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ABSTRACT

Three types of explanation in evaluation are discussed: causal explanations, explanations of actions, and explanations of value judgments. The role and importance of each form is addressed, as are alternate approaches to providing such explanation. The concept of explanation is defined as anything said or done to help someone understand something. The classification of explanation is based on a distinction between types and methods. Methods are identified and defined: descriptive, narrative, genetic, experimental, and theoretical. Two of these types of explanation--action and value explanation--have generally been neglected in evaluation. Causal explanation has been interpreted in a narrow fashion, and causal claims not satisfying its requirements have been regarded as unsound. Action and value explanations have objective significance which is capable of being spelled out empirically, and they are therefore susceptible to public testing. It is concluded that, in spite of imperfect circumstances, there are ways of responsibly arriving at intellectually and morally sound explanations: although the available means are demanding on the judgment and conscience of the evaluator. (Author/GK)

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No. 34 TYPES OF EXPLANATION

IN EDUCATIONAL EVALUATION

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March 1980

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PREFACE

The Research on Evaluation Program is a Northwest Regional Educational Laboratory project of research, development, testing, and training designed to create new evaluation methodologies for use in education. This document is one of a series of papers and reports produced by program staff, visiting scholars, adjunct scholars, and project collaborators--all members of a cooperative network of colleagues working on the development of new methodologies.

What are the basic types of questions requiring explanation in an educational evaluation? Should causal questions always be the foremost concern of an evaluation? In this report, Eric Weir discusses three important types of explanation in evaluation: causal explanations, explanations of actions, and explanations of value judgments. The role and importance of each form of explanation is addressed as well as alternative approaches to providing such explanations. This report points to dimensions of explanation largely ignored to date by evaluation practitioners.

Nick L. Smith, Editor
Paper and Report Series

TYPES OF EXPLANATION IN EDUCATIONAL EVALUATION

Evaluation in education has two basic responsibilities: it must pass judgment as to the quality or effectiveness of an educational practice, and it must make recommendations as to whether, and in what way, the practice should be adopted, maintained, or improved. This claim would be generally accepted, but it is nonetheless controversial. Some evaluation specialists have recently urged that evaluators should take a more humble view of their responsibilities, and confine themselves simply to helping people understand the situations in which educational practices have been implemented, leaving judgment and recommendation to those more intimately involved. Even here, however, there is an implicit recognition that the ultimate purpose of evaluation is to provide bases for judgment and action. Whichever of these two ways of conceiving the responsibility of evaluation we accept, however, it seems clear that offering explanations of one form or another will be a crucial aspect of educational evaluation. Certainly, where people lack understanding it is only through explanation that they will come to possess it. And whether they are considering a report which claims only to explain, or one which goes on to judge and recommend, people will have questions about what they are given which can only be properly answered by what are called explanations. Such queries can be crudely put in the form, "Why should we (do or believe) such and such?" The answers to any such question will be an explanation, and thus construed giving explanations may be the crucial aspect of the evaluators' work.

In educational evaluation it is very widely assumed that the kinds of explanations which are required are furnished by showing that there exists a regular association between a particular condition or set of conditions--

the treatment or program--and some other condition or set of conditions--the outcome or goal. It is assumed that the relevant question for practice or policy is simply, "What variables can we manipulate to achieve a particular goal?" and it is assumed further that establishing regular associations (significant correlations) gives answers to this question. It is also very widely assumed that, given the great complexity of educational settings and processes, controlled experiments, as they have been described and defined in the literature of social science methodology, are absolutely essential if educational practitioners and policy makers are to take the explanations offered to them as a basis for action.

In contrast to this general position, a few educational evaluators have recently begun to question the necessity, and to some extent even the legitimacy, of the evaluator's concern with giving explanations. In seeking explanations, these evaluators say, evaluators inevitably over-simplify and distort educational activities and situations. Seeking explanations also commits the evaluator to deciding for others how they should act, and involves him in imposing his personal values on them. To avoid these difficulties they urge evaluators simply to describe educational programs and settings as they find them, and to leave interpretation, judgment, and decision to the audience of the evaluation. If they are to come to their own understanding, the audience does not need explanation or experiment. What they need is simply detailed description.

An assumption common to these two different attitudes toward the role of explanation in educational evaluation is that there is a single fundamental sense of "to explain," namely, "explain causally." Further, it is assumed that controlled experiments are essential if causal explanations are to be possible in the social sciences. That these assumptions are made should be

obvious enough to anyone who is familiar with the field of educational evaluation. These assumptions require arguments in their favor; they should not simply be accepted as self-evident truths. While arguments have often been given, they are generally not as strong as they might be, for one reason: they either ignore altogether the possibility of other forms of explanation, or they consider only the weakest arguments for them. The primary purpose of this paper is to undermine these assumptions, and to call to the attention of practicing evaluators the existence of other forms of explanation. That is, not only are there other types of explanation besides causal explanation, but there are other ways of identifying causes besides conducting controlled experiments. This will necessitate considering some of the arguments for and about different types and methods of explanation, but an effort will be made to confine the discussion to those issues which have fairly direct bearing on problems evaluators would confront were they to offer an explanation of a particular type. A secondary purpose is to make a case for the importance of these other types and methods of explanation, that is, to argue that they cannot be eliminated from educational evaluation.

In this paper the concept of explanation is being construed, as it ordinarily is by nonspecialists, very broadly, as anything said or done to help someone understand something. One of the problems of any discussion which does not simply focus on a single model of explanation is the great diversity of factors, types, and methods which present themselves for consideration. Without some system for classifying and organizing these, one easily becomes confused. Different authors have different ways of classifying explanations, with no two being entirely consistent. The classification used in this paper will be based on a distinction between types and methods. Types refer to the

different basic questions in response to which explanations are given. Three of these will be considered: Why did X happen? Why was X done? and Why is X good? The basic types of explanations, in other words, are causal explanations, explanations of actions, and explanations of value judgments. Methods of explanation refer to the different ways in which answers to the three basic questions can be presented. Among those which can be identified are the following: descriptive, narrative, genetic, experimental, and theoretical.

As originally conceived, this paper would have discussed both types and methods of explanation, and in approximately the same detail. This has not been possible. The hypothesis of the original conception was that such a discussion would establish the relevance of each of the methods to each of the types of explanation. Of particular concern was the relevance of descriptive, narrative, and genetic methods to causal and evaluative claims. In the case of causal explanations, this would have undercut the assumption that there is a single ideal method. In the case of value judgments, it would have undercut the assumption that there is no method at all. As it stands, the paper deals only with types of explanations. Some effort has been made to argue for the indispensibility in evaluation of each of the types. That is, to do its job effectively any evaluation must provide answers to all three basic questions. In the conclusion, an effort will be made to suggest some of the implications of the discussion of types for the relevance of the different methods. Other than that, the reader will regretfully have to judge the implications of the paper for this question for himself.

* * *

Whether causal judgments and claims have a place in educational evaluation is a matter on which people may disagree. Some, for example, might argue

that the circumstances of most evaluations are such that warranted causal judgments cannot be achieved, and since what is impossible cannot be required, evaluators need not be concerned to make causal judgments. Others might point to the apparent conflict between making causal judgments about educational programs and the right of people to decide for themselves how their institutions will be ordered, what policies will be adopted. Evaluators ought not to interfere in the rights of other people, therefore, they ought not to make causal judgments or claims. On the other hand, it can be argued that however broadly or narrowly we construe the responsibilities of evaluation, causal judgments are necessary. This is most obviously so where practical recommendations are sought or expected; recommendations are invariably put forward on the ground that acting in a certain way will result in, or produce, some desirable result. When emphasis is simply on placing a value on a particular program, there will be a claim, implicit or explicit, that the program produced, or was responsible for, the state of affairs judged good or bad. Even when the interest is simply in understanding what happened in a particular situation, causal judgments will be hard to avoid. For example, in a report making no explicit recommendations or value judgments, it is hard to imagine an evaluator successfully describing what happened without making such claims as "The heavy work load and the fast pace left students with little time to use their imagination or to evaluate their own ideas." There is no explicit causal judgment in this example, but there is a causal judgment nonetheless. If things like this do happen in educational programs, telling about them is part of telling what happened.

One assumption underlying this paper is that negative conclusions about the legitimacy or propriety of causal judgments in evaluation are based on misunderstandings of the concept of causation. An examination of the concept,

of what is entailed by causal assertions, and of how causal relations are known, should lead to a clearer understanding of its place in evaluation, and to improved assessment of causes when they are required. While it cannot be claimed that philosophers have achieved any definite results about exactly how the concept of cause is to be analyzed or defined, there is general agreement on many points which are overlooked by nonphilosophers, especially, it seems, social scientists.

Prior to the seventeenth century, the traditional philosophic conception of cause was that of a necessary connection between events. Given one event, the other must occur, or could not fail to occur. This conception carried with it strong connotations of compulsion and unavoidability. This is a sense which seems to be retained to this day in many uses of the concept. Necessity in this sense has been thought to distinguish causal relations from relations of mere coincidence or accident. It is also an interpretation which seems to have been given some support by the success of science in reducing natural processes to the operation of uniform laws. But the necessary connection interpretation of cause is one which has itself proved difficult to understand. Early in the eighteenth century Hume argued that the connection between cause and effect is not logically necessary, for there is never any contradiction in denying that a cause, no matter how well recognized or firmly established, should be followed by its effect. To use his example, it is not inconceivable that a pool ball should remain stationary on being struck by another, rather than rebound away. Nor, Hume argued, is the supposed necessity of causal relations empirical in nature, for it is never directly observed in any recognized causal relation. When one pool ball strikes another, all that is observed is the first approaching and then the second beginning to move away from the first. Hume's arguments create great difficulties for anyone who interprets causal claims to mean what the necessary connection theory says

they mean.

Hume's own definition of cause has been the subject of much discussion, and versions of it remain influential today. It has become known as the constant conjunction, or regularity, theory. According to it, a cause is simply one event followed by another, such that events of the first type are always followed by events of the second type. The idea of necessity is not observed in objects themselves, but is imputed to them by the observer. This interpretation is presupposed by many social scientists when they talk about causes, since it is on this interpretation that statistical analysis can be expected to be most helpful in discovering causes: the more frequently two events or conditions are found associated, the more likely that they are causally related. Nevertheless, the regularity interpretation is generally regarded by many contemporary philosophers as deficient. The most important difficulties as far as educational evaluation is concerned are that it provides no way of distinguishing causal relations from merely coincidental relations, and that it fails to account for our ability to identify causes in specific circumstances, that is, when we have nad no prior opportunity to observe similar situations. Clearly, we do not interpret every association or regularity as an instance of a causal relation; something more is involved. There is general agreement among contemporary philosophers that this additional factor is that the one event, in some sense, produced, brought about, or is responsible for, the other. (Not all philosophers, however, would agree that reference to these factors constitutes a satisfactory analysis. These terms themselves must be analyzed, some would argue.) At most regular association is an indicator that there may be a causal relationship, but does not itself establish that there is one. While the claim that we can identify causes without making repeated observations may be difficult for statistically trained social scientists to

accept, it is an ability which Hume himself believed we have, and which contemporary philosophers have been much concerned to explain. Such an explanation would be very helpful to evaluators who, unlike educational researchers or experimental psychologists, frequently are unable to arrange repeated observations.

There have been a variety of attempts in contemporary philosophy to clarify the conditions under which we designate something as the cause, or hold it responsible. Some of these retain the flavor of the regularity interpretation, and some go beyond it altogether. One which remains substantially in the Humean tradition appeals to laws as the distinguishing feature of causal relations, and as the means by which causes are identified. According to this interpretation, we have a causal relation when one event is deducible from premises containing a law and a description of the conditions in which the event occurred. The cause is the event or condition present in the circumstances and identified in antecedent of the law. There are numerous problems with this proposal. Of those which have most direct relevance for the problem of causal explanation in educational evaluation are the following. Like its cousin, the regularity theory, the law theory fails to distinguish between causal relations and accidental associations; that is, it does not seem to be possible to identify laws of nature without appealing to the notion of cause. For example, if it is true that all the coins in my pocket are silver--a universal statement--it does not follow that if any coin were put into my pocket it would be silver--which is what it ought to imply if it were a law of nature. Another problem is that whether we consider the highly specified laws of physics, or the loose "laws" of common sense, there is always a problem of determining the conditions under which they apply, and thus, in

particular circumstances whether they apply at all, or whether they imply what they seem to imply when considered in isolation from concrete circumstances. In physical laws, a wide range of conditions is excluded in the statement of the law, while in the ordinary laws of common sense, conditions known to be relevant simply are not stated; these have to be taken into consideration when the law is applied. Experience, training, and judgment seem to be involved when a law is applied to specific circumstances. These problems seem to indicate that laws are not sufficient for causal explanation. It does not follow, however, that they are altogether irrelevant. A third problem for the law theory is that it is possible to identify causes without appealing to laws, or where causes are not available. Auto mechanics, for example, are often highly successful at identifying causes, though they know little or nothing of the laws of physics. And historians may agree in identifying a particular event as the cause of another even when the events in question occurred only once. Michael Scriven, a prominent critic of the law theory, has argued that identification of causes without laws occurs even in the sciences. For example, "Exposure to the sun caused the farmer's skin cancer" might be asserted on the ground that regular exposure to sunlight is a cause of cancer and the farmer was so exposed, though there is no law warranting an inference from exposure to the sun to the occurrence of cancer.

Another way of interpreting the causal relation still nominally within the Humean tradition is in terms of necessary and sufficient conditions. Some authors prefer a necessary condition analysis, others a sufficient condition analysis, and still others an analysis in terms of conditions which are jointly necessary and sufficient. The appeal of such analyses is the fact that "If X had not occurred, Y would not have occurred," and "If X had occurred, Y would have occurred," are generally taken as alternative statements or implications

of the statement that "X caused Y." But this is not strictly or literally what we mean, and whether interpreted less literally it is what we always mean is at least an open question. We frequently identify things as causes which are neither strictly necessary nor sufficient. "The cause of the fire was the short circuit" may be true even though the fire could have come about some other way, and even though it would not have occurred if oxygen had not been present. It is necessary, therefore, to restrict necessary and sufficient condition analyses to the conditions or circumstances actually obtaining at the time the event in question occurred. Sometimes the conditions which are usually relevant can be identified; sometimes they are very difficult to identify. This fact, coupled with the logic of necessary and sufficient condition argumentation, makes it very difficult to establish whether a condition is either necessary or sufficient. To establish that a condition is necessary it must be shown that the effect never occurs when the condition is absent; the fact that they have always been observed to occur together leaves open the possibility that there is another condition associated with the first which is sufficient by itself for the effect. To establish that a condition is sufficient it must be shown that the effect always occurs when the condition is present; again, regular association of the two conditions leaves open the possibility that there is another condition associated with the first, without which the effect does not occur even when the first is present. Determination that a condition is necessary or sufficient, therefore, depends upon prior knowledge, judgment, or assumption that no other causes are present. It does not follow that determination of necessity or sufficiency cannot be made; the prior knowledge may be well established, the judgment highly reliable, the assumptions the only reasonable ones in the circumstances.

This brings us to the final interpretation of cause. Actually it is

not a single interpretation, but a set of more or less independent, but intuitively related interpretations. These interpretations attempt to account for the wide variety of considerations appealed to in actual practice in distinguishing causes from accidental associations, and in identifying specific factors as causes, especially in specific circumstances. These considerations have to do with the knowledge, understandings, and values of the persons requesting or giving explanations, and are recognized to play a role by even philosophers who prefer one or the other of the interpretations of cause considered above. These interpretations could be designated as pragmatic or contextualist in nature. They are pragmatic in that they give priority to what people actually do in making causal judgments, rather than to what abstractly or logically considered it may be thought they ought to do. They are contextualist in that they call attention to, and try to account for, the way in which we often appeal to particular features of a situation--an aspect, condition, or event--in justifying our picking out one feature of the situation as the cause, even though we use no rule, law, or other formal principle in doing so, and would be unwilling to make our appeal to this feature into such a principle.

One of these interpretations attempts to account for tendency to attribute "agency" or "power" to causes, and to select as causes factors which strike us as active rather than merely passive. For example, we are more likely to attribute the development of imagination and critical thought in students to the presence of competent and stimulating teachers, rather than to the presence of quiet and orderliness in the classroom. The account given for this tendency is in terms of our own abilities to manipulate things: a cause, as opposed to a mere condition, accidental or otherwise, is any factor which we could, by manipulating, use to bring about a particular effect.

Manipulability would seem to be an obvious consideration in a field like educational evaluation which is concerned with making practical judgments and recommendations. Learning about conditions which they are unable to change is not helpful to educators or citizens, and if we are not confident that manipulating a particular factor would bring about the desired effect, we should be cautious in calling it the cause, or in applying other causal locutions to it. But manipulability does not provide us with a criterion of cause, at least not in any simplistic sense. It may be that a particular manipulation is regularly followed by a particular result in all the cases observed so far; it still may be that there s another factor, which if it were removed, would render the manipulation ineffective. Again, other considerations seem to be involved in deciding whether a manipulation did or would bring about an effect. Still, as a regulative ideal--"Seek factors which could be used to produce the effect!"--manipulability does seem to be a helpful interpretation.

Another pragmatic-contextualist interpretation of causation might be called the semantic connection theory. It calls attention to the way in which our understanding of the effect--the description we believe appropriate, or the way we conceive it, that is, the network of assumption and theory into which the word we use to refer to it fits--may affect the kinds of things we accept or reject as suitable causes of it, and vice versa. Relations between causes and effects on this theory are not simply empirical or contingent; they are also partly relations of meaning. Much disagreement about causes in education seems to stem from considerations of this kind. Two individuals may agree that the schools are not doing their job properly. But one means by this that students are not going to college at the same rate or getting jobs as good as students from other schools, while the other is concerned that students are

not learning to think critically, or are not developing a lasting interest in learning. It is quite likely that the factors they identify as causes of the schools' failure will differ, perhaps radically. Likewise, a program judged good when described simply as "a program to help potential drop-outs complete their high school education" may be judged quite differently when described as "a baby sitting service, which grants diplomas simply for time served." "What does that have to do with getting an education?" someone may ask. These different judgments are explained on this theory by the different conceptions of the cause or the effect held by the different parties; each chooses that factor which "fits," or is "semantically congruent with," his conception of the cause or the effect. The networks of assumption and theory employed in this way may be composed of truisms and generalities, rather than laws or universals. A somewhat related interpretation appeals to our expectations regarding a particular situation, rather than our conceptualization of it as such, to explain how we pick out the cause. Situations which are not unusual are situations in which no explanation is called for. It is deviation from the normal which calls for explanation, and we select as the cause that factor which makes the particular situation different from the normal situation. Causes are thus relative to expectations, and, therefore, do not require laws or regularities for their identification.

This interpretation of the causal relation has the virtue of accounting for the way particular facts, as opposed to generalizations, may be accepted as explaining an effect; the fact is one which is connected by accepted meanings, truisms, or generalities with the effect. It also accounts for the way descriptions may explain an effect: the description either employs concepts which are connected with the way the effect in question is conceptualized by the person to whom it is given, or else it shows how the effect is more

adequately or appropriately to be conceived. Those who propose this theory do not offer it as a theory of how causal claims are established or justified, but simply of how causes are picked out or identified. When used to justify, it presupposes the adequacy, correctness, or truth of the concepts, meaning relations, and generalities embodied in the network appealed to. There is the danger that ready availability of a "fitting" cause for every effect when a particular network is uncritically presupposed may lead people to overlook or disregard other ways of conceiving the situation. It is only when these latter possibilities are explicitly entertained that the justificatory appeal to conceptualizations can be regarded as nonarbitrary.

* * *

Explanation of human actions is a type of explanation which has been seriously overlooked in evaluation. In action explanation, human behavior is regarded as something done, rather than something which merely happened, and it is explained by giving the reasons or the purposes for which it was done.

Is evaluation concerned with action? It should be. One reason it should be is that education is necessarily concerned with promoting action, and not mere behavior, in students. That is, it is concerned that students should in some sense know the reasons or purposes for the things they learn to do. So in evaluating the effectiveness of an educational program part of the problem will be determining how the behavior produced in students is to be explained--whether it is action, or something else, and if it is action, what kind of action. Another reason is that the kind of action involved in an educational program is an important clue to the values to be applied in judging it, to the effects requiring explanation, and thus to the causes to be sought out. Why

did the policy makers adopt the program they did? What did they hope to accomplish? What were the program personnel doing when they adopted certain measures? What expectations did parents have when they sent their children to the program? Still another reason evaluators ought to be concerned with action is that action and agents are important causal factors in educational settings, and can thus be crucial in accounting for a program's effectiveness or ineffectiveness in bringing about certain results. If program personnel do not do certain things, or do them in a certain way, the program will fail, and if they do not share the reasons for which they are requested to perform actions, they may not do them. Likewise, if people in the community hold values which are in conflict with the reasons given for doing particular actions or kinds of action in a program, they may act in ways which undermine its effectiveness.

There are a number of questions which might be considered in discussing the role of action explanations in educational evaluation. One is whether action explanations can be replaced by explanations of some other type, perhaps purely descriptive or causal in nature. Another is whether explanations in terms of actions can be tested, and if so how. A conviction that action explanations are inherently untestable has been one of the reasons for their neglect in educational research, and for searching for other kinds of explanations to put in their place. Philosophers have approached these problems primarily through the concept of action, that is, through a consideration of what we mean when we make claims about actions or abilities to perform them. Some of the answers to this last question will be reviewed in this section, and some general conclusions will be drawn. The consequences of these conclusions for the first two questions will then be considered.

One of the oldest, and to the nonphilosopher perhaps the most natural, interpretations of action is that it is bodily movement, or behavior, which is preceded by some internal mental event--a feeling, desire, choice, willing, etc. This interpretation has its contemporary proponents, but as stated in this unsophisticated version it has been generally found deficient in several respects. One is that it appears to rule out a very wide class of recognized actions, namely, habitual actions. It is perhaps characteristic of a skilled and experienced teacher that he does not have to consciously think or decide about every thing he does during the course of a lesson. He does not have to decide whether to clarify a student's confusion or to squelch a disturbance about to break out in the back of the room. He just does one or the other, and whichever it is, it is no less an action simply because there was no conscious decision. Likewise, it would require us to count as an act any behavior which was preceded by a mental event of some kind. But we often refuse to do this when there is evidence that the behavior was in some way compelled or coerced, as in the case of the behavior of people whom we judge to be emotionally disturbed. So if mental events are involved in action in some way, it is not simply by preceding behavior. Probably the most difficult problem for this interpretation, and the one which has had the most impact on educational evaluation, is the belief that the mental events spoken of, being mental, are purely private, and thus not subject to external observation. Thus, they can play no role in the explanation of behavior, since explanations making use of them could not be objectively testable or verifiable.

It is this latter problem which gives rise to the interpretation of action to be considered next. This interpretation is familiar to every student of educational psychology. According to it, actions are nothing more than tendencies to behave in certain ways, perhaps in response to conditions in

the environment or to physiological states of the body. To explain an action on this theory is simply to say that whenever the agent, or organism, is in a certain situation or a certain state, it always behaves in a certain way. All of the elements of the explanation--the environmental conditions and the bodily states under which the behavior occurs, and the behavior itself--are externally observable, and explanations making use of them are therefore objectively testable. Actions, then, are explained by laws which are not different in any essential respects from the laws which explain the relations of physical objects. In addition to the great difficulty of specifying the precise conditions under which reasonably complex organisms in natural environments behave as they do, there are reasons for regarding this interpretation as inherently implausible. For one thing, we do draw a distinction between action and mere behavior, or "mindless" behavior. Sometimes the distinction is not so easy to draw, but sometimes it is very sharp, as in the case of people acting under hypnotic suggestion. Related to this is the fact that citing behavioral tendencies is often very unsatisfying as an answer to the question "Why did he do it?" A teacher may always exhibit a certain behavior whenever certain conditions occur, but citing this fact does not explain it; we want to know "why" it was done, i.e., what the teacher was trying to accomplish. Further, the kinds of regularities described or appealed to in action explanations are never unqualified; even when we know the conditions under which a teacher exhibits a certain behavior, and the reasons for which he does so, we still allow that even under these conditions and with these reasons he could act differently. For example, a particular teacher makes it a point to ask students to give reasons for statements they make in class, but this time he does not, since he does not want to intimidate this particular student. Running through all these problems

is the fact that the regularities involved in action do not seem to be simply behavioral or physical; the agent's point of view, the interpretation or description he would give to the situation, seem to be ineliminable. The situation in which a teacher demands a reason, and the one in which he offers encouragement instead, though outwardly the same, are not the same situation to the teacher.

It is this last fact which is given prominence in the next interpretation of action. On this interpretation, action is rule-following behavior. Here, "rule-following" is contrasted with rule-conforming behavior. That is, the agent either implicitly or explicitly acknowledges that the rules apply to his behavior, whereas in rule-conforming behavior, no assent is implied. The fact that the agent's assent need be only implicit permits us to regard habitual actions, that is, actions not preceded by any mental event, as actions in the full sense. And provided that we know the rule which applies, we can explain a person's actions merely by citing the rule and describing the behavior. Indeed, if the rules and the conditions under which they apply are known to others, description alone, on this interpretation, will be sufficient to explain actions.

One of the problems of this interpretation, however, is explaining how, if at all, we can know what rules apply in a particular case. Is this an objective matter or not? It is possible to ask people, but as many evaluators will point out, this can often be misleading: people are often reluctant to acknowledge the appropriate descriptions of their behavior. To account for our ability to recognize actions, to recognize them as actions of distinct kinds, and to provide an objective basis for the descriptions and explanations we give, proponents of this interpretation have appealed to the notion of social practices. To have a rule is to engage in a form of behavior for which

there are publicly ascertainable conditions for regarding or recognizing it as behavior of a certain kind; it is either to have been trained into an established social practice, or to be able to train others into a practice which is capable of becoming established. In the context of an established practice, to behave in a certain way is to perform a certain kind of action, whether one acknowledges it as such or not. At a public auction, for example, to nod one's head or to lift one's finger at the appropriate time is to "up the bid." The kind of action that was performed in a particular case will not always be so clear cut. Different rules may be relevant, and the conditions governing them may overlap, or be undetermined for the conditions at hand. A teacher's behavior may be described as "humiliating" students, or as "making them think." But which it is will be decided by describing the facts of the situation in more detail, and requires no appeal to any irreducibly subjective mental events.

There are philosophers, however, who, though they are prepared to recognize both the importance of the agent's point of view in explanations of what he does, and the role of rules and public practices in recognizing different forms of action, fail to see the explanatory force of merely ascribing a rule to behavior, or of fitting it into a social practice. If descriptions of an action in terms of rules or practices are to be genuinely explanatory, they must indicate why the person acted as he did, how he came to act in this way. These philosophers suggest that the only possible answer to this question is to regard the reasons in terms of which an action is explained--the attitudes and beliefs which make it intelligible--as the cause of the action. Otherwise, reason-giving explanations do not really explain. The only reason for not regarding reasons as causes of the actions they explain, it is argued, is certain misunderstandings of the concept of cause. Some of these, those having

to do with the role of generalizations in causal explanation, for example, have been touched upon in the preceding discussion of causal explanation. The fact that we may know the reason for an action without knowing the truth of any generalization, or that we cannot take the reason for an action--the rule and the condition in accordance with which and under which it was done--as a straightforward generalization, does not prevent reasons from being causes, for the same thing may be said of other kinds of causes.

Two points from the discussion of objections to regarding reasons for actions as causes are especially important, however. The first is that even though reasons and actions are conceptually connected--that is, in giving the reason we describe the action, and we may describe the action by giving the reason for which it was done--whereas causes and effects are merely contingently related, this does not prevent reasons from being causes. Though reasons and actions are conceptually connected, each is an independent occurrence, which may be describable independently of the other. The teacher asked the student for his reasons in order to make him think. But it will also be true that the student blushed, stumbled over his words, became confused, etc. Further, that wanting to make the student think was the teacher's reason may be checked by asking him, by asking other people who know him and who have observed his performance in the past, or by observing his behavior in similar situations in the future. If these checks support the interpretation, then that he was trying to get the student to think has been empirically established, and was not simply a foregone conclusion of the initial description. Likewise, if the interpretation is not borne up by our efforts to test it, then another--he was simply humiliating the student--will have been objectively and empirically established.

The second point is that regarding reasons as causes does not conflict

with the idea that actions are voluntary behavior--it does not make agents into helpless victims. The belief that it does so is based on the assumption that every cause itself has a cause, that the only systems operated upon by external conditions can be causally explained. Proponents of the reasons-are-causes view deny this assumption. They call attention to the existence of self-maintaining physical systems, and to those causes which "have no agents," primary among which are said to be "those states and changes of state in persons which, because they are reasons as well as causes, make persons voluntary agents."[2]

It should be stressed that the overall force of the argument that reasons are causes is not just that action is subject to causal explanation--which is claimed--but that explanations of actions in terms of reasons are legitimate forms of explanations. It is certainly not claimed that the distinctive features of action explanations--that the situation must be viewed from the perspective of the agent, and that the action is performed to bring about a certain desired state--can be eliminated in favor of straightforward physical causal explanations not involving these features.

Before leaving the subject of action explanation there is another topic which ought to be at least mentioned. There is a broad class of social explanations, and approaches to explaining social phenomena, which are not concerned with, and may make no mention of, individual human actions. There are also explanations in which the behavior of an idealized individual, either an actual individual specially selected or a hypothetical individual constructed from observations of several individuals, is interpreted as a way of explaining the behavior of a whole class of people or an institution. Certainly in evaluation we ought to be concerned with the broader social, political, and cultural dimensions of educational programs, as well as the programs

themselves and the activities of the people in them. Nevertheless, the issues raised by these kinds of explanation, while interesting in themselves, seem sufficiently similar to those involved in explaining individual actions to permit a discussion of the latter to serve as an introduction to the former. The discussion of the explanatory efficacy and the empirical testability of action explanations, for example, should throw some light on the use of functional explanations, that is, explanations appealing to the purposes served by social arrangements. The discussion of the role of rules and social practices in interpreting behavior and understanding actions could be taken as an interpretation of what is meant when it is claimed that "understanding" depends on "insight" or "empathy." The ineliminability of the agents' point of view suggests the potential significance of descriptions of "ideal types." Finally, without suggesting the meaninglessness of statements about social wholes or patterns, it may be argued that explanations in terms of them must ultimately, as with explanations of individual actions, be tested by seeing whether they apply to the behavior and actions of the individual members of the social whole--and, with qualifications, whether they are recognized as doing so by the individuals themselves.

* * *

There is an important question which remains unanswered when we have understood, or explained, what a person did, or why he did it. That is the question whether he <u>should</u> have done it, whether it was a <u>good</u> thing to have done. Any answer to this question gives rise to a further question: Why should he have done it? What was good about it? In other words, there is a role for explanations in judgments of value, and thus it is perfectly proper to speak of giving value explanations. This is a possibility which both

those educational evaluators who emphasize the importance of causal judgments in evaluation, and those who say that simply helping others to understand is enough, have neglected. An understanding which does not help us to see what is good or bad about a thing, in what respects, and with what qualifications, is a poor understanding. And an explanation which merely tells us that manipulating a certain variable will produce a certain result provides us with no basis for deciding whether actually to do so.

If we accept the idea that the fundamental responsibility of educational evaluation is to produce warranted judgments about effective and economical means to worthwhile ends, there would hardly seem to be any more important form of explanation in evaluation than value explanation. This is a claim that most evaluators, though not all, probably would not agree with, however. That it strikes us as a meaningful, if somewhat rash, assertion rather than an obvious truism or tautology, is testimony to this fact. The reasons for this attitude are certain assumptions about the nature of value explanations. There is the assumption that they are simply not possible, that is, that they cannot be objectively tested or criticized, and are therefore scientifically or intellectually irresponsible. On the other hand there is the recognition that to claim that something is good or worthwhile is to make an objective claim, one that claims general validity, and the assumption that this involves a denial of the legitimacy of values held by others, and the adoption of an authoritarian and absolutist stance. Finally, there is the belief that it is possible to simply describe educational programs without making any commitments on questions of value, and the assumption that since it is possible it is somehow a worthwhile thing to do. In the remainder of this section we will review some of the major attempts to understand the nature of value judgment, in the hope that we will see our way clear to a resolution of the issues which will furnish some guidance to evaluators.

One sense in which a statement might be said to be objective is that in which it refers to an object, or a property of an object, in the world. One important Twentieth Century theory of value known as intuitionism, gives prominence to this sense of objectivity. In this theory, "good" is the name of a special kind of property of objects. In this respect, normative concepts and statements are no different than the strictly factual concepts of science. But in another respect normative and factual concepts and statements are very different, for the properties referred to are unique: they are neither factual nor definable in terms of factual properties. That this is so is shown, it is held, when we consider any attempt to define a normative concept on purely factual, nonnormative terms: the definition and the concept are never equivalent; the fact that the former is satisfied leaves open the possibility that the latter is not satisfied. Consider the concept of a "good teacher." A "good" teacher could be defined, as many would have us define it, as one whose students get good grades, or earn high scores on standardized tests. But if the students of such a teacher became dogmatic thinkers, or learned to hate school, or came to believe that nothing was worth doing except for some reward, many would urge that he was in fact a poor teacher, in spite of his students' good grades and high scores. Similar problems could be raised for any attempt to define good teaching in nonnormative terms, as the volumes of research on teacher characteristics would appear to show.

An important, and to many minds desirable, consequence of this theory is that insofar as it is adequate, it establishes the autonomy and the legitimacy of normative judgments and institutions. Normative claims are meaningful claims, and their meaning is not dependent upon or reducible to merely factual claims. In the business of making and defending normative judgments

we must make use of normative concepts; we cannot dispense with them in favor of other concepts with which we may happen to be more familiar or more comfortable. If observation and description of teaching, for example, are to provide warrant for normative claims about teaching, it must be observation and description in terms of the concepts by which teaching, perhaps teaching of a specialized kind, is judged good or bad, effective or ineffective, appropriate or inappropriate.

There is another side to this achievement, however. In thus arguing for the autonomy and indispensability of normative concepts, intuitionism raises serious doubts about the relevance of factual information to normative claims. This is troubling because it appears to undermine the very thing the theory was concerned to uphold--the objectivity of normative judgment--for it suggests that normative claims cannot be defended or tested by appeal to facts in the way that other claims are.

Whether normative judgments can be objective, whether they are subject to rational defense or testing, depends, therefore, on the theory's positive account of normative meaning. If normative properties are not definable in terms of nonnormative properties, then how do we know what the meaning of normative concepts is? The only alternative to acknowledging that normative concepts and statements do not have any proper meaning is to claim that we are somehow directly acquainted with their meaning; the meaning of normative concepts will be something given through a direct and unmediated intuition. This account of meaning is paralleled by a theory of the way evaluative claims are justified. All value depends ultimately on things which can be seen to be valuable in themselves, or intrinsically valuable, independent of their relations to other things or the attitudes we take toward them; otherwise any

value claimed will be merely relative or subjective. Until an action, for example, is shown to at least lead to consequences which are good in themselves, its value can on this theory be only provisional at best.

This theory of normative meaning has a number of unsatisfactory consequences. One of them is the great difficulty in practice of discovering anything which may be said to be good in itself. Most of the things we ordinarily find good we judge to be good for some purpose, or because it is regarded as good by some group of which we happen to be a part, or to hold in esteem. This theory would appear to call into question the validity of such judgments. Educational programs have frequently been evaluated in terms of their goals and objectives; recently this procedure has been criticized on the ground that it does not address the problem of evaluating goals and objectives themselves. It seems farfetched to interpret this as a disagreement over whether in practice goals and objectives have been shown to be intrinsically good.

Another problem is the fact that while the theory gives an explanation of what, in the ideal case, the meaning of a normative concept or claim is like, it provides no explanation at all of how the meaning of a normative concept, or the truth of a normative claim, may be known when this is a matter of controversy. Indeed, the theory seems to deprive us of any means for dealing with such situations. Either we are acquainted with the relevant property, and recognize it to be present in particular cases, or we do not. We may not appeal to definitions in explaining the meaning, nor to nonnormative facts in persuading others that the property is present. Nor may others do so in persuading us. As G. E. Moore, one of the major exponents of this theory has argued, anyone who "attentively considers" what is "before his mind" when he uses the word "good" will see that "he has before his mind the unique object--

the unique property of things--which I mean by 'good.' Everybody is constantly aware of this notion, although he may never become aware at all that it is different from other notions of which he is also aware."[3]

But if someone is not aware that he is aware, how may we persuade him? And can the means of persuasion employed in such cases be properly regarded as rational? The theory gives no answer to the first of these questions, and it suggests a negative answer to the second. Thus the intuitionist account of the meaning of normative concepts fails to resolve the doubts raised by the argument for its independence from factual meaning.

The concept of "good teaching" can again be used to illustrate these difficulties. If, as the intuitionist theory implies, "good teaching" cannot be defined in terms of factual or descriptive concepts, then what basis is there for judgments about the quality of teaching? The answer is that there must be a property which marks teaching as good, and it is acquaintance with this property which makes our judgments true; if in a particular instance the teaching lacks the property, then the judgment that it is good will be false. But there seems to be no little dispute and disagreement about what makes teaching good, even in particular cases. Imagine that a particular evaluator is in fact acquainted with the property which the intuitionist says must exist if judgments about the quality of teaching are to have meaning and to be subject to confirmation. How are those who are not acquainted with the property to be made aware of this fact? How may he persuade them of it? Since he may not use any nonnormative definitions, it would seem he has no way of doing so. As a result, those who disagree with him have no way of differentiating his judgment from that of someone who is simply being dogmatic.

It may well be that the features of the intuitionist theory which give rise to its problems are closely related to assumptions about the nature of

value judgment which have led many educational evaluators to deny that it is appropriate for them to make value judgments. But if so, and the theory is inadequate, then this conclusion does not follow.

The next theory of evaluative explanation to be considered is one which attempts to correct many of the deficiencies of the first. Where the first was primarily concerned with accounting for the objectivity of normative judgments, the second gives prominence to normative disagreement. The fact that such disagreements are far more difficult to resolve than those of a more narrowly factual or scientific character is difficult to account for on the intuitionist theory of normative meaning and justification. Disagreement is a fact not just to be accounted for, but a possibility to be preserved, for this possibility is in a way essential to normative judgment. When it is claimed that a particular course of action would be the best one to follow, all affected have the right to request reasons for the claim. Likewise, however, there must be some account of how dispute and disagreement may reasonably be brought to an end.

The second theory notes some facts about normative judgment which are overlooked in the intuitionist theory. The first of these is that normative judgments do not simply report that a thing has a particular kind of property. They also, and equally importantly, give rise to tendencies to act in a certain way, or to have a certain attitude toward the thing judged. When we are told that a teacher or an educational policy is good, we will, if we are inclined to accept this claim, tend to approve of them or act favorably toward them. Why is this so? How does the simple claim that something is good do this? The second oversight is the very great complexity, in actual practice, of normative meaning and argumentation. This is primarily a function of the vagueness

of normative concepts. Whereas the intuitionist theory suggests that any descriptive meaning a normative concept may have will always be some simple property, the theory we are now considering points out that normative concepts are customarily used to refer to a wide and unspecifiable range of characteristics and features of things and situations. It is not just that normative concepts may be used differently by different people, or that their use might be made more precise by definitions. On different occasions they may be used differently by the same person, and no nonarbitrary definition can foreclose this possibility. The same evaluator who judges a teacher to be good because his students earn high scores, may on another occasion judge a teacher who lacks this characteristic to be good, or on still another judge a teacher who <u>has</u> this characteristic to be a bad teacher. On each occasion there will be something about the situation which the evaluator claims makes different characteristics important. No definition will prevent us from recognizing that teaching may be good or bad in many different ways. Scientific or factual concepts are not entirely free from ambiguity, but they do not possess it to the extreme degree that normative concepts do.

As the first step in developing a more adequate account of normative judgment and disagreement, the second theory argues that the latter are differentiated from nonnormative or factual judgment and disagreement by the fact that they involve, in addition to disagreement in belief, disagreement in attitude. In a scientific dispute, when we have laid out all the facts, we have done all that we need to do to resolve the issue; anyone who continues to dispute beyond this point need not be given further consideration. When there are disagreements in attitude, however, the facts alone do not settle the issue; it is settled only when the disputants come to share a common attitude. Disagreement in attitude, then, accounts for the relative difficulty of

resolving normative disagreement. The possibility of objectively and rationally resolving such disagreement depends on the availability of some method for influencing or altering attitudes.

It is this feature of normative judgment which leads to the critical feature of the second theory's positive account, the one from which it acquires its name--its theory of normative meaning. Since there appears to be no one thing or property to which normative concepts refer, they must have meaning, if they are to have any at all, in some other way. The proposal put forward is that we regard as the meaning of normative judgments or claims the attitudes or emotions they express. Thus, to say that a thing is good is to say simply, "I approve of this." (Actually, the theory is prepared to acknowledge that more may be claimed, but this is the key element. The qualifications which are acknowledged will be discussed shortly.) The meaning of a normative concept, then, is said to be its tendency to evoke or arouse emotions or attitudes of a certain type in those who encounter it. For this reason this theory is known as the "emotive" theory of value. It is the complexity of the specific reactions evoked--the fact that they may be altered by circumstances, and be quite different for different people or at different times--which accounts in good part for the vagueness of normative concepts.

It is the fact that normative concepts have emotive meaning, that they arouse and shape attitudes, which is thought both to furnish the basis and to constitute the limits of reasonableness in the resolution of normative disagreements. We may, for example, describe features of an object or situation, that is, report facts about it, which will cause the hearer to be more favorable toward it than he had initially been disposed to be. Or, we may forego any appeal to facts or descriptive meaning altogether, and rely simply upon the emotive force of particular words, together with a knowledge of their

likely effect on the hearer, to make him more disposed to a judgment we wish him to accept. But in either case, it is the hearer's attitude which determines whether the "reasons" thus provided will be effective or not. Normative reasons are not logically connected with the judgments they support, but only psychologically: because of the role of attitudes in normative judgment, it is always open to the hearer, if he happens not to share the attitudes of the judge, to refuse to accept the judgment. This is true even when the reasons offered are true facts, or when it would be logically inconsistent for the hearer not to accept the judgment. Thus, anyone who wishes to claim truth or correctness for a normative judgment is obliged to first bring others to share his attitude.

Some advocates of the emotivist theory of value acknowledge the shortcomings of a theory which denies that normative judgments or concepts have any descriptive meaning whatsoever. Yet often when we say that something is good we are prepared to say in what respects it is good, to point out features of the thing or situation which make it good. To correct this deficiency, the theory of emotive meaning is supplemented in some versions with an account which allows that within specific contexts and for certain purposes normative concepts may be given definite descriptive meaning. Thus, an evaluator may explain that when he says a particular teacher is good, he means that she is sensitive to children's emotional needs, and that she is effective in helping them develop a sense of their own worth as persons. He may be asked what these qualities have to do with helping kids to get ahead in school--to learn to read and write, do arithmetic, and so forth. Here the evaluator could respond in a number of ways, which may or may not satisfy the questioner. He could point out that a high proportion of the teacher's students come from homes with weak families, and urge that the schools should be concerned to give such children an equal chance in life. Or he might claim that the basic

function of schooling is to develop feelings of self-worth in students. In either case the evaluator has given what the emotive theory of value calls a "persuasive definition." In a persuasive definition, the speaker assigns specific descriptive meaning to a term with the intent of bringing the hearer to adopt the speaker's attitude toward the thing to which the term is applied. While the normative concept thus acquires descriptive import, the descriptive features assigned to the concept take on an emotive coloring.

As with emotive meaning proper, persuasive definitions rest on a psychological, rather than purely logical, foundation. Whether they are accepted as correct or adequate depends on whether the hearer happens to share the attitude which they advocate, or whether they are effective in bringing the hearer around to acceptance of the attitude. Persuasive definitions reemphasize the vagueness of normative meaning, the complexity of normative argument. The descriptive meaning of normative concepts can no more be nonarbitrarily limited to a single definition than can their emotive meaning; it can only be "fixed" within a certain context, and only insofar as it rests upon or achieves agreement in attitude. But persuasive definitions are far from being merely arbitrary. In acknowledging the interdependence of emotive and descriptive meaning, they greatly enrich the resources available for resolving normative disagreements: empirical descriptions and facts regain some of the relevance many theorists would deny to them. Further, within a specific context and for specific purposes, it will often be possible to settle at least temporarily the meaning of troublesome normative concepts.

It should be clear by now what the strengths of the emotive theory are. In focussing on the actual use of normative concepts, rather than the requirements of an abstract philosophical preconception of what it is for a concept to have meaning, it gives us a theory which reflects far more accurately the

actual difficulties of normative judgment and argument than does the intuitionist theory. Most importantly, it provides us with an account of the role of normative judgments in influencing attitudes and behavior, and of the way description and factual information may support normative judgments. These are contributions which are not to be demeaned. Nevertheless, the theory, as it stands, falls short in one critical respect, and this deficiency seriously undermines the very features which ought to make it most attractive to us. In stressing disagreement in attitude, in making emotive meaning the fundamental aspect of meaning in the normative use of concepts, the emotive theory makes it impossible to distinguish between a judgment which gains acceptance and which is correct (valid, sound, true), or between reasons which are merely psychologically effective and reasons which, though they do not succeed in altering the attitudes of those to whom they are addressed, are logically sufficient to establish a claim. Without this distinction we cannot distinguish between mere propaganda and considered argument. Any fact, or any other consideration, which is persuasive must be regarded as good, and any claim which gains adherence must so far be regarded as correct. Whether we interpret the idea that normative judgments are objective to mean that they make a claim about things in the world, or that they make a claim which is susceptible to public testing and verification, it is an idea which no longer has any meaning.

The problem presented by the emotive theory, then, is that of distinguishing between good and bad reasons, on the one hand, and reasons which merely happen to be psychologically effective or ineffective, on the other--between reasons and other kinds of appeals or persuasion. Until this is done we can make no sense of the idea that normative judgments may make objective claim, nor can we understand what logical relation, if any, description and

facts may have to normative judgments. It might be argued that this problem arises because attitudes--feelings, likings, wants--are admitted to play any role in normative judgment and reasoning at all. Whether a thing is good or right, it might be urged, is independent from whether anyone wants, likes, or approves of it. There is a point to this argument, but if taken too strictly it leads straight back to the intuitionist position. The approach now to be considered adopts a different strategy. It dismisses neither descriptions and facts nor attitudes out of hand, but rather urges a limitation on those which may be admitted as relevant considerations in making and defending normative judgments.

As with the previous two accounts of normative judgment, this one is founded on a theory of meaning, but it is a theory developed in the light of the difficulties of the earlier accounts. The meaning of a concept is said to be, not a special kind of property, nor the attitudes it expresses or arouses, but simply the way in which it is used in a particular practice by speakers who share the practice in common. The circumstances or properties referred to, the emotional associations involved, may be quite different on different occasions of the use of a word or concept, whereas the meaning will generally be something constant. This constant factor running through all the occasions, therefore, is not given by identifying the properties or attitudes with which it is associated, but comes to be recognized as a result of being trained into the practice in which the word or concept is used. Anyone who has received this training will recognize what aspects of the situation are being referred to on a particular occasion, and they will also be able to judge whether the word or concept is being used properly.

How does this theory of meaning make it possible to distinguish, in the context of normative judgment and disagreement, good and bad reasons from

reasons which are merely effective or ineffective? It does so because the authority for the correct use of a normative concept on a particular occasion, no more than for that of any other concept, no longer rests entirely with the particular intuitions, feelings, or preferences of the individual, but with the social practice in which the concept is used on that occasion. Of course, this authority will generally be expressed through the judgments of individuals, but it is because they are practitioners of the relevant practice, perhaps especially knowledgeable or skillful practitioners, that their judgments are credited. This does not mean that the judgments of individual practitioners are infallible or immune from criticism, but the criticism which shows them to be in error will be criticism which expresses the judgment of the practice itself, that is, of the body of practitioners as a whole.

For example, the practice of educating children appears to assume both that there are things they should learn--a body of knowledge which can be regarded as true, skills which are valuable--and respect for the child as a potentially rational person. These assumptions often come into conflict, and in particular cases making a judgment which gives adequate weight to both is often difficult. At times, one assumption may come to be emphasized to the exclusion of the other. One person may insist that the school system has no right to "impose" a particular set of beliefs on his child. Movements may develop advocating rote learning of facts or routines with little concern for understanding. No matter how strongly such an individual adheres to his position, no matter how self-evident it appears to him, his judgment <u>may</u> be simply wrong. And no matter how broadly based any movement for educational reform may be, its program will not <u>necessarily</u> be good educational practice. What will decide the question will be the judgment of the educational profession itself, particularly of those members most directly involved in the actual

practice of educating. This is not so much because they know more about teaching and learning, or about the effects of various practices, but because their judgment defines what it means to educate someone. It does so because, and only insofar as, they are qualified and concerned practitioners of an activity which is independent of their merely personal desires.

A social practices interpretation of normative meaning and judgment puts the problem of the relation between descriptions and facts, and normative or evaluative concepts and judgments in a somewhat different light. In ordinary life we think it appropriate that one who makes a value judgment ought to be able to defend his judgment in terms of facts which have bearing in some way on his judgment. The intuitionist and emotive theories seem to deprive facts of this kind of warranting or justificatory use. But if the meaning of normative concepts is determined by the way they are used within the context of a social practice, there is no longer any justification for such a sharp distinction between facts and values. To see something as good or bad is not, when it is good or bad, simply to make an arbitrary pronouncement; it is to recognize it as such on the basis of characteristics which fit it, or make it unfit, for certain purposes in a certain kind of activity. It will be for a person competent in this activity that such characteristics have relevance, and when he has stated his judgment, it is to these characteristics that he will refer in explaining or defending it should he be asked to do so. The point of referring to these characteristics may or may not be understood by persons who are not particularly skillful or knowledgeable about the activity in which the judgment is made, but his fellow practitioners will know what he is talking about if what he says has any sense at all. The fact that non-practitioners do not understand or do not agree can bring his judgment into question only if it is confirmed or supported by the judgment of others who

are competent and concerned.

To call something good, therefore, is to make a descriptive claim, whose truth can be tested, and whose meaning can be spelled in terms of characteristics possessed by the object. Likewise, to describe a thing as having certain characteristics is already, from the point of view of a particular activity or practice, to begin to judge its worth. Thus, the connection between facts and values is an intimate one, one which in two important respects may be seen to be logical, and not merely empirical or psychological: what counts as a fact in a particular activity will not be recognizable apart from the values embodied in that activity; that certain facts constitute a reason for a judgment of value is not negated by the fact that someone is unable or unwilling to recognize them as such.

This theory may help to explain why educational evaluators have had such difficulty in identifying and applying criteria of educational effectiveness--of good teaching, for example. Not only do they find it difficult to get educators to agree upon standards or criteria which, from the evaluator's perspective, are at all precise, but educational researchers have found few correlations between any of the great variety of candidates which have been proposed. From the perspective of the social practices theory this state of affairs is readily understandable. Educators are reluctant to agree to any rule which picks out a specific characteristic, or even a set of characteristics, as the indicator of a good teacher because this is not the way they judge good teaching. There are innumerable respects in which a teacher may be good, and innumerable factors which may identify a teacher as good in any one respect. What makes a consideration relevant is whether it contributes to or detracts from the point of the activity of teaching and educating children. Whether a factor is a consideration in the evaluation of teaching, and what

in a particular case it indicates, is best judged by those who best understand the point of the activity. Correlational research attempts to evade this kind of judgment, and to assess the relevance of various factors apart from it altogether. But whether a factor correlates to a high degree or a low degree with some other factor tells us very little about its status as an indicator of good teaching. A factor which correlates highly with some other proposed indicator may in certain circumstances be discounted by a competent practitioner, and one which has only a low correlation may also be given great weight.

This theory gives rise to many legitimate questions and concerns. In particular, there is likely to be a feeling that it introduces an element of arbitrariness and relativism, not unlike those encountered in the intuitionist and emotive theories. At this point it can only be briefly suggested how the ideas of the preceding discussion might be brought to bear on these concerns. This will be done by addressing two issues which may be of special concern to evaluators. One of these arises from the fact that facts are things which we normally believe it takes care to discover. Evaluators are especially acute to the difficulties of this task. The theory being considered here may seem to undercut this, for if descriptions and facts are relative to social practices, it might be thought that it is open to the individual practitioner to make anything he wants a "fact" merely by calling it such. This is a mistaken conclusion, however. The kinds of things which may count as facts are defined by the practice, but whether any object or situation possesses these features is something to be found out by observation requiring no less care than any other interpretation. Further, even a person who knows how to look and what to look for may make mistakes in carrying out his observations, or in drawing conclusions from them. Such errors will be discoverable by anyone

competent and concerned to find them out, in much the same way that errors in scientific observation and inference are discovered--by conducting observations of one's own under similar circumstances, and by comparing the conclusions drawn with the evidence presented. They will even be discoverable by nonpractitioners, provided they are willing to make the necessary investment in becoming competent themselves.

Another concern of evaluators may be that the social practices theory makes normative judgment appear too relativistic, and thus leads practitioners and evaluators to think either that there is no need to explain a practice or the judgments made in it to nonpractitioners, or that there is little they could do toward this end if they wanted to. On the first point, when properly understood, the implication of the social practices theory is quite to the contrary. The claim is not that normative judgments are relative to social practices simply in the way that values are said to be relative to culture or ideological perspective. Rather, the claim is that it is only insofar as there is a shared practice that disputes about the truth or correctness of judgments have any point. Thus, if one person claims that an educational program is good, meaning only that it is compatible with his ideological commitments, and another says it is bad, meaning only that it is compatible with his ideological commitments, they do not so far disagree. It is only when they disagree about the point of a practice which they have some common interest in and commitment to that they disagree, and only insofar as they are able to come to some agreement on this question that they can hope to resolve the question of whether the educational program was a good one or not. Thus, if educational evaluators want to be taken seriously by others, they had better be concerned with explaining the activity within which their judgments have a point.

Nor does the social practices theory deny to practitioners or evaluators any of the resources for communicating with outside audiences that would otherwise have been available to them. What it does suggest is that the problem is not so simple as it has often been assumed to be, and that it will therefore be necessary to draw more widely and deeply on the resources of the language shared by practitioners and nonpractitioners alike, and perhaps employ them more skillfully, than we have done in the past. It is not that judgments cannot be understood by nonpractitioners, but that they will not be understood if communicated and explained in the condensed way they often are among people who have common understandings and concerns. Rather, judgments will be made intelligible by describing in the common language those features of the situation which are thought to be involved in and to justify them, with the intent that a person who does not have the practitioner's background should be able to gather from such a description something of his feel for the situation.

It may be claimed, therefore, that the social practices interpretation of evaluative explanation preserves the insights and achievements of the intuitionist and emotivist theories while avoiding their difficulties. Facts construed without regard to normative considerations do not establish normative judgments. The diversity of normative meaning, the difficulty of normative judgment, and the fact that it goes beyond reporting information to provide bases for action, are acknowledged and accounted for. Nevertheless, within normative contexts, constituted by the existence of distinct social practices, normative judgments have objective significance and can be objectively established.

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At this point the reader may wonder what implications this review of types of explanation has for educational evaluation. This question deserves response at length, but at this time the following comments by way of summary and conclusion will have to suffice. It has been argued that there are three distinct types of explanation, each of which is in different ways indispensible to an adequate evaluation. Two of these types of explanation--action explanation and value explanation--have generally been neglected in evaluation, largely out of doubts about the degree to which they may be objectively established. Causal explanation has generally been interpreted in a rather narrow fashion, and causal claims not satisfying its requirements have been regarded as unsound. To the extent that the discussion of types of explanation is judged satisfactory, its consequences for evaluation should therefore be rather important. For it has been argued that action explanations and value explanations may in their proper uses have objective significance which is capable of being spelled out empirically, and that they are therefore susceptible to public testing. They are, in other words, fully legitimate forms of explanation. Further, those analyses of causation which are most similar to the way the concept is generally used among educational researchers and evaluators have been shown to be inadequate, while claims of the type which have been discounted--particularly those which are neither based upon nor give rise to generalizations--were shown to be both meaningful and capable of being known to be true.

Evaluators frequently find themselves in positions of having to "make do"--of having few of the generalizations, explicit goals, or formal criteria which their methodological training and commitments lead them to believe are necessary, and with little time, resources, or skill for obtaining them. Under these circumstances they are often beset by doubts about the intellectual, and

even the moral, respectability of anything they might do in carrying out their responsibilities. The first general conclusion of this paper might be put thus: in spite of the less than ideal circumstances in which evaluators generally have to do their work, there are ways of responsibly arriving at intellectually and morally sound explanations. Indeed, the purposes for which evaluation is conducted may be poorly served if evaluators give first priority to satisfying their methodological commitments rather than the demands of the situations in which they are called upon to do their work. This is not to say that the evaluators' work will be any easier, for the means which are available make severe demands on both their judgment, and their consciences. There are no simple rules telling them how they should conduct themselves.

A second general conclusion, and some corollaries of it, begin to suggest what these means are. This is the great importance in each of the types of explanation of background knowledge of the appropriate kind, and of thorough familiarity with the details of the specific situation in which explanation is called for. The background knowledge here is not simply empirical, though it is that; it is also conceptual and normative. One must understand and know how to use the language in which situations of the kind in question are described and discussed, and one must be familiar with and understand the point of the activities going on in them. One corollary of this is that it is in detailed exposition of the particular situation, embodying and expressing the language appropriate to it, with careful discussion of the considerations thought to justify the selection of particular explanatory factors, that evaluators will find the substitute for the generalizations, criteria, and theories which are unavailable to them, and which are not likely to be forthcoming. The second corollary should be obvious: exclusive reliance upon formal methods of formulating and testing hypotheses is likely to give misleading and

unsatisfactory answers to explanatory questions. This is not to say that such methods are inherently irrelevant or useless, but that their validity presupposes, and must be supplemented by, detailed considerations of substance of the kind being discussed here. Formal methods are no shortcut to, nor can they override, substantive knowledge and understanding.

On the basis of these conclusions and the discussion from which they are drawn, it is possible to make some general comments about the relevance, if not the use, of the different methods of explanation which were distinguished from types of explanation in the introduction. These methods can themselves be divided into two categories. In one are the descriptive, narrative, and genetic, in the other are the experimental and theoretical. Evaluators in the two camps holding the different positions on the role of explanation referred to in the introduction generally assume that this division is fairly sharp and final. One group insists that descriptions do not really explain, the other that it is possible to describe without either using or suggesting theories. This assumption is mistaken, and both camps err in judging only one of the two categories of methods to be of general significance or utility for understanding educational programs. Description and theory are interdependent, and the different methods of providing answers to explanatory questions shade into one another.

In the sense that observation and judgment may be guided simply by a loosely interrelated set of beliefs, understandings, assumptions, and routines which are inexplicitly formulated, if at all, description is not dependent on theory. It may nevertheless be found to be highly accurate and revealing. When it has these qualities, and when the audience to whom it is offered share to a sufficient degree the background knowledge on which it is founded, description--including narration and genetic accounts--may give rise to insights which

are as deep and reliable as those provided by any abstract theory. These insights may indeed become theories as they are tested and revised through extension to situations different from the ones which suggested them. Evaluators should not think of theory and theorizing as concerned exclusively with what has been experimentally established, or which can be quantitatively formulated and tested; they are concerned with any effort to bring any body of information into logical order, including information obtained through direct observation, or recorded in the mundane language of ordinary discourse. Finally, those hypotheses which have been verified in experiment and embodied in theory remain dependent upon careful description in two important respects. Without it we cannot be confident that all the important factors not explicitly tested in the experiment have been adequately considered. Nor do we know how the theory is to be applied, or what conclusions it leads to, in situations containing factors not mentioned in the theory itself.

On the other hand, sound theory--which may be normative as well as "empirical"--may greatly enhance observation, judgment, and interpretation, and insofar as it is available it is arbitrary not to make use of it for this purpose. Theory can not only be useful, it may be required. The audience of the evaluation may know--in a certain sense--what happened, but not understand why, or what it means. They know the facts; what they don't know yet is how they fit together, what kind of situation they constitute, what implications they have. They may need to have aspects of the situation not given in the facts pointed out to them, or to be given explanations of essential but unfamiliar concepts. Finally, just as experimental findings and theories depend in critical ways on careful description, there is a kind of theorizing which must go on in simply describing a situation even when there is no intent to formulate general conclusions. First, the evaluator needs to be sensitive to

the ways in which the background knowledge which guides his or her observations and interpretations may be inappropriate or irrelevant altogether. In addition, about any given situation there will be a welter of information which presents itself, and much of it may appear incompatible or contradictory, even after a measure of reflection. To simply "state the facts" here it is necessary to define the situation in some way, to make judgments about the relevance or importance of different facts, and to render the remainder consistent insofar as this is required by the situation they are about. It may even be necessary, still with the intent only of securing an accurate description, to conduct experiments--that is, to act on hypotheses and judgments thus tentatively arrived at to see how well they are borne out in situations similar to but different from the initial one. A single observation or stint of observation may not--though also it may--provide all the information needed for reliable description.

More needs to be said, of course, about the specific character of each of the different methods which have been mentioned. What, for example, is the point of distinguishing between description, narration, and genetic explanation, since from one perspective they are all forms of description? When and how are the different methods appropriately and properly used? Are some perhaps more relevant in certain practical situations or explanatory contexts than others? Might each take on a slightly different appearance or form when applied in different contexts? What do the answers to these questions suggest for assessing the use made of the different methods in particular instances? Answers to these questions obviously could have important consequences for educational evaluation, but they must be left for the future.

Notes

1. Michael Scriven, "Explanation and Prediction in Evolutionary Theory," in Krimerman, The Nature and Scope of Social Science, 1220125.
2. Donald Davidson, "Actions, Reasons, and Causes," in Brand, The Nature of Human Action, 79.
3. G. E. Moore, Principia Ethica, 16-17.

Bibliography

Listed below are sources which either were consulted in writing the paper, or may be helpful to those wishing to explore the ideas and issues discussed more thoroughly. They are grouped to correspond to the sections of the paper.

Among those insisting on the necessity of formal experiments in evaluation are Donald T. Campbell and Robert F. Boruch; see "Making the Case for Randomized Assignment to Treatment by Considering the Alternatives: Six Ways in Which Quasi Experimental Evaluations in Compensatory Education tend to Underestimate Effects," Evaluation and Experiment, Carl A. Bennett and Arthur A. Lumsdaine, eds. (New York: Academic Press, 1975). For the alternative point of view see Robert E. Stake, "Responsive Evaluation," Center for Instructional Research and Curriculum Evaluation, University of Illinois at Urbana-Champaign, 1972, and "An Approach to the Evaluation of Instructional Programs (Program Portrayal vs. Analysis)," a paper presented at the Annual meeting of the American Educational Research Association in Chicago, April 1974.

Each of the following authors classifies explanations somewhat differently: their works should also be consulted for good introductions to the substantive issues of explanation. Robert H. Ennis, Logic in Teaching (Englewood Cliffs, N.J.: Prentice-Hall, 1969), 255-371; Carl G. Hempel, "Aspects of Scientific Explanation," Aspects of Scientific Explanation (New York: The Free Press, 1965), 331-496; Thomas F. Green, The Activities of Teaching (New York: McGraw-Hill, 1971), 147-171; Nicholas Rescher, Scientific Explanation (New York: The Free Press, 1970). Robert Ennis, "On Causality," Educational Researcher, Vol. 2, No. 6 (June 1973) relations causal explanation specifically

to educational research, and to the value considerations involved in causal judgment.

In addition to the preceding sources, the following specifically on causal explanation may be helpful. Richard Taylor, "Causation," Encyclopedia of Philosophy, Vol. 1 (New York: Macmillan, 1967), 56-66. Two anthologies with excellent selections of articles are Myles Brand's, The Nature of Causation (Urbana: University of Illinois Press, 1976), and Thomas Beauchamp's, Philosophical Problems of Causation (Encino, CA: Dickenson, 1974); Brand's introductory essay is especially useful. See also the introduction to Part 2 of Leonard Krimerman's, The Nature and Scope of Social Science (New York: Appleton-Century-Crofts, 1969). An interesting paper advocating the semantic connection interpretation is William Ruddick, "Causal Connection," Synthese, Vol. 18 (1968), 46-67.

In addition to the discussion in Ennis, Hempel, and Green, see the following on action explanations. Myles Brand, The Nature of Human Action (Glenview, IL: Scott, Foresman, 1970); this is an anthology with useful introductions. Two papers by Theodore Mischel, "Scientific and Philosophical Psychology: A Historical Introduction," and "Epilogue," Human Action (New York: Academic Press, 1969), give a good historical overview of approaches to action explanation. Two other papers in the same volume, "Concepts and the Explanation of Behavior," by Stephen Toulmin, and "Motivation, Emotion, and the Conceptual Schemes of Common Sense," by R. S. Peters, advocate the social practices interpretation of action explanation. Krimerman's anthology contains papers representing all three approaches, as well as a set dealing with the issue of the reducibility of social explanations to explanations of individual actions; his introductions are very helpful in sorting out the issues; see the introductions to Parts Four, Five, and Seven of The Nature and Scope of Social

Science. The classic paper on the causal interpretation of reasons is Donald Davidson's, "Actions, Reasons, and Causes," which is reprinted in Brand's anthology; see also J. L. Mackie, The Cement of the Universe (London: Oxford University Press, 1974), Ch. 11, especially 285-296.

The only author among those originally referred to who treats explanations of value judgments as explanations is Ennis. A good overview of approaches and problems in value theory is William Frankena, "Values and Valuation," Encyclopedia of Philosophy, Vol. 8 (New York: Macmillan, 1967), 229-232. For intuitionism, see G. E. Moore, Principia Ethica (London: Cambridge University Press, 1903), Ch. 1; for emotivism, Charles L. Stevenson, Ethics and Language (New Haven: Yale University Press, 1944), Chs. 1-2, 4-5, 9-10; and for the social practices interpretation, Arthur E. Murphy, The Theory of Practical Reason (LaSalle, Illinois, 1964), Chs. 2-3, 5, 10.

For guidance on the problem of making explanatory judgments in "less than ideal circumstances," see the chapter on material inference, and also the one on value statements, in Ennis' Logic in Teaching. For suggestions on the problem of getting observations and making reports which are "appropriate to the situation," see discussion of the essayist John McPhee's working methods in William L. Howarth's introduction to The John McPhee Reader (New York: Vintage Books, 1977), vii-xxxiii. For an illustration of the way in which detailed description can raise and respond to difficult and pressing value issues, see McPhee's, Encounters With the Archdruid (New York: Farrar, Straus, and Giroux, 1971). It should be kept in mind, however, that McPhee is an essayist, not an evaluator. For indications that the two camps of evaluators referred to are not insensitive to the interdependence of description, values, and theory, Donald T. Campbell, "Qualitative Knowing in Action Research," a

paper presented at the annual meeting of the American Psychology Association, New Orleans, September 1974 (this paper was to have been published in The Journal of Social Issues); and Robert E. Stake, "The Case Study Method in Social Inquiry," Educational Researcher (February 1978).