

# GOAL CHAINS AND PREFERENCE ORDERS

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## Abstract

Goal-action relations, and especially goal-means relations, are mainly analyzed and elaborated in social psychology and micro-sociology, although they clearly play an important role for macro-sociology as well.

The paper attempts to elaborate social learning theory (as a well researched representative of goal-action) in such a way that it can be fruitfully applied to macro-sociological problems. It is argued that action-alternatives (preference orders) are established on different bases (basic needs, direct command, suggestion, and long-term "distal" goals) with different consequences.

Most importantly, it is argued that the establishment of preference orders on the basis of distal goals has distinct advantages for the learning ability of an individual.

But since the bases for the establishment of preference orders are mainly institutionally controlled, institutional arrangements have a direct influence on preference orders and learning ability which, in turn, has consequences for various collective phenomena. The paper presents various examples for this interplay and argues for the explicit use of propositions on individual behavior for the solution of macro-sociological problems.

## GOAL CHAINS AND PREFERENCE ORDERS.

### 1. Introduction.

Many of the implicit assumptions in sociology have to do with the relation of goals and action. Frequently, it is readily assumed that individual actions are goal-oriented, that the goals are formed or affected by cultural values in a society, that socialization transmits the goals and that positive and negative sanctions keep people committed to them. The predictions derivable from these assumptions are quite limited, and where they are more specific they are frequently wrong. The assumptions seem too simple. This is an area where we could search for better propositions. And by 'better' I do mean better than the assumptions above, I do not mean 'perfect' and 'beyond criticism'.

Yet, where to begin with the search for better propositions and how to work with them? The present paper attempts to sketch a research program (in the widest sense of the word) on propositions on goal-action relations and their application to sociological problems. By 'research program' I mean something much humbler than the phrase suggests, viz. a number of suggestions and questions with or without tentative answers. Nonetheless, the suggestions and questions are as much as possible systematic and may therefore deserve the label 'program'.

### 2. Goals and Action.

There is a variety of choice in the literature on goal-action systems. But it is fair to say that virtually all interesting contemporary goal-action theories are based in one way or another on Lewin's field theory. Thus, the choice is actually less varied than it may seem at first. Given this situation, I chose the goal-action theory that has been most extensively researched: the social learning theory by Julian Rotter and his co-workers (see Rotter et.al., 1972).

#### 2.1 Summary of the Social Learning Theory.

Social learning theory (SLT) is based on the following (greatly simplified) idea: there is a goal and an activity; the individual has an

estimate ('expectancy') of how likely the activity will produce the goal, and the individual values the goal more or less. It can now be stated that the individual is the more likely to engage in a particular activity in a given situation the higher his/her estimate that this activity will indeed produce the goal in this situation and the more he/she values the goal.

Let us take an example: you sit in the dining room and you are quite sure that there is something to eat in the kitchen (a high estimate or expectancy that going into the kitchen will get you something to eat). The hungrier you are (the higher you value the goal 'something to eat'), the more likely you will get up and go to the kitchen. Or, you are hungry and you are walking through the center of a town you don't know. From past experience you have a low expectancy of getting food in a clothing store and a high expectancy of getting food in a restaurant; you also have a high expectancy of finding a restaurant in the center of a town, so you go and look for a restaurant (sub-goal) in order to get something to eat (goal).

The examples are, of course, quite primitive. They do not consider any possible complications, such as the selection of goals, conflicting goals etc. Nonetheless, they may suffice to clarify the general idea.

Learning in this theory is defined as a change in expectancies. For instance, you were quite sure of finding some food in the kitchen. If you don't find it this time, it may change your expectancy of finding food in the kitchen. But there is no simple relationship between the number of times your expectancy was wrong and change of expectancy. Here other factors become important. Foremost among them is the question whether the occurrence or nonoccurrence of the goal is seen as dependent on one's own action (internal control) or not (external control). For example, your goal in question is high wages for your labor and you are member of a big union. You believe that little you do could possibly influence the contract your union negotiates with your employer (external control); that is, your expectancy is low for all possible action alternatives regarding the goal. Should you happen to do something that objectively contributes to the realization of your goal, this will not influence your expectations since you assume that nothing you do would make a difference for the realization of the goal. Actions that are possibly instrumental for reaching your goal (such as voting or attending a union meeting) are then performed only if they have a higher expectancy for some other goal (such as doing your duty or not disappointing your friends). With regard to the original goal (higher wages), these actions become purely ritualistic.

In short, as far as the goal 'higher wages' is concerned, you don't change your expectations, i.e. you don't learn, no matter whether the wages go up or down and no matter whether you perform possibly instrumental actions or not.

The situation is very different if you assume that the goal is not at all or at least not completely externally controlled. Even if all action alternatives that you perceive have a low expectancy, you assume that there must be something you can do that has a higher expectancy, and you search for this action alternative. No matter what you chose to do, you will compare the action with the result and adjust your expectancy accordingly. In other words, you learn from what you do.

The internal/external effect is strengthened through the effect of generalization. Expectancies generalize from a specific situation to a whole set of situations perceived to be related or similar. For example, if you have a high expectancy of reaching a particular goal through activity x, then you are likely to generalize this expectancy to what you believe are functionally related activities, even if the situations for these activities are different. In short, success (and also failure) is generalized from one situation to another similar situation and from one activity to what you believe are functional equivalents of this activity. In this way, internal and external control (which are themselves expectancies) are generalized. If you experience quite often that the occurrence or nonoccurrence of your goals depend on what you do, you are likely to generalize internal control to new situations and new goals. If, however, you experience quite often that the occurrence or nonoccurrence of your goals depend on others or chance rather than on what you do, you are likely to generalize external control to new situations and new goals. This implies that the less you learn now, the less you are likely to learn in the future.

This short overview does not give a complete picture of SLT, but it will suffice to investigate what I set out to do, the relationship between goals and their relation to action.

## 2.2. The concatenation of goals and preference order.

Many goals are only goals because they are instrumental for another goal. In the example above, a person was looking for a restaurant (sub-goal) in order to find something to eat (goal). Here 'restaurant' and 'something to eat' are concatenated goals. It is, of course, possible that going to a restaurant is also a goal in itself.

Thus every event can be both a goal and a subgoal. The chains of concatenated goals can be quite long, and I will argue that longer goal-chains have a distinct advantage in terms of learning and the internal-external control continuum.

Let me introduce two more terms: "proximal" goals and "distal" goals. The first refers to goals close in time, the second refers to goals farther away in time that are thought to be contingent on the achievement of proximal goals. Thus, "restaurant" is a proximal goal, "getting something to eat" is a distal goal in the short goal chain mentioned above. On what basis can he/she select the proximal goals? In other words, what determines the preference order of proximal goals?<sup>1</sup>

To some degree everybody's preference order of proximal goals is determined by basic needs. We all have to eat, drink, sleep, etc. But this is a matter of degree. The more resources we have, the fewer activities will be taken up for satisfaction of the basic needs. This also means that fewer of our activities are decided on the basis of a preference order dictated by basic needs. As long as the preference order is dictated by basic needs, this order is quite inflexible (as inflexible as the needs themselves) and systematic<sup>2</sup>, i.e. based on some meaningful sequence. But what happens if the order is less and less decided by basic needs? There are, of course, different possibilities. Preferences may be dictated by direct command: "do this now, do that next...." and the reason the direct command is followed is the lack of any competing preference order or the ability of somebody else to control the attractiveness (value) and/or expectancies of goals (by, say, threatening to shoot you if you pursue other proximal goals). To some degree, most people's preference orders are determined by direct command, but again, this is a matter of degree. The more freedom of movement we have, i.e. the less other people can directly control the value or expectancy of possible proximal goals and/or the fewer people are interested in doing so, the fewer of our activities are decided on a preference order dictated by direct command. As long as the preference order is dictated by direct command, it is inflexible (given), but whether it is systematic or not depends entirely on the particular sequences of commands and nothing general can be said about it.

With high freedom of movement, and little determination by basic needs, the preference order of proximal goals is either determined by distal goals or by the ability of other people to influence the attractiveness (value) of certain achievable proximal goals for us ("suggestion"). In our society, for instance, advertising may increase the value of buying product x and lower the value of buying product y; increase the attractiveness of taking a vacation at resort, and decrease

the attractiveness of resort y, determining our preference order by suggestion. Again, most people may be open to this influence, but not to the same degree. The more our preference order is determined by distal goals, the less suggestion will directly determine the preference order of proximal goals. As long as the preference order is dictated by suggestion, this order is flexible. i.e. it can quite easily change, but whether it is systematic depends on the structure of influences. In our society, for instance, most attempts to make proximal goals attractive are in competition and thus not part of a meaningful sequence.

Determination of preference orders by distal goals means that proximal goals are at least also selected on the basis of their contribution to distal goals. The preference order for proximal goals is thus flexible in the sense that various proximal goals can lead to one distal goal. And the longer the goal chain, the more flexible the preference order, since the goals following the proximal goals are again proximal for yet another distal goal etc. At the same time, the preference order is systematic, since it is related to the achievement of distal goals; in other words, a particular preference order of proximal goals is meaningful in terms of its relation to distal goals.

In some sense, the foregoing is common sense and one may ask why it is offered to the reader. As we will see, there are many reasons for (at least provisionally) answering the question: what determines the preference order of proximal goals. At the moment, the important point to make is to trace a relationship between the way the preference order is determined and the ability to learn.

When the preference order is determined by basic needs, the person does not control many resources while the order is inflexible. In terms of SLT this means that such a person is likely to develop a generalized expectancy of external control. Either lack of control over resources leads to frequent frustration of expectations without the ability to adjust the order of goals and it thus leads to a generalization of external control, or the external control is obvious in advance. For example, a poor black attempted to find a job under various conditions, having a medium hope (expectancy) of getting the job each time. Twice he did get the job, four times he did not. He came to believe that the likelihood of getting a job had little to do with what he does himself; others may come to believe this without even trying to get the job. There are, of course, differences in the areas to which external control is generalized, and there are cultural differences in general beliefs about situations and their controllability (Rotter, 1972:262). Neglecting these details we can say that to the degree

that the preference order of proximal goals is determined by basic needs, generalization of external control is likely. This has at least two important consequences. First, as mentioned earlier, generalization of external control reduces the ability to adjust expectancies on the basis of experience, that is, the ability to learn. Second, external control reduces the likelihood that long goal chains develop, since goal chains are by definition plans to influence the environment sequentially and external control is the belief that one cannot influence the environment.

When the preference order is determined by direct command, external control is obvious if following of the command is based on others' ability to control the attractiveness and/or expectancies of alternative preference orders. In this case it has the same consequences as determination by basic needs.

When the preference order is determined by suggestion, we assume by definition that the expectancies for reaching the proximal goals are not frequently frustrated. Generalized external control is thus unlikely to develop. Yet, learning is impaired nonetheless, since the expectancies generated are limited to the narrow range of externally suggested proximal goals. In other words, the world about which expectancies are generated is small and, in addition, the expectancies in this world do not require much correction. One is "exempt" from learning.

When the preference order is determined by distal goals, many events believed to lead to a distal goal will acquire reinforcement value (they become attractive), which multiplies the number of generated expectancies. Many of these expectancies may be wrong, increasing the opportunity to learn. But the general problem of learning from experience is to be able to be frequently wrong without becoming discouraged, that is, without generalizing external control. Quite obviously, one can only learn from experience to the degree that one needs to learn from experience, that is, to the degree that one's expectancies were wrong. However, there is an apparent paradox involved. With regard to wrong low expectancies, one would be pleasantly surprised by one's efficacy, but one is unlikely to act; with regard to wrong high expectancies, one is likely to act but also likely to be discouraged about one's efficacy, generalizing external control. The result is an apparent paradox: one can only learn from experience to the degree that one's expectancies are wrong, but to the degree that one's expectancies are wrong, one is likely to become unable to learn. How is it possible to break this vicious circle?

In the case of long goal chains (distal goals), there are at least two

reasons why many mistakes can be made without generalization of external control. First, since the preference order of proximal goals is flexible, it can be adjusted on the basis of mistakes. Second, distal goals increase the likelihood of mixed reinforcement. Roughly, this means the following. A distal goal introduces an additional expectancy. An activity x now has one expectancy of leading to the proximal goal and another expectancy of bringing the person closer to the distal goal. For example, the activity "looking for a restaurant" has a certain expectancy of leading to a restaurant and another expectancy (not necessarily the same as the first) of bringing the person closer to food. The important point is that the first expectancy may be frustrated without frustrating the second. The person may not have found a restaurant, but looking for one he/she found a stand with nice hotdogs. We may call this a "mixed reinforcement" situation because one expectancy was reinforced, the other was not.

(It could also have happened the other way around: our person finds a restaurant but it is closed, he/she looks for another restaurant and it is also closed. In this case the first expectancy is reinforced but not the second which will in all likelihood lead to the selection of an alternative proximal goal, for instance a hotdog stand. The very phrase "to learn from your mistakes" encourages through a mixed reinforcement: you were wrong (negative) but you achieved your goal of learning (positive). The longer the goal-chain, the more simultaneous expectancies. And the more simultaneous expectancies, the greater the flexibility in selecting proximal goals and the greater the likelihood that reinforcements are not purely negative. The greater the likelihood that reinforcements are not purely negative, the smaller the likelihood of generalized external control. In short, the flexibility of the preference order of proximal goals and the high likelihood of mixed reinforcements that come with long goal chains allow much learning without generalized external control.

### 2.3 The Breakdown of Goal Chains and its Consequences.

The length of a goal chain depends on two factors: distal goals must be highly valued in order to have a strong influence on the preference order of proximal goals; and in order to create a double expectancy for proximal goals, the expectancy to reach the distal goal may not be too small (how small?). Thus, goal chains will break down if distal goals lose value or if the expectancy to reach them greatly decreases.

The effects of these two factors (reduction in value of distal goal

and reduction in expectancy for distal goal) are likely to be different, as schematically shown in Figure 1. Each of these links could be derived from the social learning theory. Without going into much detail about the sequences sketched in Figure 1, a few important points need to be stressed. First, in the early phases of both sequences, we can expect an increase in activity, viz. attempts to restore the status quo ante and, if that does not succeed, search for alternative high valued goals and avoidance behavior, respectively. What these activities are will depend on the particular initial and boundary conditions, but in general we can expect these activities to include interaction with others. This is important for the consideration of collective effects about which more will be said later. Second, in a later phase, reduction in goal value will lead to emphasis on proximal goals, while reduction in expectancy will lead to symbolic and fantasy connections between proximal and distal goals. These are different effects. The consequences of emphasised proximal goals depend on the determination of the preference order, as discussed earlier. But they have in common that the goal chains are shortened and no change in opportunities alone will recreate long goal chains. In the case of symbolic or fantasy connections between proximal and distal goals a change in opportunity can restore the goal chain to its former length.

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Figure 1 about here

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On the assumption that strong distal goals are not easy to come by, this difference is quite important (for instance for the behavior of downwardly mobile people). In terms of determination of preference order for proximal goals, it is difficult to make any prediction since determination by basic needs, direct command, or suggestion are all possible with the important difference that generalization of external control is unlikely to develop. Mixed reinforcement is always possible in this case because the expectancies for distal goals are internally controlled (fantasy controlled). Third, the two sequences are linked at one point: the search for alternative highly valued goals. Avoidance behavior may lead to a reduction in the value of the distal goal, at which point the sequence jumps over to the other sequence. For example, a student whose strong distal goal is to become a good scholar may find the chances that he will become a good scholar slipping. After he tried to work harder or to improve these chances in some other fashion, he may find that his expectancies are still decreasing. At this point he is likely to increase his activity in some other area (say, committee work or extra curricular activities) in order to avoid the negative reinforcement he got when pursuing his distal goal. The avoidance behavior may reduce the value he attached to becoming a good scholar in which case he begins to look for an alternative distal goal. What this new distal goal will be, if it is found, depends entirely on the specific initial and boundary conditions of the case, but it does not have to be entirely "new", i.e., it could also be a semi-metric down-scaling of the original distal goal (say, becoming an "ordinary" scholar). Fourth as can be seen from Figure 1, there are numerous forks in the sequences. Such forks indicate the need for additional initial conditions in any application of the theory; they thereby also indicate the predictive limitation of the underlying propositions of the social learning theory.

### 3. Application of Propositions on Individuals: Some Research Questions.

Up to now, I have briefly described the Social Learning Theory and then elaborated it with regard to preference order of proximal goals and with regard to goal chains. This elaboration can now be applied to various sociological questions. By "sociological" questions, I mean questions related to the explanation of collective phenomena (see Lindenberg, 1976), such as: the description of social situations in terms of the particular propositions on individuals used; the deduction of individual effects

jointly from the description of a social situation and the particular propositions on individuals; the calculation of collective effects on the basis of rules of transformations, individual effects and boundary conditions.

As said in the beginning of this paper, this is the sketch of a research program, not the result of the program. For this reason, the application of propositions on individuals often takes the form of problems rather than solutions.

### 3.1 Descriptions of Social Situations and Individual Effects.

The important point about propositions on individuals is that social situations are described in such a way that they can effectively figure as initial conditions for the propositions. Otherwise, individual effects cannot be deduced. In the following, I give three examples for such descriptions in terms of our propositions, one relating to the Protestant ethic, the other to sanctions and law, and the third to occupations.

#### 3.1.1 The Protestant Ethic.

From our background knowledge in sociology, we know that Max Weber wrote extensively on rationalization. 'Rationalization' is a colorful concept, meaning many different things, but there are two meanings consistently found in Weber's work: systematization and increased planning. Without too much imagination, one can suspect that rationalization (in these two senses at least) can be linked to the preference order of proximal goals and to goal chains. For instance, one can describe a particular religion in terms of the degree to which it encourages the determination of preference orders of proximal goals on the basis of distal goals. Here Max Weber's sociology of religion is immensely helpful since his problem (rationalization) is closely related to our problem.

Roughly, we can summarize the characteristics of a religion that strongly encourages preference orders on the basis of distal goals as follows:

First, distal goals (e.g. redemption and other "Heilsgüter") are systematized, that is, explicitly defined, brought into relation with each other and with the cosmos, and related to the individual. Magical religions, for instance, do not have such distal goals for the individual.

Second, the achievement of these distal goals is methodical. This means

- a. the distal goals are seen as subject to internal control (i.e. their achievement is not subject to incalculable forces such as "fate"); and
- b. the achievement of distal goals is related to subgoals (hence "methodical").

Third, the methodical achievement of distal goals is not just related to some ritualism but to the conduct of life. Otherwise, the distal goals would have little influence on the preference orders related to the conduct of life; their influence would be limited to periodic activities (rituals).

Fourth, the distal goals are such that the methodical conduct of life includes gainful activities ("Beruf", "innerweltlich"). If, for instance, the distal goal is such that mystical union with God is part of its methodical achievement, then gainful activity is excluded from the influence of the distal goal; in other words, much of the daily activities of making a living have to be minimized ("Bettelmönch") or excluded.

Fifth, distal goals are achievable not just by religious virtuosi (such as monks and martyrs) but also by laymen. Otherwise, the distal goals and their methodical achievement will remain without influence for the preference orders of the "masses".

Sixth, laymen are subject to the same methodical achievement as virtuosi. This means that laymen are not allowed any shortcuts in the achievement of the distal goals, such as accumulation of "good points" through unrelated good deeds, absolution for unmethodical conduct etc.

Seventh, determination of preference orders on the basis of basic needs is minimized through the minimization of what may be considered as basic need (asceticism).

Eighth, determination of preference orders on the basis of direct command is minimized through emphasis on personal decision and exclusion of "submission to authority" as a subgoal for achieving the distal goals.

These eight points fit Weber's (1947; 1964) description of the protestant ethic rather well, although much could be added in detail. We thus have a (rough) description of a complex social situation in terms of the propositions on individuals. The rules of correspondence (see Lindenberg 1976) linking terms of the description of religion to terms of our propositions remain implicit and draw on a much wider context of Weber's work. But in this case, these rules are also not very problematic because Weber, scrutinizing the literature of religions, has already described religions with an aim similar to ours. Yet, Weber's propositions on individuals remained implicit and did not allow him to deduce individual effects from his description of religions. Applying the propositions on goal chains to the "protestant ethic", and assuming that other ethics fall short on all eight points

above we can deduce a number of effects. First, those individuals who actively adhered to the protestant ethic (mainly 17th century Calvinism; Pietism; and Methodism) are likely to have shown little determination of preference orders by suggestion. This means that to the degree that their preference order was not determined by basic needs and by direct command, their preference orders were likely to be innovative. Second, for two people of similar resources, one actively adhering to the protestant ethic and the other not, we expect that the adherer's preference order is less determined by basic needs than the non-adherer's. This means that adherers to the protestant ethic could be poorer than non-adherers without basic needs becoming determinative. Third, for two people in a similar subordinate position, one actively adhering to the protestant ethic the other not, we expect the adherer's preference order to be less determined by direct command than the non-adherer's. Fourth, for two people of similar resources and similar position, one actively adhering to the protestant ethic and the other not, we expect that the adherer has a higher capacity to learn than the non-adherer.

These conclusions are quite uninteresting compared to the rich descriptions, given by Weber and others, of the consequences of the protestant ethic. But one would miss the point of the endeavour if one expected the deduction of detailed individual effects from such global initial conditions. The point is just the reverse: The explicit propositions on individuals indicate the need for more detailed initial conditions. The eight points listed above are an ideal typical description of the Protestant ethic in terms of propositions on preference orders and goal chains. Nobody would readily assume that wherever there were Calvinists, Methodists, or Pietists the same conditions prevailed. For example, we can deduce that the poorer the adherers to one of these Protestant churches are the more likely that their preference orders are determined by basic needs rather than distal goals (even though this determination may be less than for non-adherers). Thus we could not expect much innovative behavior, nor a high capacity to learn under these "poor" conditions (see Burrell, 1960 for a discussion of Calvinism in Scotland). We could also not expect that no matter where these Protestant churches reigned, determination of preference orders by direct command was uniformly low (see for instance Erikson, 1966). For example, when the value of the distal goals are slipping, we expect an attempt to restore this value, which, in a church community, is likely to take the form of increased emphasis on church authority. Thus, again, we would not uniformly expect much innovative behavior and a high capacity to learn wherever these Protestant churches reigned. Nor would we expect that other ethics were always short on

the eight points listed above. It was mainly the Counter Reformation that created a low profile for Catholics on the eight points and a high profile for Protestants (see Lüthy, 1964). In areas where the Counter Reformation was weak we would not automatically expect more innovative behavior and a higher capacity to learn from Protestants. Finally, additional information is needed in all cases in order to explain the channelling of innovative behavior and a high capacity to learn into economic activity.

What do we gain from this kind of analysis? I think there are several points. First, we would not collect statistics on the percentage of Protestants in a particular area and the level of economic development in the expectation to prove or disprove "Weber's thesis". To collect such statistics is only meaningful on the simplistic assumption that "cultural values" (ideal-typically described) determine behavior, "Protestantism" is a complex of cultural values, hence Protestantism determines behavior (at least economic behavior). Even a vastly superior version of this assumption, viz. "cultural values influence childhood socialization, childhood socialization influences the formation of personality, personality influence behavior" (see McClelland, 1961), even this assumption treats the "value complex" of Protestantism as a rather undifferentiated influence on the parents, and the personality as rather uninfluenced by the social situation (see Kunkel, 1969). Second, we would collect the historical material, if it is available, in terms of the explicit propositions on individuals we use. In our case, we would collect the material in terms of determinants of preference orders, such as level of resources; ability of others to lower the value of alternative preference orders (direct command); availability, strength, and direction of distal goals.<sup>3</sup> And we would need some information on available behavioral alternatives on order to understand the channelling of innovative behavior and a high ability to learn. Third, we can use the same kind of analysis for other periods than the 17th century Western Europe; that is, the link between innovative behavior and a high ability to learn on the one hand, and a particular religious ethic on the other hand has been replaced by the propositions on individuals and varying initial conditions. The problem of "secularization" of the Protestant ethic becomes a question for the source, conditions of strength, and direction of secular distal goals. At the same time, fourth, the contribution of Weber's sociology of religion can be brought into relief. For instance, long goal chains are a cultural invention; what is the influence of various religious doctrines and practices on the creation, maintenance, and direction of distal goals? In this context, the Protestant ethic is only one contribution to distal goals, building on many others, such as the symbolization in magical religions, the systemati-

zation of "Heilsgüter" by prophets whose messages were public goods in opposition to prophets (nebijim) whose messages were private goods (divination and magical therapy), the adaptation of these messages to everyday-life through priests, etc. And in this kind of account, the descriptions of religions can be ideal typical, highlighting their differences, since the effects (symbolization, systematization, etc) are also ideal typically described.

### 3.1.2 Sanctions and Law.

Among the fundamental concepts of sociology are positive and negative 'sanctions'. Behind these concepts lie rough assumptions about the steering of performance through reward and punishment as intentional acts. There are expectations (norms, role expectations, etc), and conformity to these expectations is positively sanctioned, deviance is negatively sanctioned.<sup>4</sup> This conception gives rise to the ideas of "social control" as the mechanism by which behavior is kept in line with expectations.

There has been some criticism of this view but the typical diagnosis is not that the assumptions on individuals underlying this view are not good enough, rather the diagnosis is that the concept of social control has falsely been based on assumptions on individuals rather than collectivities. The typical cure suggested is thus not: better propositions on individuals but: better conceptions of "systems" and "self-regulation" (see, for example, Janowitz, 1973; 1975).<sup>5</sup>

According to the sanction/social-control view, behavior is only controlled through norms and sanctions linked to these norms. The intended consequence of sanctions is a reduction in the likelihood that deviation from the norm occurs. Yet without specifying a mechanism how sanctions control behavior, that is, without explicit introduction of propositions on individual behavior, it is impossible to specify under what conditions sanctions will have the intended effect. On the basis of Social Learning Theory, one can explicitly state that sanctions will control behavior only if they affect the value of the particular behavior and/or its expectancy. Even the direction of control can be specified. Thus the threat of a jail sentence and the presence of guards will not lead to a reduction in bank robbery if the threat does not reduce the value and the guards do not reduce the expectancy of robbing banks. Thus the introduction of explicit propositions on individual behavior which in turn are open to social aspects of situations allow a specification of the information we need to have in order to make the right predictions about the

effects of sanctions. We need information on changes in value and changes in expectancy. This line of reasoning has already led to fruitful research in the area of deviance and rehabilitation (see Harris, 1975).

Once these propositions are introduced, it becomes evident that behavior may not only fail to be controlled by sanctions, but that unintended effects may indeed effectively control behavior, viz. all events that happen to change the value and/or expectancy of a particular kind of behavior for a particular group of people.<sup>6</sup> For example, inflation may differentially lower the expectancy of reaching certain goals, and social security measures may decrease the value of certain jobs. Neither event was meant to have these effects, and yet they may have a stronger controlling influence than intentional sanctions. In short, in order to predict the consequences of events (intended or not) on behavior, the events have to be explicitly described in terms of the propositions used (for example in terms of changes in value and expectancy). This description is in turn only possible if the propositions are made explicit in the first place.

Law can also be explicitly linked to the propositions. It was already clear to Max Weber (1964:255, passim) as it is to many economists (for example Alchian and Allen, 1974:141ff, 237ff) that laws play an important role in the creation of expectancies. For example, property rights create certain expectancies about the use of goods. Law thereby may be essentially involved in the establishment of goal chains. I would not produce x units of a good today, if I had not a high expectancy of being allowed to sell them tomorrow. How law establishes these expectancies is another question, for there are great differences with regard to different laws. For example, in some cases it is not important for what alternatives expectancies are high, as long as expectancies are high. This is true in areas in which there is a great need of co-orientation (Scheff, 1967), such as in traffic regulation (see Schelling, 1971). It does not really matter whether we drive on the right or the left side of the road, as long as there is co-orientation on whether it is left, or right. In these cases the government needs very little power to lower the value and or expectancy of alternatives. In other cases, a law is not only sought for the creation of co-orientation but also for the increased expectancy of particular alternatives, as in the case of property rights. These laws can increase expectancies only if the government (or some other authority) can affectively lower the value and/or expectancy of some other alternatives, since property rights are not equally advantageous for all people, or differentially advantageous for individuals at different times.<sup>7</sup> This protection of rights can again not be limited to the sanction social-control view. Frequently, a right is only marginally protected by

punishment. Licensing procedures for professionals, for instance, are protections of rights of professional organizations to set their own standards, and punishment plays only a marginal role in the protection of these rights.

Protection of laws against infringements can be very costly, and we can expect that laws are differentially protected, i.e. some laws are more protected than others and some people enjoy more protection through the law than others. This also means that to the degree that the protection of laws is uneven and to the degree that expectancies and values of goals depend on protection of these laws, to that degree the ability to build long goal chains is also differentially distributed. Laws have thus an influence on the determination of preference orders and thereby also an influence on the flexibility of goals and the ability to learn, an influence which in most cases is wholly outside the intention of the law makers. These effects can simple not be described, let alone explained and predicted, on the basis of the sanction/social control view.

This short analysis is more than scanty, but it hopefully indicates that the sanction/social-control view is insufficient. Instead, we need descriptions of the social situations in terms of propositions. In our case, this means description of events in terms of their influence on the value and the expectancy of goals, and thereby in terms of the determinants of preference orders and the ability to learn, including the dynamics depicted in Figure 1. Using explicit propositions on individual behavior, effects can be predicted, and these effects may be complex. For example, the non-protection of rights may make it impossible for some people to build up long goal chains; as effect , their learning ability is reduced which, in turn, has the effect that other laws fail to lower or increase their expectancies for other goals. This, in turn, can bring these people in conflict with the law and, as a consequence, lower the value of "legitimate" goals (see Harris, 1975). To describe this situation as a lack of internalization of value or as a lack of social control at the right time ignores the most important elements of the situation.

As with religion, one can ask again for an ideal typical description of the influence of law on the source, maintenance, and direction of distal goals. And again, Max Weber's work (1964:495 - 656) is a good lead for this problem. Only, it is no substitute for the descriptions of social situations in terms of explicit propositions on individuals.

### 3.1.3 Occupations.

Occupations are frequently described as role expectations which, in turn, are internalized by individuals and stabilized through sanctions. This kind of "role analysis" has been criticized for neglecting individual role definitions (Levinson, 1959), role strain (Goode, 1960), situated roles (Goffman, 1961), finer grain social typing (Klapp, 1962), and others. But few of these improvements described occupations in terms of propositions on individual behavior. More powerful studies in this respect can be found in organizational and industrial sociology.<sup>8</sup> Yet, most of these fine studies choose propositions and situations with regard to the internal functioning of organizations. This makes it difficult to trace macrosociological collective effects.

For our purposes, occupations would have to be described with regard to determinants of preference orders and goal chains. For instance, occupations require different kinds and amounts of planning for their execution (see Miller et. al., 1960:95ff) which means that they require different goal chains, some long, some short, some with flexible proximal goals, others with inflexible proximal goals, etc. In addition, occupations require different goal chains for their attainment, and they allow different goal chains for further career planning. Thus, the goal chains required for attainment, execution and promotion differ for different occupations. Considering that most people spend considerable time on their job, and that jobs are the main source of livelihood for most, we can expect that these job characteristics have an important influence on the individual's determination of preference orders and the individual's capacity to learn, not only on the job but also off the job (see for instance Zajonc and Wolfe, 1966; Seeman, 1966; Seeman, 1967).

Remuneration of occupations in relation to what are considered basic needs will, in the lower brackets, also have an influence on preference orders. The amount of autonomy on the job is similarly important for the determination of preference orders by direct command.

If occupations are thus described, then changes in characteristics of occupations can be related to changes in the determination of preference orders and the ability to learn.<sup>9</sup> For example, if occupations with low remuneration, little pre-, on-, and post-job planning, and low autonomy greatly increase at a particular period of the division of labor, and if the number of people in these occupations also greatly increases, we would expect a similar increase in individuals whose preference orders are determined by basic needs and are inflexible.

For this new group of individuals, we would expect political awareness to be low where it does not concern proximal goals; we would expect little initiative for planned organization, since such initiatives involve long goal chains; we would expect little participation in voluntary organizations, if these organizations are not related to proximal goals<sup>10</sup>; we would expect little awareness and use of the legal machinery (lawyers, courts, etc) where such awareness and use depends on planned information search involving longer goal chains; for the same reason, we expect that law will play a relatively minor role in stabilizing expectancies and that, where frequent interaction is possible, informal norms will play a considerable role in stabilizing expectancies. In short, we expect the creation of a large group of individuals whose capacity to learn is systematically low.

This, of course, is only the roughest sketch of such consequences in the occupational structure, since institutional arrangements, special learning programs etc. have not been considered. Nonetheless, the sketch indicates the direction a more detailed analysis could take. On the basis of the propositions on individuals used, we would also be able to generate expectations about the consequences of government and union measures for improving the situation for certain occupations. For example, if, say, due to union action the remuneration in "low planning, low autonomy" occupations increases, and if, say, due to government measures the autonomy for holders of these occupations increases, we would not expect much increase in the determination of preference orders by distal goals, nor would we expect a great increase in the ability to learn. Rather, we would expect a stronger determination of preference orders by suggestion, and a reduction in the need to learn. Economic wellbeing and increased "freedom" do not by themselves increase the likelihood of distal goals, except for those whose distal goals can be reactivated (see symbolic and fantasy connection between distal and proximal goals in Figure 1).<sup>11</sup> Extensive learning programs and strong ideological support may have the effect of creating distal goals, but even these will have a powerful obstacle in occupations that require little pre-, on-, and post-job planning.

In all the examples given so far (Protestant ethic, sanctions and occupations), it is evident that the explicit use of propositions on individual behavior did not block the recognition of social causes. To the contrary, on the basis of these propositions, the effects of religion, law, and division of labor on individual behavior could be specified. In the following section, I intend to go one step further. Social factors have an influence on individual behavior, and, given certain social condition (boundary conditions), the individual behavior has certain collective consequences. In

this way, social causes can be linked to social consequences which in turn become social causes.<sup>12</sup>

### 3.2 Collective Phenomena.

As already suggested during the discussion of occupational characteristics, one can use the propositions to transform one kind of distribution (number of people in occupations of different categories with regard to remuneration, planning, autonomy) into another kind of distribution (number of people in different categories of preference order and learning ability) under the assumption that there are no particular institutional arrangements that independently influence the determination of preference orders and learning ability (for instance no compulsory training and information courses). This aggregated collective effect can become again an initial condition for the same propositions and be transformed into yet another distribution (say, the percentages of people in various categories of preference order and learning ability participating in voluntary organizations).<sup>13</sup> In this way, distributions are causally linked to each other with the help of propositions on individual behavior.

Although this linkage between distributions is very important and even said to be the main task of sociology (Blau, 1974), there are many situations for a sociologist that are considerably more complex. The following discussion of the university is meant to be an example of a more complex situation in which propositions on individual behavior play, in concert with many assumptions on certain social conditions, an important role.

#### 3.2.1 The university: The growth of a movement.

Let us assume a period of economic prosperity and a government's<sup>14</sup> decision to have more people (especially from "disadvantaged" strata) enjoy higher education, by encouraging university study during all phases of primary and secondary schooling, and by adjusting admittance regulations at universities, increasing university facilities etc. What would happen? With the benefit of hindsight, our propositions on individuals and certain assumptions about institutional arrangements, one could sketch the following sequence of effects.

First we have to redescribe the attempt by the government in terms of the propositions: the government would like to establish university study as a

valued distal goal for school children, and it would like to increase the expectancy for reaching this goal. Let us now assume that the government's program is successful in the sense that for many pupils in secondary school the distal goal "going to the university" is more attractive than alternative distal goals, and that for many pupils in secondary school the distal goal "going to the university" has a high expectancy of being attainable. Table 1 gives a schematic picture of this situation (for which we would need percentages or absolute numbers and more categories for expectancy in a real-word analysis).<sup>15</sup>

		Expectancy for "going to university"	
		High	Low
goal value for "going to university"	higher than alternatives	great increase (definitely to university)	increase (conflict)
	lowerer than alternatives	increase (conflict)	great de- crease (definitely not to uni- versity)

Table 1. Changed distribution of secondary school pupils with regard to relative goal value and expectancy for "going to university" as consequence of government program

As can be seen from Table 1., the government greatly increased the number of pupils who will go to the university, but it also increased the (relative) goal value of "going to university" for some pupils who have a low expectancy of reaching this goal, and it increased the expectancy for "going to university" for some whose alternative goals are more attractive. These last two categories of pupils are in a conflict between perceived ability to reach the university and the value of reaching the university. For the moment, we will leave these pupils and look first at those who will go to the university.

Since the government's plan was to increase participation in higher education rather than participation in particular occupations that require higher education, there will be many among those who go to the university whose distal goal was "going to the university" and nothing more. These people have come close to the end of their goal chain upon graduating from secondary school. What will they do? Some of them will be able to establish new goal

chains on the basis of specific distal goals, such as "diploma for a particular occupation" (lawyer, medical doctor, research physicist, etc); and they will choose their university studies accordingly. But many will be unable to establish a new distal goal quickly, and they will be likely to choose their subject matter on the basis of suggestion without any distal goal. This means we would expect a great increase in general subjects that are not linked to particular occupations or that are "en vogue" or both (sociology is probably among them) and it means that since there is no distal goal, the ability to learn is also reduced for these students .

Before we pick up the trail of this last category of students again, we have to attend to yet another likely effect. For a certain number of pupils in secondary school, higher education is attractive (also) because it provides a certain elite status. Most of these are likely to be from families in which "going to the university" has long been an encouraged distal goal. The government program, by increasing the number of students, reduces the elite status of higher education without making alternatives more attractive. Thereby it lowers the value of the distal goal "elite status" for this category of students, but these students will nonetheless go to the university. According to the propositions diagrammed in Figure 1, these students will attempt to increase the elite status of higher education, and, unable to do so, will search for an alternative distal goal for higher education. At first, the reduced value of "elite status" will be apparent only once the students are at the university, but in later phases, we would expect that these students begin to search for alternative distal goals for higher education already during secondary education.

It is impossible to say much about this search for an alternative distal goal without specific information on the specific cases, but in all likelihood, the search will be for a goal that is clearly alternative to the one whose value has been reduced: anti-elite, anti-professional. New distal goals are not easily found nor easily formulated, especially in a context (university) in which the running program is still oriented towards the old distal goal. Thus, the search for an alternative distal goal is likely to involve communication among these students and an attempt to establish a larger support in the search. Where does this support come from?

Here, the interests of different groups meet, especially in subjects that attracted students without distal goal for higher education. This category of students is groping for a distal goal for higher education and experiences increasingly external control.<sup>16</sup> There is a high likelihood that many of them will join the "elite" students in the search for an (alternative) goal, especially if they thereby also receive help in coping with problems

of proximal goals (such as meeting or changing the requirements, finding housing and contact).

In addition, there will be students who do have a distal goal but who see their chances slipping for reaching it. This category of students could always be found at the university, but now their number is increased at least proportionately to the absolute increase in student numbers. According to the propositions diagrammed in Figure 1, these students will try to increase the expectancy for reaching their goal; say, they will study harder. But for many of them this will not increase the expectancy, and they look for avoidance activities. Joining or supporting the already growing number of students who search for an alternative goal for higher education has the double advantage of being an avoidance activity and lowering the value of the unreachable ("old") distal goal.

In short, we have the beginning of a student movement, led by former "elite" students and followed for various reasons by a growing number of other students.<sup>17</sup> Outside the university, this movement is likely to find support among the (at least proportionately) growing number of ex-students who have not finished their academic training, and the (at least proportionately) growing number of pupils in secondary school who either belong to the "conflict" groups (see Table 1) or to the "elite" who are increasingly aware that the elite status of higher education is waning.

Since all these youths are also an economic power in the sense that they have money to spend, they will soon awaken commercial interests. For instance, publishers will gladly join the search for alternative goals for higher education, being assured a growing market for these publications. Clothing, record companies etc. will be interested in stressing the growing visibility of the movement.

There is not only economic power in great numbers, but also political power. Many of the movement's members and sympathizers are in voting age and therefore also become interesting for politicians. Many additional collective effects can come from this, such as changes in party-strength, changes in laws, changes in the decision making structure of the university, changes in the curriculum of the university adapting to newly found goals for higher education etc. But for the deduction of all these effects many additional boundary conditions are necessary, and I will not attempt to elaborate these boundary conditions hypothetically, in the hope that the example has gone far enough in showing how complex collective effects can be predicted or explained on the basis of propositions on individual behavior and certain given conditions.<sup>18</sup> The described process shows how a social movement can grow as an unintended consequence of a government policy. At the same time,

the propositions allow us to specify the conditions under which such a movement would disappear, viz. under a prolonged grave economic crisis. Not only would such a crisis reduce the economic power of youths and thereby reduce the commercial backing of the movement, the crisis would also - albeit with some lag - increase the category of students for whom "basic needs" are determinative for their preference order. In addition, the crisis would provide a pragmatic but strong distal goal (income) for students whose distal goal ended upon entry into the university. A "professional" orientation in academia would be revived to the degree that reduced funding will hurt "luxury" (i.e. nonprofessional) activities first. And this return to a professional orientation would undercut efforts to formulate alternative goals and would partially restore elite status to academic studies.

#### 4. Conclusion.

The present paper attempted to demonstrate a particular strategy for improving sociological theories and research. The hard core of this strategy is the explication and improvement of propositions on individual behavior. These propositions allow in turn specification of the factual information needed in order to answer sociological questions. Take for example the question of the social consequences of the division of labor. What information is needed to answer such a question? On the basis of the propositions elaborated in this paper, there are various possibilities of specifying this general question. One possibility is to translate the problem into questions concerning the change of occupations with regard to autonomy and planning needed for attainment, execution and promotion. Thereby the factual information needed is specified. On this basis, particular effects can be deduced. For instance, one can say that given an increase in jobs with little autonomy and planning needed for attainment, execution and promotion, and given an increase in numbers of people in these jobs, the number of people that has a low ability to learn will also increase. This is no trivial point, and many other social consequences are based on this aggregated individual effect.

Sociologists are mostly interested in collective phenomena, and deduction of collective effects (such as the growth of a social movement) from aggregated individual effects is only possible on the basis of additional factual information about institutional arrangement, government policies, distribution of income etc. Each of these additional factors can in turn be made the object of explanation, but then other factual information is needed. Propo-

sitions on individual behavior alone are thus useless without factual information on social conditions, but they aid us in determining what social conditions we need to consider because they supply the explanatory mechanism.

This role of propositions highlights another point. Many sociologists have a healthy suspicion against propositions on individual behavior. In their view, explanations using such propositions are an alternative to (and thus in competition with) sociological explanations. But these sociologists fail to make a distinction between two types of propositions: those that help us specify which social conditions we need to consider, and those that render information on social conditions irrelevant. The present paper is solely concerned with the first type and there is no competition between "sociological" and "individualistic" explanations.<sup>19</sup>

The second type of propositions is based on the assumption that individual behavior is quite independent of social conditions. For example, instinct theories, racial and body type theories, as well as certain kinds of personality theories leave little room for the continued influence of social conditions on individual behavior. They are in competition with sociological explanation because they are in competition with propositions of the first type. The suspicion of sociologists vis-a-vis propositions on individual behavior should thus be selective and focus on the second type. As things look now, propositions of the first type are the sociologist's best allies.

Footnotes

<sup>1</sup> By 'preference order' I mean the order of proximal goals according to their value and expectancy simultaneously. The order is thus, according to SLT also an order of predicted action probabilities. The problem with rationalistic action theories (see Schütte, 1976), viz. that in the preference order only the goals and not the chance of their realization (expectancy) are considered, does not arise here.

<sup>2</sup> The degree of flexibility indicates the degree of maneuverability vis-a-vis circumstances and controlling others. I also mention "systematic" and "unsystematic" in this context to indicate that the preference order "makes sense", is meaningful to the actor in various degrees. This problem of meaning has been emphasized by authors like Nietzsche and Durkheim, and it appears to be an interesting aspect of preference orders. However, the problem will not be further pursued in this paper.

<sup>3</sup> There is, of course, a relationship between distal goals and McClelland's "need for achievement" in the sense that this need is produced by standards of excellence. These standards can be interpreted to be distal goals of numerous goal chains, and in this sense McClelland's interpretation of the Protestant ethic is also a goal chain interpretation. The present effort is compatible with McClelland's but it does not limit distal goals to standards of excellence. It thereby can take more aspects of the social situation into account.

<sup>4</sup> More sophisticated versions distinguish between positive deviation ("you do more than expected") which is even more positively rewarded, and negative deviation ("you do less than expected") which is met by negative sanctions. Still more sophisticated versions also distinguish between expectations of different strength linked to sanctions of different strength (see Dahrendorf, 1959; Merton, 1957:133). Still, the same criticism applies also to these versions.

<sup>5</sup> This is an example of the implicit assumption that sociological explanations are an alternative to individualistic explanation. This view is only correct if the individualistic propositions exclude the continued influence of social conditions on individual behavior (such as instinct theories, racial and body type theories, and certain personality theories; see Lindenberg 1976). The propositions elaborated in this paper are meant to form a part

of a sociological explanation rather than an alternative, and they can play this part (viz. providing an explanatory mechanism) because they not only allow the consideration of continued influence of social conditions on individual behavior, but also help us specify which social conditions to consider.

<sup>6</sup> The limitation of the sanction/social-control view to norms had been explicitly broken in the tradition of behavioral learning theory (Homans, 1961); but since this learning theory has mainly been applied to small groups in which rewards and costs are quite explicitly linked to norms, this learning theory has unintendedly served to corroborate rather than to criticize the sanction/social-control view.

<sup>7</sup> This creates the problem that the advantage of co-orientation, so important for the building of goal chains, may conflict with the content of co-orientation, so that individuals frequently would like to break the law on account of the content of the law in the hope that nobody else does (otherwise the co-orientation breaks down). See de Vos, 1976. Co-orientation can be interpreted as a curious collective good that is not only not used up but reproduced through its use. The question to what extent a particular law produces co-orientation that maintains itself becomes an interesting question closely connected to our problem through the fact that co-orientation is a most important stabilizer of expectancies.

<sup>8</sup> To mention just a few: Tausky, 1970; Fox, 1971; Crozier, 1971; Argyris, 1972; Mansfield, 1973.

<sup>9</sup> This kind of reasoning could also provide a better theoretical basis for studies on the orientation to work (see for example Goldthorpe et. al., 1968; Ingham, 1970; Brown, 1973).

<sup>10</sup> Olson (1965:76ff) observes that union membership in the United States increased most in periods of growing employment, i.e. in times when unions had a better bargaining position. This indicates a pattern of participation based on a high expectancy of short-term, low risk success rather than on future-oriented planning (long goal chains). Olson's remark about unions is embedded in a discussion on public (collective) goods, the free rider problem, and organizability of large groups. He argues that it is not rational to work for a public good if one's own contribution cannot be calculated (as in large groups) and if the good, once it is produced, also benefits those who did not work for it (public goods).

One can add that the inability to calculate one's own contribution is not just a matter of group size but also of the kind of goal chains that can be maintained. In other words, we would expect that the "rationality" of participation does not only vary with the kind of good and group size but also with the differential ability of individuals to establish long goal chains. This point seems interesting enough to warrant further discussion, but it cannot be followed through in this paper.

<sup>11</sup> Whenever occupational characteristics change so as to lower the expectancy for established distal goals, we may expect some individuals to retain their distal goal (see Figure 1). Who and how many individuals will depend a.o. on the sources of support for such distal goals (example: clubs, nostalgia literature, church).

<sup>12</sup> The actual explanation of collective phenomena depends at least on the specification of boundary conditions and some rules of transformation that link individual effects and boundary conditions to collective effects (cf. Lindenberg, 1976). The following examples are hypothetical and therefore lack a detailed description of boundary conditions and rules of transformation. They are solely intended to indicate the direction an analysis of collective phenomena could take using propositions on individual behavior.

<sup>13</sup> Here, specifically, more detailed boundary conditions are needed on availability of voluntary organizations, on the law (allowing free assembly?), on the planning effort needed to obtain information on these organizations, etc. At the same time, we see why sociological generalizations that directly link social phenomena neglect the influence of varying boundary conditions and therefore do not hold generally. Ironically, sociological generalizations of this kind are minimizing the consideration of social factors and are therefore less "sociological" than explanations in which propositions on individual behavior are explicitly introduced for the specification of boundary conditions.

<sup>14</sup> By government, I mean a decision making process by certain individuals within a constitutional and institutional structure similar to our own society; these individuals are empowered in terms of this structure to make national decisions on educational policy. Thus, I have packed a great deal of implicit boundary conditions into the term 'government' and refrain from explicating these conditions on the grounds that I assume the

structure to be similar to a society we know.

<sup>15</sup> For the sake of simplicity, cases are omitted from the table for which the alternative "going to the university" is equal in value to all other relevant alternatives.

<sup>16</sup> Since they do not have a distal goal, and since the tasks of study cannot all be chosen by suggestion, these students will have many inflexible proximal goals that are solely established by "direct command" from staff. Hence external control.

<sup>17</sup> Inside the university, there is yet another group of potential supporters: staff. The number of staff members is also increasing as a consequence of the government program and thus the number of staff whose choice for the academic profession was itself not based on distal goals but on suggestion will also increase (at least proportionately). The group of staff members who see the expectancy of reaching their distal academic goals decrease also increases at least proportionately. Finally, the reduction of elite status for academic professions will reduce the value of distal academic goals for yet another category of staff members. All three categories are likely to support the search for an alternative distal goal of higher education.

<sup>18</sup> Since the propositions are based on value and expectancy of goals and since neither value nor expectancy can wholly be controlled by the individual him/herself, the propositions make the consideration of social influences particularly easy. Via goal value and expectancies people are interdependent. Thus, these propositions should not lead to any anti-psychologicistic reaction as do propositions on individuals that do not allow the consideration of social influences.

<sup>19</sup> This point is further elaborated in Lindenberg (1975) and Lindenberg (1977)

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Figure 1. The breakdown of goal chains and its consequences

