

THE TRAGEDY OF THE COMMONS

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All of the countries situated in southern Europe have more serious environmental problems than those countries to their north (OECD, 1985). These problems involve all aspects: marine, land, and air pollution.

It comes as no surprise therefore to discover that the Greek people express the least satisfaction with their lives and the least happiness of all the 12 EEC countries (Eurobarometer 24, 1986) (though this is obviously not exclusively because of environmental problems, other factors such as inflation and unemployment no doubt also contribute). Yet there is a paradox - you will not find very active environmental groups in Greece (OECD Environmental policies in Greece, 1983). Is this because of a feeling of helplessness, a cultural "fatalism" In an attempt to explore this and people's attitudes to pollution in general I have concentrated my studies on the Athenians and their city - Athens.

This city has 32% of the population, over 50% of the country's registered vehicles, and over 50% of the country's industry. It is surrounded by hills on three sides and suffers from serious photochemical smog most of the year (SLIDE). Last year I conducted a survey (students, parents, civil servants, experts working in the city centre, N=230) that revealed high levels of worry and concern by all groups (78-97%). They felt that their health might be seriously damaged by air pollution, and that even their lives might be shortened. Whilst most people exhibited fairly accurate knowledge of the short-term effects of photochemical smog (running eyes, headaches, irritability etc.), there was a great anxiety about the possible unknown effects of long-term exposure to polluted air, especially where children were involved. In contrast to many other risks over which people felt they have some personal control (like smoking) the health risks from air pollution leave people with a feeling of personal helplessness.

However the situation is not perceived as being totally out of control. For this reason the "learned helplessness" model is rejected. Rather the situation is perceived as being a problem that requires social co-operation, social control, and legislation, i.e. a classic "social dilemma" (Dawes, 1980). A problem caused by everybody acting in a selfish way, that cannot be solved by a person individually, it can only be solved by social co-operation. Introduced by Hardin (1977) as the "Tragedy of the Commons" it is usually stated in economic or socio-political terms and held up as a criticism of Adam Smith's classic "invisible hand" model, in which the individual's best interests also serve the best interest of society as a whole.

However, there is no reason why the problem cannot be examined within a psychological framework. To achieve this and to apply it to air pollution requires a restructuring of the commons problem as it is normally stated. Taking "car use" as an example, clean air is a common and vital resource, and polluting activities involve putting something into the system rather than taking something out, as is the case with Hardin's original grazing example. Other aspects are similar, for instance the increased levels of pollution (negative utility) are shared by all, but the advantage to the individual of using his car is his personal gain. Furthermore, it is a rational choice, because if he decided not to use his car the benefit of reduced pollution from this one car would be shared by all, but the cost of reduced mobility, loss of privacy, loss of status symbol, loss of door-to-door convenience would be his alone to bear. It is a conflict between selfishness and public spiritedness, in which the benefits of selfishness and public spiritedness, and any feelings of guilt that might inhibit the selfish behaviour are removed once the air has become polluted by the activities of all. Individual blame is not accepted, blame is shared by all.

In order to obtain a deeper more cognitive perspective it is necessary to shift the analysis from being an external one in which the individual's interest conflict with the group's, to an internal conflict that is experienced by being in that situation. The common problem as originally formulated did not encompass any conscious awareness by the person entering into the problem. It was simply assumed that an individual would act on the principle of maximising personal gains or rewards. A more reasonable assumption would be that an inner conflict is aroused between one's social self-interest and one's personal self-interest.

There are, of course, a number of different ways in which such a conflict might be resolved, and "reason" as proposed by Hardin seems the least likely. No doubt the resolution of the conflict would depend on information availability, but people have a number of defence mechanisms at their disposal, and they can be very selective about the information to which they attend, ignoring facts and opinions that don't fit their belief structures. It is also possible that contradictory belief structures are separated into cognitive compartments with thought processes switching from one to another, from utilising one structure to another, shifting from acting according to one principle to acting according to another principle (Harre, 1979), depending on which mode of self is operating, with no attempt at achieving cognitive consistency. For example, a car to the personal identity could be an object that facilitates a journey. To the social identity it might be a status symbol, or a polluter that is detracting from the local amenity. In this way it is possible that the car simultaneously produces a threat to one "self" and a benefit to the other "self". The resulting tension would call for adjustment and adaptation, and whatever the outcome of this internal conflict its resolution will certainly affect the wider external conflict.

"Common dilemmas" arise in western societies because of their simultaneous emphasis on self-expression and personal control. The solution lies

with a deeper understanding of the nature of social co-operation and control, and its relationship to personal control. Unfortunately social psychologists have neglected this area (Lynn & Oldenquist, 1986).

When we wish to examine what research psychologists have conducted on social control Rotter's Locus of Control (LOC) construct studies come to mind. These concern the perceived ability to control one's personal and social life. Individuals may believe they have control of alternatively may believe in luck/chance/fate. I would argue that "perceived social control" has two aspects and that it is bi-directional, more specifically:

1. Control exerted by individual on society (this is what is measured by Rotter's LOC) and,
2. Vicarious control through identification with social institutions.

Some evidence for this distinction comes from a new questionnaire I developed about social control. Factor analysis revealed three scales: one in which the individual exerts control social institutions, and another in which the government is perceived as acting to effect changes in society. The third was a cynicism/fatalism scale.

What conclusions can be drawn? The research is still continuing but, it seems possible that here in Greece, as far as environmental issues are concerned they have risen above the traditional party politics in Greece, now a member of the EEC is pursuing an active, harmonious, integrated environmental policy that allows people to identify and thus accept and adjust to the social control imposed, e.g. no protest about restrictions on traffic, no violations. The tragedy thus ends on a happy note with the Greek people more optimistic than any other EEC member (Eurobarometer, 1984).

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