## COMMENTS ON THE PAPER OF PROF. PARTHA DASGUPTA

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I thought Prof. Dasgupta's paper was extremely interesting and I think it raised a number of points. I'm going to try to put some of what he said in a broader perspective. The fundamental problem that he has been concerned with, and which the general literature and social capital is concerned with, is how, in a context of individuals who are self-interested, can we generate cooperative behaviour that is directed at the social good. The basic theoretical insight is that, in what is sometimes called 'theory of repeated games', we can induce cooperative behaviour in a way that we couldn't if we weren't in a repeated relationship, so it's that repeated relationship that can lead people to act cooperatively at the same time as they are only self-interested.

There are a couple of aspects I want to call attention to. The way things work is that, basically, if you don't cooperate, you're punished. So that it's not appealing to people's highest moral sentiments. I'll come back to that in a second. It's really saying, if you don't cooperate, if you don't act in the social good or in the way that we deem to be the social good, there will be consequences that are so adverse that it's in your own interest to behave well.

One of the questions that the literature has concerned itself with is how credible is the punishment? Will people actually execute, is it in the self-interest of the people who punish to execute the punishment? That is actually a very interesting literature where one aspect is that punishment is part of cooperative behaviour. That is to say, when you are part of the club, part of the social system, you punish those who don't punish so you enforce the enforcement through the same kind of sanctions that you enforced good behaviour, so that people are induced cooperatively to behave well by punishments and the punishments themselves are induced by these repeated games.

The ease with which you can induce cooperative behaviour is sometimes increased by the range over which people interact. In a way, this stands behind some of what Prof. Dasgupta was talking about in terms of social networks. When there are social networks where individuals are interacting in many spheres, then the potential of enforcing cooperative behaviour is greater. You can think of it as in a simple village where, if you misbehave in one area, they can punish you in many other areas, there are many other things you can do. You can actually get better enforcement of cooperative behaviour. One of the aspects of the success, I think, of the microcredit regimes, programmes in Bangladesh that Yunus pioneered and that BRAC engaged in is that they have been trying to create denser forms of social interaction. And I think that's not widely understood by a lot of people trying to export the microcredit schemes because they are exporting microcredit schemes just as financial arrangements as opposed to a much broader social context. They are successful not because they are a bank but because they are actually part of a broader social context. Both Yunuf and the guvs who thought up these programmes were very much aware that they were operating in a social context where it wasn't finance, it was really social change they were trying to engineer. That's why, for instance, BRAC has not only a microcredit programme, it has a health programme, a legal education programme, it provides all kinds of intermediary goods, education, there's a whole variety of things and I think that density of connections makes the enforcement of the social contracts easier and more effective.

At the other side of it is the fact that marketisation, the market economy and, more broadly, development and globalisation, actually served to weaken these ties. They weakened them because the nature of market interactions is based on the notion of anonymity. You aren't dealing with people with names, you're dealing in an anonymous marketplace and so, as the sphere of the market gets larger, the sphere of social interactions and the kinds of enforcement mechanisms that have been associated with the kinds of repeated interactions become weaker. Actually it's worse than that because, in many contexts, globalisation and marketisation result in the weakening of the community base, people migrating out of communities, and the result of all this is that the ability to enforce cooperative action is weakened.

One of the hypotheses in development is that, as you go from low stages of development to a more market economy things may get worse before they get better because you break down the social enforcement mechanisms before you get the ability to have the legal enforcement mechanisms, which is an alternative and often a less efficient way of enforcing cooperative action, enforcing things that are to the social good.

Now, the second broad point I wanted to raise is to highlight the point that Prof. Dasgupta mentioned, but I think didn't emphasise enough. When he said that there are multiple equilibriums what he meant is, in fact, you can enforce, implement through these social sanctions, through this socalled cooperation, not only the social good but also social bads and you can get stuck in bad equilibrium. An example that everyone in the United States knows very strongly is Jim Crow behaviour, where you have segregation. This is a real example where a standard market economist really went astray. Gary Becker famously wrote a book saying that discrimination could not exist because, if it did, it would be profitable for somebody to hire somebody who was discriminated against and therefore, since discrimination isn't profitable, it doesn't exist. It was a very short line of reasoning from the argument that it wasn't profitable to the fact that it doesn't exist. Well, in fact, the kinds of models that Prof. Dasgupta talked about can be used to explain the persistence of discrimination and actually provided a very good description of what happens: those who don't discriminate get discriminated against. And so, even if you yourself were not prejudiced, the fact that the system would actually punish those that did not go along with the social norm of discrimination led to the persistence of a social arrangement that I think most of us think is not a social good but a social bad. So one of the problems with these kinds of cooperative actions, they lead to cooperation but not necessarily cooperation that is viewed as a social good, it can be a cooperative behaviour that is a social bad. As Prof. Dasgupta said, we don't have a very good theory about why one society might wind up in a very positive equilibrium, I'm presuming a social good, and another society can wind up in a very negative situation, a cooperative action to enforce a social bad, and another one just has chaos. So we don't have a very good answer to that, other than to say that history matters.

The third point that Prof. Dasgupta emphasised was that part of what determines the nature of the equilibrium is our beliefs: our beliefs are related to the networks to which we belong, which, in some sense, you can say perpetuate those sets of beliefs, those views about what are the equilibriums, and he used the term 'identity'. There is another use of the concept of identity that I want to describe very briefly. One of the ways of enforcing good behaviour, what you might call socially desirable behaviour, cooperative behaviour, the one that we described is one where people have differ-

ent preferences and are induced to act in a cooperative way, in the pursuit of their self-interests, by the threat of punishment. The other general approach is to say, let's make their preferences the same as that of the social good, we'll change their preferences so that they will want to act in the social good. That's a very different way of inducing cooperative behaviour and you see that in the context of firms: when firms hire workers they go through elaborate processes of indoctrination, of creating what is called a corporate culture, of trying to persuade individuals that it's a good thing to...they try to make them feel part of the team, and in feeling part of the team to actually change their preferences in some way so that what they think is their own interest becomes the group interest. They try to somehow elicit that kind of identity of preferences and we do that in a whole variety of contexts: governments, societies try to develop a sense of loyalty to the country and, in that process, try to induce preferences about a whole variety of things, of trying to create values that are coherent. The big advantage, of course, of that is if you can actually get people to believe that what is in the social good is in their own personal good. When they see those two as coincident, it's actually much easier to enforce good behaviour, or cooperative behaviour, because you have eliminated the sources of dissention. Now you can't always do it, and obviously there's a certain danger in trying to get that kind of preference change. But it's certainly one of the mechanisms that is widely used and it's a mechanism that we call 'identity', you try to get them to identify with the groups to which they belong.

The fourth general point goes back to a topic that has been raised in this meeting several times, which is that there is a difference in our sense of wellbeing, our sense of, I don't know how to describe it, pleasure in what we do, our sense of satisfaction in doing something because we think it's the right thing to do as opposed to we do it because, if we don't do it, we will be punished. It's interesting all of Prof. Dasgupta's equilibriums are enforced by the threat that, if we don't behave the right way, there are all kinds of consequences as opposed to, I do it because I feel good about myself when I act in a good way. In a way, if we can change the preferences in the way I described, we change the identification of the individual with the group interest, then he has the ability to have the pleasure of doing something that is in his own interest and in the interests of society at the same time. He can get the pleasure of gift-giving, that we talked about earlier, as opposed to the notion of 'I'm giving a gift because if I don't give the gift I will be punished'. It's a very different notion of these two forms of cooperation. And then of course it's also related to the role of the state, we say that there's a difference between helping the poor because we are compelled to do it by the state versus helping the poor as an act of charity that comes from our self-motivation. So I think there is at least an element here of an individual's wellbeing that is not captured well in the models of cooperative behaviour and trust that are induced by the threat of the consequences of not behaving well.

The basic idea of identification the way I've described it can be viewed, in a way, as part of a general theory of what we call 'endogenous preferences', how preferences are actually affected, and that again is one of the topics we've hinted at, for which there's no easy answer. But clearly the nature of the way society is organised does affect our preferences, does affect our senses of identity.

So, to come back to the other point I made earlier, I think there are concerns that markets may in fact enhance a sense of selfishness and non market kinds of behaviour may change preferences in ways that are consistent with less selfish ways of behaving. There are a number of experiments in economics that confirm this. Economists believe in self-interested behaviour more than anybody else and there are some studies that have looked at students of economics, and it turns out that students of economics in their first year are systematically more selfish than students in, say, psychology. But what is also interesting is, by the end of their first year, and certainly by the end of their undergraduate studies, students of economics are even more selfish in that they've learned how to think in a more selfish way and, in a way, we are indoctrinating them so that our models become more descriptive of their behaviour because we've succeeded in getting them to behave the way our models tell them they are supposed to behave. This broad issue that I think has been hinted at at various times is that how we design social institutions, markets, does affect people's identities, their preferences and therefore the mechanisms by which we can sustain cooperative behaviour. There's a whole literature in evolutionary game theory that talks about the virtues of various kinds of behaviours, including nonselfish behaviours for the viability of societies: societies where there are less selfish behaviours can be more sustainable, so, in a way, if that is true, of course, it raises concern about the emphasis of market economies which are actually encouraging the development of more selfish behaviours as opposed to more altruistic behaviour.

Finally, I just want to mention that, in a way, picking up on some of the remarks that were made this morning, it is interesting that there are parts of the new economy where cooperative behaviour is flourishing: Wikipedia,

the development of things like Firefox, a whole set of computer networks where people are acting cooperatively even at a distance. And a strong movement in this direction is suggestive that at least there are subsets of the population who feel very strongly that forms of cooperative behaviour are more productive, and that one can get cooperation in ways other than the threat of punishment which are at the centre of the kind of repeated game context that Prof. Dasgupta was talking about.