

Utility and Morality

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I. INTRODUCTION

Economics and sociology finally show signs of convergence as social sciences, mainly due to efforts by economists to transcend the borderlines set by neoclassical economics. Examples of pioneering efforts of this kind are: KENNETH ARROW's *Social Choice and Individual Values* [1951], ANTHONY DOWNS' *An Economic Theory of Democracy* [1957], JAMES BUCHANAN and GORDON TULLOCK's *The Calculus of Consent* [1962], MANCUR OLSON's *The Logic of Collective Action* [1965], ALBERT O. HIRSCHMAN's *Exit, Voice and Loyalty* [1970]. This list is, naturally, very incomplete. On the side of sociologists who help(ed) bridge the gap one could mention COLEMAN, HOMANS, ALBERT, BOUDON, OPP and the Dutch group 'Explanatory Sociology'. Despite all these efforts, a major stumbling block exists: the fact that modern economics is founded on 'choice and utility', while modern sociology is founded on 'moral obligation' (the absence of choice and utility considerations).

This stumbling block is real rather than imaginary. To the degree that economists enter new terrain (of other social sciences and of non-western societies), they will encounter the fact that their science is ill-equipped to throw much light on institutional and social-structural limits of choice. And to the degree that sociologists attempt to explain the workings of institutions they discover that they cannot get around the problem that choice is not eliminated by institutions and structural constraints.

The structure of this paper is as follows. First, the problem will be delineated in some more detail. Then the tools for a possible solution to the problem will be developed in the form of a model for rational, repetitive choice. After this, the tools will be applied to the problem, and finally

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some institutional and social-structural conditions for various kinds of choice behavior will be discussed.

II. THE PROBLEM

The classical sociological view on behavior is that through an elaborate process of socialization, the individual learns to *want* to do what he *has* to do. There are moral rules (norms) and they are 'internalized' by the individual so that he feels *obliged* to follow the rules. There is no weighing of costs and benefits regarding the moral course of action; in other words, conformity to moral rules is not a matter of *expedient* choice. This, however, is not the end of the story. Moral rules are, according to sociological orthodoxy, *always* stabilized by 'sanctions', *i.e.* by costs for deviance and benefits for conformity. The absence of sanctions is a telltale sign that a rule is not a moral rule. How can sanctions have any effect on conformity with moral rules if consideration of costs and benefits of this conformity is said to be absent? We have what can be called *the sociologist's dilemma*: either he drops the assumption that cost-benefit considerations are absent from conformity to moral rules or he drops the assumption that moral rules are always stabilized by sanctions. In the first case, he would make conformity to moral rules a matter of expedient choice, negating what is said to be *the* central sociological insight. In the second case, he would negate the empirical foundation of sociology, forcing him back to a purely idealistic position. Clearly both horns of the dilemma are unacceptable. To my knowledge, this dilemma has never been overcome, a fact that may account for the sociologist's failure to deal with the problem of choice adequately.

Economists are in a better position. By and large, they can sidestep the whole issue by using a standard technique to sidestep issues: the hypothetical introduction of costs. An economist can assume for every rule he wishes that the rule imposes infinite costs on deviant alternatives. For example, a change of property rights effectively restructures the alternatives for all individuals involved. To what degree this restructuring of alternatives is due to coercion or to changed moral obligations (if any) is immaterial. If effective, either one can be assumed to raise the costs of deviant alternatives sufficiently to eliminate them.

For many purposes in economics, it is quite reasonable to sidestep the issue of expediency versus moral obligation. But the more economists

venture outside the neo-classical boundaries of this science, the less easy and the less fruitful it is to sidestep this issue. The first step of recognition is that many moral rules make economic sense. As POSNER [1977, pp. 185f.] puts it: 'Honesty, trustworthiness, and love reduce the costs of transactions; avoidance of coercion promotes the voluntary exchange of goods; neighborliness reduces the problem of external costs ... selflessness reduces the free-rider problems; charity reduces the demand for administratively costly public welfare programs; carefulness reduces social waste.' This does not mean that all moral rules aid economic efficiency, nor does it mean that even some rules promote efficiency all the time. 'Honor among thieves', trustworthiness among members of a cartel, selflessness among members of a guerilla organization aimed at destroying the foundation of capitalism, religious zealots fighting against trade with unbelievers, patriots sacrificing income to boycott foreign products, members of different castes refusing cooperation at substantial economic losses to themselves, all these examples involve conformity to moral rules and yet it cannot be said that they are *prima facie* conducive to economic efficiency. While these examples are less interesting to the economists solely concerned with market problems in Western societies, the recognition that some moral rules are economically useful even in Western societies may bring the issue of expediency versus moral obligation closer to home. For example, OLIVER WILLIAMSON [1975] makes 'opportunism' an integral part of his transaction cost approach to economic organization. He states: 'although opportunism is a variety of self-interest seeking assumption, and thus akin to the prevailing behavioral assumption employed throughout microeconomics, the consequences of opportunism are incompletely developed in conventional economic models of firms and markets' [p. 7]. Why is this so (assuming WILLIAMSON is right)? Why is expedient choice not *by definition* opportunistic? For WILLIAMSON it is the use of 'self-disbelieved threats and promises regarding future conduct' in the expectation that individual advantage will thereby be realized that distinguishes opportunism from other kinds of behavior. What keeps (some) people from engaging in opportunism? Clearly, it does not suffice to point out that refraining from opportunism is good for economic efficiency. This efficiency is a public good inviting free riders, as WILLIAMSON observes himself [p. 27].

BUCHANAN [1977] also puts the question of conformity to moral rule into a public goods context. He argues that the individual chooses be-

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tween expediency ('private maxim') and moral rule on the basis of assigning subjective probabilities to preferred states. In small groups the assignment results in a larger expected value for following the moral rule while in a large group the assignment leads to a positive balance for expediency. For reasons to be presented later, I agree with BUCHANAN on the point that size affects conformity to moral rule (under certain circumstances), but I do not agree on the construction. BUCHANAN makes the choice between moral rule and expediency itself a matter of expediency: in a small group, it is expedient to follow moral rule because you thereby influence the behavior of others in a desired direction; in a large group, there is no such influence and therefore it is not expedient to follow the moral rule. In effect, says BUCHANAN, there is no such thing as moral obligation; there are only moral rules and they can be adopted or not adopted as expediency directs.

Let us assume, for the sake of the argument, that BUCHANAN is right. How, then, do we explain differences in small groups? How is it possible that in some small groups we find opportunism and in others not? Why can some people be put to shame others not? Are there conditions under which it would not be wise to assume that strategic behavior is banned from households? Is it rational for any public authority to invest in moral education? Is it rational for parents to do so? I leave these questions open to ponder, for myself and others. For the time being I don't believe BUCHANAN has overcome the sociologist's dilemma by letting moral obligation vanish as an empirical phenomenon.

In sum, there is every reason to believe that the issue of moral obligation versus expediency is also relevant for economists and probably becoming more important as economists venture beyond the boundaries of neoclassical microeconomics. If this is so then economists too will be confronted with the sociologist's dilemma. In the next section, the tools for a possible solution to this dilemma will be presented in terms of a model of rational, repetitive choice.

III. TOOLS FOR A POSSIBLE SOLUTION: A MODEL OF RATIONAL, REPETITIVE CHOICE

The choice model to be presented here has been developed over the last years [LINDENBERG, 1980 and 1981] for repetitive choice situations. It was

built on the basis of earlier suggestions by SIEGEL *et al.* [1964] and by OFSHE and OFSHE [1970]. It seemed that for the social sciences in general and for sociology in particular a choice model was missing that took account of the fact that many choice situations are repetitive and are expected to be repetitive by the actor. For example, a student signs up for a course that meets weekly. He knows that each week he has to make a decision whether or not to attend. A worker has to decide daily whether or not he will go to work or call in sick. A manager may be routinely confronted with complaints by employees; most citizens are regularly asked to vote *etc.* There is one restriction that qualifies the repetitiveness: the reward structure of the repeated choice situations is stable enough that the same alternative has the highest expected utility throughout the series of repetition (similar to certain supergames in game theory). Thus there is a 'pure' strategy that leads to the same choice over repeated choice situations. The reason why we need a repetitive choice model is that there is ample evidence that people mostly do not choose the pure strategy.

The basic idea of the model is that there are two 'utility baskets', *i.e.* two baskets of goods (or bads) each of which has a utility index number. The *main basket* pertains to costs and benefits per alternative, conforming to the 'normal' utility theory. The *side basket* pertains to utility aspects connected with the distribution of choices over the alternatives. Specifically, the side basket represents a summary of all utility arguments that pull the actor away from the pure strategy. For example, imagine you have two levers before you and you know that pressing the right lever will yield you \$100 with a probability of 0.7, while pressing the left lever will yield you the same amount with a probability of 0.4. You have a taste for money and may choose fifty times in a row which lever to press. Money is now in the main basket and, of course, the pure strategy is to press the right lever every time. Yet you also have a taste for variety, *i.e.* you get bored pressing the same lever all the time. Your taste for variety is in the side basket, tugging at your pure strategy and probably getting you to press the right lever only about 75 percent of the time.

It is important to remember that the distinction between main and side basket does not correspond to the alternatives but to 'pure strategy' versus 'deviation from the pure strategy'. Thus if the side basket was totally successful in dictating the choice, the pure strategy would not be reversed, rather the choices would be evenly distributed over the alternatives. This is the reason why the terms 'main' and 'side' were chosen

for the baskets. The main basket dictates the general course of action while the side basket only distracts from this course (rather than reverse it). The model is also called 'discrimination' model because it can be seen as pitting two forces against each other: those towards total discrimination between the alternatives (pure strategy) and those towards total non-discrimination.

For our purposes, it is sufficient to present only the two-alternative version of the formal model. The model has two main components: the expected utility of discrimination, $E(U_d)$ and the (certain) disutility of discrimination, DU_d . Let $E(U_s)$ stand for the expected utility of a strategy (a probability vector $[P_1, P_2]$), then the maximand is:

$$E(U_s) = E(U_d) - DU_d \tag{1}$$

How are these components defined?

$$E(U_d) = ag_1P_1 + ag_2(1 - P_1) = a(g_1 - g_2)P_1 + ag_2 \tag{2}$$

where:

- a = marginal utility of the global reward (basket) g ;
- g_i = the sum of rewards and costs of the i th alternative, each weighted by the appropriate event probability π ; ($i = 1, 2$);
- P_i = stable state probability of choosing the i th alternative ($i = 1, 2$);

$$DU_d = (P_1 - 0.5)^2 \quad \text{with } P_1 \geq P_2 \tag{3}$$

The disutility expression (equation 3) is based on the idea of a *global* disutility of discrimination in which all possible 'motives' that turn against the pure strategy are aggregated [see LINDENBERG, 1980, pp. 298 ff.]. This idea is translated into the following: let x be a point such that $P_1 > x$ and interpret x as a reference point for an ideally *maximal* deviation from non-discrimination, then $P_1 - x$ is proportional to the disutility corresponding to this reference point. For example, for a situation in which strategies have distributional effects on self and others, equality may be connected with $x = 0.5$, equity with $x = 0.7$ and charity with $x = 0.9$. Rather than to list these (and other) motives as separate utility arguments, which would lead to arbitrary *ad hoc* lists and problems of commensurable measurement, one can aggregate over all the 'motives' (*i.e.* reference points). Individuals are likely to have an idiosyncratic scatter of

'motives' and with aggregate data, a *global* disutility (basket) is more likely to capture the joint effect of these scatters. Mathematically, the aggregation is simple: let $P_1 \geq P_2$ and $P_1 + P_2 = 1$, then

$$DU_d = \int_{0.5}^{P_1} (P_1 - x) dx + \int_{P_2}^{0.5} (x - P_2) dx = (P_1 - 0.5)^2 \quad (4)$$

Thus, equation (1) turns into:

$$E(U_s) = a(g_1 - g_2)P_1 + ag_2 - (P_1 - 0.5)^2 \quad (5)$$

The individual is maximizing utility. It will therefore choose a strategy (P_1, P_2) that will maximize $E(U_s)$, the expected utility of the strategy. This point is uniquely determined by the following equation:

$$P_1 = \frac{a}{2}(g_1 - g_2) + 0.5 \quad (6)$$

Equation (6) is the prediction if a is known or estimated. To the degree that a (the marginal utility of the global reward or main basket) can be assumed to be stable from one choice situation to the next, it can be estimated on the basis of P_1 in a known situation by solving equation (6) for a . This completes the presentation of the formal model¹.

Note that there is no separate weight assigned to the disutility term. Every change in the weight of the disutility expresses itself in a change of the marginal utility a . A change of weight of the main basket is similarly expressed. Thus a is the crucial parameter. The higher it gets, the smaller the influence of the side basket; the lower it gets, the more pronounced the influence of the side basket. Due to this parameter, there is no problem of commensurable measurement of the utility arguments (thus a also adapts to the scale of the global reward, since DU_d is fixed

1. In case there is a good reason to assume a utility function for reward r that is not a straight line and if that function can be specified, then equation 6 changes into

$$P_1 = k[\pi_1 U(r_1) - \pi_2 U(r_2)] + 0.5 \quad (6')$$

where k is a scale constant, $U(r_i)$ is the utility of the sum of rewards and costs of the i th alternative, and all other symbols are as for equation 2. The estimating equation for k can be obtained by solving equation 6' for k . This note, however, is only meant to give the reader a fuller understanding of the model. It finds no application in the remainder of this paper.

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in scale; its absolute value is meaningless). Turn back to our example above. In terms of the model, the effect of boredom with pressing the same lever is a lowering of the marginal utility of money, resulting in a strategy that deviates considerably from the pure strategy.

Empirically, the model has done very well so far. In a confrontation with more than twenty sets of available experimental data, the model's predictions were very acceptable in all cases (the highest average absolute discrepancy between predicted and observed choice probabilities being 0.036 for one data set, with an average of about 0.02 for all data sets). Directly competing models, the CAMILLERI-BERGER model, and HOMANS' 'value-quantity' model were shown to be inferior to the discrimination model [see LINDENBERG, 1980 and 1981].

IV. MORALITY, UTILITY AND CHOICE

How can the discrimination model help us to overcome the sociologist's dilemma? Let me begin by offering a very simple definition of a moral rule for actor A:

A rule is considered to be a moral rule for A if

- (a) the rule contains a command or demand (an *ought*) regarding a course of action in a situation specified by the rule; and if
- (b) A feels obliged to follow the rule once he has identified a situation as the one being specified by the rule.

For example: 'When a friend is asking for your help you ought to help him.' Feeling 'obliged' to follow the rule means two things: first, A derives utility from conforming and disutility from not conforming to the rule; second, A sees the situation as a choice situation between conformity and non-conformity to the rule, once he has identified it as the one being specified by the rule. This last point is very important because it is the element that causes repetitiveness of the choice situation. Imagine that A in one situation when his friend asks for help tries to decide whether his friend has used the right grammar in his request and in another situation he tries to decide whether his friend has actually turned thinner since he last saw him *etc.*, then the rule is not a moral rule for A since the rule does not impose the choice of conformity or non-conformity.

The specification of the situation contains explicitly or implicitly a

range of sacrifice (if any) for A in following the rule. If the sacrifice is higher than the upper (fuzzy) bound then the rule does not apply. For example, if the friend comes to A asking a loan of a small percentage of A's monthly income the rule will probably apply even in our day and age. But if he asks for ninety percent of A's monthly income, the rule does not apply. Thus, one aspect of expediency is already removed from the moral decision and located in the preconditions (the question whether the rule applies).

Since the choice situation is structured in terms of conformity and non-conformity and since the relevant utility aspects are connected with conformity and non-conformity, we can identify the main basket: it only contains the good 'conformity' (its presence or absence). Since the benefit and the cost are certain, no subjective probabilities have to be estimated. We can arbitrarily assign numbers to the outcomes connected with the main basket, as long as we stick to the same numbers across situations and as long as a higher number is assigned to conformity than to non-conformity. Let us say that $g_1 = 1$ (the utility connected with conformity) and that $g_2 = -1$ (the disutility connected to non-conformity). A different set of numbers would only change the scale of a . The prediction equation becomes:

$$P_1 = \frac{a}{2} [1 - (-1)] + 0.5 = a + 0.5 \quad (7)$$

The crucial parameter is, as before, a .

I now maintain that all other cost/benefit aspects operate on the marginal utility of conformity (a) rather than entering directly into the calculation of g . The side basket contains all utility aspects that detract from the pure strategy of conformity such as the opportunity costs of conformity, personal animosity and a wish to be free of obliging rules. If these aspects gain in weight, a will be lowered. Whether this has any behavioral effect depends on whether a is lowered below 0.5. Sanctions, the sociologist's term for rewards for conformity and punishments for non-conformity, pull a in the opposite direction (towards the pure strategy). If they increase, a increases and *thereby* the weight of the side basket will decrease. It is important to note, that sanctions do not enter into the utility calculus of the main basket; they are not added to the utility of conformity or the disutility of non-conformity. *In this way, expediency*

does not enter into the decision-making process, although the process is sensitive to changes in sanctions and other utility aspects (such as opportunity costs). The sociologist's dilemma seems to me to be overcome. An individual can be a rational, utility maximizing, choosing animal, capable of moral obligation and yet sensitive to the non-moral reward structure at the same time.

The solution is more than a verbal trick since it may be false. For example, it maintains that when moral obligation is operative, it cannot happen that the individual conforms less than fifty percent of the time. It should also be true that where conformity has also an instrumental goal (such as participation in a protest march or voting), the person acting on the basis of moral obligation should be much less sensitive to changes in the subjective success probability (regarding the instrumental goal) than a person acting on the basis of expediency. This is so because the success probability enters the utility calculus directly in the latter case, while it can influence the decision only indirectly (via a) in the former. The same difference of effects should hold for sanctions and opportunity costs.

1. Two effects of punishment

The difference between morality and expediency as modeled can explain why punishment often decreases, but sometimes also increases the punished behavior. When choice is *expedient*, punishment adds to the costs of the punished alternative and its frequency will decline.

When choice is *moral* and punishment is directed *against the deviant alternative*, its frequency will also decline. However, when choice is *moral* and punishment is directed *against conformity* (i. e. punishment from outside the group), its interpretation among the punished is likely to be in terms of clashing moralities. Then punishment (from the 'outside') becomes a signal for the preservation of the own morality.

The marginal utility of conformity increases thereby and the punished behavior may *increase* although the punishment increases its opportunity costs. This happens at times with government action against terrorist groups, or with economic and political sanctions against another country. Religion, ideology and nationalism, the prime vehicles for the interpretation of rewards and costs in moral terms, will thus have a strong influence on the effect of punishment from the outside and for the marginal utility of moral behavior in general.

2. Reversal of baskets

Elsewhere [LINDENBERG, 1977], I argued that when a person reaches a fifty-fifty chance of choosing one or the other alternative, he will attempt to restructure the choice situation. I would like to translate this in this context into the following hypothesis: in repetitive choice situations, the closer an individual gets to an equal distribution of choice probabilities over the alternatives and the longer he has stayed with such a distribution, the more likely that he will change the baskets. In our case, this means that he feels no longer obliged to structure the situation in terms of conformity and non-conformity. Expediency returns, and sanctions and opportunity costs may reappear in the main basket. This does not mean that the moral rule is completely gone. It may find its way into the side basket. The rule still exists and the individual may still derive some utility from following it and some disutility from not following it, but these utility aspects are now reduced to having only an indirect effect on A's decision via their influence on the marginal utility of the main basket. These 'dormant' moral rules may thus still detract from the pure strategy of maximizing, say, a 'selfish' utility basket. For example, a crook may 'spare' some of his possible victims.

OFSHE and OFSHE [1970] conducted an interesting experiment in this respect. Subjects were to form a coalition by choosing one of two persons. The coalition received a monetary reward, while the person left out received nothing. There were two experiments, identical except for the instruction. In both cases, the subjects received a higher reward by choosing one particular coalition partner than by choosing the other. In both cases the subjects were asked to make as much money as they can. But in one condition, the instruction included a number of reminders that if a person is left out continually, he will have earned nothing by the end of the session and if no one will help a player he will do very poorly. Subjects in this condition were also told that they would meet the other persons at the end of the session to discuss things. The results were quite dramatic: for male subjects the choice probabilities for the better rewarded coalition was 0.85 without the reminder and 0.67 with the reminder. For female subjects the results were even more pronounced: 0.94 and 0.63, respectively.

In terms of the model, it is clear that the weight of the 'selfish' main basket (the marginal utility of money) could be lowered by increasing the

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weight of the side basket, in these experiments. But it is interesting to note that in a replication of the experiment in which it was not mentioned that the partners would meet afterwards to discuss things, the effect of the reminders quickly vanished and the subjects returned to a high level of 'selfish' behavior [see OFSHE and OFSHE, 1970, pp. 55ff.]. Mobilization of 'dormant' moral obligations seems to be most effective when face-to-face interaction is anticipated and thus accounting for one's behavior is anticipated. This result is supported by research on helping behavior. On the other hand, if this mobilization was persistent enough (and even accompanied by sanctions), the moral obligation could end up back in the main basket. 'Moralization' and 'demoralization' seem to be processes that are in principle reversible, given the appropriate institutional and social-structural conditions.

V. SOME INSTITUTIONAL AND SOCIAL-STRUCTURAL CONDITIONS CONCERNING MORAL BEHAVIOR

1. The government and moral affairs

As mentioned earlier, quoting POSNER, many moral rules make eminent economic sense. Honesty and trustworthiness reduce transaction costs, avoidance of coercion promotes the voluntary exchange of goods, *etc.* To the degree that sanctioning each other when non-conformity occurs is itself a moral rule, moral behavior is self-enforcing and the government can stay out of it. This, however, is only partially true. First of all, most government activities have some effect on the marginal utility of moral behavior. Secondly, lowering of this marginal utility through other sources, may only be counteracted by a central authority. Thirdly, some moral rules may lower government efficiency. Let me briefly discuss these points in order.

First, moral behavior such as honesty, acceptance of authority, mutual help and mutual sanctioning, avoidance of coercion, save governments a great deal of money. Administration and enforcement costs are much lower and fewer public welfare programs are necessary. Thus the government should be seriously interested in keeping the marginal utility of certain kinds of moral behavior high. Prominent sociologists (for example DURKHEIM and PARSONS) have seen the state as preservers of morality. This function, however, no matter how sensible, is very difficult to fulfill.

Most state activities have an influence on the opportunity costs for moral behavior. For example, an increase in taxes raises the opportunity costs for tax-paying as a moral behavior. The result may be a reduction of fiscal income and an increase in enforcement costs, as more people cross the morality/expediency border. Subsidies put a premium on dishonest behavior, no matter how noble their purpose; they thereby also raise the opportunity costs for moral behavior, lowering the marginal utility of such behavior. It seems that the more the state gets involved in regulating societal affairs, the more likely that it will decrease the marginal utility for moral behavior for various groups, quite contrary to the intention of the government activity.

Second, since the state is not the only source of change in the opportunity costs for moral behavior, it may have to intervene according to its own interest in moral behavior. For example, deteriorating economic circumstances may put pressure on individuals and firms to deviate from moral rules more frequently than is 'normal', creating uncertainties that further the economic downturn. In these times, the government is likely to revert to explicit moral appeals. Since the deterioration of moral behavior affects many organizations, moral appeals by the government are likely to be widely supported by very diverse organizations united by a common interest in reducing governance costs. Due to 'dormant' moral obligations, the united appeals are likely to increase the weight of the side baskets, increasing the incidence of moral behavior, and eventually moral obligation may reappear in the main basket on a large scale. Due to the source and intention of this moralization, it is to be expected that its political coloring is more to the right than the left. However, due to the effects discussed in the first point, a modern state has so many side-effects on opportunity costs for moral behavior even with large scale moral appeals that periods of effective moralization will not last very long.

Third, there may be moral rules that turn against government efficiency. These too will involve the government in moral affairs. For example, there may be moral rules that create rival loyalties, such as ethnic, familial, church and 'free conscience' loyalties. Every government will have to deal with these possible rivals. Besides legal means which involve possible coercion, each government will see to it that there is an elaborate institutional complex with the sole function of increasing and/or maintaining the marginal utility of loyalty to the state in specified circumstances. This ranges from influencing school books on history and civil affairs to spon-

soring national heroes to flag and national anthem. But here too we cannot expect constancy of moral behavior, due to the morally destabilizing effects of state activity discussed in the first point (and probably for others reasons as well). The morality/expediency border will be frequently crossed in either direction with regard to loyalty to the state.

2. Moralization and demoralization

As the brief comments in the last paragraph suggest, the picture of a relatively stable institutional framework within which roles are played (sociologists) or expedient choices are made (economists) is probably wrong. The morality/expediency border is permeable from both sides and the discrimination model explains how this is behaviorally possible. Yet, there are also some secular trends with regard to moralization and demoralization.

Demoralization trends

As argued elsewhere [LINDENBERG, 1979] in some detail, moral rules are likely to come into being as a response to severe structural Prisoner's Dilemmas created by a high level of risk sharing. The welfare of each individual depends heavily on the number of others who cooperate in risk sharing, but each individual receives a higher utility from not cooperating. When the temptation not to cooperate is not too great, moral rules will develop that remove the individual utility calculation from expediency and thus put cooperation into the main basket.

What happens if the structural Prisoner's Dilemma becomes less severe? The individual's welfare becomes less dependent on the proportion of cooperating others. Thus, the sanctions are reduced, the marginal utility for conformity declines and expediency choices increase. But the moral rule does not vanish since there is still a structural Prisoner's Dilemma. It will be adjusted to apply only to situations involving a smaller personal sacrifice for cooperation. This process of 'downtuning' the moral rule can continue until it becomes only 'dormant', to be mobilized in acute situations of severe risk sharing by moving from the side basket to the main basket.

It can be argued that changes in the legal structure of Western societies creating better legal protection for everyone and changes in the social security through government programs and (more importantly) through insurance companies have created a secular trend of risk reduction and

thereby a secular trend of demoralization. Many moral rules have become more and more superfluous. This interpretation is meant as a (more viable) alternative to the standard sociological view (introduced by DURKHEIM and SIMMEL) that the division of labor has demoralized Western societies.

There are other reasons for such a secular trend besides reduction in risk sharing. Both have to do with increasing material welfare. First, it has been shown [LINDENBERG, 1982] that (under reasonable model assumptions) increases in material welfare will lead to very small and very large sharing groups. 'Sharing groups' are groups of individuals who jointly purchase (or produce) a good and share its use. These kinds of groups create externalities for their members in the form of structural Prisoner's Dilemmas. In very large and anonymous sharing groups (such as mutual insurance companies), individual members are not in contact with each other and no moral rules are developed to overcome the Prisoner's Dilemma. Very small sharing groups (say, one or two people) create too little externalities and/or too fleeting structural relationships for moral rules to develop and be sustained. Medium sized sharing groups in which moral rules are developed and/or sustained vanish with increasing welfare. As increasing material welfare has been a secular trend in Western societies, it contributed via changes in sharing groups to the secular trend of demoralization of Western societies.

Second, increasing material welfare increases opportunity costs for many forms of moral behavior. For example, as new forms of leisure activity come into reach of many, the relative costs of spending this leisure time caring for others increases. Parents hire babysitters, children send their parents into old age homes, friends recommend psychiatrists to their friends, *etc.* The morality of helping turns into the expediency of helping. Another example is church attendance. As material welfare increases, other, very attractive activities come into reach on Sundays and the relative costs for church attendance increase. And the role of the church in risk sharing has already declined for other reasons (see above). The result is increasing secularization regarding the established churches.

Moralization trends

Maybe the most important insight by the sociologist DURKHEIM was that moral rules, embedded in an interrelated structure of (circular) justifi-

cation, create 'meaning' or higher order goals for life that help the individual to order his preferences where they are not ordered and to identify states of satisfaction where these states are not clear. For example, do I prefer to work further on my career or do I prefer spending more time with my family? Do I prefer to finish this paper or do I prefer to hike through the hills? Questions like these may not be difficult to answer because the information costs are high or because they convey equal utility and I am torn like Buridan's ass. They may be difficult because I am genuinely uncertain how to evaluate these alternatives. Moral rules may have prevented these questions to begin with, because they may have justified in each case only one alternative. With regard to satisfaction, the following example will clarify what DURKHEIM meant. People may know that they prefer being rich to being poor but when should they be satisfied with having realized their higher preference? Or when should somebody be satisfied with being a good carpenter (if that is what he wants to be)? Moral rules concerning (wasteful) consumption and moral rules concerning workmanship would provide the answer (or not let the questions arise) [see also LINDENBERG, 1977a].

With a secular trend of demoralization, problems with important decisions in the face of preference uncertainty increase. According to DURKHEIM, the effect is a higher suicide rate. While this can indeed be demonstrated, I think something else is going on as well: an increased search for higher order goals or, as I would call it, a higher demand for preference ordering goods. These goods do not have to be moral rules, but they are likely to be moral rules because in this fashion dormant obligations can be activated. Moral entrepreneurs appear to provide the goods. They organize groups around Schelling-points (salient points to which people in search for a common ground converge without communication), religious and secular. Meditation, environment, nuclear threat, women's emancipation: these are some Schelling points today. In each case, the groups will only serve as a preference ordering good if they provide not just an issue but also an interrelated structure of moral rules and their (circular) justification linking up to dormant moral obligations. Because these groups create rival loyalties to the state they are 'left' on the political spectrum, as opposed to the moralization induced by state and established organizations in economically bad times. Both kinds make use of dormant moral obligations in the same society but in different ways.

If this analysis is right then even the secular trend of demoralization

creates a counterforce. Even here the border between expediency and morality seems permeable.

VI. SUMMARY AND CONCLUSION

As economics and sociology converge, a major stumbling block emerges: the fact that economics is based on 'expedient choice' and sociology is based on 'moral obligation'. Since sociologists also assume that sanctions have an effect on moral behavior they are in a dilemma: either admit only *expedient choice* or *negate the empirical foundation of sociology* (in favor of an idealistic position where sanctions play no role for morality). As economists venture beyond the confines of neo-classical micro-economics into the areas of other social sciences, they too are confronted with the phenomenon 'moral obligation' without being able to incorporate it into a theory of efficient choice. Eventually the economists will be confronted with a similar dilemma.

The purpose of this paper was to suggest how the dilemma could be overcome. This suggestion was done with the aid of a model of rational, repetitive choice. With this model, it can be shown that moral choice can be sensitive to sanctions without being expedient. It can also be shown how expedient choice can be influenced by 'dormant' moral obligations. The solution is not semantic because there are empirical conditions that can prove it wrong. The upshot is thus that while moral and expedient choice are different, the door between them is open and social processes can make individuals go back and forth. Common to both kinds of choice is the assumption that man is a utility maximizing animal.

The rest of the paper sketches various lines of argument that show how certain social processes affect the change from moral to expedient choice and *vice-versa*.

In conclusion one can say that first there is no reason for sociology and economics to operate with different models of man. Second, the assumption of a relatively stable institutional framework within which roles are played (sociology) or expedient choices are made (economics) is probably wrong. Third, it would be beneficial for economics to turn more attention to moral obligations, their institutional and social-structural conditions, and their relation to expedient choice.

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REFERENCES

- ARROW, K.J.: *Social Choice and Individual Values*, New Haven and London: Yale University Press, 1951.
- BUCHANAN, J.M.: *Freedom in Constitutional Contract*, College Station and London: Texas A&M University Press, 1977.
- BUCHANAN, J.M. and TULLOCK, G.: *The Calculus of Consent: Logical Foundations of Constitutional Democracy*, Ann Arbor: University of Michigan Press, 1962.
- DOWNS, A.: *An Economic Theory of Democracy*, New York: Harper and Row, 1957.
- HIRSCHMAN, A.O.: *Exit, Voice, and Loyalty*, Cambridge, Mass. and London: Harvard University Press, 1970.
- LINDENBERG, S.: *Externalities and behavior*, Paper presented at the conference Institution, Individuals, and Collective Action, Utrecht, 1977.
- LINDENBERG, S.: 'The direction of ordering and its relation to social phenomena', *Zeitschrift für Soziologie*, Vol. 6 (1977a), pp. 203-221.
- LINDENBERG, S.: *Solidaritätsnormen und soziale Struktur*, Paper presented at the annual meeting of the Section for Theoretical Sociology of the German Sociological Society, Bad Homburg, 1979.
- LINDENBERG, S.: 'Marginal utility and restraints on gain maximization: the discrimination model of rational, repetitive choice', *Journal of Mathematical Sociology*, Vol. 7 (1980) 2, pp. 289-316.
- LINDENBERG, S.: 'Rational, repetitive choice: the discrimination model versus the Camilleri-Berger model', *Social Psychology Quarterly (Sociometry)*, Vol. 44 (1981), pp. 312-330.
- LINDENBERG, S.: 'Sharing groups: theory and suggested applications', *Journal of Mathematical Sociology*, Vol. 9 (1982), pp. 33-62.
- OFSHE, L. and OFSHE, R.: *Utility and Choice in Social Interaction*, Englewood Cliffs, N.J.: Prentice Hall, 1970.
- OLSON, M.: *The Logic of Collective Action*, New York: Schocken Books, 1965.
- POSNER, R.: *Economic Analysis of Law*, Boston and Toronto: Little Brown, 1977.
- SIEGEL, S.; SIEGEL, A.E. and ANDREWS, J.M.: *Choice, Strategy, and Utility*, New York: McGraw-Hill, 1964.
- WILLIAMSON, O.E.: *Markets and Hierarchies: Analysis and Antitrust Implications*, New York: The Free Press, 1975.

SUMMARY

Expediency and moral obligation are two very different bases of action. Economists have tended to concentrate on the former and sociologists on the latter. As sociologists and economists venture outside their respective traditional boundaries, they are confronted with bases of action their theoretical tools are ill equipped to handle. In this paper, it is shown that both expediency and moral obligation can be explained within a utility framework if one uses the recently developed discrimination model of rational, repetitive choice. In addition, it is shown that in all likelihood the action

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basis changes back and forth over time making it imperative for social scientists to integrate both into one theory of action that is powerful enough to serve all social sciences (utility theory).

ZUSAMMENFASSUNG

Zweckrationalität und moralische Verpflichtung sind zwei sehr verschiedene Handlungsgrundlagen. Ökonomen haben sich im allgemeinen auf Zweckrationalität und Soziologen auf moralische Verpflichtung konzentriert. Je mehr Soziologen und Ökonomen sich ausserhalb ihrer jeweiligen traditionellen Grenzen begeben, desto mehr werden sie mit Handlungsgrundlagen konfrontiert, die sie mit ihrem theoretischen Instrumentarium nicht gut erfassen können. In diesem Aufsatz wird gezeigt, dass sowohl Zweckrationalität als auch moralische Verpflichtung innerhalb eines nutzen-theoretischen Bezugsrahmens erklärt werden können, wenn man das kürzlich entwickelte Modell wiederholter, rationaler Wahlhandlungen (das sogenannte Diskriminationsmodell) anwendet. Es wird auch gezeigt, dass sehr wahrscheinlich die Handlungsgrundlage über die Zeit zwischen Zweckrationalität und moralischer Verpflichtung hin und her pendelt. Dadurch wird es noch dringender, beide in einer Handlungstheorie zu integrieren. Diese Theorie muss allerdings aussagekräftig genug sein, um den verschiedenen Sozialwissenschaften gemeinsam als Basis dienen zu können (wie die Nutzentheorie).

RÉSUMÉ

L'opportunité et l'obligation morale sont deux bases d'action très différentes. Les économistes se sont plutôt penchés sur la première et les sociologues sur la seconde. Quand les économistes et les sociologues s'aventurent en dehors de leurs frontières traditionnelles respectives, ils sont confrontés à des bases d'action que leurs outils théoriques ne sont vraiment aptes à manier. Il est démontré dans cet article que l'opportunité et l'obligation morale peuvent toutes deux être expliquées dans un contexte d'utilité, si l'on utilise le nouveau modèle de discrimination du choix répétitif rationnel. L'article montre aussi que cette base d'action varie dans le temps, passant alternativement de l'opportunité à l'obligation morale. Cette constatation prouve la nécessité d'intégrer l'une et l'autre dans une seule théorie d'action, suffisamment complète pour être utilisable par toutes les sciences sociales (la théorie de l'utilité).