks) is predominant. This is so because rational individuals ‘are less interested in *general* reputations than in whether a particular other may be expected to deal honestly with *them* – mainly a function of whether they or their own contacts have had satisfactory past dealings with the other’ [*ibid.*]. The identity and past relations of individual transactors thus matter and ‘limited’ – rather than ‘generalised’ – trust is sufficient to make the market function adequately. Put in the language used in the previous sub-section, bilateral and multilateral reputation mechanisms – that have been shown to have a pervasive influence in traditional societies – are all that a market system needs to solve the trust problem and capture all the available trade opportunities.

Granovetter’s thesis entails an obvious contradiction between the two conditions of a market order that have emerged from our previous discussion: that required for mitigating opportunism and that of independence (or atomisation) of the agents. Or, put in another way, his thesis appears to give rise to a genuine paradox which looks like another impossibility theorem: the market order may not arise or, more exactly, its potentialities may not be effectively exploited because one of the two essential social preconditions of its existence and effective working can be established only by destroying the other.<sup>39</sup> For Granovetter, no such paradox actually exists since he can only view the above statement as being grounded in a wrong premise, namely that the market system consists of *free* interactions of socially atomised actors. In his own words: ‘Actors do not behave or decide as atoms outside a social context . . . Their attempts at purposive action are instead embedded in

concrete, ongoing systems of social relations . . . the anonymous market of neoclassical models is virtually nonexistent in economic life and transactions of *all* kinds are rife with the social connections described' [*ibid.*: 487, 495 – added emphasis]. Moore has recently taken this argument to its logical conclusion when he writes that 'markets are to a very high degree self-regulating' and it is wrong to believe that effective commercial law is essential to (fast) economic growth [*Moore, 1993: 45–6*].

Granovetter has no doubt a good point when he questions what he calls the 'undersocialised' conception of human action implicit in much economic theorising. Indeed, as we know from the previous discussion in the sub-section above, when the asymmetrical character of information distribution is taken into account, it is no longer legitimate to view the agents as socially unrelated automatons reacting parametrically to the signals of the market. In other words, relations between them can no more be conceived as being exclusively mediated through prices: rules, institutions or direct interactions of some sort must be posited to solve the co-ordination problems resulting from informational asymmetries. While recent advances in GE theory point towards the necessity of rules that are part of the market game infrastructure, Granovetter thinks that the solution lays in personalised and continuous relations among agents.

It is undeniably true that in real-world market economies repeated contacts among transactors or across organisational boundaries may be easily observed. Rather than consisting of single-purpose, self-contained and short term arrangements, trading relationships may have a more lasting character and be based on the personal involvement of the parties concerned. Such involvement in customer market relationships may be seen as a strategy whereby transactors wish to create and maintain incentives for trustworthy behaviour as well as to bring reputation effects into play [*Macaulay, 1963; Williamson, 1975: 106–8; Clegg and Redding, 1990; Coleman, 1988: S98–9; Elster, 1989a: 117–18*]. Moreover, as Granovetter has again pointed out, 'there is evidence all around us of the extent to which business relations are mixed up with social ones. The trade associations deplored by Adam Smith remain of great importance. It is well known that many firms, small and large, are linked by interlocking directorates so that relationships among directors of firms are many and densely knit' [*Granovetter, 1985: 495*]. Finally, an important contribution of the new transaction cost economics is to have suggested that, rather than being specialised units operating across market interfaces (as implied in the neo-classical theory of the firm), firms are hierarchical organisations which internalise economic

transactions, thereby transforming open-market relationships into relationships handled within the 'governance structure' of corporate entities. Such a contribution is all the more important to note as one of the main reasons advanced by Williamson (one of the pioneers of this new branch of economics) to account for the emergence of the modern firm is precisely the entrepreneurs' motive for attenuating opportunism through the establishment of authority relations [Williamson, 1975; 1985; 1986; Eggertsson, 1990: Ch.6].

Clearly, what all the foregoing considerations tend to demonstrate is that, far from corresponding to purely decentralised systems grounded in social atomisation, market economies are actually made of imperfectly competitive markets where individual agents or organisations strategically interact with one another, whether they are few or many. This being granted, despite their indisputable empirical relevance, these considerations alone cannot provide a reliable escape from the above-formulated dilemma. Indeed, Granovetter's contention that in (modern) market economies trust is essentially produced by dense interpersonal networks supported by effective codes of 'limited-group morality' [Shipton, 1988] is not able to provide a complete answer to the problem of market order nor to do justice to some important, easily observable phenomena. Abstract rules are also necessary.

The first thing to point out in this respect is that Granovetter's analysis applies better to markets where businesspeople interact among themselves than to those where the large public is involved. It is thus more relevant to markets for production inputs and to wholesale markets in the distribution sector than to consumer markets. This is particularly true given the fact that market development has usually meant that many small-scale, highly dispersed retail shops have been gradually replaced by large-scale, more centralised selling points in which relations between sellers and buyers are necessarily anonymous. And, even to the extent that the former persist, the trust problem becomes more serious as people's mobility increases, thereby preventing the kind of regular dealings and close information networks that are so helpful in establishing and sustaining honesty. Moreover, as exchanges have become more complex involving goods and services with many valuable attributes costly to measure, consumer markets are especially prone to fraud and deceit. For example, given the sophisticated technologies now available, even the quality attributes of essential agricultural goods can be easily concealed from the consumers' sight and, if too much fraud should occur (particularly if it entails health dangers), it is likely that many people would return to self-production of these goods. Vulnerability of second-hand markets to fraud is typically so high that

one would normally expect none of them to emerge since all willing purchasers would fear to get 'lemons' [Akerlof, 1970].

Even with respect to other markets, the evidence is more mixed than Granovetter seems to indicate. Thus, in recent study of relations between US corporate firms and investment banks (an ideal case where his thesis should perfectly apply given the crucial importance of trust in credit relations), we learn that 'there is only partial support for the long-untested assumption that director interlocks overlay economic ties' [Baker, 1990: 618]. In addition, if many corporate firms have privileged ties with one or two banks, they usually deal with several other banks at the same time so as to bring the pressure of competition to bear on their privileged banker(s) [*ibid.*]. More fundamentally, Granovetter does not explain how private property rights, a crucial infrastructural condition of an effective market system, are respected by all economic agents. Firms belonging to a given network of personalised relations may well trust each other in all their dealings, yet may be helpless if their property is under the constant threat of theft and destruction (whether by workers, consumers or organised gangs). Finally, it may be wondered why inter-firm networks do not cease to apply their own codes of fair behaviour as soon as they come into contact with other networks, especially in a world where specialisation is highly developed. Is this not an expected feature of an economy based on limited-group morality? It is true that this risk is mitigated to the extent that businesspeople are members of several intensively-transacting groups which have little membership overlap. Nevertheless, the operation of powerful organised mafias in numerous parts of the world (including in the western world) attest that the above risk is real enough [e.g., Gambetta, 1988; Walston, 1988; Vaksberg, 1991]. Of course, mafias often come to agreed arrangements for the peaceful sharing of the market space (an important objective since any conflict can easily lead to outbreaks of bloody violence), yet these arrangements are typically unstable and they entail considerable costs for the whole society.<sup>40</sup>

In the same vein, it may be remarked that, as a flourishing literature on contractual choice has shown, agents can always use various forms of contracts to control incentive problems of both the moral hazard and adverse selection kinds. However, even assuming that they can allow for all possible contingencies, the crucial question remains as to how and at what price can such contracts be devised and effectively monitored and enforced: in any event, they belong to the second-best world. In particular, it is not at all evident that authority relations can actually deflect opportunism (in the form of labour-shirking, asset mismanagement, input pilfering, output underreporting, etc.). As

Williamson has himself pointedly observed, the monitoring of the workers' labour inputs and the continuous revision of their rewards according to their productive performances creates the negative externality of a calculative and suspicious atmosphere with detrimental effects on the employment relation. Constant 'metering' is bound to give rise to serious disputes over monitoring observations and reward adjustments that are costly in time and good will and may easily drive the workers to perform their jobs in a minimal, or 'perfunctory' fashion [Williamson, 1980; also Putterman, 1986: 318–19]. Precisely for this reason, the labour market is perhaps the sphere of modern economic life where Granovetter's thesis applies better. Indeed, personalisation of employer-employee relationships together with job stability resulting in a system adroitly combining hierarchy and loyalty – the so-called 'Japanese model' which, incidentally, was also widely practised in nineteenth-century England [Roberts, 1979; Joyce, 1980; Kleinig, 1983] – might appear to some as an efficient solution to the trust problem in intra-firm transactions: labour mobility is impeded but this is a second-best solution given pervasive moral hazard risks.

In the following subsection, the critique of Granovetter's thesis is pursued by looking at the historical experience of Europe since medieval times and at some instructive game-theoretical contributions which have been specifically made to interpret it.

*The need for private and public order institutions: governing agency relations:* As we know, bilateral and multilateral reputation mechanisms are possible only in so far as agents can easily acquire information about each other. This tends to hold true in small communities with dense networks of continuous relationships. It is not surprising that as new trade opportunities opened up and more or less peaceful conditions prevailed (such as was the case during the period spanning the eleventh to fourteenth centuries in Europe and the Mediterranean) business-inclined people attempted to rely on these solutions to capture them. Thus it was a natural practice among such people to use kin as agents in long-distance trade. That is, 'a sedentary merchant would send a relative with the cargo to negotiate sale and to obtain a return cargo' [North, 1990: 120]. Provided that the shipping of goods could be properly insured, a merchant could reduce the cost of trade by sending goods to an overseas agent who would look after his business in a foreign trading centre. The system was particularly profitable when merchants could rely on a multilateral reputation mechanism since such a mechanism ensures honest behaviour on the part of agents even when the relations between a specific merchant and agent pair are not expected to recur (an outcome that cannot be obtained under bilateral punishment).

For example, it was used by the Maghribi traders who operated in the Muslim Mediterranean during the eleventh century after having migrated from the insecure surroundings of Bagdad to North Africa in the course of the previous century [Greif, 1989; 1992a; 1992b; 1992c; 1993]. In effect, thanks to their emigration experience, these Jewish traders came to acquire a strong social identity and to form a highly cohesive group whose members employed each other as agents (without usually resorting to any legal contract), and all retaliated against any agent who had cheated a group's member by refusing to hire him. For reasons that have already been made clear, the system was self-enforcing: 'each merchant was induced to hire only agents who were expected to be hired by others' [1992a: 130] since, given the prevailing expectations, a cheater would have to be paid more to be kept honest.

The assumption is indeed that 'since the optimal wage decreases in the probability of future hiring, a cheater's optimal wage is higher than an honest agent's wage, and hence each merchant strictly prefers to hire an honest agent' [Grief, 1993: 534].

An important feature of the Maghribi group is that it operated as an effective information-transmission network since traders operating abroad passed on to other members information about trade circumstances their agent(s) faced, thus helping the former evaluate their agents' conduct [1989: 880]. The additional gains from co-operation, the value of the information flows, and the expectations concerning future hiring ensured that the Maghribis were motivated to hire and to be hired only by other Maghribis, while non-Maghribis were discouraged from hiring Maghribis [1992a: 130]. By solving the principal-agent problem pertaining to relations between merchants and overseas agents, the Maghribi traders' closed grouping (a non-market institution) therefore promoted the integration of interregional markets in a context where there was no legal framework within which these relations could be organised [1989: 865-6; 1993: 544-5].

Among Italian traders, by contrast, 'a different political and social history led to the emergence of institutions based on political control and bilateral reputation' [Greif, 1992a: 130]. After the political faction that controlled Genoa lost its monopoly over the city's lucrative overseas trade by the end of the twelfth century, the city grew rapidly and unstable social networks prevented the emergence of any multilateral reputation mechanism while favouring instead the growth of a patron system based on bilateral reputation [*ibid.*].<sup>41</sup> What needs to be emphasised is that neither mechanism (but particularly not the latter) can be considered to have been efficient. Among the Maghribis, the volume of trade was limited by the size of the group which has itself been deter-

mined by historical circumstances and could not grow as trade opportunities expanded.<sup>42</sup> Moreover, ‘although this deficiency could have been remedied by an appropriate co-ordinating organisation, such an organisation did not emerge’ [*ibid.*: 131]. As for the Italian situation, trade magnitude was politically determined under the political coalition system while, under the patron system, agency relations could be governed only at a high cost till a new organisation, the family firm, was established during the thirteenth century. The family firm (a permanent partnership with unlimited and joint liability) is helpful to overcome incentive problems because its lifespan is ‘infinite’ and it is less likely to go bankrupt than an individual merchant. As a consequence, the price (wage) to be paid to keep agents honest is lower [1989: 874–5; 1992b: 27–8; 1992a: 131]. Interestingly, the family firm did not emerge within the ‘collectivist’ culture of the Maghribis where, Greif presumes, it was not perceived as necessary [1989: 875–6].

*The need for private and public order institutions: disciplining foreign rulers:* The governance of agency relations is only one of the problems that surrounded trade expansion in Medieval times. Another critical issue was that of ensuring proper behaviour on the part of the rulers of foreign trading centres or even of territories crossed over to reach foreign market places. Now, a bilateral reputation mechanism was obviously unable to prevent such rulers from abusing the rights of alien merchants (for example, by confiscating their property or arbitrarily increasing tolls) since the volume of trade and, therefore, of revenue which a particular merchant represented was necessarily low (that is, the value of the future trade of the ‘marginal’ traders to the ruler was zero). But a multilateral reputation mechanism under which a group of merchants would threaten a ruler to cease trading in this realm if he abused one (or several) of them, does not provide a reliable solution either. The reason is simply that if individual traders have an interest in joining an embargo decision by a group of sufficiently large size, once such a decision is taken, they will be incited to break the embargo and free ride on others’ self-restraint: during a boycott, indeed, trade shrinks to below the point at which, say, bilateral punishment is effective. It must therefore be concluded that, to support the efficient level of trade, a multilateral reputation mechanism must be supplemented by an organisation able both to co-ordinate responses of individual merchants and to enforce embargo decisions upon them. In other words, as repeated play is not sufficient to discipline the foreign ruler at economically efficient volumes of trade, not only is collective action needed but it must also be supported by some mechanism that can ensure ‘solidarity of incentives’

among the merchants concerned [*Greif, Milgrom, and Weingast, 1992: 5-7, 26; Greif, 1992c: 4; 1992a: 129*]. It is only then that a ruler is likely to commit himself to non-arbitrariness, because the merchants' threat of retaliation is credible.<sup>43</sup>

Thanks to their social cohesion, Maghribi traders could ensure members' compliance to boycott decisions in a purely decentralised way, yet in the more 'individualistic' culture of western Europe, as no such group cohesion existed, a specific organisation had to be in place to surmount the alien ruler's commitment problem. In Italy, each city actually functioned as a merchant guild while it is only after a long process of institutional evolution that the small towns (too small to pose a real threat to foreign rulers) around the Baltic Sea could be incorporated into an inter-city guild, the German Hansa [*Greif, Milgrom, and Weingast, 1992: 13-17*]. This is where the political factor – strangely neglected by Granovetter but so rightly emphasised by Hicks [*1969: 37-8*] – comes into play. As a matter of fact, it is because Italian cities had 'a solid internal political and commercial organisation' *even before trade expansion demanded it* (they were true city-states and the merchant guild was a sub-division of a city administration) that they were able to perform the co-ordination and enforcement functions required for thriving trade [*Greif, Milgrom and Weingast, 1992: 17, 26*]. Enforcement was actually based on various inducements or sanctions, some of which offered member merchants with a stream of rents in their own city – since the guilds were usually able to exert powerful controls in their home territories – while others relied mainly on the organisation's coercive power [*ibid.*].<sup>44</sup>

This is not to deny the potential role of 'social embeddedness' underlined by Granovetter. As pointed out by Hicks, religious or ethnic connections among merchants could be helpful in providing the natural leaders and arbitrators needed to ensure effective collective action at local level [*Hicks, 1969: 36-7; also North, 1990: 127*]. Yet Hicks again had probably a strong point when he observed that: 'The fact that European civilisation has passed through a city-state phase is the principal key to the divergence between the history of Europe and the history of Asia' where progressive communities (like the Parsees of India) could not rely on the active support of their states [*Hicks, 1969: 38*].<sup>45</sup> Note that, as centuries passed and larger political units emerged in Europe, merchant guilds declined since their functions were gradually taken over by the state system [*Greif, Milgrom, and Weingast, 1992: 27*].<sup>46</sup>

Interestingly, there are instructive present-day examples of effective 'collectivist' kin-based organisations designed to discipline foreign rulers. It is certainly not coincidental that most of these organisations

seem to exist in countries where political authorities are unable or unwilling to make reliable long-term commitments *vis-à-vis* alien trading communities, such as is still commonly the case in Sub-Saharan Africa (see the pioneering work of Cohen [1969; 1971]). To my knowledge, one of the best-documented examples is provided by a recent study [Jul-Larsen, 1993] of the organisation adopted by the migrant Popo fishermen from Bénin in the town of Pointe Noire in Congo-Brazzaville. (Similar organisations actually exist among the Popo staying in Gabon, Cameroon, and Ivory Coast.)

The main motive behind the creation of the *Association des Ressortissants du Bénin* (ARB), an organisation webbed into the extended family system of the Popo fishermen on the beaches, was clearly to minimise conflicts with the Congolese society in general and with the state in particular so as to secure continuous and safe access to local fish resources. It is noteworthy that the initiative to create the association actually came from Beninese fish traders (of Youruba origin) who, for obvious reasons, insisted that Popo fishermen on whose catches their business depends be included into it. To achieve their objective, ARB leaders quickly developed links with key actors within the Congolese society, in the civil society as well as in the state apparatus. Yet, in September 1977, these links did not suffice to prevent the Congolese government, without any forward notification, from repatriating all Popo fishermen who did not possess formal stay permits and from confiscating their outboard engines on the grounds that proper import authorisations were lacking. However, most of the ARB leadership, possessing legal stay permits thanks to their contacts with high-ranking Congolese officials, remained in Pointe Noire and immediately reacted by deciding that all remaining Popo should refrain from fishing for other purpose than for pure subsistence. Because of the high level of internal authority of the association over all the Popo fishermen operating in the area ('As member of the Popo fishing community, you are under ARB jurisdiction whether you wish it or not and the only way of escaping ARB control is to leave Pointe Noire'), there quickly ensued a severe lack of fish in the markets in town. The government could not remain indifferent to this state of affairs and, after all sorts of incidents, the situation was gradually reversed: the expelled Popo slowly returned and, around 1982, the Popo population in Pointe Noire eventually reached back its 1977 level.

Since this effective demonstration of corporate power by the ARB, the rights of access of Popo fishermen to the local waters have not been any more threatened, and the relationship between their association and the Congolese authorities has significantly improved. Instead of trying

to abuse them, army colonels, party officials, police officers or town mayors have accepted the establishment of more or less reciprocal relations with Popo leaders, and these relations have been increasingly characterised by a certain mutual understanding. Note that the ARB has been skilful enough to contribute positively (and not only through the threat of withdrawal) to this improvement by seizing upon any opportunity to demonstrate its loyalty toward the host society and government (like when it supported a series of fund-raising campaigns launched by the Congolese government to finance projects of national interest). In other words, the Congolese government, without losing face, can maintain good official relations with the ARB on account of the latter's co-operative spirit and its usefulness in solving a series of practical problems resulting from the presence of the Popo fishermen in the country. The ARB's effective power of retaliation, which is no doubt the crucial factor disciplining the government's behaviour, remains more or less concealed behind this screen of mutual goodwill.

*The need for private and public order institutions: overcoming imperfect information:* Let us assume that the above problem is somewhat surmounted: in alien trading centres the ruler exercises the forbearance and restraint in using coercive force. There then remains the crucial question as to how merchants coming from different localities can be induced to respect contracts requiring enforcement through time *when information is imperfect* (past actions of merchants are not known and merchants could renege on their promises and leave the place before being detected). This question cannot be evaded even in the face of evidence that 'merchants could and did communicate extensively, writing letters, engaging in trial relations, and checking the credentials of their trading partners'; indeed, with geographical specialisation in production, merchants increasingly needed 'to rely on the promises of individuals with whom they were not well acquainted' [Milgrom, North and Weingast, 1990: 19]. The difficulty obviously arises from the fact that in a large community 'it would be too costly to keep everyone informed about what transpires in all trading relationships, as a simple reputation system might require'. Clearly, it is the costliness of generating and communicating information – rather than the infrequency of trade in any particular bilateral relationship – that comes out as the main problem to solve [*ibid.*:3]. In the aforementioned paper, the authors have shown formally that an institutional solution exists to such a problem: if merchants are able to co-ordinate their efforts to establish private judges who would centralise information and act as third-party adjudicators of disputes, they could be induced 'to behave

honestly, to boycott those who have behaved dishonestly, to keep informed about who has been dishonest, to provide evidence against those who have cheated, and to honour the decisions of the judges' [*ibid.*].

The interesting feature of the system is that private judges are able to promote honest exchanges *even though they have actually no binding authority to enforce obligations*. In other words, once the third party is established thanks to the merchants' collective action (assuming that this collective action is feasible), the system is self-enforcing and does not call for the use of any coercive power: in the authors' own words, the main function of the private judge consists of transmitting '*just enough* information to the right people in the right circumstances to enable the reputation mechanism to function effectively for enforcement' [*Milgrom, North and Weingast, 1990: 3*]. The self-enforcing character of the private judge system hinges critically on the provision that unless a trader makes appropriate queries with the judge about the quality of his current partner, he cannot use the system to resolve disputes and to obtain compensation for damages inflicted on him. In effect, it is the judge's ability to activate a multilateral reputation mechanism by controlling information (if the judge lacks the ability to enforce judgments once a trader left the trading centre, he is capable of verifying past actions and keeping records of traders who cheated in the past) that provides the appropriate incentives prompting merchants to participate in punishing cheaters [*Greif, 1992a: 132; Milgrom, North, and Weingast, 1990: 10*]. Further, only the names of those merchants who did not pay the compensation required of them when they were found guilty of cheating become part of the judge's permanent record. Finally, it must be borne in mind that acquiring information and appealing to the judge is costly for each merchant. None the less, despite these costs, there exists a (symmetric subgame-perfect) equilibrium in which cheating does not occur and merchants are induced to provide the court with the information needed to support honest exchanges [*Greif, 1992a: 132*].

The above private order institution was apparently used at the Champagne fairs, an important nexus of trade between northern and southern Europe during the twelfth and the thirteenth centuries. The private judge was then known as the Law Merchant, an appellation which refers to the fact that he was chosen from among the merchant community [*Milgrom, North, and Weingast, 1990*]. It is worth stressing that, if this system has features which tend to make it relatively cheap compared to available alternatives, it can work only under certain institutional conditions. It will thus not lead to a honesty equilibrium (that is, merchants will not use the information-pooling mechanism and, as a result, cheating will not be deterred) if (1<sup>o</sup>) the merchants live at

great distances from one another and their principal assets are illiquid thereby making wealth transfer particularly difficult; (2°) the cost of information query is so high as to exceed the gain of having an honest deal; (3°) the cost of appeal is too high; (4°) the advantage of cheating is too large; (5°) trade is not very frequent; (6°) the Law Merchant is corrupt (this risk may nevertheless be averted under certain conditions). Above all, it must be reckoned that the Law Merchant system does not fully account for trade outside a single trading centre since we do not know how information about a trader's dishonesty in one location could be transmitted to another [*ibid.*: 13–18, 20]. These various constraints, especially the latter, probably explain why the Law Merchant system was eventually replaced by a system of *state enforcement*, typically in the late middle ages or the early modern era in western Europe.<sup>47</sup> Rather than depend for punishment upon the decentralised behaviour of merchants, recourse to the state authority when nations exercised extensive geographic control enabled the seizure of the property, or the imprisonment, of individuals who resisted paying judgments. Given the enlargement of the trade space, it is likely that the intervention of the state resulted in a reduction of the transaction costs of policing exchange [*ibid.*: 21].

*The need for private and public order institutions: concluding comments and contemporary examples:* In view of the foregoing evidence, it should now have become abundantly clear that, unless the division of labour remains rather limited, an effectively working market cannot be sustained only on the basis of purely decentralised mechanisms of fraud and deceit control. Private and public order institutions are required and recourse to coercive power cannot be escaped. If it were true that decentralisation arrangements based on reputations could suffice to ensure honest behaviour, one would be unable to explain the presence of numerous institutions (such as laws for contract enforcement, notaries for the recording of agreements, state courts for the resolution of business disputes and so on) that have made up an important part of the landscape of many western societies for at least several centuries.<sup>48</sup> North has laid considerable stress on the fact that 'historically the growth of economies has occurred within the institutional framework of well-developed coercive polities': the state was 'a major player' or a 'crucial actor in the process of economic specialisation' that took place in Europe during modern times [*North, 1990: 14; 1991: 107*].<sup>49</sup> At the same time he rightly emphasises that: 'Quite complex exchange can be realised by creating third-party enforcement via voluntary institutions that lower information costs about the other party'. Ultimately,

however, institutions that can enforce agreements by the threat of coercion are required to sustain complex exchange because the transaction costs of a purely voluntary system of third-party enforcement would be prohibitive [*ibid.*: 58; also 35, 47, 59, 109]. To North, it is the gradual and unusually successful blending of the voluntaristic structure of contract enforcement via merchant organisations with enforcement by the state, and the progressive encoding into formal laws of behavioural patterns determined by private order institutions that constituted the main factor behind the rise into prominence of the western world during the last centuries [*North, 1990: 41, 43; 1991: 107*].

It is important to bear in mind that institutions can be found even nowadays, which, like the Law Merchant, are more or less self-enforcing once they are set up. They are again essentially concerned with storing and retrieving truthful public-record information about a person's previous failures to behave according to honesty rules.<sup>50</sup> Two interesting examples are taken from present-day Belgium with which the author is most familiar. The first one is the institution of protest, organised under the aegis of the state. Under this mechanism any holder of a bill of exchange for which reimbursement has not occurred is able to raise a protest by a bailiff who will then see to it that the name of the defaulter is duly publicised through a specialised official journal known as the Journal of Protest. The very threat of having their names thus publicised presumably prompts many potential cheaters to meet their obligations or to try and find an arrangement with the creditor. Second, there are the information networks that banks maintain among themselves to keep record of all customers who default on loans taken from any of them. This information-pooling mechanism enables them to retaliate multilaterally against defaulting even when bank-customer relations are not repeated. Note that in Belgium all credit institutions are now requested by the law to signal to a central agency (located in the Central Bank) all cases of default regarding personal consumption loans and credit to private firms. This is with a view to making such information available to all financial intermediaries. With respect to the former kind of credit, when debts are repaid (if they ever are), credit institutions are again required to transmit the information so that the names of amended debtors can be erased from the official 'black list' (one year after the repayment). Moreover, since the 1st April 1987, financial institutions are obliged by law to consult the data file before granting a loan to a particular customer (subject to the ultimate sanction of withdrawal of registration certificate). Of course, they remain completely free to decide whether to accede or not to their customer's demand *after the file's consultation* [*ABB, 1989*]. This recent amend-

ment of the system, note in passing, attests to the fact that the mechanism did not previously work according to expectations because too many credit institutions did not apparently want to incur the cost of information query (in actual practice, the system was not self-enforcing).

To establish and sustain honesty the state can perform functions other than organising and strengthening information-pooling systems. Thus, it may solve pure co-ordination problems and reduce sources of ambiguity and disputes by enacting rules and designing measurement devices (systems of standardised weights and measures, auditing and accounting procedures and so on) that ensure uniformity of interpretation and narrow down the scope for fraud opportunities. Deeper involvement by the state is entailed when it lays down rules of conduct and establishes rights which it is willing to enforce (usually through a system of courts), but only at the request of some plaintiff. State intervention deepens further when it assumes both the initiative of control and that of enforcement of rules designed to prevent fraud and deceit: this is typically the case with several official commissions in charge of monitoring compliance of banks, stock exchanges, private firms and so on, or with various types of legislation enacted by the state. Finally, again with the aim of controlling the risk of fraud and deceit, the state may create monopolies towards the same purpose, as exemplified by its monopoly over the supply of the monetary base.<sup>51</sup>

*final version received October 1993*

#### NOTES

1. In the same vein, Machiavelli argued that republican government (though the most desirable form of government where it could be achieved) was destined to fail where social conditions were unsuitable, in particular where men lack civic virtue and where social and economic life is organised in feudal fashion [Putman, 1993: 132].
2. My definition of an institution is therefore quite different from that used by most neo-institutional economists who use the word in a very wide sense. Thus, for North, institutions are devices that constrain individual behaviour and structure human interaction [North, 1981; 1990; also Langlois, 1986: 247]. Essentially, they thus 'encompass the fundamental rules of the game within which the economic system operates' [Van Arkadie, 1990: 154; also Nabli and Nugent, 1989: 7-9]. Informal codes of behaviour, norms and conventions are obviously institutions according to this definition. Hence the distinction between formal and informal rules or institutions which is at the heart of North's last book [1990].
3. The same position is found in the Public Choice theory forwarded by Buchanan and Tullock for whom the market in particular has a tendency towards spontaneous order (see for example, Buchanan [1986]).
4. In the subsequent presentation of Marx's ideas, the interpretation proposed by Deleplace [1979: 209-25] has been closely followed.
5. It is interesting to note the parallelism between the above analysis by Marx and the more recent contribution of two eminent sociologists who have also contrasted market-dominated with traditional societies in terms of the mode of socialisation:

Maximal success in socialisation is likely to occur in societies with very simple division of labour and minimal distribution of knowledge. Socialisation under such conditions produces identities that are socially predefined and profiled to a high degree. Since every individual is confronted with essentially the same institutional programme for his life in the society, the total force of the institutional order is brought to bear with more or less equal weight on each individual, producing a compelling massivity for the objective reality to be internalised. Identity then is highly profiled in the sense of representing fully the objective reality within which it is located. Put simply, everyone pretty much *is* what he is supposed to be. In such a society identities are easily recognisable, objectively and subjectively. Everybody knows who everybody else is and who he is himself. A knight *is* a knight and a peasant *is* a peasant, to others as well as to themselves. There is, therefore, no *problem* of identity. The question, 'Who am I?' is unlikely to arise in consciousness since the socially predefined answer is massively real subjectively and consistently confirmed in all significant social interaction . . . A society in which discrepant worlds are generally available on a market basis entails specific constellations of subjective reality and identity. There will be an increasingly general consciousness of the relativity of *all* worlds, including one's own, which is now subjectively apprehended as 'a world', rather than 'the world'. It follows that one's own institutionalised conduct may be apprehended as 'a role' from which one may detach oneself in one's own consciousness, and which one may 'act out' with manipulative control [*Berger and Luckmann, 1967: 183–4, 192*].

This analysis allows one to better understand Marx's belief that in the capitalist society for the first time in human history man becomes aware of his own individuality [*Deleplace, 1979: 203*]. This was not possible before because, in a peasant society for example, 'one is born and one remains a peasant, one does not *become* a peasant' [*Barthez, 1982: 33-added emphasis*].

6. For a nuanced and well-articulated modern exposition of this viewpoint with specific reference to Africa, see Kennedy [*1988: Ch. 7*].
7. It deserves to be noted, however, that the problem of market order arises not only when agents are selfish but also when they are altruistic in a *particularised* sense (individuals are concerned about the lot of *some* other individuals). Under the latter circumstances, there is no a priori reason to expect that altruistic individuals would refrain from renegeing on contracts, violating property rights and the budget constraint and so on. This is attested by the well-known case of 'social bandits' who rob the rich to help the poor. If altruism is of a *generalised* kind (everybody is concerned about the lot of everyone else), there is intuitively a possibility for a market order to be sustained insofar as all agents would then abstain from (opportunistic) acts that harm the interests of other people. This line will not be pursued in this article because it leads to serious conceptual problems [*Griffith and Goldfarb, 1988*]. Since morality is basically a concern about the generalised other, generalised altruism has a moral connotation. Now, it is not very satisfactory to think of altruistic predispositions or moral values as a preference, especially because such an approach implies that they are then considered as given. As a result, it is impossible to allow for the fact that concern for the others' lot might well turn out to be endogenous to one's economic experiences (events which the individual experiences and observes may lead to modify his existing values). Values are clearly to be distinguished from ordinary tastes: as pointed out by Hirschman, 'a taste about which you argue, with others or yourself, ceases ipso facto being a taste - it turns into a value' [*Hirschman, 1985: 9*].
8. Formally, the reason why an agent does not steal another agent's initial endowment is simply because such an act is not in his feasibility set. Individuals are allowed to choose only consumption bundles (i.e. points in their budget sets): they may not choose between stealing other people's commodities and not doing so [*Basu, 1986a: 1984*].

9. In the words of De Villé again, the fundamental ambiguity inherent in the concept of perfect competition lies in the fact that this concept cannot be understood as a description of the nature of interactions among agents but must rather be viewed 'as a state of the system which would result from an interaction process left unexplained by the theory itself' [De Villé, 1990: 23]. See also Bianchi [1990:1].
10. This important feature was first underlined by Hume who observed that since 'mutual performances cannot be finish'd at the same instant', it is necessary 'that one party be contented to remain in uncertainty' [Hume, 1740: 519].
11. If agents carry different weights (competition is imperfect), the Equivalence Theorem should not generally be expected to hold any more (the core does not correspond to the set of Walrasian competitive equilibria). Nevertheless, it is sometimes possible to restore the equivalence principle even though some traders are assumed to be 'large': this happens when these traders are similar to each other, or when to each such large trader there corresponds a set of small traders which are similar to him [Gabszewicz and Shitovitz, 1992: 462]. As pointed out by Gabszewicz and Shitovitz, these conditions suggest that when large traders find competitors similar to them in the economy, their market power is diluted. For example, the presence of several large traders engenders such intense competition among them that the effect of the larger traders' size is nullified [*ibid.*: 462, 467]. This kind of results is attained by working with a finite economy framework or with the model of so-called 'mixed markets' (in which non-negligible market participants are represented as atoms coexisting with a continuum of negligible participants).
12. Thus, for example, in the fixed threat bargaining model of Edgeworth, transaction costs are assumed to be nil, the negotiation process is completely transparent, and agents trust each other.
13. In non-co-operative games, agents take as given the strategies of the other agents, and binding agreements among them are not possible.
14. Each participant in the exchange economy makes an offer (in terms of quantity) and a price ensues according to the aggregation (price-formation) rule adopted. To each price is associated a final allocation that enters the utility function of each individual and plays the role of a payoff function. Individual behaviour is strategic because each player maximises his payoff given the actions of all other players.
15. Note that if there were absolutely no transaction costs then complete markets could be costlessly constructed and, consequently, exogenous uncertainty could be wiped out by completing markets in contingent trades. The presence of transaction costs creates endogenous uncertainty so that, even in the absence of exogenous uncertainty, money and financial institutions are needed to offset markets incomplete endogenously [Shubik, 1986: 4-5, 58].
16. It could of course be argued *à la Mandeville* that opportunistic behaviour, even when its influence is pervasive, needs not cause the collapse of the economy and may even stimulate it: does not theft make work for the locksmith [McNally, 1988: 163]? However, as Hucheson has aptly pointed in his criticism of Mandeville's *Fable of the Bees* (1713), 'profit from crime or suffering' does not add to human happiness [*ibid.*: 165]: in other words, additional incomes thus generated do not reflect enhanced well-being since they have been spent to avoid something bad or regrettable rather than to produce something good or enjoyable (by analogy, see Mishan, [1986: Ch.5]). More seriously, if the incidence of fraud and deceit is too large, economic transactions, being too costly, will be discouraged and the volume of market activities will shrink.
17. Bear in mind that in these economies most goods traded are unstandardised and highly variable with the result that trust is a crucial problem [Plattner, 1989: 215].
18. Therefore, if one player is allowed to know the other player's move before taking his own, the equilibrium is unchanged. For a clear exposition of the concepts and analysis involved in the PD game, see Rasmusen [1989: 19-34]. It is interesting to note in passing that, since expectations about others' behaviours do not play any role, all models yielding such a dominant strategy equilibrium are the game-theoretic analogue to perfect competition in traditional economic models.

19. For this to be the case, players must discount their future benefits at a low enough rate (and this is common knowledge).
20. A 'tit-for-tat' strategy is defined as follows:
  - (1) start by choosing to co-operate;
  - (2) thereafter, in period  $n$  choose the action that the other player chose in period  $(n-1)$ .
21. A particularly interesting conclusion that emerges from the work of Kreps and his associates is that the set of Nash equilibria is not robust to slight perturbations. Thus, 'A one-in-one thousand chance that one's opponent is generous, or that one's opponent assesses a substantial probability that oneself is benevolent, or that one's opponent assesses a "change" in the game. Yet it completely changes the theoretical prediction', implying that we must be very wary of the theoretical prediction [Kreps, 1990: 542]. This agnostic conclusion can be actually tied back to reputation in the following sense:

In the finitely repeated prisoners' dilemma, suppose one player assesses a small probability that the second will 'irrationally' play the strategy of tit-for-tat . . . In a long enough (but still finite) repetition of the game, if you think your opponent plays tit-for-tat, you will want to give co-operation a try. And even if your opponent isn't irrational in this fashion, the 'rational' thing for her to do is to mimic this sort of behaviour to keep co-operation alive . . . We can think of these effects as 'reputation' in the sense that a player will act 'irrationally' to keep alive the possibility that she is irrational, if being thought of as irrational will later be to the player's benefit through its influence on how others play. That is, in this sort of situation, players must weigh against the short-run benefits of certain actions the long-run consequences of their actions [Kreps, 1990: 542-3].

- Note that the above conclusion also holds if the number of rounds in the game is rather small. Yet, as proven by Gibbons [1992: 224-32], the probability that the other player can play only the tit-for-tat strategy must be large enough if co-operation is to occur in a game that is not long repeated. If this requirement is satisfied, there exists an equilibrium in which both players co-operate in all but the last two stages of the game. (More exactly, in a three-period game, the player who is uncertain about the strategy played by the other co-operates till the last stage while the latter co-operates till the penultimate stage.) It thus appears that a sufficiently high suspicion that the opponent who plays tit-for-tat may make up for a low number of game stages to generate co-operation.
22. These authors show that, under certain analytical conditions (recall is bounded and there is a positive probability that the other player follows a strategy of recall zero, that is, his current actions are not influenced by the outcomes of his past moves), all equilibrium outcomes are close to the unique co-operative outcome when there is a radical uncertainty about which strategy the other player is going to play.
  23. Strategies of brave reciprocity have two defining characteristics. First, against an unconditional defector, these strategies defect in every round except the first. Second, if two brave reciprocators meet, they both co-operate in every round.
  24. Some more details about the evolutionary approach used by Sugden will be given in Part II.
  25. In the literature attention is actually limited to a few basic types of strategy while there are innumerable possible strategies in repeated games.
  26. Consider the tit-for-tat again. It is evident that such a strategy is highly unstable; if one player defects once (for example, he makes a mistake) and then plays tit-for-tat while the other player does the same but starts by co-operating, co-operation will never occur. Now, it is easy to show that modified tit-for-tat strategies of the kind 'Co-operate if your opponent is in good standing, or if *you* are not. Otherwise, defect' – that is, strategies that prescribe one or several rounds of reparation following any

unjustified defection – allow co-operation to start again after a breach of convention. Such strategies are stable equilibrium outcomes provided that the probability of mistakes is sufficiently small [Sugden, 1986: 112–5].

27. Several centuries ago, Hume (and Adam Smith as well, who spoke about the 'discipline of continuous dealings') had already well understood that, in small-scale social settings, considerations of what is sometimes called reciprocal altruism but really amounts to selfishness with foresight, should lead people to co-operate. The same considerations help explain why they are quite reliable about keeping promises when no legal sanction requires them to do so and when keeping them is inconvenient or costly:

We can better satisfy our appetites in an oblique and artificial manner, than by their headlong and impetuous motion. Hence I learn to do a service to another, without bearing him any real kindness; because I foresee, that he will return my service, in expectation of another of the same kind, and in order to maintain the same correspondence of good offices with me or with others. And accordingly, after I have serv'd him, and he is in possession of the advantage arising from my action, he is induc'd to perform his part, as foreseeing the consequences of his refusal . . . After these signs [i.e. promises] are instituted, whoever uses them is immediately bound by his interest to execute his engagements, and must never expect to be trusted any more, if he refuse to perform what he promis'd [Hume, 1740: *Book III, Part II, Sect. V, 521–2*].

28. In the same vein, see Evans-Pritchard [1940]; Colson [1974: 54–6]; Hayami and Kikuchi [1981: 16–17]; Bates [1983: *Ch. 1*]; North [1990: 37–9; 1991: 99].
29. Punishment activities are indeed public goods subject to the free rider problem. In the words of Elster: 'Punishment almost invariably is costly to the punisher, while the benefits from punishment are diffusely distributed over the members. It is, in fact, a public good: to provide it, one would need second-order selective incentives which would however run into a third-order free-rider problem' [Elster, 1989a: 41; also Taylor, 1987: 30; Coleman, 1990: 270–89].
30. Note incidentally that gossip, which tends to flourish in close-knit, highly connected social networks, constitutes a powerful device that helps deter norm-breaking. As pointed out by Coleman, gossip is an incremental form of sanctioning since 'the cost incurred by each sanctioner is small, and the effect of each sanctioning is small as well, but the effects are additive, giving a large total effect' [Coleman, 1990: 278].
31. Consider a two-person PD where the agents make their decisions independently of each other. According to Elster, 'if they are sufficiently alike, each of them may reason in the following manner. "If I co-operate, there is a good chance that the other will co-operate too. Being like me, he will act like me; let me, therefore, co-operate to bring it about that he does too"' [Elster, 1989a: 197]. Now, the smaller group, the more other people are like oneself [*ibid.*: 208]. In the context of a small group, therefore, people's proclivity to believe that by acting on the symptoms one can also change the cause helps explain why they may start by co-operating, thereby providing an irrational basis for strategies of 'brave reciprocity'. For Elster, in effect, moral behaviour rests on a form of 'magical thinking' [*ibid.*: 195–6].
32. See, for example, Cordell and McKean [1986: 89, 91–3, 95–6]; Leviell [1987: 74–85].
33. Among the Kung San of the Kalahari desert, a person is said to 'hai' the partner in his heart, meaning literally to hold and figuratively to be responsible for that person: from then on, each partner can call on the other in times of need [Wiessner, 1982: 66–7]. In the Berber societies of the High and Middle Atlas (Morocco), where caravan trade requires personal protection from a powerful person living in the locality crossed and where strong codes of honour exist, we are told that 'the essential transaction is that a man who counts "stands up and says" to those to whom he counts "this man is mine; harm him and you insult me; insult me and you will answer for it"' [Geertz, 1979: 137].

34. Such practices were also observed in Europe during medieval times such as when 'free' trading was allowed between members of two different lordships on the specific occasions of (official) tourneys, that is, in events strictly regulated and controlled by the feudal authorities concerned.
35. In fact, the concept of spontaneous social order is completely alien to the traditional universe of social relations. In traditional societies, indeed, individuals are convinced that the social fabric being profoundly unstable and fragile, it can persist only as a result of a genuine process of 'uninterrupted creation' [*Bourdieu, 1980: 225–6*]. Such process may be considerably reinforced through identification with kin or pseudo-kin groups: leaders are then usually father or mother-figures, and the territory is often quasi-parental in the cultural symbolism [*Babcock, 1986: 180*].
36. In tribal ideology, to cheat one's clan is equivalent to cheating oneself while cheating outsiders gives strength to the clan of the cheater and weakens the clan of the cheated person [*Massoz, 1982: 87–8*].
37. In the words of Polanyi: 'Domestic and foreign relations are in stark contrast: solidarity here, enmity there, rule the day. "They" are the objects of hostility, degradation, and enslavement, "we" belong together and our communal life is governed by the principles of reciprocity, redistribution, and the exchange of equivalents' [*Polanyi, 1977: 59*].
38. Note that, among economists, Hirschman seems to share a similar viewpoint [*Hirschman, 1982: 1473–4*].
39. Note, however, that Granovetter himself has somewhat qualified his thesis by acknowledging a potential role for 'generalised morality' (the existence of which 'one can hardly doubt'). Yet he seems to confine its role to a restricted number of highly specific situations that have characteristics which, in his own words, make them 'somewhat unusual' [*Granovetter, 1985: 489–90*].
40. In this regard the history of California fisheries in the nineteenth century and even later is extremely interesting since Chinese and Italian immigrant groups operated as real mafias for the harvesting, processing, and distribution of various species of fish (the Italians later divided into northern and southern subgroups) [*McEvoy, 1986: 95–100*]. To Jack London, who worked as a patrol deputy for the California Fish Commission, 'the Bay Area shrimpers were little better than pirates who kept no law but their own' [*ibid.: 97*].
41. Putman has offered a picture of North Italian city-states that is at variance with that painted by Greif. In particular, Putman has emphasised the large incidence of horizontal ties (instead of vertical bonds of the patron–client type), the vitality of associational life, and a strong sense of belonging to an integrated community that have characterised the cities of North Italy, at least between the twelfth and fourteenth centuries [*Putman, 1993: 124–37*].
42. In actual fact the Maghribi traders retained their separate identity as long as they were active in long-distance trade. There is scant evidence of business associations between them and non-Maghribi traders whether of Jewish or Muslim origin [*Greif, 1989: 877*].
43. For a formal proof, see Greif, Milgrom and Weingast [*1992*].
44. One could add that, in a way reminiscent of traditional practices of trust-manufacturing, personalised alliance relations with alien rulers could also mitigate the latter's temptation to abuse foreign merchants. This solution, as already noted, was used as a way to get protection while crossing foreign territories in caravan trades. For such a solution to be feasible and to be stable, however, there had to be some political dimension to the alliance sealed between the merchant (or group of merchants) and the ruler.
45. The fascinating question as to why rulers of important European city-states came to look favourably upon trade and tried to promote it rather than stifle it through unwise fiscal policies is clearly beyond the scope of this paper. Hicks had his own answer (favourable geographical conditions) but others are available as well (such as the acute degree of political competition prevailing among city-states in Europe which

- encouraged continuous advances in military technology, which in turn required the rulers to have substantial resources at their command on a more or less continuous basis).
46. This is particularly evident in Polanyi's account of the rise of the 'self-regulating market' in Western Europe. According to him, extension of the market area from localised spheres of transactions to a national domain has *not* been an endogenous process due to the merchants' fear of losing ground in the face of unknown competitors whose actions were out of their control. According to Polanyi, indeed, it is at the behest of the state that an integrated internal market has been created within the national space of the emerging modern countries of Europe. In other words, national markets were neither the outgrowth of the gradual extension of urban trade centres nor the offspring of long-distance trade. The intervention of the state was necessary because the determined protectionism and particularism of the cities and principalities constituted a formidable obstacle to internal market integration and expansion. Local networks of bourgeois interests, strongly structured around highly codified rules and institutions (such as guilds and corporations), fiercely opposed any step which could jeopardise their economic position and encroach upon their business sphere. It is true that what the European states thus built up (except in Holland) were not *free* national markets but highly regulated (mercantilist) trade systems. Yet they did promote the formation of enlarged spheres of exchange which were, at a later stage, to be increasingly freed from mercantilist barriers, restraints and privileges under the mounting pressure of bourgeois interests *now* acting as a national class through the body of a representative assembly [Polanyi, 1957: Chap. 5].
  47. Except for the Champagne fairs, there seems to be little empirical (historical) support for the otherwise ingenious private judge system (personal communication of Avner Greif).
  48. Thus, in the Italian city-states, as early as the twelfth to thirteenth centuries, covenants and contracts were central to all aspects of life, 'and ranks of notaries, lawyers, and judges burgeoned to record, interpret, and enforce these agreements'. In Bologna, for example, a town of roughly 50,000 inhabitants, as many as 2,000 professional notaries were estimated to operate. Moreover, an itinerant, professionally trained jurist-administrator elected for a limited term (known as the *podestà*), came to play a key role in communal affairs [Putman, 1993: 126].
  49. For instance, the way the (merchant) law provided protection of the bona fide purchaser (against the claims of the original owner of stolen or lost goods) from the beginning of the seventeenth century in England solved an important problem which confronted merchants and hindered trade for many centuries in Europe [North, 1990: 128-9; also Rosenberg and Birdzell, 1986: Ch.2].
  50. For Ellickson, the improved circulation of accurate reputational information thanks to recent advances in data processing can deter flight-by-night opportunism more effectively than in the past [Ellickson, 1991: 285-6].
  51. In eighteenth-century Naples, bonds and money were currently counterfeited and people no longer accepted them, causing the collapse of the economy [Paqden, 1988: 137-8]. For money to exist and persist, it is necessary that everyone believes in it and also believes that everyone else similarly believes in it, so that it becomes a self-fulfilling prophecy [Basu, 1984: 179; 1986a: 1895]. The state must therefore intervene to establish and sustain the required convergence of expectations.

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