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**Identity, Trust and Altruism
Sociological Clues to Economic Development**

by

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Abstract

Much of economics is built on the assumption of individuals being driven by nothing but self-interest; and economic development is viewed as an outcome of the free play of such individuals. On the few occasions that economics recognizes the role of trust, integrity, in-group cooperation and altruism, the tendency is to build up to these from the axiom of individually selfish behavior. The aim of this paper is to break away from this individualistic tradition and to treat as a primitive that individuals have hard-wired in them the ‘cooperative spirit’, which allows them often to work in their collective interest, *even when that may not be in their self-interest*. The main objective of the paper is to track the consequences of this primitive. By using the basic structure of a Prisoner’s Dilemma game and building into it assumptions of other-regardingness, the paper demonstrates how our selfish rationality interacts with our innate sense of cooperation. The model is used to outline circumstances under which cooperation will occur and circumstances where it will break down. The paper also studies how sub-groups of a society can form cooperative blocks, whether to simply do better for themselves or exploit others.

Key words: cooperation, trust, altruism, identity, development, Prisoner’s Dilemma

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Identity, Trust and Altruism: Sociological Clues to Economic Development

1. Celebrating Self-Interest

That the butcher, the baker and the bee-keeper, each pursuing his or her self-interest, can bring about social order, whereby the meat arrives on the diner's table, the bread gets delivered to the street corner deli, and honey travels from the remote Tasmanian farm to the Edinburgh restaurant, was a stunning intellectual insight. It is not surprising that when, on 9 March, 1776, Adam Smith's book, **The Wealth of Nations**, containing this proposition was published it was quickly recognized as a classic¹. So enamoured were the political economists of that time and their progeny, the economists, that this became the central tenet of economic theory. That individuals would be self-seeking was not just taken to be a fact, but celebrated. Development and growth were attributed to the actions of such atomistic selfish individuals.

In trying to understand why some nations have grown and industrialized rapidly, while others have remained mired in poverty, economists have sought many different explanations, but all the while held on to the selfishness axiom as sacred. This, in turn, has tended to obscure the fact that rapid growth and successful development may also require individual integrity and honesty, and the ability of individuals to forego some personal advantages for reasons of societal benefit, and for groups of people to show trust in other members of their group. Max Weber's conviction, reinforced after his travels in the United States in 1904, that the "Protestant ethic"

¹ It is interesting to note that, in the first two or three decades after the book came out, Smith was considered a renegade thinker (Rothschild, 2001). He would become the voice of orthodoxy and be claimed by the conservatives only after the safety of his death in 1790.

and a people's ability to be trustworthy were key ingredients of economic prosperity, would never make serious inroads into the orthodoxy of economics.

Ever since Adam Smith's classic, methodological individualism has become such a deeply entrenched foundation stone of economics² that we refuse to admit that a person can and often does act in his national interest or class interest or caste interest or interest based on some other collective identity³. Individuals, whose intuitions are not sullied through excessive education, realize that a group's ability to do well often depends on the ability of members of the group to hold in abeyance some of their self-interest in order to contribute to the cause of the group. Many corporations have figured this out. Among the five key principles that workers employed by Toyota are taught is "team work". While it may not sound as impenetrable as some of the others, *genchi genbutsu* and *kaizen*, for instance, it is given special emphasis in the company and is, essentially, an appeal to curb self-interest in the larger interests of the collectivity of the Toyota fraternity.

Likewise, sociologists and political scientists (and occasionally economists), have written about the importance of trust and altruism among people, and how these are important for more complex relationships to thrive and for a group or a nation to progress economically (e.g., Luhman, 1979; Gambetta, 1990; Fukuyama, 1996; Knack and Keefer, 1997; and Benabou and Tirole, 2006). But when economists have acknowledged the role of trust, collusion, in-group cooperation and altruism formally, the tendency has been to build up to these qualities, to the

² Self-awareness about the use of 'methodological individualism' would occur much later, in the writings of Carl Menger (1883), with the actual expression being used for the first time in the English language by Schumpeter in 1909. He had used it earlier in its German equivalent.

³ The assumption in most of economics is that an individual will act in his or her collective interest, for instance, by providing a public good efficiently, only when the collective interest *happens to* coincide with his or her self-interest.

extent that one can, starting from individually selfish behavior and to abandon them when that has not been possible.^{4,5}

The aim of this paper is to break away from this individualistic tradition and to treat as a primitive that individuals have hard-wired in them, admittedly to varying extents, the ‘cooperative spirit’, which allows them to often work in their collective interest, even when that may not be in their *self*-interest and to make sacrifices for the sake of fairness, justice and integrity. One way of seeing that we have these societal values deeply rooted in us is by the shock most of us feel when we hear of a moral or a societal code at divergence from the one we are used to. In his engaging ethnobotanical travelogue, Wade Davis (1997, p.19), reports that, while traveling by train in Colombia, “I noticed a sign stuck to the back of the seat in front of me. It politely asked all travelers to be civilized enough to throw their garbage out the window of the train.” The reason this shocks and amuses us is because, while the instruction is a piece of normative advice (asking people not to be selfish and litter the train) and so cannot be faulted as false, it is at sharp variance with the normative thinking of most people who are likely to read Davis’s book or this paper.

That human beings have innate social and normative values is increasingly recognized in our formal social-science models, thanks to the new large literature on ‘behavioral economics’⁶

⁴ The only exception is the analysis of the household where cooperation among members has been treated as natural and economists and sociologists have tended to take a relatively common approach (see Basu, 2006; Blumberg and Coleman, 1989). Zelizer (2005, p. 165) observes, “[The] mixture of caring and economic activity within households takes place in a context of incessant negotiation, sometimes cooperative, other times full of conflict.” This is similar to the line taken by contemporary economics that treats the household as a domain of—to use Sen’s (1990) descriptive term—“cooperative conflict.” Guyer (1981) argues how this social science approach has its own unity, and stands in contrast to the biological approach. This is because, for us, the household is described by the household members’ sense of obligation to one another and by the presence of trustworthiness among the members, and not by “the ascriptions of kinship.”

⁵ This is not to deny that many interesting questions of fairness and justice can be raised within the domain of self-interested players. I explored some of this in Basu (2000). Recently, Myerson (2004) has developed the ingenious approach of modeling justice as a method of selecting equilibria in contexts where there are multiple equilibria and, left to anarchy, agents can end up in the equilibrium where everybody is worse off.

(though it is a bit alarming that social-science model-builders need a large literature to realize this)⁷. Hence, the main objective of the paper is not just to acknowledge that human beings have these traits, but to track their consequences in an area of central concern to social scientists, namely, development and efficiency.

One of the results demonstrated here is the converse of the celebrated ‘invisible hand’ theorem in economics. The invisible hand theorem asserts, in essence, that even though each individual may be innately selfish, the collection of such selfish behavior, mediated through the market, leads to socially optimal outcomes. I shall here argue that human beings are innately social, altruistic and other-regarding⁸ and, while these traits typically aid cooperative behavior, there are situations where, despite each individual’s instinctive cooperative spirit, social optimality can break down. In other words, lurking in the wings of the invisible hand is the ‘invisible shredder’ that has been ignored by contemporary social science but at its own peril. Hence, if we want to encourage development, we need to channel, bolster and on occasion modify the already-present cooperative spirit of human beings. Hence, the policy implication of this work is very different from the ones popularly championed by economists.

The research agenda of this paper is in the spirit of what was suggested by Geertz (1963, p.2), when, stressing the social concomitants of economic growth, he observed, “What looks like a quantum jump from a specifically economic point of view is, from a generally social one, merely the final expression in economic terms of a process which has been building up gradually over an extended period of time.”

⁶ See, for instance, the paper by Loewenstein and O’Donoghue (2005), which summarizes some of this, with emphasis on how our rational selves combine with our other selves to guide what we ultimately choose.

⁷ Outside of the social sciences, it is well-recognized that individuals are not always relentless maximizers of material wealth. In his novel, **Mating** (New York: Alfred Knopf, 1991), after discussing how people generally “want more,” Norman Rush goes on to observe (p. 5), “The average Black African has the opposite problem: he or she does not want enough.” And recognizing that this causes distress to social scientists, he goes on to observe, “A whole profession called Rural Animation exists devoted to making villagers want more and work harder to get it.”

My analysis belongs to positive social science. While I comment on normative matters, I deliberately do not take a normative stand on the cooperative spirit. This is because I am only too aware that the same spirit of cooperation that can promote economic progress and lead to greater wealth can be, and in the long history of mankind there are many instances where it has been, turned against other groups, usually minorities, but also majorities that are disorganized and unable to promote their own cooperative spirit of resistance. I am also aware that cooperation promoted by a group, such as a nation or a racially-homogeneous community or a collectivity of co-religionists, against others can be more ruthless than oppression promoted by individuals. One reason for this is that it allows for the free-riding of guilt. “It is not my action that oppresses them,” it allows each person to think, “for I am just a cog in the wheel.” The heart of the paper is the study of the implications of the cooperative spirit in the mode of positive social science. When it comes to normative analysis, the remarks made are mainly in passing and it is both commended and castigated depending on the context.

Relatedly, a terminological note that needs clarification at the outset concerns the word “collusion”. The word is usually used pejoratively in economics, since its most common use is in the context of firms colluding *against* consumers. In the present paper the term is used in a value-neutral way to denote the ability of a group of people to set aside some of their individual interests in order to serve their collective well-being. Clearly, if the group refers to everyone in a country or, more compellingly, on earth, or to a small group trying to solve some public good problem of its own, which does not have a negative fall out on those outside the group, then ‘collusion’ is commendable. But if the group refers to a subset of society trying to leverage some advantage out of others or to oppress others more effectively, then collusion should be thought of

⁸ This is not to deny that these qualities can be enhanced or muted, through appropriate nurture

as a moral wrong. Hence, the term, in itself, should not be thought of as carrying a necessary normative connotation.

2. Identity and Trust: Some Illustrations

In one of his recent books, Amartya Sen (2005, pp. 335-6) asks the interesting question why British investment which came so plentifully to so many sectors (such as tea, coffee, railways and jute) of its prize colony, India, nevertheless failed to come in, in any substantial measure, into the cotton textile, iron and steel. He then points out that these were central to the old established industries of Britain in Manchester and elsewhere. But that still does not explain why the bureaucrats of the Raj, who had no direct interest in these industries, would deprive India of capital. To close the argument, Sen points out that we have to recognize that a “general sense of social identity and priorities, which are known to play a considerable part in economic decisions in general, exerted significant influence on the pattern of British investment in India.” The British bureaucrats were working not in their self-interest but in the interest of the group that they identified with⁹.

The converse was also true. When in the early twentieth century insurgency and violent uprisings against British rule started in many places in India, especially Bengal, there was some puzzlement on the part of the British, as was evident from the Rowlatt Sedition Committee Report of 1918, about the fact that the leaders of these insurgencies were usually from among the English-educated elites (known among the British as “gentlemanly terrorists”), employed by the British and the ones to gain most from the persistence of British rule (Ghosh, 2005). The answer

once again lies in identity. These elites identified themselves more with the Indian masses than with the British rulers and were willing to make personal sacrifices in order to promote the group interest. This is not to deny that people also have strong self-interests and with even more skillfully designed incentives the British rulers may have been able to keep the Indian elites behaviorally loyal to the Raj. But, in fact, to design such incentives right, one has to keep in mind that self-interest is often mediated by one's collective-identity interest, a fact that seemed to have eluded the British in the early twentieth century.

In addition to examples from out in the world, there is now plenty of evidence from controlled experiments that people can work in their collective interests, even when that entails making personal sacrifices and, in addition, the trust and the altruism can be conditional on who they are interacting with, even when they are all strangers. That human beings have these additional 'moral preferences', like the desire to reciprocate and win approval in the eyes of others and, at times, even of one's own conscience is now well-documented.¹⁰ An interesting set of experiments was conducted by Fershtman and Gneezy (2001) on students from the University of Haifa, Academic College of Tel Aviv and Tel Aviv University. They were made to play the 'Trust game', which is a two player game in which player A is given 20 shekels (NIS). In period 1 player A is given the option of giving part of that to player B and keeping the rest for herself. Whatever she chooses to give, the game organizer trebles that amount and gives this trebled amount to player B. So if player A keeps 15 to herself and gives 5, then player B actually gets 15.

⁹ Sen makes a similar point in the more formal setting of experimental games, when he (in Sen, 1985) points out that the "puzzling tendency of players" to be concerned with other players' payoffs may be understood in terms of the "identity of the players vis-à-vis their fellow players".

¹⁰ See, for instance, the discussion by Fehr and Falk (2002). They show, interestingly, that not only are these other traits a part of the human psyche but, at times, monetary incentives can actually backfire because they can weaken one of these other motivations for human action.

In period 2, player B has the option of giving any of what he receives back to A. So, for example, if A gives 20 and keeps nothing for herself in period 1 and B gives 30 in period 2, then in the end, player A gets 30 NIS and B gets 30 NIS.

The play of the game just described is clearly not rational for player B, who, if he were completely selfish (that is, 'rational' in common economics parlance), should give A nothing in period 2. That in turn means that if A knows that B is rational, then A should give nothing to B in period 1. Hence, with two fully rational players, who are also aware of each other's rationality, the expected outcome is one where A keeps all 20 to herself. Hence, their total gain, if they were fully rational, would be 20. On the other hand, if A is willing to be trusting and give money to B, their total gain can be as high as 60. Therefore, trust can generate wealth but of course it requires each player to curb his or her self-interested behavior.

Fershtman and Gneezy (2001) found that, not only is trust widespread, but a large number of agents are willing to go all the way in trusting others so as to achieve the efficient outcome. That is, when they are in the position of player A, they are willing to hand over the entire 20 to the other player¹¹. But what is more, Fershtman and Gneezy demonstrated that trust can be conditional. Close to 60% of the individuals playing this game chose the efficient transfer, that is, to hand over all 20 shekels, when their opponent was of Ashkenazic origin; but only 20% chose the efficient transfer when the opponent happened to be of Eastern origin. Similar results of conditional trust have been reported from other experiments by other researchers (Glaeser et al, 2000; Eckel and Wilson, 2002; Burns, 2004).

The objective of the next sections is to take some of these ideas—of our innate cooperativeness and also our ability and penchant to vary the extent of cooperativeness

¹¹ There is now a substantial literature that reports similar findings of trust and altruism in experimental situations from around the world. See Ensminger, 2000; Heinrich et al, 2004.

depending on who we are interacting with--to an abstract analytical model and track their consequence for efficiency and development. Under what conditions will the cooperative spirit result in cooperation? And when will cooperation break down, despite individuals having an in-built cooperativeness? These questions are, in some sense, the opposite of what economics has been concerned with, namely, how we go from individual *selfishness* to social optimality.

To be able to answer these questions even partly (fully being quite beyond the scope of this paper) is to get insights into the causes of economic underdevelopment that are arguably more important than the factors that economists have conventionally focussed on—tax rates, import tariffs, trading laws and so on. The insights take us towards a better understanding of the *cultural roots* of economic underdevelopment. The *economic* policies that we have been so concerned with and are the bread and butter of the recommendations of the IMF, the World Bank and the WTO to developing countries are no doubt important. But there are deep links between a society's culture and social norms (a society's implicit rules about lying, honesty, altruism, promise-keeping, hard work), on the one hand, and economic development, on the other. Not making enough effort to understand these links is to condemn societies to remain poor. The fact that we have now for at least half a century been trying to get the economic policies right and still have more than half the world population living in abject poverty should alert us to caveats in our analysis. The aim of the next section is to draw on scattered, existing ideas and develop some small building blocks to close some of those caveats—namely, the link between some 'social' variables and 'economic' outcomes.

3. Altruism and Identity: Game-Theoretic Model

3.1 The Basic Framework

The aim of this section is to understand and formalize what the ‘cooperative instinct’ does for human society and the economy. Instead of assuming that human beings are selfish and they ‘cooperate’ only when ‘cooperation’ is a derivative of selfish behavior,¹² as most economics models suppose, I shall here assume that the cooperative instinct is innately human. But it can break down. So one of the issues to be analyzed is when and why it may break down. This is, in fact, one of the central claims of this paper. People are self-seeking, but they also have other ‘social’ characteristics like altruism, sense of fairness, the cooperative spirit, which temper their selfishness. Just as self-interest creates drive and ambition, so can these other social concerns. But, more importantly, it is these other social characteristics--mainly the cooperative instinct--that provide the glue to hold society together and prepare the ground for markets to function effectively (Granovetter, 1985; Elster, 1989; Arrow, 1998; Nee and Ingram, 1998; Platteau, 2000; Basu, 2000; Francois, 2002). Turning this argument around, we could claim that economies can fail when the cooperative instinct breaks down. Traditional economics, rooted in methodological individualism, makes no room for our innate cooperative spirit and so is handicapped in commenting on its breakdown. Hence, the aim of this paper is to introduce a modicum of non-individualistic behavior as basic to individuals, and then to build from that.

While the cooperative instinct can be a source of economic development, it can also result in strife and conflict. As was mentioned above, what is being suggested here is a kind of converse of the invisible hand theorem of Adam Smith. Just as the invisible hand theorem shows

¹² One may legitimately wonder why the word cooperation should be used in such cases.

that selfishness can lead to social harmony, what I am claiming is that, equally, there is the invisible shredder that can lead our innate cooperative instinct to socially noncooperative outcomes. To understand this, consider the case where people have in-group trust and in-group cooperative instincts (see Swedberg, 2003, pp. 232-4, for discussion). This can lead to disparities between individuals larger than those that would occur if people were completely selfish. It was, for instance, in-group trust that allowed colonial rulers to extort much more from the natives than they would have managed if they acted selfishly.

Before going into formalism let me clarify the assumption about behavior that forms the backdrop of this analysis. We will take individuals to be basically selfish but to have the wherewithal of altruism, trust and other indicators of, what I shall call, the ‘cooperative spirit’¹³. This does not mean that individuals will always cooperate. Just as in standard economics selfish individuals often behave cooperatively, we can have cooperative individuals *behaving* selfishly. The study of the complex link between innate traits and manifested behavior is, in fact, the heart of this study.

The aim here is to illustrate these ideas using simple game-theoretic constructs. There are many different kinds of games that can be used to understand the connection between trust, altruism and identity – most notably the Trust Game, discussed in the previous section, but also the Ultimatum game (Heinrich et al, 2004; Bowles, 2004), and the Traveler’s Dilemma (Basu, 2000; Capra et al, 1999; Rubinstein, 2004). But let me here use what is, arguably, the most familiar game in the social sciences – the Prisoner’s Dilemma. This is illustrated below in Table 1.

¹³ A related exercise, combining selfishness and egotism with the collective spirit, occurs in Macy (1997). His aim, however, is to understand this in the context of an evolutionary process.

Table 1. The Prisoner's Dilemma

		Player 2	
		C	D
Player 1	C	6, 6	0, 8
	D	8, 0	3, 3

Though its mathematical structure is standard, it will be *played* differently than in most textbooks. Hence, it needs some explanation. What is illustrated above are the dollar payoffs and I shall take it (purely for expositional ease) that each number represents an index of each person's overall well-being, for instance, units of utility. It is convenient to assume that 'utils' match one-on-one with dollars. So in this game player 1 can choose between *C* and *D* and likewise for player 2. It is a useful mnemonic to think of *C* as 'cooperative behavior' and *D* as 'defection'. If player 1 chooses *C* and 2 chooses *D* – something that can equivalently be described as “if players 1 and 2 choose (*C,D*)” – then 1 earns \$0 and 2 earns \$8. If they choose (*D,C*), they earn 8 and 0 dollars, respectively, or (8,0), in brief. If they choose (*C,C*), they earn (6,6) and, if they choose (*D,D*), they earn (3,3). This entire information is summarized in the table, above.

The standard analysis of the game goes as follows. Place yourself in the shoes of player 1 and observe that if player 2 chooses *C*, you are better off choosing *D* instead of *C*, since $8 > 6$. And if player 2 chooses *D*, you are better off choosing *D* instead of *C*, since $3 > 0$. Hence, no matter what the other player does, it is better for you to choose *D*.¹⁴ Because the game is

¹⁴ It is useful to note that the Prisoner's Dilemma is no real dilemma, since what is best for one player does not depend on what the other player does.

symmetric for the two players, each player will reason the same way. Hence, the outcome will be (D,D) – both players will choose defection -- and so they will earn \$3 each. It is an unfortunate outcome since they could have earned \$6 each if both chose C , the cooperative strategy.

But, in reality, people do not just maximize their own dollar incomes or even their own utilities. People typically have fellow feelings, altruism, senses of fairness and the urge not to hurt others (or, in some cases, to hurt others). To keep the analysis as simple as possible, I shall simply allow for one kind of ‘social feeling’ in this formal analysis, that of altruism¹⁵. This will be captured by assuming *as if* \$1 (or, what is the same, 1 util) earned by the other player is valued by this player as equal to α dollars of his own, where $0 \leq \alpha \leq 1$. Later I shall allow the possibility of α varying depending on who the other player is. Thus, α may be 1 for kin, $\frac{1}{2}$ for kith, and 0 for an alien; and so on. But let us, for now, treat this as fixed. Hence, now if player 1 plays C and 2 plays C , player 1’s behavior is predicted by treating her *effective payoff* as $6 + 6\alpha$.

Two important clarifications are worth placing on record here.

First, one question that may arise in the reader’s mind is about the meaning of selfishness. It appears at first sight that, once the α is treated as a part of a person’s preference, she can, then on, be thought of being perfectly selfish, since it is *her preference* to give a weight of α to others’ income. So, it seems arguable that, given her preference, she is just as selfish as a person who values only his own dollars¹⁶. The problem with this critique is that it reduces

¹⁵ That people do more for one another than would be dictated by purely selfish considerations is widely noted from various walks of life. Laborers typically work harder than can be explained purely in terms of their direct self-interest (Fehr and Gächter, 2000; Minkler, 2004). Caregivers often give more care than they are required to give in terms of their job requirements (Zelizer, 2005). It is arguable that the commons problem is not as relentless as it is made out to be in classical economics because of this (Basu, 2006).

¹⁶ This refers to a much larger problem, namely, that of interpreting the payoffs in a game. We can of course write down the number that each player will earn but there is no easy way of representing what this means to the player, who may ‘correct’ the number psychologically to take account of fairness, altruism and so on. Not surprisingly, this problem arises more seriously in sociological games and one of the earliest discussions of this problem occurred in

selfishness to a tautology; selfishness then becomes impervious to criticism. To counter this, what has to be kept in mind is that, contrary to what many economists claim, it is not a tautological definition of selfishness that economics uses. Economists would not have been able to derive any testable proposition if they did so, because all behavior would then be compatible with selfishness and so the selfishness assumption would not be able to predict any particular behavior.

Hence, the way I view α here is not as an innate part of a person's utility but simply as a guide to a person's *behavior*. It is something that we, typically, acquire through socialization. Indeed, it may not be a part of our preference; it could be simply that we behave *as if* we valued other people's dollars by that amount. A player's welfare or level of utility is throughout measured by the payoffs shown in Table 1. It is simply that people do not play to maximize their utility but a hybrid of their utility and their social and moral sense captured by α . Consider a person who gives \$1,000 to a charity in Africa. It would be reasonable to say that he preferred to give this money (that would be pretty normal use of English). But would we say that he is better off by giving the \$1,000 to the charity? Many mainstream economists would say yes, but I would contest this and argue that the person *is* worse off (in terms of most reasonable interpretations of well-being and personal happiness) but that he, nevertheless, prefers to make that little sacrifice for a good cause¹⁷. Otherwise, "making a sacrifice" would have to be deleted from our lexicons. This divergence between the index of individual well-being and what guides individual behavior

Bernard (1954)--see also Swedberg (2001). Weibull (2004) encounters the same problem when analyzing the problem of interpreting results from experimental games.

¹⁷ In a paper focused wholly on this subject, we would distinguish between two kinds of other-regarding behavior. When a person makes a sacrifice for her child, for instance, it is arguable that this behavior is an extension of a person's selfishness, since a child's welfare is often internalized by us. But when one makes a contribution to some social charity or helps a person one does not know, it is arguable that this entails personal sacrifice. One does it not to gratify oneself but because one believes that one *should* this. Behaviorally the two cases may look the same but they are prompted by different internal processes and therefore would be evaluated differently when we normatively compare the outcomes. In this paper I am considering the latter kind of model for 'other-regarding' behavior.

needs some getting used to since it is alien to traditional choice theory. Fortunately, there is a small literature in game theory that inclines towards this: see Weibull (2004), Battigalli and Dufwenberg (2005).¹⁸ To sum up, there are three indicators associated with each person—the dollars earned by her, the utility she gets and what I call her ‘effective payoff’¹⁹. In this paper I treat the first two as the same. This is an innocuous assumption, made purely for expositional convenience. However, I treat the third as distinct from the other two. This is a significant assumption—one that is crucial to this paper. Hence, what is being assumed is that the effective payoff numbers are guides to human behavior. People behave as if they are maximizers of those numbers. Their well-being however is related to but distinct from those numbers. The well-being numbers are given in table 1 and the effective payoffs are the numbers we get by making the α -based corrections to them.

Second, while formally what I am modeling is altruism rather than trust, it is reasonable to think of the model as an idiom for trust or other indicators of a person’s sense of society. As will be evident soon (from Figure 1 below), a person’s likelihood of cooperation depends on her expectation that the other person will cooperate. Hence, we could think of the player’s decision as follows. If she trusts that the other person will cooperate, then she will be more inclined to cooperate²⁰. Hence, the analysis that follows, while explicitly that of altruism, could also be thought of as a model of mutual trust.

¹⁸ Sen (2006, p.21 [pagination may change]), in his new book discusses the standard question economists ask “If it is not in your interest why did you choose to do what you did?” and goes on to observe, “This wise-guy skepticism makes huge idiots out of Mohandas Gandhi, Martin Luther King, Jr., Mother Teresa, and Nelson Mandela, and rather smaller idiots out of the rest of us ...”

¹⁹ Henceforth, a reference to payoff will mean effective payoff. And when I want to refer to a person’s direct well-being (that is, the kind of numbers shown in Table 1), I shall speak of dollars or utility.

²⁰ Despite a large literature, a formal definition of trust and trustworthiness remains elusive. The essential idea is that trust involves choosing a course of action that leaves oneself vulnerable to abuse or exploitation and expecting that the other person will not take advantage of this.

We could similarly, introduce stigma into the model by assuming that there is some stigma attached to being selfish and playing D. Of course, the person who chooses D need not be selfish but could be playing this in anticipation of the other player choosing D. But one of the functions of stigmatization, as pointed out by Gans (1972), is to scapegoat individuals in order to maintain certain norms of behavior. Further, in a more sophisticated and realistic model we may wish to allow for the fact that the α I attach to the other player's utility would generally depend on how she achieved it. I may attach a higher α to her income if she achieves it through (C,C), than if she achieves it through (C,D). But I shall here stay away from such complications.

3.2 Homogenous Society

Suppose we have a society with n individuals and players are randomly matched with each other and made to play the Prisoner's Dilemma. Note that a society in which players manage to cooperate a lot will become richer over time. This is because they will have a higher income that way. And if we append to this simple model a larger economy so that people can save a part of their income (over and above what they need to consume) and earn interest on that, then a society that manages to reach the outcome (C,C) often could become many times more prosperous than a society that always reaches the outcome (D,D). If, for instance, 3 is subsistence consumption, then the latter society will, presumably, have no savings, whereas the latter will not only earn more, but save and become even richer in the long run.

Keeping in mind that the cooperative spirit, captured here by the altruism parameter, is natural to human beings, I want to locate conditions under which cooperation will occur and conditions where it will collapse into individualism and totally self-seeking behavior.

Let us begin by considering the case where a player is uncertain about how her opponent will play. Suppose λ is the probability that the other player will play cooperatively, that is, choose C . Then, if this player plays C her expected (effective) payoff, denoted by $u(C)$, will be given by:

$$u(C) = \lambda(6 + 6\alpha) + (1 - \lambda)8\alpha.$$

And, if she chooses D , her expected payoff, $u(D)$, is given as follows.

$$u(D) = \lambda 8 + (1 - \lambda)(3 + 3\alpha)$$

Hence, she will choose C if and only if

$$u(C) \geq u(D)$$

which, a little calculation shows, is equivalent to

$$\lambda \geq \frac{3 - 5\alpha}{1 + \alpha} \tag{1}$$

Equation 1 can be used to draw a line in an (α, λ) - space which marks the zone where a player will choose to play cooperatively.

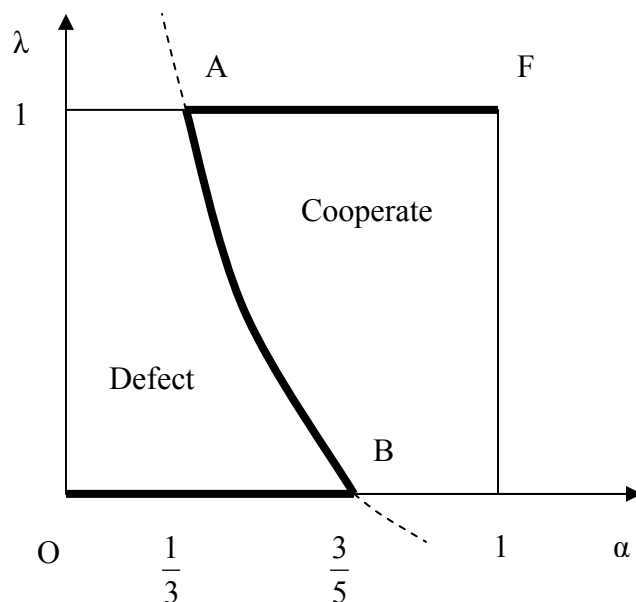
In Figure 1, the line AB is the graph of (1), with the inequality sign replaced by an equality. Hence, if, for some α , the λ happens to be on or above the line AB , then a player will choose to play C . In other words, if a player's altruism parameter, α , and her expectation that the other player will cooperate, captured by λ , is such that (α, λ) lies to the right of AB , then and only then will she choose to cooperate.

This however does not as yet tell us about how this society will behave in equilibrium. This is because, while α (the society's altruism parameter) is being treated here as exogenously given,²¹ λ cannot be exogenous. Each individual's decision on how to play the game

²¹ In a deeper work we may wish to derive this from more basic assumptions about human biology and psychology, but that is beyond the scope of the present paper.

determines what fraction of society will play C and this determines what λ will be. Hence, we have to *derive* the value of λ .

Figure 1. The Zone of Cooperation



This is easily done. If α is to the left of A , that is, $\alpha < 1/3$, then no matter what the value of λ , a person will choose D . If everybody does this, λ will in fact be 0 . Likewise consider the case where α is to the right of B , that is $\alpha > 3/5$. Then, no matter what value λ takes, each player will choose C . Hence λ will be 1 .

Finally, consider the case where $\frac{1}{3} \leq \alpha \leq \frac{3}{5}$. Let me use $\lambda(\alpha)$ to denote the point on the line AB . That is, $\lambda(\alpha) \equiv (3 - 5\alpha)/(1 + \alpha)$. If $\lambda > \lambda(\alpha)$, then a player confronting this λ will choose C . Since all players are identical, all will choose C under such circumstances; hence $\lambda = 1$. If, on the other hand, $\lambda < \lambda(\alpha)$, by a similar reasoning λ will be 0 . In other words, we

have multiple equilibria. This will lead to threshold effects, as in Granovetter and Soong (1983), whereby behavior can swing over from one extreme to another once it goes over a critical line. Finally, if $\lambda = \lambda(\alpha)$, then each player is indifferent between C and D . Hence, it is, in principle, possible to have λn players play C and $(1 - \lambda)n$ players play D . Hence, $\lambda = \lambda(\alpha)$ is also an equilibrium, albeit a precarious one.

Gathering the above derivations together, we have the following possible societal equilibria. If $\alpha < 1/3$, $\lambda = 0$. If $\alpha > 3/5$, $\lambda = 1$. If $1/3 \leq \alpha \leq 3/5$, then $\lambda = 0$ or 1 or $\lambda(\alpha)$. This information is summed by the correspondence illustrated by the thickened line in Figure 1, denoted by FABO.

If we ignore the points on AB, which depict unstable equilibria (a slight perturbation will have society spiraling away to one of the two other equilibria), then we see that if altruism is very high ($\alpha > 3/5$) cooperation will be automatic. If altruism is very low ($\alpha < 1/3$), there can be no cooperation. But with intermediate altruism there are multiple equilibria. The same society can behave totally cooperatively or totally non-cooperatively. By seeing one society behaving cooperatively and getting richer and another that is anarchistic, selfish and poor we cannot conclude that there are innate differences between the people of these societies. It could simply be the case of both behaviors being self-sustaining in equilibrium; and so two *ex ante*-identical societies could exhibit very different kinds of outcomes.

There is some important implied policy wisdom that emerges from the above model. What we have modeled here as altruism is part of a generalized idea of trust, other-regardingness and the social spirit. There are situations in life – for instance, in starting a business – where we have to take the risk of vulnerability for the business to work. This is akin to playing C in the Prisoner's Dilemma. If your business partner (player 2) is cooperative (chooses C) you both do

well, but if he betrays your trust, you will do badly (get 0). Hence, as already suggested, the altruism parameter α could also be thought of as a propensity to trust. So what this model shows is that altruism and trust are critical ingredients for a society to do well and prosper. In the present model we have treated α as exogenous. But we know at an intuitive level that people (especially children) can be taught or inspired to be more altruistic, more trustworthy and more trusting²². Now, one person being more altruistic (having high α) would not help that person economically. In fact, he would be vulnerable to being cheated. But, if *at a societal level* all individuals were more trusting, for instance, with α going from less than $1/3$ to over $1/3$, then there would be the possibility of greater cooperation and, if α went above $3/5$, cooperation would occur for sure, with all the attendant economic benefits of higher income.

Hence, greater altruism and trust among a people is like a public good. How exactly a government or an educational institute can create and nurture a more altruistic society we do not fully understand, but, at the same time, we do know that these traits change and can be changed. People can be taught not to litter the streets. Societies can cultivate habits of charity. Corporations can become environment conscious. Even if we do not as yet understand how these things happen, it is important to recognize that (a) unselfishness and altruism or, more accurately, the capacity to have these traits are innately there in human beings and so can, potentially, be modified and nurtured and (b) such traits are valuable for development. So much of standard economics had become a celebration of selfishness that we did not even make room for the fact that greater altruism is a useful trait and can contribute to economic efficiency.

3.3 Heterogeneous Society

²² The value of this to the individual would, of course, depend on how trustworthy others in society are.

All this time I have dealt with a society where all individuals have the same level of altruism. But some of the more interesting and complex issues arise when we recognize that the ‘cooperative spirit’, while innate, can vary across individuals.

What we are interested in understanding is what generates greater cooperative behavior (we may even call it collusive behavior) among citizens. The degree of altruism, α , is an instrument towards this. In a homogeneous society, our aim would be to raise α if we wished to make cooperation more likely. But in a heterogeneous society the relation between the distribution of altruism and the possibility of cooperation can be complex. Interestingly, a tiny change in α can cause huge changes in behavior. For instance, the addition of a small number of selfish individuals in a society can, like adding culture to milk, transform the character of the entire society, in this case to a non-cooperating one. Hence, the cooperative outcome can be fragile equilibrium.

To understand this, let us suppose that person i has an altruism parameter of α_i . If we number individuals from the most selfish (person 1) to the least selfish (person n) – and clearly there is no loss of generality in this – then we have:

$$\alpha_1 \leq \alpha_2 \leq \dots \leq \alpha_{n-1} \leq \alpha_n \quad (2)$$

An individual’s altruism parameter is not visible. It will be assumed throughout that n is large; and that, when a player faces an opponent, she assumes that his altruism parameter is α_1 with probability $1/n$, α_2 with probability $1/n$ and so on.

Consider first a case where all n persons have altruism parameters in the interval $[1/3, 3/5]$. It is then easy to see that everybody playing C is an equilibrium and everybody playing D is another equilibrium. This is obvious. Since each person’s α lies between $1/3$ and

3/5 each person will choose C if he expects everybody else to choose C ; and each person will choose D if he expects everybody to choose D .

What is interesting is that the introduction of one person can cause a breakdown in the cooperative equilibrium. Indeed, the introduction of *one* low- α (or high-selfishness) person can ensure that society will have a unique equilibrium – one where nobody cooperates.

The algebra of this kind of result is rooted in the idea of ‘global games’ and Bayes-Nash equilibria. The intuition is straightforward. Assume that the first t persons (i.e., persons 1 to t) prefer D over C . Now consider the $(t+1)^{th}$ person’s decision problem. We know from (1), he will prefer D if

$$\lambda < \frac{3 - 5\alpha_{t+1}}{1 + \alpha_{t+1}}$$

Now, since the first t persons prefer D , the probability that the randomly chosen person that player $t+1$ confronts will play D must be greater than or equal to t/n . Hence, the λ (probability that the other player will play C) that player $t+1$ faces is less than or equal to $(1 - \frac{t}{n})$.

Hence, player $t+1$ will certainly play D (assuming that players 1 to t play D) if

$$1 - \frac{t}{n} < \frac{3 - 5\alpha_{t+1}}{1 + \alpha_{t+1}}.$$

This may be rewritten as

$$\frac{2n + t}{6n - t} > \alpha_{t+1} \tag{3}$$

This is the crucial equation that will be used to show how a small injection of selfish individuals into society can cause a total break down in cooperation.

Here is an example. Let us start with a society of 9 individuals ranging from person 2 to person 10. For person t in this society let α_t be equal to $(t + 19)/60$. Hence,

$$\alpha_2 = \frac{21}{60}, \alpha_3 = \frac{22}{60}, \dots, \alpha_{10} = \frac{29}{60}.$$

As we have already seen, since in this society all α 's lie between $1/3$ and $3/5$, this society can be in an equilibrium where everybody cooperates at all times.

Let another person now join this society – call him person 1 – whose altruism parameter is $19/60$. That is, $\alpha_1 = 19/60$.

Hence, now we have a 10-person society. It is easy to verify that, for every t , going from 1 to 9, (3) holds. Let us, for instance, check this for $t = 5$. Since $n = 10$, the left-hand side of (3) is $25/55$. Clearly this exceeds $\alpha_6 = 25/60$.

Next note that $\alpha_1 < 1/3$. Hence, player 1 will certainly choose D . Now, since all players, 2 to 10, (that is, $t + 1 = 2, \dots, 10$), satisfy (3), we know that every player will strictly prefer D . Hence, this society of 10 persons has a unique equilibrium, where nobody cooperates. Though everybody's altruism parameter is unchanged, the injection of one habitual non-cooperator results in a total break down in cooperation.

This result is akin to what I have in a different context described (Basu, 2005) as the 'malignancy of identity' whereby what may be a dormant marker of identity with no consequence on behavior can, with a little egging on, acquire malignancy leading to conflict between the races and different religious groups.

This alerts us to the very real risk of how the injection of a small dose of new social norms or individuals carrying those different norms can create a cascading effect of change and breakdown. This must be happening nowadays with the global movement of people. And this must have happened in the days of high-colonialism, when the colonial masters arrived in new lands prepared to cooperate among themselves but not with the indigenous people. Radical

writing in developing countries often talks about how the harmony of these *economically* backward societies, which nevertheless may have had a high moral code of behavior among themselves, got disrupted by the colonial invasions. There may be an element of exaggeration and false nostalgia, and a tendency to glorify the distant past in this, but that huge disruptions in behavior codes and social norms *can* happen is clear enough, as the above theoretical construction illustrates. Just as we now recognize that the injection of new viruses in an unexplored society can spell havoc, so can the injection of new norms. It is also conceivable that ‘good norms’ carried into a society by newcomers can spread through the entire society. These are subjects that will need to be studied much more fully in the future. What the above model does is to provide a very basic building block for such ventures.

3.4 Alcoves of Altruism and Trust

Thus far, it was assumed that the altruism person i feels, she feels for everybody in her society. But, as the last discussion in the above sub-section alerts us and the examples in section 2 highlight, this need not be so. People do have different ethics and altruism for in-groups and out-groups. There are many societies fractured along lines of race, gender, religion, country of origin, language identities and caste and people often show extra trust and have an altruism premium for those with whom they share some common identity (see Glaeser et al, 2000; Luttmer, 2001)²³.

²³ The importance of identity in determining behavior has long been recognized in sociology but is relatively new in economics (Akerlof and Kranton, 2000; 2003; Fryer and Jackson, 2003; Hoff and Pandey, 2003; Darity, Mason and Stewart, 2005; Basu, 2005; Iversen, 2005; Sen, 2006). Our identities are, however, not set in stone. The boundaries of our identities can be fuzzy and we often choose our identity and, equally, on occasions opt to overlook some of our existing identities. The reader should be warned that I take a very simplistic view of identity here because the aim is to solely illustrate the complications this brings into our analysis of altruistic behavior.

With this recognition comes the possibility of many complexities. The simplest case is where in-group trust partitions the society into different alcoves, within each of which there is trust and altruism and across which there may be little of those social feelings. But there can occur situations where i treats j as belonging to i 's in-group, unaware that this feeling is not reciprocated. Cooperation in a nation or a group can break down when there are these cross-cutting allegiances. If a nation tries to create fellow feeling among its citizens, but a subset of citizens have allegiance to an identity different from that of this citizenship, then cooperation can break down.

Moreover, in the previous sub-sections altruism was always good. But in a society that is fractured, with altruism and trust confined to in-groups, these traits can become instruments of group oppression – where one group oppresses another, building up greater power in the oppressing group than it would have managed if the members of the group tried to carry out the oppression atomistically.

These are directions that will take a lot of time and research effort to pursue. What I will do here is to take some short, tentative steps to illustrate the scope of research that opens up once we allow altruism to be limited to those with whom a player shares a common identity. Where this sense of identity comes from, whether it is malleable or permanent and whether it can be contained from malignancy are large topics on which much has been written²⁴ and much more remain to be written. I shall here treat these as primitives by simply assuming that, when playing such games, people make use of some pre-existing sense of identity to decide how they will classify their opponents and how they will play against them.

²⁴ See Tajfel, 1974; Macy, 1997; Turner, 1999; Akerlof and Kranton, 2000, 2003; Basu, 2005; Sen, 2006.

Let me return to the assumption where α is a constant and work with the more interesting case, where $\frac{1}{3} < \alpha < \frac{3}{5}$. It is not as if I am assuming that everybody feels altruism vis-a-vis everybody, but simply that, when i feels altruism towards j , it is always at a constant altruism parameter of α . We could, in principle, allow the α 's to differ but that would complicate the algebra unnecessarily and, more importantly, stretch it beyond the capability of the author.

Suppose society consists of two groups. Let a fraction γ belong to group A (A can be race, caste or the fact of belonging to the same fraternity) and $(1 - \gamma)$ belong to group B. Hence, γn is the population of A and $(1 - \gamma)n$ is the population of B.

If we suppose people feel (instinctively or through cultivation) altruism only for their own group members, then we could do the same analysis as in sub-section 3.2, but simply think of each group as a society. The analysis then is trivial. When people play across groups they are selfish, that is, they choose D . But within each group there could be cooperation or defection as in section 3.2. So we could, for instance, have an equilibrium, where group A cooperates and progress economically, whereas group B is a fractious community living in poverty.

But a more interesting case arises where people of group B think of A and B as a common identity, that is, their identity is a general national identity, whereas those in group A share an in-group identity. One special case is where members of group A recognize each other (because they belong to a secret society) whereas to members in B everybody looks the same. So members of B feel altruism for all individuals in this society and cannot tell who belongs to A and who belongs to B. But members of A can tell a member of A from a non-member, and they have cultivated altruism α only towards their own group members.

Now when a type- B meets another player, the probability that the other player will cooperate is, *at most*, $(1-\gamma)$. Hence, using the same calculation that went behind equation (1) we can see that a type- B will cooperate only if

$$1-\gamma \geq \frac{3-5\alpha}{1+\alpha}$$

or,
$$\frac{6\alpha-2}{\alpha+1} \geq \gamma \tag{4}$$

Assume, for instance, that $\alpha = 2/5$. Then (4) gives us the condition $\gamma \leq 2/7$. Let us suppose this is true and all type- B 's cooperate. Type A 's, on the other hand, cooperate only with their own types.

Hence in this equilibrium type A 's earn an expected *dollar* income of $6\gamma + 8(1-\gamma)$ every time they play the Prisoner's Dilemma. This is because whenever they meet a type A (probability γ) they earn \$6 and, when they meet type B (the trusting type whom they let down), they earn \$8.

On the other hand, the expected income of type B is $6(1-\gamma)$. Hence, type A 's earn more than B 's. But not just that, type A 's, by forming this in-group collusive block, earn more than they would have earned if they cooperated with all. The latter would give them a per-game income of \$6.

There is a Machiavellian lesson tucked away in this algebra. Consider the case where $\alpha = 2/5$ and $\gamma > 2/7$. We know from (4) that type B 's will now not cooperate. It is however in the interest of type A 's to get them to play cooperatively, because that way they can be better 'exploited'. One way of restoring the 'exploitative equilibrium' is for type A 's to decide, collusively, not to play D against type B 's always but to occasionally play C. This will enable them to delude the masses into believing that they all share one common identity and play

collusively at all times. This is a rather repugnant strategy for group A to use; what this model does is to alert us that there can be sub-groups of people who use such a strategy. It is in fact arguable that some of the most successful colonial exploitations relied on strategies of this kind.

One question that may arise in the reader's mind is about the general applicability of these results, since all the derivations are being done here with the example of the Prisoner's Dilemma and that too for a certain class of payoffs. This would indeed have been cause for concern if the paper was trying to establish general results—about what will always be true in society. Instead, the aim of the paper is to illustrate how society *can* exhibit certain kinds of behavior that were treated as not possible in our textbook models of economy and society. We have just shown how some groups can use their innate traits of (in-group) altruism and trust to control or even exploit other groups. It is not being claimed that this will always happen but simply that it can happen under plausible conditions. Hence, the illustration of this argument with a game that is accepted as a good model for some social situations suffices for the present context. Of course, testing the frontiers of its generalization would be an interesting exercise for the future.

3.5 Focal Identity

The discussion of in-group trust draws attention to another difficulty that could arise with identity-based collusive behavior. As we have already seen, even if people want to trust others and cooperate, one problem could arise from there being no 'focal identity' in the society. In subsections 3.2 and 3.3 we had assumed that an entire nation shares a common identity and they are bound by a common altruism towards all (though in 3.3 one person's extent of altruism could

be different from another's). In 3.4 we saw cases where there could be conflicting identities and this could lead to a subset of society playing cooperatively.

One variant of this problem can lead to a total failure in cooperation in society. It is of course well-recognized that we have multiple identities and this can often (in fact, I believe, more often than not) help hold societies together (Sen, 2005; Dahrendorf, 1959). But this can also lead to a failure of cooperation. To see this suppose people in a country resolve to be cooperative among those with whom he or she share their primary identity. But if this society lacks a focal identity or has overlapping identities instead of partitioned identities, cooperation may fail to occur in equilibrium.

To see this suppose in a nation there are two races, 1 and 2, two religions, 1 and 2, and two language groups, 1 and 2. Using notation in an obvious way, we can describe a person as (1,2,1) or (2,2,1) and so on, where (1,2,1) means a person of race 1, religion 2 and language 1. Let me use A to denote the set of all people of type (1,2,1), B to denote all of type (1,1,2) and C to denote (2,1,1). Assume $1/3^{\text{rd}}$ the population is of type A , $1/3^{\text{rd}}$ of type B and $1/3^{\text{rd}}$ of type C .

Let us now assume that all A 's think that race is the primary identity (that is, they try to be cooperative with all and only those who share their race), all B 's think that religion is the primary identity and all C 's think that one's mother-tongue is the primary identity. In this society, each person will find that at least $1/3^{\text{rd}}$ of the times they will have the other player choose defect.

Hence, we can see that if α is less than $1/2$, the right-hand term in (1) is greater than $1/3$. Since in this society λ is below $1/3$, by (1) we know that no one will play cooperatively. Thus, even if every player has $\alpha = \frac{2}{5}$, no cooperation will occur in this society. The reason for this is the lack of a focal identity.

This has the policy implication that if a government or some collectivity wants to encourage cooperative behavior in the country or among its members, it must try to create a focal identity among its citizens. Various repressed groups that fail to rise collectively against their oppressors probably do so for reasons of an absence of a focal identity among themselves. This is an equally useful result for a tyrant or powerful government trying to prevent some group or nation from acting cooperatively within itself. The aim must be to destroy the group's ability to form a focal identity. Through a deliberate policy of splintering the group's identity into various overlapping and conflicting identities it can keep the group under control and keep at bay the possibility of group rebellion.

4. Lessons

The model above is best treated as an allegory of the real world. Nevertheless, the model talks to us about policy and, like all science, it does so whether our aims be noble or mean. It tells us how to prosper economically and gives hints and suggestions for people trying to cooperate among themselves and escape oppression, and also for people wanting to cooperate in order to oppress others, not belonging to their group. It shows, for instance, that one way to exploit a large mass of people is to form a collusive sub-group the members of which identify primarily with the sub-group but deludes the large mass into believing that it identifies totally with the large mass. Of course, and mercifully, the effort of the sub-group can be foiled by there being other sub-groups trying to do the same. If too many opportunistic groups come into existence, society could crumble into the low-output equilibrium of selfish anarchy. These are

not the kinds of behavior that are to be morally commended, but, being positive theory, the analysis simply tells us how the world works. It is neutral to the morals of the user.

A central lesson that comes out from this allegory and one that contrasts sharply with popular wisdom concerns the ubiquitous ‘invisible hand.’ The ‘invisible hand theorem’, which has come down to us from Adam Smith²⁵, and was discussed in section 1, has had enormous influence in shaping economic policy and has been prominent in the advice that various think tanks and organizations, not to mention legions of economists, have given to developing country governments. One inadvertent implication of the theorem that many have taken away from it and that has had considerable influence on the organization of our economic and social life and also in the way we conduct ourselves is that it is fine to be selfish, since in the end that is good for society. This selfishness axiom has in recent times spilled over into other disciplines, such as parts of sociology and the new political science.

As a consequence, we are taught that not only are consumers and producers self-seeking but so are politicians, bureaucrats and judges; and, more significantly, that that is fine. This has some alarming consequences. It means that all we can expect of a judge is for verdicts that best serve his or her own interest. And so the only way to make judges and magistrates give just verdict is to design the institutional and incentive structure of the courts in such a way that it is in each judge’s self-interest to be just. And, of course, this may well be infeasible.

This ubiquitous philosophy has been damaging not only socially and morally but even in terms of economic growth and development, because the truth about development is that it needs human beings to be other-regarding, fair, and trustworthy. And since these traits are innately

²⁵ As a digression on attribution, note that, though modern social scientists treat the ‘invisible hand’ as the central message of Smith’s **Wealth of Nations**, it is in reality a trivially small part of that book, and occurs when dealing with international trade. Smith had used the expression earlier, but in a different sense, in his **Theory of Moral Sentiments** (1759) and even earlier in “History of Astronomy,” which was however published posthumously.

available to most of us, what we need is not to have them muted through training and socialization. Take the problem of bureaucratic corruption, which has been eating into the fabric of so many societies, and blighting the possibility of development. The standard policy response to this, inspired by the popularity of the invisible hand theorem and the very visible global economists, is to argue that government ought to redesign the system of incentives and punishments for bureaucrats. What we do not say is that the ubiquity of corruption has a lot to do with the lack (or, more appropriately, suppression) of personal integrity and individual moral commitments. The design of incentives plays a role, but a bigger role is played by our own sense of values and morals. Governments which are non-corrupt are largely so not because of third-party monitoring of such corruption but because of the self-monitoring of bureaucrats. There is no scope for this in standard economics and economic sociology because these disciplines provide no space to *self*-monitoring.

I should add that there is no reason to believe that countries with rampant corruption are populated by citizens who are innately less moral; but simply that they *act* less morally in equilibrium. This is related to the findings from the celebrated experiments by Frank, Gilovich and Regan (1993). They showed that in games where one can be selfish to different degrees, economists play the most selfishly. There are different ways of interpreting the result but I take the view that, since economists learn from their textbooks that everybody is selfish and it is fine to be selfish, they, like all human beings, try to conform to what they take to be the standard behavior (see also Rubinstein, 2005)²⁶. In corrupt environments, people begin to treat corruption as the norm (moreover deviating from that norm also has larger costs than in more honest

²⁶ It is conceivable though that in experimental and examination-like situations people give the answers they feel are expected of them, and so these findings merely reflect the disciplinary training of economists; and that, in reality, the behavior of economists would be no different from that of others.

environments) and, like economists in the above-mentioned experiments, try to replicate what they take to be normal behavior.

In the early nineties I used to take a team of research students to a cluster of villages in one of the most anarchic and poor regions of India—now in the state of Jharkhand. Seeing the utter chaos in the region, the hollowness of the popular advice that what India needs is less government was evident. There was no trace of any government there for ‘less government’ to be a feasible option. Also there was no dearth of individually selfish behavior. What was lacking was the fauna and flora of social values that make economic development possible. What these villages had perfectly recreated was what some economists recommend—a complete resignation to unfettered self-interest. This is in fact in general true. Contrary to what many textbooks teach us, the regions of the world which are economically the biggest disasters are the ones which are, in many ways, models of the free market, with amoral individuals seeking nothing but their own self-aggrandizement, with no trace of law and a suppression of individual respect for fairness and justice.

The starkest examples of this one sees in the streets of Third World countries. With drivers willing to break every rule in the game and showing a relentless commitment to serving their own interests and with very little presence of the traffic warden, the streets of the Third World should be textbook models of neoclassical efficiency. The fact that they are not should alert us to the possibility that the central message of so many of our textbooks may just be wrong.

The truth is that human beings are not relentlessly selfishness—though they can learn to be so if it is drilled into them that that is normal or they grow up in societies caught in an ethos of selfish-behavior; and, if we want society to progress and economic development to occur, we

need to nurture our innate sense of social values—such as altruism, trustworthiness, integrity and sense of fair play.

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