

POLITICAL THOUGHT ON COOPERATION IN THE CONTEXT OF CLIMATE CHANGE (NOTES) ¹

“We may pretend that we're basically moral people who make mistakes, but the whole of history proves otherwise” – Terry Hands, British Theatre Director

I outline the problem of the 'tragedy of the commons' and ways to tackle this problem from the history of political thought, with reference to global climate change.

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Climate Change and Game Theory

The Prisoner's Dilemma

The prisoner's dilemma is an example in game theory where common and individual interests differ. Two prisoners A and B are interrogated separately for a joint crime. If they say nothing, then each will get 1 year. If one confesses and the other does not, the confessor will get 3 months but the one who did not, will get 10 years. Finally, if they both confess they will each get 3 years. Which choice should they make?

A reasons that if B confesses then his choices are not confess (and face 10 years) or confess (and face 3 years) – in this instance his best response is to confess. If B does not confess, his options are to confess (and get 3 months) or not confess (and get 1 year) – again, his best response is to confess. B has exactly the same response; the net result would be that both confess, and they get 3 years. If they had been able to cooperate, however, they would only face 1 year each. The result was optimal from an individual point of view but socially suboptimal.

The Tragedy of The Commons

Climate change is a global example of the parable of the 'tragedy of the commons'. A limited piece of common land is grazed by many farmers. Each of the sheep eats a certain amount of the limited supply of grass. Each farmer has an incentive to graze more sheep. However, eventually the land is overgrazed, and no-one has enough to feed his sheep.²

The problem is that the social costs of the grazing are not felt by each farmer.

Pollution is a similar example. The atmosphere is polluted because each polluter does not notice the effects of his pollution on others.

The Logic of Collective Action

Mancur Olson described how groups may arrange themselves in order to lobby the government for goals. Those groups which are diffuse and unstructured may not be willing to lobby the government for their common goals.

In the case of a perfectly competitive market, collusion is impossible because the many firms that gain from defecting outweigh the possible gains from those who cooperate.

One might think that the groups with a common interest could create an organisation. However, such an organisation would be unable to constrain it's members because it would have exactly the same problem, unless active members were rewarded, there would be an incentive on all to 'free-ride'.

Olson argues that in a democracy it is not the majority that are likely to tyrannise the majority. Rather, minor interests, if they have interests that are concentrated, will be able to overrun the interests of the majority.

Rent Seeking Behaviour

The battle for economic rents is often called 'rent seeking behaviour'.

e.g. Krueger (1974) points out that political restrictions lead to the possibility of excess rents being accrued. She develops a model of rent seeking and is concerned about the possibility of a 'vicious circle' developing of political action inspired by distortions, itself creating more distortions.

This may have been what has happened with global warming. The interests of minor fossil fuel interests have managed to overrule the interests that the majority (and future generations) have in protecting the planet

² Gardiner terms climate change “A Perfect Moral Storm” due to: Global Dispersion of causes and effects; Fragmentation of Agency; Institutional Inadequacy; Global; Intergenerational; Moral Corruption.

Climate Change and Economics

Does the free market work in this context?

Ignoring distributive concerns, economists suggest that the free market achieves a favourable outcome where an activity does not pollute (more formally, when a transaction between agents does not generate negative effects on other humans, animals or the ecosystem). When an activity pollutes, the market needs adjustment, or else there will be too much pollution generated.

How can the market be adjusted?

The government regulates firms and individuals. Pollution can be directly controlled, taxed, or permits to emit can be sold.

Direct control

Governments impose regulations preventing individuals or firms from emitting certain forms of toxic pollution. Firms are severely fined if they emit such pollutants, or if the concentrations of such pollutants breach safe levels. It is possible that the US clean air act could be used to control greenhouse gases.

Taxation

Taxation is an efficient way to limit a tolerable pollutant that nevertheless imposes costs on society. The amount of pollution is metered, and pollution is charged at a fixed rate. Taxation is an appropriate method of regulation where the social cost of pollution is well known.

Permits

Where the government wants to limit the amount of pollution to a certain level, it can sell a fixed number of emissions permits. The price of these permits will adjust so that the demand for them is equal to the number of permits.

Why is climate change a difficult problem to solve?

The effect of a polluter's actions are distant in space and in time.

Distant in space: Causing Problems for others on earth

The emission of greenhouse gases is a truly global phenomenon. These gases do not cause local problems, but they cause an increase in temperature for all on earth.

Distant in time: Causing Problems for future generations

The effects of CO₂ emission will not be felt for some time. In addition, the global warming potential already accumulated has been masked by the global cooling effect of particulates, such as soot, in the atmosphere. Future generations have a direct voice only in the young.

No property rights

No person owns the atmosphere, so there is no voice to protest or negotiate.

Perception of Scientific Uncertainty

Governments may use scientific uncertainty as an excuse not to act

No global government

The solution to the problem of emissions in a national context involves a benevolent, well-informed government being able to impose regulation upon firms and individuals, so that the common good is protected. In the case of emissions of carbon dioxide, we would need a global government. Such a government does not exist. There are only international treaties. In theory, a global government could be created; but this seems unlikely because it involves nation-states giving up sovereignty, which they are generally unwilling to do (the European Union is the exception to this rule).

International Treaties on Climate Change

One way to solve the problem is through international treaties. Such treaties have succeeded when the cost of reducing emissions is low (e.g. Montreal Protocol banning the use of CFCs). The treaty limiting CO₂ emissions is the Kyoto protocol. Problems with such treaties are:

Incentive to avoid stringent targets

Governments may avoid agreeing to limits on emissions that may be difficult to keep.

Incentive not to ratify treaties

Government may perceive it not to be in their national self interest to ratify international treaties. In the end even China will see it is in their interests to co-operate, if things get bad. But it may be too late then.

No Enforcement Powers

International treaties cannot be enforced, since international organisations have no enforcement powers. So governments may break their obligation without fear of serious repercussions.

Climate Change and Political Thought

How to cooperate?

How should we solve this problem of the divergence of individual and collective interests? Well, we have already seen two possible solutions.

Locke: Private Property

There is a tragedy of the commons because the land is not owned by anyone. If we assign property rights then whoever owns the land (and therefore the rights to use it) will look after it. He will then negotiate with any potential polluter, ensuring an optimal outcome.

The problem with this solution is that no-one can own the global atmosphere. The idea of emissions permits is a solution, but requires global enforcement, which is difficult. Similar issues exist regarding the global oceans.

Hobbes: The State

Hobbes famously thought that life without a state was 'nasty brutish and short'. He thought that, without a state, there would be war of all against all for three reasons: Competition, diffidence, and glory. We engage in competition for gain, we are diffident about safety, and we feel glory due to pride and reputation. We might think that humans are not necessarily like this, but, the idea of a 'prisoner's dilemma' strengthens the idea that without some sort of authority, nations can descend into anarchy, as is seen in 'failed states' such as Somalia.

Hobbes believed in a central authority who would prefer peace to prevail and would have a monopoly over the rightful use of force.

The problem with this solution to climate change is that there is no global government. One might however suggest that it would be an attractive situation if the world superpowers the US and China, and the source of legitimacy, the UN, were to find further ways of working together.

Utilitarianism; Kant and Rawls: Fairness

One might suggest that the solution to problems of co-operation is the notion of fairness. This may well be a way of preventing fights and feelings of envy over the unequal sharing of cakes. However, there is no guarantee that a 'fair' solution will be an ecologically sustainable one.

Furthermore who ensures what is fair? This could be a state (in which case this solution is perhaps the Hobbesian one) or it could be some sort of rational community (which we will come to). But there is no guarantee that states or communities would choose one notion of fairness over another. Philosophers of an ecological bent might also suggest that to consider ethics in such an abstract way is to remove it from the aspects of life which make it attractive in the first place.

Marx: Revolution?

It may be that we need quite a large shift in behaviour to solve our problems. However, there is no guarantee that a revolution would produce a solution with a government any better at solving collective problems. Indeed, Eastern bloc countries often had more severe ecological problems than the West.

Smaller-scale socialism, with an emphasis on community self-sufficiency seems to be much more positive from an ecological point of view. Some sense of needs is also important. We will come to these ideas later, within the context of Aristotle.

Perspectives and Aesthetics

There is more than one way of looking at things. For example, consider the tragedy of the commons between individuals. Without institutions (such as moral traditions), the individual self interests of each of the 6 billion people on earth conflict with the collective interests of that population as a whole.

Now consider the tragedy of the commons in an inter-national context (for simplicity consider only the main economies: the G8 plus India and China). The individual interests of the 10 major economies conflict with their collective interests. We still have a tragedy.

But note that the formulation of the inter-national problem presupposes the existence of entities (nation-states), which have already solved some of their collective action problems. These states are presumably capable of choosing between a consistent set of overall national preferences. Given this, it isn't too much further to go to solve our global problems.

If we concentrate on the conflict between interests we may fail to see that co-operation is itself a good which may be reflected in the way we think. The concepts we use may reflect social conditioning, with one will (not necessarily an individual) 'taming' another. Such a process may well produce an outcome which is aesthetically pleasing. We may rationally wish our actions to reflect a creative motif of life that one would want to live again (and in a world that one might want one's children to live in). A philosophy weighed down by a shrill cry for fairness, or the need to encompass alternative views of life, may well be 'unhealthy' in a Nietzschean sense: vulnerable to ideological attack from more brutish tendencies, and incapable of the necessary discipline to generate more attractive alternative worlds.

Liberal thought is sometimes criticised for being schizophrenic: either allowing a free-for-all or imposing blanket laws or taxes. The notion that an ecologically sound way of life is to be preferred is, within Western economies, noticeably more prevalent amongst the well off than the poor. The cynical might say that to be 'environmental' is merely the prerogative of the rich. But ecologically friendly ways of life seem to be more than simply individual preferences, or reflections of wealth: there is both reason and emotion behind them. If we are to solve our problems, we need to have a more integrated world view. For that, we can look back to the Ancient philosophers, and in particular Aristotle.

Nietzsche was also of course somewhat mad. Aristotle will, as we will see, give us more confidence in reason than Nietzsche leads us to expect. This is in part due to a different definition of 'reason'. Aristotle avoids the rather narrow epistemology of (early- and mid-) modern rationalism and empiricism, whilst retaining a rational and empirical approach and a good helping of 'common sense'.

The next page is a bullet point guide to Aristotle's ethics. Aristotelian ethics is considerably richer in basic ideas than some modern approaches. To go into this in detail would require a book, but to concentrate on one or two points might miss something. The main concepts are outlined below. The particular aspects which may be relevant to the climate change problem are emphasised.

Notes – Aristotelian Ethics - What is it?

- Ethics shows the teacher how to build good character
- Ethical philosophy is a guide for the Statesman
- Ethics is a practical art, not a theoretical discipline
- Ethics depends on the sort of animals we are
- Ethics involves an overall 'sketch' of the good
- Aristotle gives space for what might be considered 'philosophical geography'

Virtue Ethics

Virtue Ethics is a solution to collective action without the need for a central authority.

Virtues are the 'golden mean' between two extremes. Virtues rely on spheres of excellence

Man's soul has parts

- Animal Man: Humans have needs inherited from animals e.g. nutrition, sex etc.
- Social Man: Humans have social needs. The 'good' can be defined from use in everyday discourse. Social consensus is a good.
- Rational Man (Theoretical and Practical Reason). Good depends on what we know about ourselves and the world. We need knowledge to act well, but we also require good character.
- Tribal Man? See below on international co-operation.

Ethics and The City State

Close analogy between society (city states) and human beings

A good city should have a moderate number of people: Too few and societies cannot be self-sufficient. too many and order cannot be maintained.

A 'Thin Theory of the Good'

- The good as defined by Aristotle (in contrast to Utilitarianism) is not a complete ordering.
- The realms of the various virtues are contexts in which we can justifiably define some sense of excellence.
- A 'sketch of the good' should be free to consider environmental issues as they impinge on humanity, rather than necessarily being forced to be restricted to discourse which merely considers individuals and their financial interactions.
- Man is a mental animal who makes plans. In solving our collective problems we can therefore frame our solutions in the most simple and convenient way.

Notes – Other important ideas in economics and philosophy

- Non-convexities (fragility) in ecology, human physiology and in human institutions: see Dasgupta.
- The Biosphere as self regulating system: See Lovelock Agency and Climate Change Agency (abstract noun) is defined as "The Ability to Make Decisions", the ability to think; the ability to act on what is thought. What is agency. Who has agency?

Rationality

- Broome - If you are rational then you respond correctly to beliefs about reasons.
- Ethical Philosophy; Psychological question on why we act.
- Moral psychology is a part of moral philosophy. But much can be reasoned a priori

Group Intentions and Akrasia

PETTIT: Akrasia, Collective and Individual. Plato's Republic - analogy between the constitution of the city and the constitution of the soul. Agent hold intentional state in the light of which a certain response presents itself. States involve may be beliefs or desires judgements or intentions. Agent functions within limits that are favourable; there is no malfunction. However, the agent fails to act in the required way. We need to know what group intentions are. Margaret Gilbert on group intentions. Group intentions are made up of the individual intentions to control climate change. Probably a bit more complicated than that...individuals in groups swayed by large-scale beliefs, strong individuals' views etc

Politics

- Collectiv Action and The State
- Relation between the normative and the position
- Common Sense
- Conditions for the existence of a rational community

A Global Rational Community

It is very important for individuals and governments to interact with one another, allowing global networks and social capital to develop and ethical concepts to align. A global 'rational community' gives the Earth a chance to solve its problems. Such a 'rational community' must, however, 'swim with the tide', taking advantage of 'learning by doing' in a targeted and effective fashion.

Doctrine of the Whole and Parts

- For the whole to exist, it should take account of the survival conditions of the parts – related to James Lovelock.
- For collective interests to exist, the state needs to be cognisant of the organizations involved. What are the interests of the parts?