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It's Not Easy Being Green: The Limits of Green Consumerism in Light of the Logic of Collective Action

Becoming a green consumer makes sense for each of us. Unfortunately, the logic of collective action suggests that few of us are likely to do so. In this paper, Dean Pettit and Jerry Paul Sheppard look at the possible reasons individuals might become green consumers, and, more importantly, the reasons why they might not. By looking at environmental problems from the perspective of the logic of collective action, the authors explore the limits to green consumerism as a solution to our environmental problems.

ON A RECENT trip to the market we met two friends, E.C. O'Nutt and I.M. Green. Our friend E.C. has purchased Green™ detergent, popcorn, toilet tissue, crackers, oil, and a wide range of other green products. I. M. attempted to purchase environmentally friendly products wherever possible. Because they believe meat production wastes resources, E.C. is a vegetarian and I.M. eats

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"low on the food chain" (i.e. avoids meat but may eat fish or foul). In order to reduce waste packaging, both bought in bulk and provided their own containers. They loaded their groceries into backpacks, then rode their bicycles home. As we fired up the trusty old Leadmobile and ripped open a package of fried-in-palm-oil-lard-chips in the non-recyclable plastic and foil bag, we wondered how these people could get so fanatic about the environment.

Of course, E.C. O'Nutt and I.M. Green are fictitious characters (as are the chips). This is not to say that people like E.C. and I.M do not exist (they do and we may know people like them), but such pro-environment consumers are few and far between.[1] This paper attempts to address some of the reasons why shoppers like O'Nutt and Green do not constitute a larger portion of the consumer market.

Green Consumerism

BROADLY speaking the term green describes people, products, or activities that are environmentally responsible (McDougall). Such responsibility means that consumers attempt to minimize the negative environmental effects caused by the production, distribution, use, and/or disposal of the products they buy (Grunert). The notion of green consuming has become popular as a means of addressing environmental concerns without compromising the market driven economy. In other words, concern for the environment has been channelled into consumer demand for environmentally friendly products. A trip to the supermarket will confirm that many manufacturers and retailers have responded to the demand with a proliferation of green products. The demand for green products as well as the recent availability of green products in the market seems to suggest that green consumerism may affect at least some environmental goals.

While a modern market economy operates on the assumption that consumers behave rationally so as to maximize their utility (Thomson), green consumerism expands this assumption to say that: consumers derive some utility out of a healthier environment and since environmental degradation lowers the utility consumers can derive from the environment, consumers will therefore voluntarily alter their behaviour to help achieve environmental goals. It is through this basic logic that, in the abstract, the notion of green

consumerism initially seems plausible. Human nature, however, as well as the nature of environmental problems, presents some very serious difficulties for effective green consumerism. The notion that individuals will voluntarily contribute to a shared interest is, as we shall discuss, implausible.[2]

The hope of green consumer advocates, though, is that environmental goals can be achieved without the level of government interference in the economy that environmental protection seems to require (Reed). The ideal, then, would be an environmental self regulation mechanism within the market economy, i.e. environmentally concerned consumers would make informed decisions which would not harm the planet (Grunert). The focus of this study will be on the problems with green consuming and voluntary individual 'green behaviour.' As we shall see, it is difficult, in many instances, to give a good general account of why individuals contribute to environmental interests at all (Van Liere and Dunlap; Balderjahn; Vinning and Ebreo). There are a number of different explanations as to why some individuals contribute to environmental interests and why many currently do not.

The Problem of Being Green: Costs and Benefits

UNDER THE broad definition of green consumerism, consumers voluntarily contribute to environmental interests by making rational decisions in their product purchase, usage and disposal behaviour (Grunert). For example, in the environmental assessment, recycled paper is preferred to unrecycled paper because the former's production is less harmful to the environment. Ideally, the recycled paper product would also be used and disposed of in an environmentally friendly manner (e.g. by recycling it again). Thus, in order for green consumerism to be effective, the consumer should make the optimal purchase, use the product in an environmentally friendly manner and dispose of the product in a similarly environmentally friendly manner.

Changing from non-green to green behaviour comes at some cost to the consumer. As with the breaking of any habit, most of the net benefits incur a cost to the individual (e.g. stress, time spent learning

different behaviours, etc.). Green consuming requires sacrifices. The sacrifices demanded by the pursuit of environmental protection can be categorized as follows: (1) pay more for green alternatives, (2) expend effort required by some behavioural changes, (3) accept imperfect substitutes for a good or (4) reduce consumption of the good. In the first two cases, the cost to the consumer is raised; in the last two cases, the benefits are reduced. All of the above sacrifices result in the consumer's utility being reduced.

With regard to the first type of sacrifice, green products may be more costly because producers are able to demand a premium price for the product. Producers' rationale for the premium pricing may be based on an assumption that green consumers are willing to pay the higher price for the environmentally friendly product. The second case, expending more effort, is exemplified by recycling. Recycling involves washing bottles and cans, sorting plastics, binding newspapers, storing them in an acceptable manner and then taking them to the recycler. All these actions are a type of cost associated with green consumerism.

And if the green consumer is willing to accept the third type of sacrifice - that environmentally friendly goods that are imperfect substitutes - then they will be reducing their utility. The best product for the environment may not produce the results the consumer would most desire. For example, baking soda may not leave your bathroom smelling clean as a daisy, but it is a non-toxic, alternative cleaning agent. Finally, the last sacrifice, that of reducing consumption, also implies a cost. For example, reducing consumption of fossil fuels by turning down the thermostat on your oil heater in winter means either discomfort or a higher clothing bill (for blankets, sweaters, etc.).

The benefits of green consuming are less apparent than the costs. Even if we suppose that we could easily obtain such benefits it is hard to even agree about what the benefits are. Some environmental problems threaten the well-being of whole regional populations – e.g. smog in Los Angeles. As a potential benefit to green consuming, the goal of "cleaner air" in Los Angeles is something that the city's general population, (assuming they understand the threat) would most likely agree upon. However, how much cleaner the air ought to be is not generally agreed upon, and neither are the limits to which one is willing to go to reach the goal (for example, accepting a ban on automobile usage on certain days).

Achieving consensus on such issues is nearly impossible. Is everyone going to agree to make sacrifices to maintain parks, species of wildlife, or a better environment for future generations? Clearly, individuals will differ in the extent to which they are willing to sacrifice personal comforts and luxuries for environmental goals. Who will pay and who will benefit? And even if there is agreement among consumers as to what environmental goals are worthwhile, would consumers act to achieve those goals? Can we assume that individuals sharing an interest in the environment would eventually organize a means to achieve their objectives?

The Logic of Collective Action

WHETHER the environmental concerns are shared regionally, nationally or internationally, the shared aspect has the most significant impact on the ability of consumers to achieve environmental goals collectively. In the case of consumer influence on the environment, the impact the individual has on the environment is insignificant and any environmental betterment they achieve will be shared by all. In this respect, environmental concerns are similar in nature to other collective or shared goods such as parks and national defence. Such goods require individuals to contribute (usually through taxes) to an indivisible shared good. In this view, the aims of green consumerism such as clean air, clean water and ethical treatment of the natural world, are goods which must be collectively shared. There is an inherent problem in achieving and maintaining collective or shared goods. These problems have been articulated in a logic outlined by Mancur Olson both in *The Logic of Collective Action* and The *Rise and Decline of Nations*. We will turn now to a discussion of that logic.

The essence of Olson's logic is that individuals will not contribute to a collective good because their contribution furthers the achievement of that collective good but rather, for other reasons. To outline the logic, let us use the example of a consumer changing his or her behaviour to forward an environmental goal such as clean air. To the extent that the goal is achieved, it will be shared equally by all. For example, concern for cleaner air may lead some to ride their bicycle to work instead of taking their car. The individual must endure the

effort involved of switching to an inferior substitute to the auto (a slower, exposed-to-the-elements vehicle versus an enclosed faster vehicle). The contribution to the reduction in pollution may be insignificant – one less car of the road will not make a great difference – and the benefits will be shared with those who do not make the same sacrifice (i.e. the authors in their Leadmobile). Therefore, what will the individual have achieved for all their trouble? Olson outlines the paradox faced by the individual:

> What will this [individual's] sacrifice obtain? The individual will at best have succeeded in advancing the cause to a small (often imperceptible) degree. In any case, he will get only a minute share of the gain from his action. The very fact that the objective or interest is common to or shared by the group entails that the gain from any sacrifice an individual makes to serve this common purpose is shared with everyone in the group. Since any gain goes to everyone in the group, those who contribute nothing to the effort will get just as much as those who made a contribution. It pays to "let George do it," but George has little or no incentive to do anything in the group interest either, so (in the absence of [other] factors)... there will be little, if any, group action. (Olsen 1982 18)

The above paragraph outlines the essence of Olson's collective behaviour logic and, equivalently, the essence of the paradox facing the environmental consumer. An individual incurs the cost, and gains only the same share in the collective good as every other member of the group whether the other members contributed or not. Whether the collective good (e.g. clean air) is achieved or not, the individual is better off to do nothing. If the collective good is achieved then the individual is much better off since he or she will get a share without having contributed (i.e. one can get cleaner air and while still driving a gas guzzler); if the good is not created the individual is no worse off (i.e. even if the air isn't clean, one can still drive). Unfortunately, if every individual is better off by doing nothing, then the collective good is not achieved. According to Olson, this is the result if the individuals are behaving rationally and other factors (which will be outlined shortly) are not present.

Olson developed this logic to explain the emergence of organizations that seek to further collective ends, but it can be extended to explain the green consumerism phenomenon and its inherent limitations as an effective means of environmental protection. Olson's logic, as described above deals with the organization or institutionalization

of collective goals. For Olson, the issue is whether the individual would contribute to an organization as the means to achieve the collective good. With regard to the green consumer, the behaviour with which we are concerned is not institutionalized but the paradox is essentially the same.[3] The individual will still face the dilemma of whether to incur the high personal costs of contributing to collective interests and making a small relative contribution to the common good while sharing whatever benefits may accrue with others who may not have contributed.

Olson contends that the logic holds even in cases of selfless or altruistic behaviour. If the altruist derives some benefit from observably better outcomes for others, the logic still holds: whatever the individual's contribution it will make imperceptible difference in the amount of collective good the group receives, yet the individual sacrifices may be significant. Since the rational altruist, at some point, will see that the marginal benefit exceeds the marginal cost he or she will not continue to contribute to the provision of the collective good. If the altruist derives some satisfaction or benefit from the sacrifice made rather than from the observable results, then the logic does not apply because the benefits are individually achieved and individually 'consumed'. In this case, the act of contribution in itself is the reward.

Selective Incentives

ACCORDING to the formulation of Olson's logic thus far, it would appear that individuals would never behave collectively. This is obviously not the case since people do form organizations. Given the logic, how can this occur? Olson explains that collective behaviour can be explained by the presence of selective incentives. Selective incentives are inducements to the individual that are independent of the shared interest of the group. Incentives can be either positive or negative. For example, in the early years of organized labour, unions used both the positive benefits of insurance for members and the negative threat of violent harm to non-contributing individuals (Olsen 1965 66-72). Selective incentives thus encourage individuals who, according to the logic, would have no reason to voluntarily contribute to the collective good of the group. In the end, individuals may share

in the collective interest and thus support its attainment. They would not have contributed without the selective incentives, since to do so would bring about the paradox outlined by Olson.

Selective incentives do not necessarily need to be dispensed by an organization. For example, contribution to the achievement of a collective interest may garner the adulation of the individuals sharing that interest. Selective incentives can be social incentives. That is, society can heap praise upon those who contribute to socially desirable ends or they can scorn those who do not contribute to such ends (moral incentives). Such incentives are both useful and relatively costless to those granting the incentive. Certain psychological phenomena (normative incentives) can also function as selective incentives or as disincentives (Etzioni; Grossman). As we will see, these types of incentives figure significantly in the behaviour of consumers who do seek to further environmental goals through their behaviour. Lastly, selective incentives can be monetary, as in the case where individuals are paid to further the shared interests of the group.

Consumer Environmentalism as Collective Action

THE LOGIC of collective action and the related talk of selective incentives have immediate application in the context of green consumer behaviour. Any environmental concern can be seen as a collective interest of some group if not all inhabitants of the planet. We have sketched-out the paradox faced by the individual hoping to contribute to cleaner air by cycling to work. The sacrifice is significant to the individual, the contribution to the collective good negligible and whatever benefits are achieved come to be shared equally whether individuals contribute or not. Such is the paradox in the case of any environmental initiative. Thus, the individual will not make the effort unless some selective incentive acts on the individual. In the case of contributing to cleaner air by cycling instead of driving, the individual may seek health benefits, social approval or some sense of psychological relief (the feeling that he or she is doing something). These kinds of selective incentives act on the individual whether or not the end is being achieved (e.g. health benefits will still accrue to the cyclist even if the air gets no cleaner).

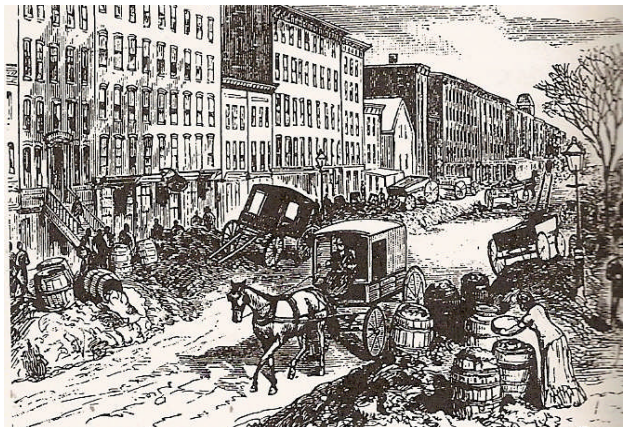
Environmental consumer behaviour is thus not based on a pursuit of environmental goals. Environmental initiatives depend wholly on the presence of selective incentives to induce the contributions of concerned consumers. The consumer will not purchase a more costly 'ozone-friendly' product because it makes a tangible contribution to saving the ozone layer; rather, consumers will buy it (if at all) because it makes them feel better, or makes them feel like they are contributing and thus doing something for the environment. Without selective incentives it is not rational to contribute to the common good – the collective action paradox would preclude this kind of behaviour.

Why then does anyone contribute to environmental goals? It is difficult to capture the motivation for environmental behaviour in a general explanation, although there are some factors predisposing individuals to action. There are, perhaps more importantly, good generalizable explanations of why individuals choose to not significantly change their behaviour in the face of environmental concerns. Individuals who do not change their behaviours are perhaps more important since, according the collective action logic as outlined here, in the absence of selective incentives this is the norm. Thus, let us briefly discuss the range of sociological and psychological factors that have been explored as selective incentives and may give rise to, or preclude, environmental consumer behaviour.

In general, there are four main areas of explanation addressing why individuals change their behaviour toward green consuming: 1) demographic reasons; 2) sociological reasons; 3) psychological reasons and; 4) economic reasons. Each of these possible explanations is summarized below.

Demographic Reasons for Changes in Behaviour

DIFFERENCES in environmental consciousness could be explained by demographic variables such as educational level, culture, age, etc. By analyzing the demographic elements in a person's background, we may be able to arrive at rationales for their environmental consciousness (e.g. a more educated person may be more aware of environmental problems and be more willing to do something about such problems). In general, there has been relatively little success in explaining environmental concern in terms of demographic



Heaps of refuse clogging of New York City streets in the 1880s. (The Bettmann Archive, Inc.)

variables such as age, social class, residence, political associations and sex (for a review see Van Liere and Dunlap). Even if such attempts had been successful, it would not logically follow that environmental concern would result in a change in behaviour. Evidence presented by Vining and Ebreo in their 1990 study of recyclers and non-recyclers suggests that demographic traits are also poor indicators of environmentalist behaviour. The absence of good correlation between these demographic characteristics and environmental concern or pro-environmental behaviour, leads to the conclusion that the underlying determinants of environmental concern may be something quite unrelated to demographic traits.

Sociological Reasons for Changes in Behaviour

THERE ARE sociological forces that act as selective incentives motivating individuals to contribute to environmental protection (Buttel). Environmental concern has become increasingly visible and popular in our culture. The environmental movement seems to be sweeping our culture and is generally perceived as a positive social phenomenon (Johnson). The movement is associated with generally positive images and symbols, and membership in an environmental organization is considered to be socially desirable. To the extent that this is so, the desire to belong encourages individual participation through changed behaviour. Thus, the purchase of environmentally friendly products is a socially desirable trait to exhibit. The positive

social value of green products induces pro-environmental behaviour. In simple language, it is somewhat trendy to be, or at least to appear to be, a green consumer.

However, if the behaviour is simply the result of the individual's desire to follow the trend, there may not be sufficient motivation for effective green consuming. For example, the individual may buy a few green products because that is seen as socially desirable, while still purchasing over-packaged goods and failing to recycle. Thus, socially induced behaviour can be more effective if people are aware of the full range of desirable behaviours. If contribution to environmental preservation is valued in a social context, a more informed society will know and discourage ineffective behaviour (such ends are assisted by recycling advertisements that focus on the only family on the block that does not have its recycling containers out on the street on the correct day, at the proper time and, of course, brimming with recyclables). Thus, if the individual is aware and sees it as socially desirable to behave effectively (or undesirable to behave ineffectively) and such behaviour is reinforced by an aware society, then effective environmental behaviour is more likely to be induced.[4] The effectiveness of socially induced behaviour is limited by the complexity of the information that one would need to know to perform such behaviours. Yet, socially induced behaviour can be effective in a case where the information is simple and the values on which the concern is based is generally accepted. For example, the awareness that purse seine net fishing for tuna involves the needless killing of dolphins has exerted sufficient pressure on tuna canners to force drastic and hopefully effective change. The major tuna canners have announced that they will buy only tuna certified as being caught by dolphin-safe means (Greenpeace). In this kind of clear case, social pressures can be effective.

Psychological Reasons for Changes in Behaviour

ENVIRONMENTAL problems can create a psychological inducement for individuals to contribute to environmental protection. Environmental problems can be perceived as a threat to the individual, whereby an individual may contribute as a psychological response to the perceived threat, whether or not the response is rational or effec-

tive. And environmental problems can also pose another type of psychological threat. Cognitive dissonance is a state induced when an individual's behaviour is inconsistent with his or her attitudes (Wortman). As environmental protection becomes identified with concepts of good citizenship, and as the consumer becomes aware of behaviour which is inconsistent with this concept, the individual consumer enters into a state of cognitive dissonance. To relieve the dissonance, the individual should, in theory, change behaviour such that it is consistent with the individual's attitudes.

A problem arises if psychological reasons are the basis of the positive environmental behaviour. The relief of an individual's cognitive dissonance is often achieved by token actions, particularly if the individual is not sufficiently informed about the problem. Thus, changes in behaviour may not be effective. For example, the individual may feel he or she have responded to the threat of ozone depletion by buying ozone friendly aerosol products. But ozone depletion is affected by automobile emissions as well as aerosol products. Thus, the behavioural change can be seen as insufficient to help fight the environmental problem. If the individual realized that driving a car contributed to the problem, this would, hypothetically, induce dissonance again. But, this dissonance would only occur if the individual was aware of the extent of the problem. In this sense, ignorance is bliss. If the individual is ignorant of additional possible solutions, then as long as such contributions remain unknown, the cognitive dissonance is relieved.

Once consumers are aware of the problem, what might induce them to change their behaviour? It has been hypothesized that environmental concern is induced by self interest (Sears, Lau, Tyler, and Allen). Such is the situation when individuals become concerned that a potential environmental hazard is to be located in their region. This threat usually evokes a strong change in behaviour due to the high negative cost associated with non-involvement. Alternatively, the sociotropic model (Kinder and Kiewit; Kiewit) supposes that individuals perceive a threat more generally as a national problem and individual concern thus extends beyond self-interest. It was concluded through further study that individuals "... evaluate ecological problems as national issues" (Rohrschneider 1988 363) In this sense, the individual may either see their contribution as so minimal as to be insignificant or the problem as so big that there is little they can do to help. In this case, change in behaviour may be less radical.

Economic Reasons for changes in Behaviour

A FURTHER inducement for positive environmental consumer behaviour, though only applicable to a small range of environmental concerns, is economic reward. In some rare cases, environmentally friendly substitutes are cheaper than their counterparts. For example, unbleached toilet paper is cheaper than bleached and dyed toilet paper. This alone may be sufficient motive to change behaviour. Also, in some cases recycling pays, such as is the case for some beverage containers. However, this may not be sufficient insentive to recycle for those with higher incomes. Cases of economic incentive to recycle or change buying behaviour are limited, but the deposit system implemented for beverage containers may be an effective incentive in any cases where packaging is recyclable (Goldoftas).

While demographic, sociological, psychological and/or economic reasons could serve as selective incentives, a further problem exists. This problem has to do with on of the more essential requirements for green consuming: the need to acquire specialized knowledge.

Disincentives for Behavioural Change: Information and the Limits of Green Consuming

IF ONE seeks to become an effective green consumer, it seems that a great amount of learning must be undertaken. If the number of books currently on bookstore shelves on the subject (Levy) is any indication of the amount of education required, one might take years learning the basics of the topic. Simple manuals like *50 Simple Things You Can Do to Save the Earth* (Earth Works Group) give some good basic suggestions, but even these require time and effort to study. The fundamental problem is that learning to be a friend to the environment can be a disincentive to action. The learning problem can be broken down into three parts: 1) "the paradox of ignorance", where the individual, consciously or not, may conclude that the learning involved in addressing environmental problems is not worth the cost and there is not much one can do anyway; 2) information complexity – the perception that

the problems are so technically advanced that the consumer has no way to become easily informed and; 3) denial that an environmental problem exists or a belief that someone else will take care of it (thus, even if one knows there is a problem he or she need not change behaviour patterns to reduce the problem).

The Paradox of Ignorance

WHAT WE have called here "the paradox of ignorance' is an extension of Olson's logic. The problem is this: suppose we have an individual who is relatively unaware of the threats posed by environmental destruction. The individual will, to the extent that he or she is ignorant of the problem, perceive no benefit in becoming informed about environmental problems. Thus, paradoxically, the individual must first be informed before they can see the value of becoming informed. If the individual understands the benefits of becoming informed, he or she may still not do so. Why? The logic of collective action. The individual must expend the effort to become informed at high personal cost (in time, if nothing else). Compared to the size of the problem, the impact of the individual – and the individual's share in whatever improvements occur in the environment – will be negligible. Unless there is some selective incentive, the individual will not expend the effort to become informed.

There are also psychological theories that propose further disincentives to becoming informed about environmental problems. These possibilities have been suggested as explanations of why non-recyclers were less informed than recyclers. Individuals who are not environmentally aware may, by selective perception, "...ignore or discount information that they perceive as being irrelevant to their own behaviour..." (Vinning and Ebreo 1990 68). For example, one may see air pollution as a problem in Los Angeles but not their home town. For most ipeople living in Los Angles, the pollution is seen as a problem for those with respiratory problems. And for those with respiratory problems the pollution is not so bad if your home or workplace has conditioning for bad days... and so on. The problem is always someone else's, the argument goes, so why act to try to affect the problem?

Another psychological disincentive to becoming environmentally informed is that the information about environmental problems "creates

dissonance by threatening [the individual's]... self concept as a responsible member of the community..." (Ibid.). In this case, some people would rather be ignorant because if they were well informed they would see themselves as irresponsible. Metaphorically, it is better to sit in the dark than to light a candle if by lighting the candle we see something we would rather not. This phenomenon prevents or discourages the uninformed individual from becoming informed. And finally, once an individual becomes more aware, he or she may still not be disposed to take action to address environmental concerns. If the information provided becomes too threatening and cognitive dissonance cannot be resolved, then the individual is liable to evoke a psychological defence mechanism such as denial.

Information Complexity

TO BE an effective green consumer one must be aware of the environmental impact of a product from production to disposal. The level of difficulty involved in acquiring such awareness is relatively low when the product is simple – hand made unglazed pottery for example. However, in our modern industrialized society the complexity of production methods associated with most products makes the information requirements for many purchases impossibly onerous. Thus, we would expect that consumers would not be able to evaluate highly complex environmental problems. Certain institutions attempt to overcome this problem by making people aware of the worst offenders. However, the vast majority of environmentally harmful practices would be more effectively dealt with by regulation where a third party (in this case, the regulator) gathers and evaluates the necessary information to determine the acceptable use and disposal of the product (e.g. toxic waste).

Denial

HOW DOES the individual react if he or she is threatened by environmental problems but is unable to contribute effectively or rationally to their resolution? (This can occur if either the problem is too complex for individual analysis or if the collective

action logic makes action irrational.) As was discussed above, cognitive dissonance can result if behaviour is inconsistent with an individual's attitudes. We have examined some of the things an individual might do in order to alleviate this dissonance, yet there are a number of psychological defences that can allow the individual to resolve to do nothing.

Psychological defences or defence mechanisms are means by which the mind responds to perceived threats (American Psychiatric Association ;'1987 393-4). A principle psychological mechanism would be that of denial. Denial is a defence mechanism in which the individual does not acknowledge the existence or importance of a serious threat, one that would be apparent to others (Ibid.). This is the same kind of mechanism which allows people to cope with the threat of nuclear war (Lotto). We would be unable to function normally without discounting the possibility of a nuclear war, whether or not the possibility is as at all times as remote as we lead ourselves to believe. Similarly we are involuntarily subject to such defence mechanisms in coping with environmental problems. Environmental problems, which are remote either temporally or with respect to our ability to perceive them, lend themselves to this defence. The effects of global warming, for example, are temporally remote and the effects of environmental toxicity are not something that can be readily perceived.

The nature of environmental dangers typically allows individuals to distance themselves from the problem. Individuals can convince themselves that the government, the business sector, or a new technology will deal with the problem (and that there is nothing much they can do anyway). The remoteness of many problems allows individuals to suppose that the problem is not as bad as they initially thought, or that it will fix itself, or that it doesn't matter. This mental retreat allows individuals to do nothing and to avoid paying the mental cost of cognitive dissonance. As environmental hazards "hit closer to home" and begin to intrude upon the individual's reality in concrete ways, it becomes increasingly difficult for individuals to psychologically distance themselves from the problem. Unfortunately, serious deterioration in the environment may occur before individuals act. Thus, the situation may move to a point where we can try to stabilize a bad environment, rather than attempting to maintain or improve a somewhat healthy one.

Summary: An Explanation of Environmental Apathy

IN THIS discussion, we have been concerned with purchase behaviour that has a negative environmental impact or, conversely, changes in purchase behaviour that could have a potentially positive environmental impact. Green products are advocated as alternatives that consumers will prefer because they can have a positive impact on the environment. The popular notion seems to be that we need only make such alternatives available and inform consumers of the benefits to be had by purchasing such products.

But as we have discussed, informing consumers so that that they can deal sufficiently with the range of environmental problems is, in itself, a problematic task. And, when it is recognized that there are costs involved in changing to such alternatives, we must consider the issue of whether consumers are willing to absorb these costs. It seems rational for consumers to absorb the costs, to some extent, for the benefits of a cleaner environment. The logic of collective action, though, provides good reason to suspect that consumers will not contribute in the absence of selective incentives.

According to the logic of collective action, if individuals do make sacrifices for environmental protection, there is some selective incentive – positive or negative – to induce the sacrifice. However, the presence of some selective incentive does not guarantee that individuals will contribute to the collective interest of environmental protection. There may be some opposing incentive, positive or negative, to not contribute. In other words, there may be some benefit to not contributing (e.g. the benefits of using one's automobile) or there may be some negative result to contributing (e.g. higher prices for some green products).

Yet what if significant disincentives arise for contributing to environmental protection? There are two relevant sorts of cases to consider, and these correspond to the nature of selective incentive. Where there are both disincentives and positive selective incentives, it seems reasonable that a simple comparison of the two alternatives would resolve the conflict (e.g. I would rather be "in" with the environmentalist movement than have my aerosol hairspray). However, where disincentives are present at the same time as negative selective incentives,

the individual then faces more than just foregone benefits and must endure some negative result (e.g. scorn of peers, cognitive dissonance, etc.).

In either case, individuals may need to develop coping strategies if they elect not to contribute to the collective ends. For example, if being green results in social acceptance (or alternately, not being green results in social scorn), the individual may make some sort of effort to appear to be green (i.e. be changing their public behaviour). Thus, the individual may gain social acceptance (or avoid scorn), but in private may still not bother to recycle or change his or her private behaviour. If the negative result is something like cognitive dissonance, we seem to have an abundance of strategies for coping by rationalizing our behaviour or, in the extreme, engaging in self-delusion. Thus, even if there are selective incentives to induce environmentally friendly behaviour, and if the number of people choosing to do so is significant, individuals may still remain apathetic an resist the pressures to change.

Conclusions and Recommendations

Green consumerism is extremely complex due to the range of behavioural phenomena involved. However, we can glean from the previous discussion a number of conclusions following from the theories discussed.

First, we propose that individuals who change their behaviour because of environmental concern are doing so in response to some selective incentive, either social, psychological, economic, or a combination of the three. Based on the social incentives we have suggested, we conclude that as the social desirability of environmental behaviour increases, the degree of participation should increase for those kinds of behaviour that are subject to public scrutiny. Additionally, psychological incentives could become more significant as the magnitude of the environmental problems increases and psychological defences are less able to deny that the problem is serious. Economic incentives could also be highly effective in inducing behaviour for certain limited types of low cost, low complexity behaviours.

Secondly, we should expect a greater degree of contribution in green consumer behaviour when costs are low. Environmental concern is becoming more wide spread and environmental problems are

becoming more acute. As the benefits due to social and psychological factors increase in the future, we would expect wide participation in activities such as purchase substitution, where the sacrifice is low. Again, the problem is that the selective incentives are unlikely to be sufficient to induce more effective behaviour, particularly if the public is relatively uninformed.

Thirdly, the level of information complexity involved in some environmental issues limits the effectiveness of consumer action, even if consumers are willing to contribute voluntarily. Regardless of whatever can be done to motivate individuals to contribute, we must ultimately rely on institutionalized technology assessment and regulation due to the complexity of some of the problems posed by environmental degradation. Limits to consumer information capacity are an inevitable obstacle to the self-regulating market mechanism of consumer influence.

Fourthly, psychological defences which individuals employ to insulate themselves from environmental problems can be difficult to overcome. At a low level of awareness, consumers are liable to be content to deal with cognitive dissonance by distancing themselves from the environmental problems or making some low cost (token) green purchases. It is important to increase public awareness of the environmental problems on which consumers are able to have a significant effect. However, if the consumer is overwhelmed by the problem and feels powerless to change the situation, denial will occur (with the accompanying lack of change in behaviour).

Finally, in cases where the problem is of low complexity and the cost to the consumer is low, consumer pressure can be an immediate, effective means of environmental protection. This type of awareness effort has been successful in dealing with the slaughter of dolphins by the tuna industry and some of the most common environmental problems. However, when the problem is complex, and the cost to the consumer high, consumers just do not have sufficient motive to contribute. Global warming will never be addressed in a significant way if we rely on individuals to voluntarily give up their cars or refrigerators. A summary of this cost/complexity trade-off can be found in Table One. Please note that in three of the four quadrants in the chart non-institutionalized selective incentives will not work (as indicated by the grey area). Thus, in many cases green consumerism is not an applicable way to achieve ecological goals.

There is an area of promise for green consumerism which is indicated in Table One. With regulation, even complex issues can be moved from high cost to the low cost quadrants. The example we have used is the nutritional information included on a box of cereal. The information is still somewhat complex, but the cost of its acquisition has been reduced due to the fact that the information is readily available and people reading it have low opportunity cost with regard to the time spent acquiring the knowledge. If a consumer is one of those who think that "Good Morning" is an oxymoron, then that consumer is probably only half conscious when eating breakfast. If that consumer were not reading the cereal box, he or she would be staring off into space. Eventually the consumer may learn something about cereal, and nutrition, but he or she may have not opted out of other useful activities to do so.

TABLE 1: Cost and Complexity in the Green Consumer Decision

Complexity	Low Cost	High Cost
High	**Selective Incentives** are not sufficient to change behaviour by the desired degree. **Examples:** Few; information problems can be moved to this quadrant from high cost and high complexity. **Solution:** Regulate for full disclosure of useful information (e.g. listing of recommended daily allowances on cereal boxes).	**Selective Incentives** are not sufficient to change behaviour by the desired degree. **Examples:** Technical matters, e.g. minimal effluent standards. **Solution:** Regulate and set minimum standards of acceptable behaviour; alter costs/benefits via fines for unacceptable behaviour.
Low	**Selective Incentives** are sufficient to change behaviour by the desired degree. **Examples:** Can, bottle, and newsprint recycling. **Solution:** Voluntary Recycling with social pressure to prompt the desired behaviour.	**Selective Incentives** are not sufficient to change behaviour by the desired degree. **Examples:** Non-auto commuting. **Solution:** Regulate driving days or times; alter costs/benefits via subsidy to mass transit and neglect of congested highways.

Thus, we may be able to change the cost to the individual of acquiring knowledge about environmental issues by either: (1) creating regulations which make the producer provide useful information or; (2) engineering ways for such information to be transmitted when opportunity costs to the individual are low. An example of the former case might be where a manufacturer is required to label packaging so that it can be more easily recycled (e.g. labelling the different types of plastics used in packaging in order to facilitate easy sorteing). An example of the latter might be including environmental messages within TV programs (this could be voluntary, a Television Code requirement, or even a government regulation). The opportunity cost, with regard to the time spent acquiring the knowledge, is low – since the viewer would be watching television in any case, and (assuming the knowledge value of the program is low to begin with) the environmental message would probably not be crowding any other educational messages.

While education may improve the consumers' environmental performance in certain cases, regulation will likely be required to make this possible. In high cost cases, regulation of some sort is practically a requirement. Additionally, many problems are best dealt with by government or other organizations in order to create selective incentives. If we are to save our environment, individual purchasing behaviour must be changed, but it seems that in many cases we cannot expect voluntary individual contribution to alter significantly consumer habits that are harmful for the environment. We must therefore fall back on government regulation to create selective incentives and to oversee the more complex environmental issues.

Notes

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1 According to Oldland, as recently as 1989, only 27 percent of Canadians even claimed that they were "concerned activists or enthusiasts" with regard to the environment.

2 This is roughly the rationale for government regulation of such interests, e.g. see Harden, Garrett. "The Tragedy of the Commons," *Science*, Dec. 13, 1968: 1243-1248.

3 Institutionalization of environmentalist goals does occur. However, we are concerned with the effectiveness of voluntary consumer contribution to collective interests independent of institutionalized collective action or institutionalized market 'interference'.

[4] Sell and Wilson report rising contributions when group members have information on the individual contributions of other group members. Also, see Russell Harden's *Collective Action* (Chapter 13 broadly addresses the issue of socially encouraged behaviour).

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