

Robert Oppenheimer
Venour V Nathan Prize

ITERATIONS OF A RIDDLE;

The Reconciliation of Individual and Collective Interests

Tired of the tirades - the condemnations and exhortations - I set my raft to the sea. As the land shrinks into the horizon I see all our conflicts and concerns, all the preaching and pleading, blur into the same mass. I see many of the major ethical and political dilemmas facing the world as recurring themes in the same tune. The dilemmas I refer to include concerns about population growth, pollution, climate change, economic de-regulation and humanitarian intervention. I will argue that the prevalence of these global issues is the consequence of our failure to understand when, where and how individual and collective interests can be most effectively reconciled.

Think of a resource which is freely accessible to all members of a group; for instance, land for the grazing of livestock or water for the irrigation of pastures. The resource is constantly renewed; the grass is growing on common land and water falls from the sky. Now, individuals are measured against their peers - the members of the group with which they share this resource; so farmers compete through quality of their animals before slaughter or their crops at harvest. When competing, is in the interest of individuals to take a little more from the public resource than their peers. Only a little is needed to gain a relative advantage but this behaviour becomes a trend almost instantly; if an individual receives more than their allotted share, it is in the interest of the others to match the first and take more for themselves. Soon the rate of consumption outstrips the rate of replenishment. Individually, there is a gain to be made by over-using the public resource - but collectively, all suffer from its loss. There are few ways to prevent rapid depletion of the resource and contain catastrophe for the group.

Before I suggest the strategies used to avoid this disaster, I must make some acknowledgements. Firstly, to Garret Hardin. In the 1960's he used the analogy of a public grazing area - a commons - to express a conflict between individual and collective interest and, since then many similar conflicts have shared the name, 'Tragedy of the Commons'. In this essay I wish to note the universality of this problem and investigate some solutions. Secondly, I have implied above that individuals are self-interested. This is a simplification I must make. I could labour the point and suggest Dawkins' view that we are the manifested collaboration of genes striving for their own survival, and can never be perfect models of self-interest ourselves. However, since the position is accepted by mainstream economics and many social sciences, since it is often assumed in political debate and casual conversation, I will let it lie. Finally, a reader deserves acknowledgement; now that you glimpsed the basic idea of a commons, we will look into the 'global dilemmas' mentioned above and discuss the effectiveness of potential solutions.

The threat of climate-change and the absence of precautionary measures presents a telling example of individual and collective interests in conflict - regardless of where you may stand on the issue of climate-change. The resources we consume for energy release carbon-dioxide, which incurs global warming. Failing to change resources or manage the output of carbon-dioxide risks catastrophe; agricultural capacity will decline, the cost of conversion to renewable energy will increase, environmental degradation will result in migration, social friction and reduction of economic capacity. For the past thirty years, action on climate-change has been dismissed due to the cost and the economic incapacitation - relative to other nations - that would result. Nations have been wary of committing to a conversion that would harm economic relations and hinder the provision of goods and services within a nation.

Robert Oppenheimer
Venour V Nathan Prize

It is in the interest of nations to delay action longer than their economic competitors in order to hold or enlarge their market share. For instance, when Australia was considering the Carbon-Pollution Reduction Scheme (CPRS) earlier this year, representatives from the Australian agriculture industry protested that international competitors who didn't share in the scheme would dominate the market with lower-priced goods. The lack of climate-change action is due to the similarity it shares with environmental pollution in general; people see the benefits of changing, but it is a needless cost unless everybody acts together. Individually, it is advantageous to wait - but collectively, immediate action is needed.

Population growth is a persistent problem for humanity. This persistence indicates that the Earth does not necessarily have a total carrying capacity of, say, 7.2 billion human beings. Malthus identified that the rate of population growth is disproportionate to the rate of technological change - which sustains the population. However, the issue becomes more complicated if we consider different nations.

Nations share an interest in finding a population limit which is appropriate to the means of sustaining the population. The means to sustain a population include; the existence of resources, the ability to extract them, the infrastructure to distribute them and space to dispose of them. Without adequate means to sustain a population, a nation risks falling into civil unrest over the incomplete or unfair distribution of resources. Further, tension between nations may rise to hostility if, for instance, an over-populated country desires untapped resources which lie beyond foreign borders.

Individually, nations may wish to increase their population since, relative to other nations, it is an indicator of productive capacity and, thus, the ability to secure national interests through economic or military dominance. Collectively, all nations will suffer the consequences of over-population.

A disturbing trend towards economic de-regulation in third-world nations has concerned economists since WWII. The crux of the problem is that less-developed nations desire foreign investment which will increase GDP, raise employment, introduce advanced technology and international goods, and aid in the growth of a domestic economy. Foreign investors maximize profitability by seeking economies with the least restrictions. However, the regulation of pollution, resource accessibility, workplace conditions and so on, is the primary method for governments to preserve national wealth and natural endowments. Therefore, it is in the interest of an individual nation to lower regulation standards, relative to their peers, in order to be more appealing to investors. Individually, nations may enter a temporary economic boom - but collectively, less-developed nations perpetuate their poverty through the attempt to alleviate it.

Consider humanitarian intervention. If we accept that there will always exist some place on Earth where human rights can be abused, then a conflict of interest follows. Nations wish to appear globally responsible, and they can achieve this by securing or restoring human rights internationally - preventing genocide, slavery, discrimination, etc. After debate, diplomacy and trade blockades fail - the intellectual, political and economic means of persuasion - it will fall to military force to change what happens in other countries. This has been the trend since the UN's role began to change from an international co-ordinator to a global authority; Yugoslavia, Somalia or the Gulf War are examples of humanitarian intervention.

However, nations wish to secure their own borders from foreign interference. Since issues of human rights can often be blurred to disguise a less noble intention for invading, nations may be doing themselves more harm than good by sanctioning the use of force to influence other nations. This was Henry Kissinger's criticism of America's War on Terror.

Robert Oppenheimer
Venour V Nathan Prize

Individually, nations benefit from appearing to restore order and peace. Collectively, international relations suffer when the principles of national sovereignty and non-intervention are breached.

People can run away from their problems. The first strategy attempting to reconcile individual and collective interests is nomadic. The group migrates into a new area in which the same behaviour persists. This area may be a new physical environment managed just as poorly as before or a different resource being abused in the same fashion. In the early examples above, this response is the equivalent of graziers moving their herds to fresh pastures or irrigators tapping into aquifers or importing water from afar. In either case, the new resource will be just as poorly managed and rapidly destroyed as the first; necessitating endless nomadic behaviour. On the largest scale resources must be finite, which means this strategy is inherently unsustainable.

A nomadic strategy has generally been used to cope with the population dilemma mentioned above. Consider the colonialists, who traversed the Earth in search of settlements which could cope with a population influx. Australia and USA are examples of British settlements which share the Mother Country's inability to manage population growth.

People can take responsibility for the group. The second strategy unites the individuals into a collective. The groups' interest in having a resource in the future leads to some system of organization and distribution that prevents unsustainable behaviour. Members of the group surrender the ability to take what they wish from the public resource and are given a portion which is considered sustainable. Harking back to the farmers, this is equivalent to each being given a limit in stock or time that animals can graze on common land or a limit in the water that can be accessed.

I think of this as conformative cooperation and as the uncle of socialism. I believe the centralized authority of the communists might have made rapid progress towards preventing climate-change by imposing changes upon the economy, delivering caps for emissions and diverting between energy producers.

People can take responsibility of themselves. The final strategy (that I have heard, read or thought of) changes the nature of competition within the group such that an individual's self-interest leads to the adoption of more sustainable behaviour. Members of the group receive a portion of the resource and take sovereignty over it. Thus, if an individual mis-manages the resource it will be to their own detriment and no others'. Also, competition against other members of the group implies that it is advantageous for individuals to efficiently and sustainably manage their resources. This strategy is the equivalent of graziers privatising the commons and irrigators purchasing a private reservoir or irrigation licenses.

I think of this as competitive cooperation and it is a capitalistic approach to resource management. We live in a global capitalist economy and the most positive response to climate-change have been the attempts to place a price on carbon, to find a carbon cap or to implement a global regime like the CPRS. These attempts share the outlook that individuals, businesses, corporations and countries, will adopt sustainable measures when they are personally responsible and economically accountable for their behaviour.

Different dishes may appeal or repel depending on context; a choice of menu may be determined by the time of day, the surrounds, the people you dine with and so on. This is not to say that some meals are better than others, rather that each dish has pros and cons which become more relevant or meaningful in different environments. Similarly, the approaches of colonialism, communism and capitalism all have positive and negative

Robert Oppenheimer
Venour V Nathan Prize

properties - and one can think of situations in which each approach might be more appropriate than the others. For instance; in the post-apocalyptic future, a commune may function better than a market; in the ancient past, establishing colonies better than holding together large communities. As such, the environment determines the ability of nomadic and cooperative strategies to manage and reconcile conflicts of interest.

Consider two examples to consolidate the three strategies, and show that in different environments each may feature as the most advantageous. Aphids are a peculiar creature. The insect's behaviour is dictated by its genetic make-up, and genes are considered as the group which exhibit conformative and competitive cooperation, and nomadic behaviour. After arriving alone on a leaf, an aphid will reproduce asexually - creating clones which share identical genetic material - in order to rapidly populate the leaf. This strategy represents conformative cooperation among the genes; the group shares a collective interest in survival and in avoiding predators through safety in numbers. After some time the aphids will begin reproducing sexually - creating individuals with similar but unique genetic material - in order to diversify the population before they embark to find new leaves. Sexual reproduction is a form of competitive cooperation among genes; when a group exhibits variety, natural selection implies that the fittest insect - and the fittest combination of genes - will survive to find a new leaf. Finally, the entire process of populating leaves and migrating from them is a form of nomadic behaviour. Aphids leave withered and mottled leaves behind them as a result of unsustainable consumption of leaf material.

A city should have as many different modes of transportation as possible - travel by bus, train, car, tram, bike, foot-path, ferry, etc. The result of this variety is the experimentation of many methods of transport so that the most functional or suited to the city will become the

most popular. This is competitive cooperation on behalf of commuters. However, a city should have as few train services as possible, to which everybody continually contributes to making the most efficient. This is better than having sixteen confused services that don't cooperate, that compete for profits through the public and waste public money which might be better spent on public projects in other parts of the city; an example of conformative cooperation. Also, since neither of these approaches entirely solves the problems of congestion, it might be beneficial to increase suburban infrastructure, remove non-essential services to remote suburbs, or encourage newcomers to divert to other cities. This last strategy is a nomadic response, but moving the problem elsewhere may be the most headway one can make.

In summary, conflicts between and within groups commonly arise in situations where the self-interested actions of individuals harm the group and encourage other individuals to act the same. The spiral towards common ruin may be prevented or limited by few strategies, and each has the potential to be effective, depending on the environment of their implementation. When a house is on fire, we shouldn't expect to find the owner at their desk, re-designing their house from non-flammable material. Their efforts must be prioritized - reducing the possibility of future catastrophe is important but should never eclipse the issue at hand. Through this essay I am not suggesting that work addressing global dilemmas should halt. Rather, that we might reflect on the strategies we implement today in order to gauge whether, and in which environments, they are appropriate in the future. For there will be new dilemmas more confronting and demanding than those we face today.

Robert Oppenheimer
Venour V Nathan Prize

I can only think of three issues in this exposition which may upset readers; the inaccuracy with which I have depicted 'global dilemmas', the liberal use of analogies and generalizations, and a topic which is deemed uninteresting and irrelevant. This criticism reveals an assumption of mine.

Authors colour their characters better than Joseph Campbell's archetypes - but his intention was to reveal the common thread which weaves characters and plot-lines. Similarly, the conjectures I have made are about a subject which never sees the stage itself; it is a script re-created in each context it is read. If I have presented some facts falsely, this is unintentional but shouldn't be of much consequence. The examples are only used as analogies for the troubled relationship between individuals and collectives.

Finally, the assumption is that all the world can be described in simpler terms; such that facts are examples of truth and not important themselves, and that metaphors are the only means of communicating ideas which are universal, interesting and relevant. Judge for yourself whether this position is unreasonable - but while deciding, consider the application of nomadic, conformative and competitive cooperation; as colonialism, communism and capitalism, as viral, asexual and sexual reproduction, as anarchy, autocracy and democracy.