In this chapter we shall discuss how our substantive sociological theory has been developed in order to facilitate applying it in daily situations of terminal care by sociologists, by doctors and nurses, and by family members and dying patients. The application of substantive sociological theory to practice requires developing a theory with (at least) four highly interrelated properties. (As we have demonstrated in this book and will discuss explicitly in the next chapter, a theory with these properties is also very likely to contribute to formal—i.e., general—sociological theory.) The first requisite property is that the theory must closely fit the substantive area in which it will be used. Second, it must be readily understandable by laymen concerned with this area. Third, it must be sufficiently general to be applicable to a multitude of diverse, daily situations within the substantive area, not just to a specific type of situation. Fourth, it must allow the user partial control over the structure and process of the substantive area as it changes through time. We shall discuss each of these closely related properties and briefly illustrate them from our book to show how our theory incorporates them, and therefore why and how our theory can be applied in terminal care situations.

**Fitness**

That the theory must fit the substantive area to which it will be applied is the underlying basis of the theory’s four requisite properties. It may seem obvious to require that substantive theory must correspond closely to the data, but actually in the current ways of developing sociological theory there are many pitfalls that may preclude good fitness. Sociologists often develop a substantive theory—theory for substantive areas such as patient care, delinquency, graduate education—that embodies, without his realization, the sociologist’s ideals, the values of his occupation and social class, as well as popular views and myths, along with his deliberate efforts at making logical deductions from some formal theory to which he became committed as a graduate student (for example, a theory of organizations, stratification, communication, authority, learning, or deviant behavior). These witting and unwitting strategies typically result in theories too divorced from the everyday realities of the substantive area, so that one does not quite know how to apply them, or in what part of the social structure to begin applying them, or where they fit the data of the substantive area, or what the propositions mean in relation to the diverse problems of the area. The use of logical deduction rests on the assumption that the formal theory supplies all the necessary concepts and hypotheses; the consequences are a typical forcing and distorting of data to fit the categories of the deduced substantive theory, and the neglecting of relevant data which seem not to fit or cannot be forced into the pre-existing sociological categories. In light of the paucity of sociological theories that explicitly deal with change, logical deduction usually is carried out upon static theories.
which tends to ensure neglect, distortion, and forcing when the deduced theory is applied to an ever-changing, everyday reality.

Clearly, a substantive theory that is faithful to the everyday realities of the substantive area is one that is carefully induced from diverse data gathered over a considerable period of time. This research, usually based primarily on qualitative data gathered through observations, interviews and documents and perhaps later supplemented by surveys, is directed in two ways—toward discovering new concepts and hypotheses, and then continually testing these emerging hypotheses under as many diverse conditions as possible. Only in this way will the theory be closely related to the daily realities (what is actually "going on") of the substantive area, and so be highly applicable to dealing with them. After the substantive theory is sufficiently formulated, formal theories can be scrutinized for such models, concepts and hypotheses as might lead to further formulation of the substantive theory.\textsuperscript{5} We have described in the appendix on method how we have proceeded in developing our theory to fit the realities of terminal care in hospitals. Readers who are familiar with this area will readily be able to judge our degree of success in that enterprise.

Understanding

A substantive theory that corresponds closely to the realities of an area will be understood and "make sense" to the people working in the substantive area. This understanding is very important since it is these people who will wish either to apply the theory themselves or employ a sociologist to apply it.\textsuperscript{6} Their understanding the theory tends to engender readiness to use it, for it sharpens their sensitivity to the problems that they face and gives them an image of how they can potentially make matters better, either through their own efforts or those of a sociologist.\textsuperscript{7} If they wish to apply the theory themselves, they must perceive how it can be readily mastered and used.

In developing a substantive theory that fits the data, then, we have carefully developed concepts and hypotheses to facilitate the understanding of the theory by medical and nursing personnel. This, in turn, has ensured that our theory corresponds closely to the realities of terminal care. Our concepts have two essential features: they are both analytic and sensitizing. By analytic we mean that they are sufficiently generalized to designate the properties of concrete entities—not the entities themselves—and by sensitizing we mean that they yield a meaningful picture with apt illustrations that enable medical and nursing personnel to grasp the reference in terms of their own experiences. For example, our categories of "death expectations," "nothing more to do," "lingering," and "social loss" designate general properties of dying patients which unquestionably are vividly sensitizing or meaningful to hospital personnel.\textsuperscript{8}

To develop concepts of this nature, which tap the best of two possible worlds—abstraction and reality—takes considerable study of one's data.\textsuperscript{9} Seldom can they be deduced from formal theory. Furthermore, these concepts provide a necessary bridge between the theoretical thinking of sociologists and the practical thinking of people
concerned with the substantive area, so that both parties may understand and apply the theory. The sociologist finds that he has "a feeling for" the everyday realities of the situation, while the person in the situation finds he can master and manage the theory. In particular, these concepts allow this person to pose and test his "favored hypotheses" in his initial applications of the theory.

Whether the hypotheses prove somewhat right or wrong, the answers still are related to the substantive theory; use of the theory helps both in the interpretation of hypotheses and in the development of new applications of the theory. For example, as physicians (and social scientists) test out whether or not disclosure of terminality is advisable under specified conditions, the answers will be interpretable in terms of awareness contexts (Chapters 3 and 6) and the general response process (Chapter 8). This, in turn, will direct these people to further useful questions as well as lead to suggestions for changing many situations of terminal care.

In utilizing these types of concepts in our book, we have anticipated that readers would almost literally be able to see and hear the people involved in terminal situations—but see and hear in relation to our theoretical framework. It is only a short step from this kind of understanding to applying our theory to the problems that both staff and patients encounter in the dying situation. For instance, a general understanding of what is entailed in the mutual pretense context, including consequences which may be judged negative to nursing and medical care, may lead the staff to abandon its otherwise unwitting imposition of mutual pretense upon a patient. Similarly, the understanding yielded by a close reading of our chapters on family reactions in closed and open contexts should greatly aid a staff member's future management of—not to say compassion for—those family reactions. A good grasp of our theory, also, will help hospital personnel to understand the characteristic problems faced on particular kinds of hospital services, including their own, as well as the typical kinds of solutions that personnel will try.

In deciding upon the analytic level of our concepts, we have been guided by the criteria that they should not be so abstract as to lose their sensitizing aspect, but yet must be abstract enough to make our theory a general guide to the multi-conditional, ever-changing daily situations of terminal care. Through the level of generality of our concepts we have tried to make the theory flexible enough to make a wide variety of changing situations understandable, and also flexible enough to be readily reformulated, virtually on the spot, when necessary, that is, when the theory does not work. The person who applies our theory will, we believe, be able to bend, adjust, or quickly reformulate awareness theory as he applies it in trying to keep up with and manage the situational realities that he wishes to improve. For example, nurses will be able better to cope with family and patients during sudden transitions from closed to pretense or open awareness if they try to apply elements of our theory (see Chapters 3, 8, 9), continually adjusting the theory in application.
We are concerned also with the theory’s generality of scope. Because of the changing conditions of everyday terminal situations it is not necessary to use rigorous research to find precise, quantitatively validated, factual, knowledge upon which to base the theory. "Facts" change quickly, and precise quantitative approaches (even large-scale surveys) typically yield too few general concepts and relations between concepts to be of broad practical use in coping with the complex interplay of forces characteristic of the substantive area. A person who employs quantitatively derived theory "knows his few variables better than anyone, but these variables are only part of the picture." "Theory of this nature will also tend to give the user the idea that since the facts are "correct" so is the theory; this hinders the continual adjustment and reformulation of theory necessitated by the realities of practice. Because he is severely limited when facing the varied conditions and situations typical of the total picture, the person who applies a quantitatively derived theory frequently finds himself either guideless or applying the inapplicable—with (potentially) unfortunately human and organizational consequences. This kind of theory typically does not allow for enough variation in situations to take into account the institution and control of change in them. Also, it usually does not offer sufficient means for predicting the diverse consequences of any action, done with purpose, on those aspects of the substantive area which one does not wish to change but which will surely be affected by the action. Whoever applies this kind of theory is often just "another voice to be listened to before the decision is reached or announced" by those who do comprehend the total picture.  

Accordingly, to achieve a theory general enough to be applicable to the total picture, we have found it more important to accumulate a vast number of diverse qualitative "facts" on dying situations (some of which may be slightly inaccurate). This diversity has facilitated the development of a theory that includes a sufficient number of general concepts relevant to most dying situations, with plausible relations among these categories that can account for much everyday behavior in dying situations. Though most of our report is based on field observations and interviews, we have used occasional data from any source (newspaper and magazine articles, biographies and novels, surveys and experiments), since the criterion for the credibility and potential use of this data is how they are integrated into the emergent substantive theory.

The relations among categories are continually subject to qualification, and to change in direction and magnitude due to new conditions. The by-product of such changes is a correction of inaccuracies in observation and reintegration of the correction into the theory as it is applied. The application is thus, in one sense, the theory's further test and validation. Indeed, field workers use application as a prime strategy for testing emerging hypotheses, though they are not acting as practitioners in a substantive area. In the next section, by illustrating how our theory guides one through the multifaceted problem of disclosure of terminality, we indicate how one confronts the total picture with a theory that is general enough in scope to be applicable to it.
This method of discovering and developing a substantive theory based on a multitude of diverse facts tends to resolve two problems confronting the social scientist consultant, who, according to Zetterberg, is "dependent on what is found in the tradition of a science" and, when this fails, is apt to "proceed on guess work" so as not to "lose respect and future assignments." Our method resolves these problems in large measure because it is not limited by the dictum that Zetterberg's consultant must follow: "Only those details were assembled by the consultant and his co-workers that could be fitted into the categories of sociology, i.e., phrased in sociological terminology." As stated earlier in the section on fitness, we do not believe that the categories of sociology can at the outset be directly applied to a substantive area without great neglect, forcing, and distortion of everyday realities. A substantive theory for the area must first be induced, with its own general concepts; and these concepts can later become a bridge to more formal sociological categories if the latter can be found. As Wilbert Moore has noted, however, we still lack the necessary formal categories to cope with change adequately.

**Control**

The substantive theory must enable the person who uses it to have enough control in everyday situations to make its application worth trying. The control we have in mind has various aspects. The person who applies the theory must be enabled to understand and analyze ongoing situational realities, to produce and predict change in them, and to predict and control consequences both for the object of change and for other parts of the total situation that will be affected. And as changes occur, he must be enabled to be flexible in revising his tactics of application and in revising the theory itself if necessary. To give this kind of control, the theory must provide a sufficient number of general concepts and their plausible interrelations; and these concepts must provide him with understanding, with situational controls, and with access to the situation in order to exert the controls. The crux of controllability is the production and control of change through "controllable" variables and "access" variables.

**Controllable variables**

Our concepts, their level of generality, their fit to the situation, and their understandability give whoever wishes to apply them, to bring about change, a controllable theoretical foothold in the realities of terminal situations. Thus, not only must the conceptual variables be controllable, but their controllability must be enhanced by their integration into a substantive theory which guides their use under most conditions that the user is likely to encounter. The use of our concepts may be contrasted with the unguided, ad hoc use of an isolated concept, or with the use of abstract formal categories that are too tenuously related to the actual situation.

For example, the prime controllable variable of our study is the "awareness context." Doctors and nurses have much control over the creation, maintenance, and change of awareness contexts; thus they have much control over the resultant characteristic forms of interaction, and the consequences for all people involved in the dying situation. Also, the
interactional modes we have specified are highly controllable variables; doctors and nurses deliberately engage in many interactional tactics and strategies.

If a doctor contemplates disclosure of terminality to a patient, by using our theory he may anticipate a very wide range of plausibly expected changes and consequences for himself, patient, family members and nurses. By using the theory developed in Chapter 8, he may judge how far and in what direction the patient's responses may go and how to control these responses. By using the theory in Chapter 3, he may judge what consequences for himself, nurses and patients will occur when the context is kept closed; and by referring to Chapter 6, he may weigh these against the consequences that occur when the context is opened. Also, he may judge how advisable it is to allow the characteristic modes of interaction that result from each type of awareness context to continue or be changed. From these chapters he also may develop a wider variety of interactional tactics than ordinarily would be in his personal repertoire. If maintaining a closed context will result in too great a management of assessment (an interactional mode) by the nurse—which might decrease the patient's trust in the whole staff when he discovers his terminality—it may be better to change the context to allow the nurse to respond differently.

The doctor may also review Chapters 9 and 10 for judging to what degree opening the context by disclosure will lead to problems in controlling family members, and how the disclosure may affect their preparations for death. Resting this decision upon our theory allows him much flexibility and scope of action—precisely because we have provided many general concepts and their probable interrelations closely linked to the reality of disclosure, in order to guide the doctor in considering the many additional situations that will be affected by disclosure. Simply to disclose in the hope that the patient will be able to prepare himself for death is just as unguided and ad hoc as to not to disclose because he may commit suicide. To disclose because the patient must learn, according to formal theory, "to take the role of a terminal patient," is too abstract a notion for coping with the realities of the impact of disclosure for all people concerned.

This example brings out several other properties of controllable variables and, thus, of our substantive theory. First, the theory must provide controllable variables with much explanatory power: they must "make a big difference" in what is going on in the situation to be changed. We have discovered one such variable—awareness contexts. As we have reiterated many times, much of what happens in the dying situation is strongly determined by the type of awareness context within which the events are occurring.

Second, doctors and nurses, family and patients are already purposefully controlling many variables delineated in our substantive theory. While the doctor exerts most control over the awareness context, all these people have tactics that they use to change or maintain a particular awareness context. The patient, for example, is often responsible for initiating the pretense context. However, all these people are, in our observation, controlling variables for very limited, ad hoc purposes. Our theory, therefore, can give staff, family and patients a broader guide to what they tend to do already and perhaps help them to be more effective.
Controllable variables sometimes entail controlling only one's own behavior and sometimes primarily others' behavior—the more difficult of the two. But, as we have tried to show, control usually involves the efforts of two parties; that is control of the interaction between two people by one or both. In the dying situation it is not uncommon to see patient, family, doctor, and nurse trying to control each other for their own purposes. Those who avail themselves of our theory may have a better chance in the tug-of-war over who shall best control the dying situation.

In the hospital, material props and physical spaces are of strategic importance as variables which help to control awareness contexts and people's behavior. We have noted how doctors and nurses use spatial arrangements of rooms, doors, glass walls, rooms and screens to achieve control over awareness contexts. By making such controllable variables part of our theory we have given a broader guide to the staff's purposeful use of them. Thus, to let a family through a door or behind a screen may be more advisable than yielding to the momentary urge of shutting out the family to prevent a scene. Letting in family members may aid their preparations for death, which in turn may result in a more composed family over the long run of the dying situation.

**Access variables**

The theory must also include access variables: social structural variables which allow, guide and give persons access either to the controllable variables or to the people who are in control of them. To use a controllable variable, one must have a means of access to it. For example, professional rules give principal control over awareness contexts to the doctor; therefore the nurse ordinarily has a great deal of control in dying situations because of her considerable access to the doctor, through or from whom she may try to exert control over the awareness context. Professional rules forbid her to change the context on her own initiative; they require her to maintain the current one. Thus the organizational structure of the hospital, the medical profession, and the ward provide degrees of access to control of awareness contexts by both doctor and nurses—and our theory delineates this matter. Family members have more access to a private physician than to a hospital physician; thus they may have more control over the former. Sometimes they can demand that their private physician keep a closed awareness context because of the control they exert over him through the lay referral system (upon which he may depend for much of his practice). The patient has little access in the closed context to a doctor in order to control changes of context. However, like the nurse, he has much access to everyday cues concerning his condition—they exist all around him and he learns to read them better and better. Thus, his access to strategic cues gives him an opportunity to control his situation—and we have discussed at length how he can manage cues to gain controls. Access variables also indicate how best to enter a situation in order to manage a controllable variable while not otherwise unduly disrupting the situation. Thus, we have delineated the various alternatives that a nurse may use to gain control over the "nothing more to do" situation in order to let a patient die.
Conclusion

Throughout our monograph we have indicated many strategic places, points and problems in dying that we feel would profit from the application of our theory. By leaving these short discourses on application in context we trust they have had more meaning than if gathered into a single chapter.

We have made this effort to establish a "practical" theory also because we feel, as many sociologists do and as Elbridge Sibley has written: "The popular notion that any educated man is capable of being his own sociologist will not be exorcised by proclamation; it can only be gradually dispelled by the visible accomplishments of professionally competent sociologists." By attempting to develop a theory that can also be applied, we hope to contribute to the accomplishments of sociology. Social theory, in turn, is thereby enriched and linked closely, as John Dewey remarked thirty years ago, with the pursuit and studied control of practical matters.

Two properties of our type of an applied theory must be clearly understood. First, the theory can only be developed by trained sociologists, but can be applied by either laymen or sociologists; Second, it is a type of theory which can be applied in a substantive area which entails interaction variables. Whether it would be a useful type of theory for areas where interaction is of no powerful consequence (that is, where large scale parameters are at issue, such as consumer purchase rates, birth control, the voting of a county, desegregation of a school system, and audiences for TV) remains unanswered.

Endnotes

1 Applied theory can be powerful for exactly the reasons set forth by John Dewey, some years ago: "What is sometimes termed 'applied' science . . . is directly concerned with . . . instrumentalities at work in effecting modifications of existence in behalf of conclusions that are reflectively preferred. . . . 'Application' is a hard word for many to accept. It suggests some extraneous tool ready-made and complete which is then put to uses that are external to its nature. But . . . application of 'science' means application in, not application to. Application in something signifies a more extensive interaction of natural events with one another, an elimination of distance and obstacles; provision of opportunities for interactions that reveal potentialities previously hidden and that bring into existence new histories with new initiations and endings. Engineering, medicine, social arts realize relationships that were unrealized in actual existence. Surely in their new context the latter are understood or known as they are not in isolation." Experience and Nature (Chicago: Open Court Publishing Company, 1925), pp. 161-162.

2 For many years, Herbert Blumer has remarked in his classes that sociologists perennially import theories from other disciplines that do not fit the data of sociology and inappropriately apply sociological theories developed from the study of data different than that under consideration. Cf. "The Problem of the Concept in Social Psychology," American Journal of Sociology (March, 1940), pp. 707-719. For an analysis of how current sociological methods by their very nature often result in data and theory that does not fit the realities of the situation see Aaron V. Cicourel, Method and Measurement in Sociology (New York: Free Press of Glencoe, 1964).

3 Our position may be contrasted with that of Hans L. Zetterberg who, after some exploratory research to determine problems, bypasses development of substantive theory and goes directly to formal theories for help. He says, "We must know the day-by-day issues facing the practitioner and then search the storehouse of academic knowledge to see whether it might aid him." Social Theory and Social Practice (New York: Bedminster Press, 1962), p. 41.

Thus, in contrast to Zetterberg who renders his data directly with a formal theory, we first develop a substantive theory from the data which then becomes a bridge to the use of what formal theories may be helpful. By bridging the relation of data to formal theory with a carefully thought out substantive theory the forcing, distorting and neglecting of data by rendering it with a formal, usually "thought-up," theory is prevented in large measure. See Zetterberg, op. cit., Chapter 4, particularly pp. 166-178.

5 In contrast, both Zetterberg and Gouldner imply by their direct use of formal theory that the practical use of sociological theory is the monopoly of the sociologist as consultant, since, of course, these formal theories are difficult enough to understand by sociologists. Zetterberg, op. cit. and Alvin W. Gouldner, "Theoretical Requirements of the Applied Social Sciences," American Sociological Review, Vol. 22 (February, 1959). Applying substantive theory, which is easier to understand, means also that more sociologists can be applied social theorists than those few who have clearly mastered difficult formal theories to be "competent practitioners of them." Zetterberg, op. cit., p. 18.

6 Another substantive theory dealing with juvenile delinquency, in David Matza, Delinquency and Drift (New York: Wiley, 1964), provides a good example of our point. This is a theory, that deals with "what is going on" in the situations of delinquency. It is not another renditigpp of the standard, formally derived, substantive theories on delinquenti which deal intensively with classic ideas on relations between culture and subculture, conformity, opportunity structures, and social stratification problems, such as provided in the formal theories of Merton and Parsons and as put out by Albert Cohen and Richard Cloward and Lloyd Ohlin. As a result two probation officers of Alameda County, California, have told us that at last they have read a sociological theory that deals with "what is going on" and "makes sense" and that will help them in their work. Thus, they can apply Matza's theory in their work!


8 On sensitizing concepts see Herbert Blumer, "What is Wrong with Social Theory," American Sociological Review, 19 (February, 1954), pp. 3-10, quote on p. 9.

9 Zetterberg has made this effort in choosing concepts with much success, op. cit., p. 49 and passim.

10 "Gouldner (op. cit., pp. 94-95) considers in detail the importance of testing the favored hypotheses of men who are in the situation. However, we suggest that the person can test his own hypotheses too, whereas Gouldner wishes to have a sociologist do the testing.


12 Ibid.

13 This theme on integration into a theory as a source of confirming a fact or a proposition is extensively developed in Hans L. Zetterberg, On Theory and Verification in Sociology (New Jersey: Bedminster Press, 1963).

14 Zetterberg, Social Theory, op. cit., pp. 188-189.

15 * Ibid., p. 139. This dictum is based on the idea: "The crucial act here is to deduce a solution to a problem from a set of theoretical principles." Theoretical principles refer to laws of formal theories.

16 * At a lower level of generality, in much consulting done by sociologists to industrial firms, hospitals, social agencies, and the like, what is usually offered by the sociologists is "understanding," based upon an amalgam of facts intuitively rendered by references to formal theory and some loosely integrated substantive theory developed through contact with a given substantive area over the years. (Sometimes this is abetted, as in consumer research, by relatively primitive but useful analyses of data gathered for specific purposes of consultation.) Providing that the amalgam makes "sense" to the client and that he can see how to use it, then the consultation is worthwhile. Conversely, no matter how useful the sociologist may think his offering is, if the client cannot "see" it then he will not find the consultation very useful. See also Zetterberg, op. cit., Chapter 2.

17 * Elements of "material culture" should not be neglected in development of substantive theory. Gouldner suggests they are the "forgotten man of social research": op. cit., p. 97.

