# Determinants of Human Action: Possibility Sets and the Actor's Knowledge

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## 1. Introduction

Both economists and psychologists want to explain why people choose one alternative from several possible ones. Various theoretical models of decision making offer different algorithms to predict the course of action given a known set of parameters. Within the now classical framework of SEU (subjectively expected utility theory), the individual's choice is considered the result of the application of the rational strategy that rational man chooses the alternative with the relatively highest value of expected utility. While (objective) probability, i.e., the relative frequency of a certain event, is seen as the best representation of "expectation," "utility" is considered a function of subjective benefit. Similar ideas were developed in motivation psychology. Under the influence of K. Lewin, most modern cognitive theories of motiva-

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tion have become so-called "expectancy x value" models (Heckhausen 1980) with expectancy and value as psychological equivalents to expectation and utility. Despite growing criticisms during the last decade, SEU is—at least, in economics—still the most influential theory of individual choice behavior (Schoemaker 1982). In fact, in many instances, "representative man" (i.e., the aggregate data one usually deals with) seems to behave *as if* he were a rational being (as SEU intends).

In this paper, we will not consider such arguments against SEU as, for example, the way expected utilities are determined, the kind of situations selected or experimentally set to analyze decisional behavior (Ullmann-Margalit 1986; Ullmann-Margalit and Morgenbesser 1977); the assumption that rational man processes all available information and that the decision problem is represented by the subject just as it is stated objectively (Kahnemann and Tversky 1984). Nor shall we discuss the question of how the decision problem is organized cognitively by the subject (Jungermann 1985). Instead, we will focus our attention on another aspect of decision making which is usually neglected. In the traditional view, any decision is perceived as a choice among *known* alternatives. Whether one tries to maximize the minimal benefit or to minimize the maximal loss, the principle mechanism remains the same. But where do the alternatives come from? Why is it that, before the decision is made, certain routes of action are definitely eliminated?

We will consider *three types of determinants* which are effective during this *first phase* of rational decisions. Later, we will discuss the role of the *individual's knowledge of these determinants*. Finally, we shall consider the influence resulting from whether the person can *dispose of this knowledge*. The determinants and the individual's knowledge determine at any given moment what courses of action are *possible* for him—at least in principle. For example, "trying to get pregnant" is not a *realistic* action possibility for a woman after menopause. If she behaves *as if* it were possible, she would be regarded as insane.

Similarly, the *set of possible actions* or, as we call it, the *possibility set* is also reduced by (missing) *knowledge:* when you don't know how to use a personal computer, there is no possibility for you to use it to prepare a paper. It would become a possible action only if you *acquired* the necessary knowledge (see below).

The individual's possibility set is usually smaller than the set of possibilities conceivable in principle. There are situations which from outside look like decision problems, as it were, because there are several alternatives—objectively. Nevertheless, the individual's possibility set might be narrowed in such a way that there is nothing left for him to choose. What is an instance of rational choice for the observer might become a case of necessary action without any alternative at all



for the actor. Since the possibility set in a given situation is decisive for the following choice between alternatives (because the only relevant alternatives are those which are elements of the possibility set), an adequate description of its composition seems to be an indispensable prerequisite for any satisfying explanation of decision making. However, we shall not deal with decision or choice behavior proper and will not comment on different models of this behavior. We only want to emphasize the importance of the first stage of decision making, i.e., the phase of composing the respective possibility sets.

The idea that the individual always has to choose from a restricted set of possibilities is by no means new. Although psychologists usually do not refer to it, representatives of quite different fields like economists (e.g., Becker 1976) and historians (e.g., Assmann 1985) are aware of the problem. Our aim is only to discuss some of its aspects a bit more systematically and thoroughly. More precisely, we will deal with the effects of (a) (missing) resources; (b) (lacking) technical facilities; and (c) standards on the composition of the possibility sets. In this context, we shall also comment on the *set of future events* which a person considers to be *possible events* and more or less *relevant to himself*. Later, we shall discuss the consequences of the *actor's knowledge* and its *availability* for the possibility set. However, we do not claim to exhaust all possible influences but only to list those which seem especially important.

## 2. Types of Determinants

(Missing) resources, (lacking) technical facilities and standards represent different types of determinants. While *missing resources* lead to the *elimination* of certain courses of action which otherwise would be elements of the possibility set, *lacking technical facilities* are an insurmountable obstacle for considering respective actions. Before the invention of the printing press, the idea of a newspaper was certainly beyond the possibility set of any human being. Trivial as this statement may be, psychologists are not accustomed to thinking in terms of constraints and, hence, pay no attention to their sometimes far-reaching consequences. *Standards,* on the other hand, can be effective in the same way as missing resources: an otherwise possible action which the actor is aware of is excluded from the possibility set because it is forbidden by law or is in conflict with his moral norms. However, contrary to missing resources, the actor can deliberately neglect these constraints and behave as if they did not exist. Despite legislation, some people do perform criminal acts. Standards, therefore, have a less decisive influence on the possibility set and it is impossible to predict on the basis of laws and legal regulations alone which actions will remain in an individual's possibility set and which will be excluded (see below).

*A. (Missing) Resources*

*i. Income and Prices.*[1] The "classical" constraints in economic theory that limit and determine individual behavior are *income* (including wealth and credit opportunities which in turn can be related to income flows) and *relative prices*. Their role in shaping human behavior is discussed in virtually every (microeconomic) textbook. It is usually illustrated for the case of two goods $x_1$ and $x_2$, with prices $p_1$ and $p_2$. Total income (or, more precisely, current expenditure) Y may be used to purchase goods:

$$Y = p_1x_1 + p_2x_2$$

This so-called *budget line* divides the accessible from the non-accessible quantities of the two goods (e.g., if $x_1 = 0$, $x_2 = Y/p_2$, etc.). Changes in income and relative prices $p_1/p_2$ allow the generation of testable propositions. In particular, the "law of demand," which forms the basis of all microeconomic theorizing, can be derived, i.e., an increase in the relative price $p_1/p_2$ leads to a decrease in the relative quantity $x_1/x_2$ (if income is held constant).

This proposition is usually derived by combining the budget line with the individual's indifference curve. However, the law of demand may also be derived by considering the change in the consumption possibility set from the increase in the relative price $p_1/p_2$ only. (See the neglected contributions by Becker 1962; Sanderson 1974.) Figure 1 shows the initial possibility set OAB indicating the feasible combinations of the quantities $x_1$ and $x_2$ which can be purchased with the given income Y. If the two goods are indeed valued positively by consumers, they will buy the maximum quantities within the budget; i.e., they will line up along the efficiency frontier AB. Since nothing is known about preferences, we may assume that they are distributed randomly along AB.

Assume that $p_1$ rises and $p_2$ falls. The maximum amount of good 1 which can be bought falls (from B to B′) and the maximum quantity of good 2 rises (from A to A′). The new possibility set is OA′B′. The quantities of $x_1$ and $x_2$ within area B′CB are no longer attainable, while combinations of $x_1$ and $x_2$ within AA′C can now be chosen. The arrows indicate that randomly distributed consumers tend to purchase less $x_1$ and more $x_2$. The relative price increase $p_1/p_2$ leads to a decrease in the relative quantities $x_1/x_2$, confirming the law of demand.

*ii. Time.* Although time constraints have been included in economic analysis (see the important contribution of Becker 1965), they have received much less attention than monetary constraints. In action psychology, time constraints are almost totally neglected. However, they have a substantial influence on the individual's set of feasible actions.

1. We refer the reader to two earlier papers of ours in which the same topic is treated in different ways: Foppa and Frey (1986) and Frey and Foppa (1986).



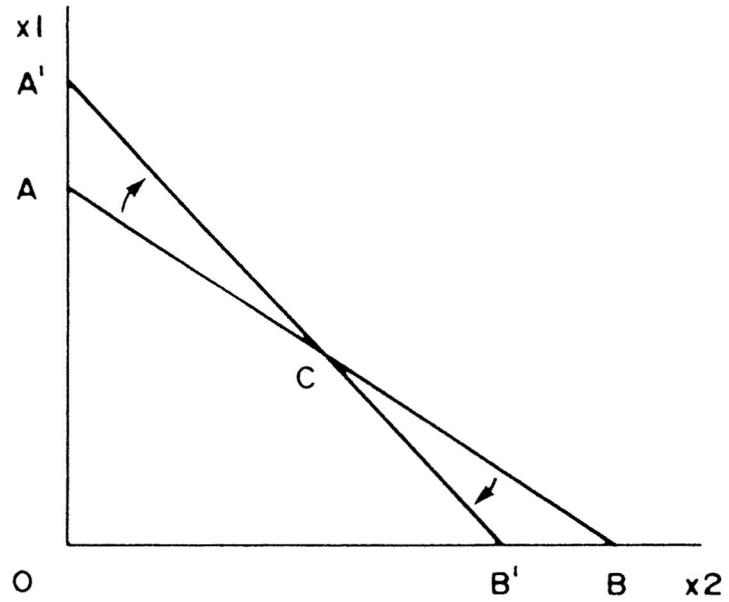


Figure 1. The law of demand derived from a change in the possibility set.

Time constraints can have an effect in at least two ways: a) The necessary time for the performance of an action may exceed the available time and therefore lead to its elimination from the possibility set. Right now, for example, it is impossible to fly from Zurich to Tokyo and back again in 24 hours. We call these types of time constraints simply *general time constraints*. b) The available time may in fact allow for the performance of an action but only at a level below (self-)imposed requirements of accuracy, etc. I may be able to type a paper without errors, given enough time; but time limits will inevitably cause typing errors. The act "producing a typescript within a limited time without typing errors" will therefore have to be eliminated from my possibility set. We call this type of time constraints *time-quality constraints*. While time-quality constraints can be overcome (at least in principle) by adequate training and exercise (except where necessary physical resources are lacking; see below), general time constraints are rooted, loosely speaking, in nature.

Human beings are usually not very good at judging the time necessary for the performance of a certain act. Most of us know how often we underestimate the time it takes, for example, to finish an article or a book (see below). Consequently, the respective act ("finishing the paper within the given time limits") remains in the possibility set, even

if it was an unrealistic course of action which should not have been chosen because the individual cannot succeed.

*iii. Physical Conditions*. Along with time and monetary constraints, *physical conditions* have a strong impact on the composition of possibility sets. Self evident as this influence is (see the above example), neither economic nor psychological theories deal with it. For example, motivation theory models man as if physical constraints do not play any role at all. (There is only one famous exception, i.e., A. Adler, who took the individual's handicaps as the starting point for the explanation of behavior. In this respect, at least, Adler takes physical constraints into account. But he speaks of compensation mechanisms and not of the consequences of having to act on the basis of a reduced set of possible courses of action.) Atkinson's and Birch's (1970) motivation theory is a good example. According to them, for any given action, the resulting action tendency (T) is given by

$$T = T_i - N_i,$$

where $T_i$ stands for action tendency (with respect to act i) and $N_i$ for "negaction tendency."

Behavior is considered a linear function of parameters like action tendency, negaction tendency, etc., which themselves depend on variables like "instigatory force," "consummatory value," etc. That the individual simply cannot dispose of several kinds of action because of a lack of physical resources seems to be of no importance.[2]

Let us now turn to some examples. An old man with arteriosclerosis and arthritis may be highly motivated to climb a mountain and yet not be able to do it. Since a realistic assessment of his own possibilities will show him that he will not succeed in this task, he will not consider it as a possible behavioral alternative. (Let us state explicitly that, although the old man's renunciation of mountain climbing might be seen as a consequence of a cost-benefit analysis, we prefer the more realistic and simpler view that this possibility is eliminated from his possibility set *before* any cost-benefit calculation has been made.)

Physical constraints are not always of this sort. Some are *transitory*. A broken leg temporarily excluding those courses of action from the possibility set which depend on the actor's unrestricted mobility will heal after a while. His fatigue which keeps him from thinking of another straining action will dissipate and the person might again consider it as a possible one.

Moreover, there are "impersonal" physical constraints. Think, for example, of the impossibility of attending two meetings at different places at the same time. Similar restrictions on the possibility set are

2. The following passage draws extensively on Frey and Foppa 1986, p. 4 ff.



imposed by natural laws. No action can be considered seriously which would imply a violation of gravity, for instance. But we must not overlook the fact that a person's physical resources do not only restrict his possibility set. The well-trained athlete in good physical condition can consider winning a world-championship. In this sense, physical conditions may also be responsible for an *expansion* of the possibility set.

*iv. Ecological Conditions*. Ecological conditions comprise all those factors in a person's environment which can have an effect on possibility sets. In the labor market, for example, as long as certain jobs are not available, it is not very realistic not to eliminate the act of "choosing one of these jobs" from one's possibility sets. The environment in general determines the possible courses of action. Where there is no road, one cannot drive as fast as on a highway. And where there are buildings and natural obstacles like rivers and lakes, one cannot take the shortest way from one geographical point to another. The "behavioral setting" (as Barker and Wright 1959, have called it) is the set of environmental conditions responsible for the selection of possible actions.

While age, illness and fatigue may be seen as "culture free" impacts, the environmental constraints reflect factors at least in part related to civilization. Again, ecological conditions do not automatically lead to a reduction of the number of possible actions. While, on the one hand, highways restrict the opportunity to cross the countryside wherever one wants to, they also make it possible to drive much faster than without them.

*v. Psychological Factors*. The last group of resources differs in some respects from the others. While, in a given situation, anxiety, for example, *reduces* the individual's possibility set so that none of the actions which he is really afraid of remains in it, it nevertheless seems to be a less "real" constraint. This might be related to one characteristic of psychological impacts. Let us look at anxiety again: As soon as you feel able to consider the performance of the hitherto feared act seriously, this very act is no longer outside your respective possibility set.

Beyond emotional states (like anxiety) and beyond intellectual deficits (which might be understood as lacking physical resources as well), the influence of *interests* seems to be of special importance. Actions may not be considered for the simple reason that the person is not interested in them. Interest may change and, as a consequence, the composition of the possibility set will change. What for the child is a highly attractive and interesting activity loses its interest for the teenager and is not considered by the adult.

Borderline cases of psychological factors are conditions of mental illness. Whether obsessions or severe states of depression are to be dealt with as psychological conditions or as physical constraints, for

instance, has to be left open because it is not our aim to provide a definite classification of different sets of determinants. Again, it must be emphasized that psychological factors can also lead to an extension of a possibility set. In dangerous situations, the man with "strong nerves" is supposed to act on the basis of a larger possibility set than a timid person.

*B. Technical Facilities*

There is no need to state (although we already have) that there is no way to perform an act for which the necessary technological prerequisites do not exist. Before the invention of the wheel, it would have been impossible to think of constructing a vehicle. This is a truism but it clarifies how our possibility sets depend on the state of man's technological know-how. While a lack of technical facilities restricts the set of possible action, new technologies open new opportunities. In general, technological progress goes hand in hand with an expansion of possibility sets.

On the other hand, most technological progress leads to changes in man's environment and thus may not only open but also restrict action possibilities as, for example, the pollution of most European rivers which makes swimming in them impossible.

Any kind of social organization and institutionalization of social relations and social behavior may also be seen as a form of "technical facilities." The legalization of the individual laborer's right to strike has offered new opportunities similar to technological developments. Other examples of new "social techniques" are the invention of the corporation, the establishment of insurance companies or the introduction of new voting mechanisms (cf. Tideman and Tullock 1976).[3] However, these "social inventions" do open new action opportunities that were unthinkable *before* they were made. We are not concerned here with how they came about but there are attempts to explain them on the basis of psychological (Leontiev 1979), sociological (Elias 1978) and economic considerations (Jewkes et al. 1958).

*C. Standards*

Even if one has access to a gun to murder someone and even if one physically could do so, one probably would not think of it. Possibility sets are not only composed of actions for which one has access to the necessary resources and technical facilities. There are at least two sets of standards which influence what kind of actions a person considers possible: i) the law and ii) the individual's own norms and values.

3. It is all the same to us if one prefers not to classify these examples as instances of "technical facilities." We agree that they could as well be treated as "ecological conditions."



*i. Law.* As we have mentioned, the law is not a decisive barrier against crime and therefore does not strictly exclude criminal acts from each individual's set of possible actions. Nevertheless, it does prescribe permitted actions and lists varieties of violations and attendant penalties. Whatever the influence of the law on individual behavior (data on the influence of the death penalty on the frequency of murder are not unequivocal), changes do have consequences as indicated by the Nazi "Rassengesetze," for example. To what extent changes in law must be accompanied by corresponding changes in value systems to become behaviorally effective is another question.

*ii. The Individual's Norms, Values and Attitudes.* When the reason for not killing someone is not that murder is forbidden by law and prosecuted by the authorities, there must be another explanation. Philosophers and psychologists usually refer to the actor's value system and general attitudes. Since there is a vast literature on the development of moral systems and attitudes and influences on behavior (cf. e.g., Kohlberg), we need not discuss it in detail. It is enough to indicate here that norms and values seem to be neglected which cannot otherwise be explained satisfactorily. One example is the size and development of the so-called hidden or shadow economy in which "tax morality" has turned out to be an essential determinant (Frey and Weck 1984). Another example are the contributions that individuals are observed to make to the production of public goods (Marwell and Ames 1981; Schneider and Pommerehne 1981). Given the incentive to act as a free rider, this behavior is difficult to explain if not for the existence of norms (Frey and Foppa 1986).

Individual and public value systems change over time and are different in different cultures. Nevertheless, the individual is aware of the values which are important to him but not of attitudes. These may have an impact on the composition of the possibility set without his awareness. For example, a person may not be aware that his refusal to swim in a pool with black people rests on his prejudice against black people in general.

We must not ignore that personal values and attitudes are prone to various kinds of influences. Mass media, propaganda and vicarious learning may play an important role although, despite decades of research, it is not clear how attitude and value changes occur but they certainly do take place.

So far, we have dealt with the concept of possibility set as the set of all actions a person considers possible in a given situation and which are in fact possible for him. For the sake of completeness, it does seem useful to assume another type of possibility set. In any situation where a person is not behaving automatically, he is not only aware of the set of *feasible actions* but also of *possible future events* which might happen as

a *consequence* of his acting or *independent* of it. Looking out the window, I may get the impression that a thunderstorm is brewing and therefore shut the doors and windows and make all necessary provisions. That is, the set of possible future events—even if they are *not dependent* on my course of action—must be considered as somehow *related* to the respective set of possible actions. (In our example, the anticipated thunderstorm is the reason for establishing a situation-specific set of possible actions.)

In addition, it is appropriate to discriminate between *future events concerning other people* and *future events concerning myself*. I may be aware that smokers run a risk of getting cancer but I may be convinced that only *other* smokers are affected and that the risk has nothing to do with me. In this case, "getting cancer" would not be in my *set of possible future events concerning myself*.

Possible future events, especially those which are action dependent and relevant for the actor himself are important—not so much for the composition of the set of possible actions but for the ultimate choice of one of them. Nevertheless, they can engender a "second consideration" of possible actions and thereby become responsible for the ultimate composition of the possibility set. For example, if my friend's house burns down, it might lead me to think that the same thing could happen to me and thus, for the first time in my life, I may get information about fire insurance. Considering different action possibilities (e.g., which insurance policy to take) constitutes a *new* possibility set only because I realized an incidence as a possible future event which could affect me.

It would be interesting to know what kind of experiences lead a person to consider a future event relevant only for others or for himself as well. Frey and Foppa (1986) indicate that *two classes of misperceptions* may be operative: *control misperceptions,* leading to the conviction that one can influence the outcome of an action although this is false. A good example of this is the gambler who thinks he controls the outcome of a game of roulette. Somewhat different are those cases where the person can in fact influence the outcome but tends to *overestimate* this influence. The representative Delta flyer believes he can control his flight better by taking care and following the rules under all circumstances, thus almost eliminating the possibility of crashing. The same is true of automobile drivers who invariably think they can control the outcome and therefore tend to underestimate significantly the chance of getting into an accident (Frey and Foppa 1986). This is reminiscent of Rotter's concept of *locus of control* (Rotter 1971) and of the controversial research on this topic since his first publication. In view of these contradictory results, it is an open question as to how control misperception—plausible as the concept is—does in fact function and if it is a useful explanatory construct.



The *second class of misperceptions* is *data misperception*. When individuals judge their *own* actions, they tend to concentrate on specific or *singular* data while outsiders tend to see the whole *distribution* of the data (for the case of predictions, cf. Kahnemann and Tversky 1982). As we all know, academics are notoriously prone to underestimate the time required to complete a paper or a book even if they have considerable experience of past failures to meet planned schedules and even if they are able to predict the time needed by *others*. The failure is the consequence of focusing on the determinants of the specific or personal problem rather than on the distribution of outcomes in similar cases (Frey and Foppa 1986).

Data misperception is well documented (cf. e.g., Kahnemann, Slovic and Tversky 1982) but it is not yet sufficiently clear when events are considered relevant to oneself.

### 3. Knowledge

We now deal with the influence of knowledge on the composition of possibility sets. Clearly, someone who does not know about electronic devices that process texts cannot consider their use. Information about technical facilities is a *prerequisite* for considering acts depending on them as possible ones. But does knowledge always work like this? Does it always extend the possibility set when present and reduce it when absent? We don't think so. For example, there is the person who is mistaken about his physical resources—i.e., does not really know what he is able to do. But whatever his knowledge about these constraints, it makes no difference with respect to the success of the action. That is, the person having performed the act for which he does not have the necessary physical resources will be forced by his failure to realize that this can no longer be considered a possible act. Reality will have the decisive influence on the composition of the possibility set, not knowledge or wishful thinking.

It is interesting to note that not only knowledge about resources and knowledge of technical facilities have different effects. There are also differences between knowledge of technical facilities and knowledge of legal norms. While the first is the presupposition for *including* a given action in one's possibility set, knowledge of the law is the prerequisite for *eliminating* a forbidden action.

Moreover, at least with respect to technical facilities, it is not sufficient to discriminate only between "objective" knowledge (i.e., mankind's know-how) and the actor's knowledge (which may be well behind mankind's know-how). Since the possibility set has to be established anew in every situation where a person's actions are not totally determined by routine and fixed habits or behavior patterns, its composition depends not only on resources, standards and technical facilities and what he knows of the latter. In the abstract, the actor might

be aware that one can use a lever to lift heavy objects yet might *not think of it* in a given situation. (Years ago, K. Duncker 1935, showed with rather simple experiments how people are kept from thinking of less obvious uses for objects by what he called "functional fixedness.") Hence, knowledge of facilities and legal standards can have an impact on the composition of the possibility sets if and only if the person *remembers* what he knows about them.

However, these days, it is almost impossible to know everything that might be of importance for the composition of a possibility set (or set of possible future events). One has to rely on efficient information retrieval systems—and to know how to use them. Every individual probably has access to more or less efficient devices for information retrieval and these devices or the respective acts for using them are elements of almost every possibility (as *transsituational elements,* as it were).

Similarly, persons may have means of compensating for missing resources and/or strengthening them. When you are too weak to lift something, you might look for technical aids, for help or you may start a training program. Training techniques and means of getting assistance may also be elements of most possibility sets but more likely of situation-specific ones than the information-retrieval devices.

## 4. Application

We shall discuss only one example of a possible application of our speculations, i.e., criminal behavior.[4] We want to show how our view of the determinants of human action opens new perspectives.

The economic theory of illegal behavior (crime, tax evasion, etc.) explicitly uses the utility maximization framework. A potential criminal compares the benefits of an illegal act with the subjective probability of being detected, apprehended and sentenced, multiplied by the utility loss imposed by punishment. In the literature (cf. especially the important econometric analysis by Ehrlich 1973), the subjective probabilities are substituted with objective probabilities published in statistical sources.

According to our argument, a careful analysis of the *constraints* to which a particular (potential) criminal is subjected reveals the decisive determinants of behavior. Three of these determinants seem to be most pertinent:

a. The possibility of embarking on a criminal act depends on physical strength and aptitude (e.g., if a bank robbery is envisaged) and/or on intelligence and information (e.g., if a computer crime is planned). Lacking these resources, a corresponding crime is out of the question. As an extreme example, if a person is very old or has trouble walking, no cost-benefit calculus needs to be done to explain and predict that he will not undertake bank robberies.
b. New potentials for committing crimes open up because of changes in "technique." For example, the new social institution of the European Community with its agricultural policy makes it possible to acquire large sums of money illegally by exploiting the complex set-up of protectionist rules and subsidies.
c. The number of crimes committed certainly does not depend only on the law and the punishment by the state but also to a very large extent on implicit norms and values, i.e., internal inhibitions and guilty consciences when violating them. Many illegal acts which are theoretically accessible are outside one's consideration, i.e., outside one's possibility set; they are not subject even to an implicit cost-benefit calculus. Therefore, it is not very helpful and is often misleading to use the "as if" construction of expected utility maximization. Research emphasis should be rather on explaining, operationalizing and measuring the implicit norms and values which shape the individual's possibility set.

4. The following passage again draws extensively on a corresponding chapter in Frey and Foppa, 1986, p. 16 f.



The number of crimes also depends heavily on the *knowledge* of the individuals involved. In certain circumstances, knowledge about objective conditions may have perverse effects: When individuals are informed that others commit a given illegal act to a considerable extent, they become aware that this crime is considered advantageous and may come to the same conclusion and commit the crime. Thus, this knowledge may serve to destroy an implicit norm. These circumstances have been identified, for example, in an experimental setting (Tittle and Rowe 1973) for cheating on examinations. When the teacher appealed to the class not to cheat on moral grounds, the effect was partly counterproductive since those pupils who had followed the rules so far now discovered that cheating was indeed widespread and started to engage in it.

There is another aspect of special importance. Whether a person commits a crime depends not only on his resources, his moral integrity and his knowledge of legal standards, opportunities and technical facilities. It also depends on what he assumes to be possible future events and whether he is convinced that they are relevant only for other people or also for himself. Therefore a rational criminal will commit a crime if and only if he is sure that the detection and punishment of other criminals has nothing to do with him. While others may be caught when robbing a bank, for example, a given individual may easily attribute that to the fact that they were not careful enough

or did not follow the rules of the criminal profession, mistakes which he thinks he will not make.

## 5. Conclusions

Even if we are correct in stressing the importance of the first phase of decision making, an adequate theory would have to comprise the whole process: the selection of those alternative courses of action which a person believes to be possible in a given situation; the choice among these alternatives (including those cases where an individual looks for further information or assistance); the performance of the chosen set; and the feedback of the consequences of the performed act on the possibility set. It is necessary to state explicitly exactly what kind of relations hold between the sets of possible actions and the sets of possible future events and whether one has to differentiate possibility sets with different degrees of situation specificity.

So far, we have only presented a tentative description of the first stage of the whole process. However, the new perspective that we propose seems worthwhile to continue the attempt to reach a more comprehensible view of human action—at least that action involving decisions. We are optimistic that this endeavor will bear fruit.

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