

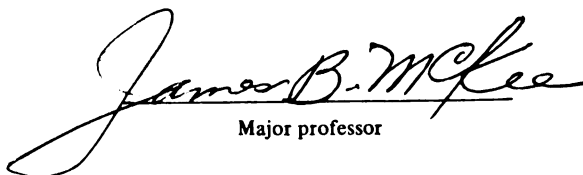


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The Unity of Mistakes:
A Phenomenological Study of Medical Work
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Marianne A. Paget

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Major professor

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THE UNITY OF MISTAKES: A PHENOMENOLOGICAL
STUDY OF MEDICAL WORK

By

Marianne A. Paget

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ABSTRACT

THE UNITY OF MISTAKES: A PHENOMENOLOGICAL STUDY OF MEDICAL WORK

By

Marianne A. Paget

This study is an interpretation of interview data on medical mistakes. The interview data were acquired in the context of a longitudinal study of the training of physicians at the College of Human Medicine at Michigan State University. Residents and practicing physicians who had entered medical school some seven or eight years earlier were asked what they thought about and did when they made a medical mistake and what they thought about and did when they observed other physicians making mistakes.

The responses to these questions are approached as texts requiring illumination. It is as if the author had come across historically remote documents, quite out-of-the-ordinary documents, which required rendering in the English language. This approach has been adopted because the author is interested in the subject's experience of making mistakes in time as it unfolds.

The physicians interviewed reported that medical mistakes are inevitable, that is to say, that medical mistakes are an intrinsic feature of the work process of medicine. Quite commonly, however, reports about the inevitability of mistakes in medicine are regarded as excuses, apologies, or rationalizations of medical misconduct. Approaching the responses as texts, then, permitted examining in detail discussions of the inevitability of mistakes.

The study's focus is the diagnostic and therapeutic process. It is described as an error-ridden activity. And making mistakes in medical work is identified as a problem of acting in time.

Three descriptive pictures of medical mistakes are constructed: first, the evolution of mistakes in clinical action; second, the identification of mistakes in the aftermath of action; and third, the complex sorrow of making mistakes. These descriptive pictures attempt to portray the subject's experience of becoming mistaken.

The study begins with the common sense idea of an honest error. I ask: What constitutes the phenomenology of an honest error? What is the work of such a phrase in discourse? An honest error disclaims blame. It suggests that someone is or, rather, was unwittingly wrong. However, a mistake is always an unwitting and unintended act. The adjective honest, the work of the

word honest, then serves to intensify and reemphasize the absence of guile. A statement like, "It was an honest mistake," captures an ambiguity in experience which is extended in the interpretation. It is used as a door, so to speak, opening onto other apprehensions of the meaning of making mistakes.

While the focus of analysis is honest errors in clinical action, negligent acts are also examined. What distinguishes a negligent act from an honest error is that a negligent act directly causes damage and represents a dereliction of professional duty. Negligent acts, however, are neither the most common errors in clinical action nor the most revealing of the character of clinical work.

Making mistakes/being mistaken is identified as a distinct experience of being. It includes but is not defined by being at fault and includes but is not defined by being blamed. Making mistakes/being mistaken is also identified as a source of the organization of clinical work, clinical discourse, and clinical conduct in the arenas of medical work.

How could anything originate out of its opposite? for example, truth out of error? or the will to truth out of the will to deception? or selfless deeds out of selfishness? or the pure and sunlike gaze of the sage out of lust? Such origins are impossible; whoever dreams of them is a fool, indeed worse; the things of highest value must have another, peculiar origin--they cannot be derived from this transitory, seductive, deceptive paltry world, from this turmoil of delusion and lust. Rather from the lap of Being, the intransitory, the hidden god, the 'thing-in-itself'--there must be their basis, and nowhere else.

Nietzsche

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CHAPTER I

THE LANGUAGE OF MISTAKES

Introduction

There are special difficulties in attempting an interpretation of mistakes in medical work. Two kinds of contemporary issues tend to overwhelm discourse: a crisis in health care and a crisis in malpractice litigation. Malpractice, a term in use in legal discourse about bad medical practice, is context specific. The malpractice of medicine, in a legal context, has its origin in a request for compensation by a patient, or a patient's family, for unnecessary harm. Compensation in this setting requires evidence of bad medical practice on the part of a physician or several physicians. Unnecessary harm, bad medical practice, and compensation, however, are not identical issues. Rather, they are issues joined in legal proceedings which require establishing blame.¹

¹See Sidney Shindell, M.D., L.L.B., The Law in Medical Practice (Pittsburgh: University of Pittsburgh Press, 1966); Elliot L. Sagall, M.D., and Barry C. Reed, L.L.B., The Law and Clinical Medicine (Philadelphia: J. B. Lippincott Company, 1970); R. Crawford Morris,

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The precise tort for malpractice is negligence. Yet this is not the only tort for which physicians can be sued. They are also commonly sued for assault and battery, breach of contract, and unauthorized autopsy. Negligence, however, is the only tort that specifically requires establishing a violation of professional standards. This means that in most circumstances, collaborative medical testimony is required.²

Though some of the mistakes referred to in this study may suggest malpractice in a legal setting, I am not investigating mistakes in a legal setting. I am investigating them in the context of clinical medicine and among clinicians of medicine. My topic is far broader; it encompasses a far wider range of mistakes than the term malpractice suggests.

This study does not discuss the crisis in the distribution of health care, a very important area of inquiry and analysis. The inequities in our health care are pervasive. These inequities do not arise denovo in medicine but reflect an indigenous system of social

L.L.B., and Alan R. Moritz, A.M., Sc.D., M.D., Doctor and Patient and the Law (5th ed.; St. Louis: The C. V. Mosby Co., 1971). For a general introduction to the evolution of malpractice litigation, see D. S. Rubsamen, M.D., L.L.B., "The Evolution of Medical Malpractice Litigation in the United States," Canadian Medical Association Journal 113 (August 1975): 334-41.

²Shindell, pp. 34-35.

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inequality, especially a market economy which has transformed many human values into commodities.

I am not investigating a phenomenon about which no one has ideas. We are, each of us, a colony housing life, as Lewis Thomas might put it, in contact with practitioners of medicine.³ Mistakes in medical work have significant implications for us all. Yet this topic should not be construed as a revelation of medical practitioners' mistakes. I approach the meaning of mistakes from the point of view of the person who makes them and the person who knows them as his or her own mistakes. I adopt an existential point of view. From this point of view, the mistakes of physicians bear a resemblance to your mistakes and my own mistakes, the mistakes each of us makes as a human being acting in time.

Being is an important concept. It should be understood not in a static sense of being an entity, but in a dynamic sense of being in-time, living in-time. Human beings live in-time. They, therefore, become beings rather than are beings.⁴ The mistakes of physicians bear a resemblance to your mistakes and my own

³Lewis Thomas, The Lives of a Cell: Notes of a Biology Watcher (New York: The Viking Press, Inc., 1974).

⁴Rollo May, "Contributions of Existential Psychotherapy," in Existence: A New Dimension in Psychiatry and Psychology, ed. Rollo May (New York: Basic Books, Inc., 1958), p. 41.

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mistakes as sentient and aware individuals acting and living in-time. In this light, I examine especially two ordinary platitudes, "everybody makes mistakes" and "mistakes are inevitable," and try to grasp their hidden and inner significance in time as it unfolds. The term "mistake" is used less often in clinical circles than a companion term "error." "Mistake" is used here, with reservations, just because it is a term employed in everyday life.

Meaning is a difficult topic, and the meaning of medical mistakes is an especially difficult topic. Each of us has already a preconception of their meaning, an already formed idea of what medical mistakes signify. They signify that someone is at fault and worthy of blame, that is to say, that a person, a physician, is at fault and worthy of blame. I do not want to exclude these meanings, being at fault or being blameworthy; but I do want to identify them as meanings commonly associated rather than identical with the use of the term "mistake."

It will be helpful to keep in mind the distinction between what a mistake denotes and what a mistake connotes. A mistake denotes something wrong rather than right, something incorrect rather than correct, for example, a wrong act. Furthermore, a mistake is connected with someone who has made it, with someone who is, therefore, wrong. It refers to a person's misunderstanding or

misinterpreting something. The term connotes being blameworthy and at fault. I will be exploring other connotations of the meaning of mistakes. Being wrong I will illuminate as a complex sorrow of clinical action.

The ease with which we connect making a mistake with being blameworthy and at fault is indicative of a mode of thinking about knowledge and action of which I was not entirely aware when I undertook this study and which will take some time to disclose. Action in this study has a precise meaning. Action unfolds in-time. More specifically, in the context of clinical work, action unfolds as a response to something already wrong, a person's experience of illness. A clinician becomes involved in something already wrong. He or she acts in response to it. But when does a clinical act or sequence of acts become wrong?

The opaque and relational nature of clinical action is examined as it becomes wrong. Action is opaque, capable of the unexpected and the entirely new. For this reason, it contains the attributes of risk and invention. Erving Goffman conceives of action in this way. He uses the metaphor of the high wire. "To be on the wire is life; the rest is waiting."⁵ Yet action is relational; it is

⁵Attributed to Karl Wallenda, cited by Erving Goffman, "Where the Action Is," in Interaction Ritual: Essays on Face-to-Face Behavior (New York: Anchor Books, 1967), p. 149.

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taken in relation to others. It also risks the world of others. The difficulty, then, with the metaphor of the high wire is that it captures action not as it risks the world of others but as a sensation or an entertainment. Only for the high wire artist is the wire a dramatic symbol of the risk of action. In Chapter III the nature of clinical action is examined as it risks a response in relation to others.

There is a paradox in being wrong. Being wrong is a cognition which follows doing something. Doing something wrong is also a cognition. What precedes the cognition of doing something wrong? In other words, when does doing something wrong arise as a cognition in doing something about human illness? When is it apprehended and apprehensible?

This study considers the-use-of-thought-in-action-in-time. I especially ask: how is it we know what is? Our knowledge of what is, in some instances, is knowledge of what already is, that is to say, knowledge of what has already happened. A mistake follows an act and identifies the character of an act in its completion. It identifies its incorrectness or wrongness. An act, on the other hand, is not wrong; it becomes wrong or goes wrong. The complex sorrow of clinical action is the sorrow of discovering that you and I are wrong,

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sometimes, with respect to a person's very existence; it is the sorrow of discovering that you and I are already wrong.

I began this study when I became aware of the anguish of clinical action and of the moral ambiguity of being a clinician, a person who acts, acts sometimes mistakenly, and who, therefore, lives within the experience of being wrong. Being wrong is a distinct experience of being, of dwelling or abiding in being. It is different from the experience of being blameworthy and at fault, just as my experience of being wrong as a subject is different from your awareness of my being wrong. Here, I am encumbered by a general lack of attention to problems of being. Descriptions of the conduct of life are seldom invested with the full weight of existence.⁶

⁶See Theodore Thass-Thienemann's discussion of the etymology of being in The Interpretation of Language, Vol. 1, Understanding the Symbolic Meaning of Language (New York: Jason Aronson, Inc., 1968), pp. 141-52. I quote here only one of a number of concepts of being: the I was of being. "Different from the present being I am, it is is the past I was, it was. It is another verb and another concept. It refers not to being, but to that which has been, that which does not exist anymore; thus, it refers to non-being. If we say there is no presence without a past implied, there is no I am without I was, which means, in other words, there is no 'being' without the implication of 'non-being.' The verbal symbols which describe this 'I am' with the implication of the past point, in Germanic languages, (refer) to 'dwelling, abiding,' to something that remains. The 'house' became the symbol of 'being' with the implication of 'has been.' In English, one can observe, even in present-day language, the tendency to make an equation between 'to dwell' and 'to live.' . . . The 'house of being' (Heidegger) unites

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Background and Method

This study is based on interviews with forty physicians who, at the time that I was given support to transcribe their tapes, the academic year 1973-1974, were in residency training or in medical practice. These interviews were two or three hours long and were the fifth or sixth in a series of interviews with these physicians who were participants in a longitudinal study of medical training initiated by Ann G. Olmsted in 1966. Her study is a 15-year study of five classes of medical students in the College of Human Medicine at Michigan State University.⁷ I joined her study in 1968.⁸

These interviews occurred as conversations on clinical work, clinical training, and patient care. Open-ended in format while systematic in the development and coverage of themes, they included a discussion of mistakes in medical work: both mistakes these physicians had made themselves and mistakes they had observed others

past, present and future. One can still trace, in the distant related languages, the original meaning of English was and were, German war, 'was,' and gewesen, 'been' with the noun wesen 'essence, being,' p. 145.

⁷For a description of this study see Ann G. Olmsted, "The Professional Socialization of Medical Students: Research Plan," September 30, 1969.

⁸See "A Brief Introduction to My Research Interests in Medicine," presented to the Office of Medical Education Research and Development, October 24, 1974, for a description of the impact of this study on my thinking.

making. The questions asked were: what do you think about and do when you make a mistake and what do you think about and do when you observe another physician making mistakes? My primary focus here is on the discussions of mistakes, although entire interviews in which these discussions are embedded serve as a background for this emphasis. I also have as a background a much longer period of research contact with these physicians. Either Ann Olmsted or I interviewed these physicians and their peers once a year in medical school, at least once in residency training, and once in medical practice. In 1973, these physicians were the first to reach either advanced residency training or medical practice. In general, they were members of the first and second classes of the college.

These discussions have been employed in an unusual manner. I have attempted to render them, to construct a reading of them as one would construct a reading of manuscripts of deep human significance. This has been done, in the first instance, because I believe these discussions are deeply significant. In rendering them, I have treated them as texts requiring illumination. I have approached them as a scholar would approach historically remote texts or as an archeologist would approach the remnants of another civilization. I have not assumed that their meaning is transparent because they are English

language "texts" and I am a native English speaker. I have assumed instead that our "common" language requires penetration; it imposes an order, as any language must, on the expression of experience. Our "common" language structures both my understanding of their experience and their capacity to articulate their experience.

At best, after all, language is a vehicle of approximate meanings which must be clarified in context. At best, it captures something of the richness of what lies behind its use and is far more subtle, complex, and vital, that is, existence (ex-sistere which means literally to stand out, to emerge). I have tried to be sensitive to the limits of language, the uncommon nuances of common terms, the altered significance of spoken words as they sediment out in analogues, allusions, and metaphors and in the rhythms and inflections of speech.

Although I have worked with these discussions as "texts," they are remnants of a more complex communication. The sounds of speech acts have been lost in written transcriptions. The silent languages of gesture and expression are also gone, along with the vividness of persons speaking about their mistakes. These "texts" are artifacts of conversations which are themselves remnants of experience being pressed into words, sentences, and paragraphs, and I am engaged in an effort to retrieve a richer content.

My rendering of these "texts" is an act of interpretation. I have not assumed that it is either complete or that it is the only possible rendering. It is, however, a full, or thick, rendering.⁹ I have used these "texts" on mistakes, first, to create a description of clinical medical work and, second, to create a description of clinicians at work. These "texts" contain an irreducible substratum, a raw fact of reportage which is this: medical mistakes are inevitable. I have worked with this raw fact of reportage. I have asked, given these data, what is clinical work like and what is it like to be a person who does this kind of work, a person who is mistaken.

Interpretation is by its very nature an open effort and a personal act. I have been guided in my thinking about mistakes in medical work by the following ideas. First, the meaning of mistakes lies within human consciousness, yours and mine, because meaning is an issue of human consciousness, i.e., human awareness. I have examined the presumptions of my own thinking about mistakes, especially regarding the problem of blame. Blame does not describe the meaning of mistakes; it transforms

⁹See especially Clifford Geertz, The Interpretation of Cultures (New York: Basic Books, Inc., 1973), pp. 3-30. See also Hans-Georg Gadamer, Truth and Method (New York: The Seabury Press, 1975).

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the meaning of mistakes. Blame is actually a social process which, in Chapter II, is described as a dialectic between persons.

Second, meaning is culturally situated. I have thus attempted to remain aware of the press of the cultural tradition in which I am located which throws my thinking in particular directions. Instead of recapitulated surface thinking about mistakes, I have tried to go beyond it. And, in going beyond it, my interpretation attempts to extend our awareness of the meaning of mistakes by exposing the presuppositions of much of our thinking about them.

Language terms are themselves highly suggestive of what lies within immediate awareness and what lies at the periphery of awareness. A mistake, as suggested, denotes a wrong act. It is a compound word, mis-take: in Middle English, mistaken, from Old Norse, mistaka, which means to take wrongly, for example, to take the wrong path or to go astray. Its synonym, error, in Middle English is erren, to wander about, from Old French errer, from Latin errāre, to go astray. According to Theodore Thass-Thienemann, errāre developed out of the primary meaning to go astray into the moral implication to do wrong, to sin.¹⁰

¹⁰ See especially his discussion of Oedipus' error in The Interpretation of Language, Vol. II, Understanding the Unconscious Meaning of Language (New York: Jason Aronson, Inc., 1968), pp. 94-97.

I engaged, especially early in my thinking about this topic, in considerable analogical and associational thinking in an effort to get on the track of other modes of thinking about mistakes. An example will be helpful in clarifying this point. In ordinary language, we call some of our mistakes "honest mistakes." We say, for example, "it was an honest mistake." But what is it we mean here? In particular, what is it we mean by the adjective "honest"? The context in which we use such a phrase is very suggestive. In general, we mean to disclaim being blameworthy while at the same time acknowledging that we are wrong or rather were wrong. We are saying that we are unwittingly wrong. A mistake is always, however, unwitting or unintended.¹¹ The adjective "honest," therefore, serves to intensify and reemphasize the absence of guile.

The phrase, "it was an honest mistake," captures an ambiguity which I want to extend. It is a door, so to speak, into other apprehensions of the meaning of mistakes. Saying that "it was an honest mistake" not only disclaims blame but implies something else--the possibility of being both mistaken and unblameworthy. It implies, that is, that the phrase may have a real referent, real

¹¹Ibid., p. 94.

here referring to something existentially real, i.e., real in human experience.¹²

Why use the term "mistake" at all? The term expresses personal involvement in something wrong. I want to examine this involvement very closely, especially the moral tensions of being involved in something which has happened wrong with respect to a person's life.

I have adopted an actor's point of view. This is not a matter of empathy but an informed research strategy which attempts to disclose the integrity of an acting subject's experience.¹³ This is perhaps easier to do when such actors are strangers. Physicians are not strangers in the same sense that Kwakuitl shaman are. We have already at hand knowledge about their work. For this reason, we have much to unlearn as well as to learn for the first time, especially about what clinical medicine is like.

I have also created a language, a network of terms and concepts, which makes my rendering possible. The reader will see the development of this language throughout; it refers to conduct and consciousness and

¹²See Rollo May's discussion of real, "The Origins and Significance of the Existential Movement in Psychology," in Existence, pp. 13-14.

¹³See Phenomenological Sociology: Issues and Application, ed. George Psathas (New York: John Wiley & Sons, 1973), pp. 1-21.

contains terms like person, conscience, awareness, acting as if, and sorrow. It is a social psychological language or a language of existence created because the language in general use in sociological theory is too abstract and too impersonal to express or delineate tensions which arise in the here and now of lived-time. The term person is illustrative. It is used instead of the term role because I am interested in the sentient and aware being who acts, thinks, perceives, feels, and reflects in time. The term role does not depict a consciousness: thinking, acting, reflecting. It usually implies norms, attributes, or functions of an occupation.¹⁴

The public aspects, the observable aspects, of a person which can be noticed in action and discourse are rather like Erving Goffman's idea of "role." He employs the term in the dynamic sense of being a role player, a figure who plays a part on the stage.¹⁵ But I have chosen

¹⁴See for example Robert K. Merton's list of norms of the role of physician, "Some Preliminaries to a Sociology of Medical Education," in The Student Physician: Introductory Studies in the Sociology of Medical Education, ed. Robert K. Merton et al. (Cambridge: Harvard University Press, 1957). See also Talcott Parsons' list of attributes of role, e.g., universalistic, functionally specific, achievement oriented, affectively neutral, The Social System (New York: The Free Press, 1951).

¹⁵Erving Goffman, The Presentation of Self in Everyday Life (Garden City, N.Y.: Doubleday Anchor Books, 1959); see also Erving Goffman, Encounters: Two Studies in the Sociology of Interaction (Indianapolis, Indiana: The Bobbs-Merrill Company, Inc., 1961).

to call the public aspect of a physician, a persona, and have avoided using "role" in Goffman's sense, less because it is inaccurate than because it is tarnished with the cynicism of being a "staged" person. It also too quickly becomes infected with over-determinism, as though this figure really has a script rather than is improvising action.¹⁶

Although sometimes very hidden, every sociology has a psychology. Mine is an existential and phenomenological psychology rather than a depth psychology. I am interested in problems in human consciousness rather than in problems of the unconscious, i.e., the phenomena of repression.

Data

I have tried to bring the reader as close as possible to the "texts" being interpreted because such data are rarely seen. And I ask something different of a reader: to follow both the data, what is being said and what it means, and my rendering of it.

Two of the transcriptions of discussions about mistakes are remarkably rich. One appears in Chapter III, the other in Chapter IV. A series of "texts" about

¹⁶For a very important discussion of what a stage actor really knows, see Maurice Natanson, "Man as an Actor," in Phenomenology of Will and Action, ed. Erwin W. Strauss and Richard M. Griffith (Pittsburg, Pa.: Duquesne University Press, 1967), pp. 201-20.

mistakes, presented in Chapter V, confirms these statements and expresses additional complexities. I have edited these "texts" in minor ways, deleting many speech distractors, the "hms" and "ahs" of ordinary discourse, in order to make them more readable. When necessary, I have taken precautions to assure the anonymity of the speakers.

The form in which these data are displayed should not lead anyone to assume that they are somehow not real data. Their transformation into percentages, their classification into types of errors, for example, errors of ignorance vs. errors of neglect, would serve no real purpose. Indeed, many issues of the interpretation of meaning would be obscured.¹⁷ What matters here is whether the data refer to something real in human experience and whether the mode of representation accurately depicts that reality. I have attempted to bring the reader to the very heart of the phenomena being interpreted. A more complete representation of the data would have required audio. A still more complete representation would have required video.

The inclusion of these interview transcriptions, or "texts," has another purpose also. They are intended

¹⁷Thomas J. Scheff has developed a classification of diagnostic errors. His purposes, however, are very different. See Thomas J. Scheff, "Decision Rules, Types of Error, and Their Consequences," Behavioral Science 8 (April 1963): 97-107.

as evidence of the inevitability of mistakes, i.e., evidence in the sense that these statements refer to something existentially real. The inevitability of mistakes is sometimes denied in favor of an inquiry into the veracity of statements about mistakes. Eliot Freidson does this, for example, by transforming the inevitability of mistakes into an idea about them.

The practitioner is prone to believe that mistakes are bound to be made by the very nature of clinical work, so that every practitioner at one time or another is vulnerable to reproach. This belief is used to excuse oneself and also to restrain one from criticizing others and them from criticizing him. In looking at others' apparent mistakes the physician is inclined to feel that "there, but for the grace of God, go I" and that "it may be my turn next." When he gets into trouble he expects colleagues to cultivate the same sense of charity and is inclined to feel that those who are not so charitable are dogmatic fanatics to be distrusted and avoided.¹⁸ (Emphasis mine.)

"Prone to believe" effects a transformation in Eliot Freidson's conception of mistakes. Mistakes are an "idea" in the minds of clinicians, a "belief." This belief, he says, functions as an excuse, that is to say, it forms the basis of a charitable attitude, an attitude of restraint. What should be noticed is that his description does not raise the possibility that mistakes are inevitable. Rather, their inevitability becomes an imputation of their inevitability, their existence, an imputation of their existence.

¹⁸Eliot Freidson, The Profession of Medicine (New York: Dodd, Mead & Company, 1970), p. 179.

Freidson's description is also suffused with the rhetoric of blame. Speaking from the point of view of a particular physician (that is to say, any? or all physicians?), he comments as follows:

In most cases he is prone to feel that he is above reproach, that he did his best and cannot be held responsible for untoward results. "It could have happened to anyone!" or "How could I have known?" are commonly used remarks. In relatively few cases he personally concedes error; these he punishes himself for, but even so he must find them excusable in some way--"a bad break," "just one of those things." Self-criticism is more likely to be observable than other forms of criticism for it is often verbalized in order to get reassurance from friendly colleagues. By conceding error to friends who will not themselves criticize one gains the cathartic benefit of confession while avoiding the price of penance.¹⁹ (Emphasis mine.)

Phrases like "these he punishes himself for," "verbalized in order to get reassurance," "the cathartic benefit of confession," and "avoiding the price of penance" identify the rhetoric of blame.²⁰

¹⁹Ibid., p. 179.

²⁰These are Eliot Freidson's most polemical statements about mistakes. In his most recent book Doctoring Together, A Study of Professional Social Control (New York: Elsevier, 1975), his description is less pejorative. "Nonetheless, it is possible to say with great confidence that most physicians agree that everyone makes mistakes simply by virtue of the fact of working. Insofar as it is a human being rather than a machine performing some function, 'mistakes will happen,' as the common saying goes. Being human, the physician could not be perfect. In this sense, some number or proportion of mistakes was excusable and did not constitute deviation from a technical rule. Some physicians would not even call this group mistakes, and few were ashamed of them. They were normal mistakes. In contrast, there were mistakes that were in some sense inexcusable, of which the individual was ashamed. These were deviant mistakes," p. 128.

I start in another place. I do not regard the inevitability of mistakes as an idea but as an existential reality. I ask instead, given the inevitability of mistakes, what is medical work like and what is it like to be a person who does this kind of work?

These "texts" then are evidence of the inevitability, the reality, of mistakes. They display the phenomenon in its full complexity and detail. Although all of the physicians in this study described mistakes, not all of their discussions have been included. The discussions excluded are by no means different, though they are briefer. Data, in any case, on the inevitability of mistakes are quite common; but the problem is not providing data on mistakes--the problem is understanding their meaning.

All of these discussions of mistakes provide the grounds for my interpretation. Mistakes are regarded not as excuses but as signs of purposeful conduct going awry.

Plan of the Study

In the chapters which follow, medical work is described as a process of discovery and response, of risked action and error. I call it an error-ridden activity. My description of medical work as an error-ridden activity is not at all like contemporary sociological descriptions. Clinical work is not usually described as an error-ridden activity. In fact, it is rarely described

at all. Instead, it is characterized abstractly as a profession, an applied science, a field of expertise, or a technical activity.

Chapter II reviews the literature on the sociology of work and focuses especially on the meaning of work as a human activity, as something which is done by sentient individuals. I examine the divergence of my conception of work, as activity, from the sociological conception of work, as occupation. The chapter then begins a description of medical work emphasizing the diagnostic and therapeutic process. Finally, the literature on mistakes is reviewed.

Chapter III creates a language of description with terms like thinking and acting, acting as if, and the dramaturgy of acting as if. This descriptive language is intended to create a picture-in-motion of work and of persons at work. I am interested in depicting movements and transition in conduct in time. My topic, mistakes, is itself dynamic, intimately bound up with time as it unfolds. The picture presented, then, is not like a portrait or a still life. Rather, it is like edited film footage, a visual and animated representation of medical work.

Chapter IV creates yet a second descriptive language called a language of intention. Terms like intention, attention, care, and regret are used to

describe mistakes not in action as it happens, but in action as it is reexamined in retrospect. The identification of an error is shaped by an inquiry which attempts to get to the point of understanding what has gone wrong and correct it. Yet some errors are not correctable. My description of the reconstruction of action in retrospect focuses on regret.

Chapter V develops an interpretation of mistakes as complex sorrows, an interpretation taken from the inside of action. It is a phenomenology at the psychological level. It is I who create the phenomenology of the mistakes of physicians. This is, of course, what interpretation implies. It is they who give me the grounds for my interpretation. Chapter V also considers the problem of negligence, and I argue that it is neither the most common "mistake" (here I reach the borders of semantic sense) nor the most revealing of the character of clinical work. Irreparable and unavoidable mistakes are more revealing of the character of medical work.

Chapter VI returns to an early theme--making mistakes as a problem of being. Making mistakes includes but is not defined by being at fault and includes but is not defined by the experience of being blamed. This chapter also examines the limitations of the interpretation and of the data. Finally, I consider the ways in which being mistaken shape the organization of clinical work.

A recurrent theme of my description of medical work is that it is a process of discovery: medical work is discovered in action. Discovered, as a term, is not like seeing or observing. Patients do not wear their illnesses as they wear apparel. One apprehends, one infers, one tests, one experiments, one tracks, one follows the course of events in order to disclose the nature of illness and affect it.

This study is always implicitly about language and how it shapes our awareness. In attempting to create several descriptive languages, I have departed considerably from sociological practice. I have tried to invoke nuance, imagery, complexity, movement, feeling, and paradox. Without losing analytic precision, I have also attempted to shift a pervasive and false vision of clinical medicine, a vision which is in large part connected with a language of variables, categories, and tables. Sociologists have developed a particularly barren language. In doing so, we have not so much achieved insight into the human world as emptied it of its meaning, richness, and depth.

CHAPTER II

LANGUAGE DEPARTURES

Introduction

In this chapter and the next, medical work is described as an error-ridden activity, a core referent from which an interpretation of mistakes radiates. For some time, I had been using a cumbersome phrase, practice of knowledge, to describe medical work, a phrase which is far less telling and clear. Calling medical work an error-ridden activity is intended to suggest that the work is an inaccurate activity practiced with considerable unpredictability and risk. Especially, it is intended to suggest that the essential activity of medical work, the diagnostic and therapeutic process, is error-ridden. (Medical work is a general term which encompasses a range of related activities and social relations. Clinical medicine is a still more general term.)

Later in the chapter, the diagnostic and therapeutic process is described in a preliminary way. Here it is important to focus on the anomalous nature of my

description of medical work as an error-ridden activity. My use of the term activity is specialized. Activity expresses movement and transition; the diagnostic and therapeutic process intersects the movement of human illness. It unfolds in response to it. Activity is a term, then, which expresses this depth structure: motion, movement, transition, and transformation. Language either captures this depth structure or it fails to do so. Error-ridden is utilized in neither a statistical nor a pejorative sense; rather, it is used descriptively. It is intended to suggest that mistakes are an indigenous feature of the diagnostic and therapeutic process as it unfolds.

A clinician's description of medical work does not emphasize the error-ridden nature of the diagnostic and therapeutic process; instead, it stresses the progressive refinement and modification of the process. Philip Tumulty, for example, in referring to clinical diagnosis, says the following:

It should be remembered that a clinical diagnosis is not a one shot affair, and as the physician's observations and study of a patient's illness advances, this list of pertinent facts will have to be revised repeatedly. Data considered of little or no import today may become of prime significance as new developments occur.¹
(Emphasis mine.)

¹Philip A. Tumulty, M.D., The Effective Clinician: His Methods and Approach to Diagnosis and Care (Philadelphia: W. B. Saunders Company, 1973), p. 191.

As Tumulty suggests, a clinician's description emphasizes the development of his observations, i.e., the repeated revisions of his observations through time and the development of the phenomenon of illness. Calling medical work an error-ridden activity, then, attempts to depict it as it develops in time and suggests that its practice is continuously problematic.

My use of the term work is also specialized. Work, in this study, does not refer to occupation, a way of being occupied in a social structure, nor to a particular kind of occupation, a profession, for example. Work, here, is a term of embodiment: it refers to doing something with one's mind-body. Work is also a purposeful activity which unfolds: it is a practice.² Clinical work is a practice of responding to the experience of

²See an especially clear discussion of work as a practice by Peter Berger, "Some General Observations on the Problem of Work," in The Human Shape of Work: Studies in the Sociology of Occupations, ed. Peter Berger (New York: The Macmillan Company, 1964), pp. 211-41. "To be human and to work appear as inextricably intertwined notions. To work means to modify the world as it is found. Only through such modification can the world be made into an arena for human conduct, human meaning, human society or, for that matter, human existence in any sense of the word," pp. 211-12. See also Karl Marx and Frederick Engels, The German Ideology Parts I and III, ed. with an Introduction by R. Pascal (New York: International Publishers, 1947). "The chief defect of all materialism up to now (including Feuerbach's) is that the object, reality, what we apprehend through our senses, is understood only in the form of the object or contemplation; but not as sensuous human activity, as practice; not subjectively," p. 197, "Thesis on Feuerbach."

illness. As a practice, its context is a relation encounter between persons about the afflictions of the human body and the human spirit. It is grounded here in a relational encounter from which it typically departs and to which it typically returns.

My description of medical work is at odds with many contemporary descriptions because such descriptions refer to medicine as an occupation or a profession rather than to medicine as a purposeful activity. It is also at odds with many contemporary descriptions because they refer to medicine as a field of expertise, an applied science, or a technical skill.

A review of the literature on occupations and work, with special attention to its abstractness, follows. Then, the essential activity of medical work, the diagnostic and therapeutic process, is described in a preliminary way. Finally, the far briefer literature on mistakes is examined.

The Literature on Occupations and Professions

The literature on clinical medicine is characteristically abstract. Medicine is not described as an activity, as something being done, but is summarized as a profession, an applied science, a technical skill, or a field of specialized knowledge, categories which are unlikely to provoke an imagery of trial and error, of

action and risk, or uncertainty. For example: "Medicine is of all the established professions based on fairly precise and detailed scientific knowledge, and it entails considerably less uncertainty than other technical occupations."³ The frame of reference here is comparative. Medicine is being compared to other occupations: "fairly precise and detailed scientific knowledge," "considerably less uncertainty than," "of all the professions."

The difficulty is just this comparative focus. Fairly precise and detailed scientific knowledge in relation to what? Considerably less uncertainty than which occupations? Which professions? These terms are suitable in a classification of occupations in a social structure, but not in a description of the conduct of medical work. Instead, they substitute for a description of the conduct of medical work.

Two papers have established the focus of the study of work for several decades: Talcott Parsons, "The Professions and Social Structure,"⁴ (1939) and T. H. Marshall's "The Recent History of Professionalism

³Freidson, The Profession, p. 162.

⁴Talcott Parsons, "The Professions and Social Structure," in Essays in Sociological Theory (rev. ed.; New York: The Free Press, 1954).

in Relation to Social Structure and Social Policy,"⁵ (1939). Although this entire inquiry can be traced to Emile Durkheim's The Division of Labor in Society,⁶ both these papers are concerned with mapping the social structures of industrialized societies, with the role of professions in industrial societies, and with the changing characteristics of professions. Their frame of reference is necessarily abstract. They are not about what persons are doing but how they are occupied and, even more abstractly, how the ways in which they are occupied are changing under the impact of industrialization. The extant literature on the professions, including medicine, follows out the logic of this inquiry into the development of industrial societies. Topics range from the professionalization of occupations in industrial society,⁷ to the organizations of

⁵T. H. Marshall, "The Recent History of Professionalism in Relation to Social Structure and Social Policy," in Sociology at the Crossroads (London: Heinemann, 1969).

⁶See especially the 1902 preface to the second edition, "Some Notes on Occupational Groups," The Division of Labor in Society, trans. George Simpson (New York: The Free Press, 1964), pp. 1-31. See also R. H. Tawney, The Acquisitive Society (New York: Harcourt, Brace & World, Inc., 1920).

⁷Nelson Foote, "The Professionalization of Labor in Detroit," American Sociological Review 58 (January 1953): 371-80; Harold L. Wilensky, "The Professionalization of Everyone?" The American Sociological Review 70 (September 1964): 137-58; Everett C. Hughes, "The Professions in Society," in The Sociological Eye: Selected Papers,

professions,⁸ the use and abuse of professional authority,⁹ and the professionalization of society.¹⁰

vol. II (Chicago: Aldine-Atherton, 1971), pp. 364-73; Wilbert E. Moore, The Professions: Roles and Rules (New York: Russell Sage Foundation, 1970); Howard M. Vollmer and Donald L. Mills, eds., Professionalization (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966).

⁸See especially Eliot Freidson, "Professions and the Occupations Principle," in Professions and Their Prospects, ed. Eliot Freidson (Beverly Hills: Sage Publications, 1973), pp. 19-38 for a review of the issue of authority and autonomy. See also Gloria V. Engel and Richard H. Hall, "The Growing Industrialization of the Professions," in Professions, pp. 75-88; Eliot Freidson, Professional Dominance: The Social Structure of Medical Care (New York: Atherton, 1970); Freidson, The Profession; Freidson, Doctoring; William Kornhauser, Scientist in Industry (Berkley: University of California Press, 1962); Rue Bucher and Joan Stelling, "Characteristics of Professional Organizations," Journal of Health and Social Behavior 10 (March 1969): 3-15; Everett C. Hughes, "Psychology: Science and/or Profession," in Men and Their Work (Glencoe, Ill.: The Free Press, 1959), pp. 139-44.

⁹Especially, Talcott Parsons, The Social System (New York: The Free Press, 1951), chapter 10; Amitai Etzioni, ed., The Semi Professions and Their Organization (New York: The Free Press, 1969); Freidson, Professional; Freidson, The Profession; Freidson, "Professions and the Occupations Principle," in Professions; Eliot Freidson and Buford Rhea, "Knowledge and Judgment in Professional Evaluations," Administration Science Quarterly 10 (June 1965): 107-24; Eliot Freidson and Buford Rhea, "Processes of Control in a Company of Equals," Social Problems 11 (Fall 1963): 119-31. Eliot Freidson's oeuvre is an extremely important critique of the abuse of professional authority. Terrence Johnson, Professions and Power (London: The Macmillan Press, 1972); A. M. Carr-Saunders and P. A. Wilson, The Professions (Cambridge: Oxford University Press, 1933). For a historical account of the political activity of the American Medical Association, see Richard Harris, A Sacred Trust (Baltimore, Maryland: Penguin Books, Inc., 1969).

¹⁰Paul Halmos, The Personal Service Society (New York: Schocken Books, 1970); Paul Halmos, "Sociology and the Personal Service Professions," in Professions, pp. 291-306.

A lengthy and unresolved discussion of the essential characteristics of professions has permeated the entire tradition of thinking since some stable semantic referent is required in order to classify occupations as professions.¹¹ None has emerged. Although several characteristics are regularly cited, expertise, codes of ethics, control of the terms of work, for example, these characteristics are subject to disagreement because they are arbitrary, intended for particular research purposes, and because they are implicitly evaluative, they confer status. Profession is not a neutral nor scientific concept. It is an honorific title in use in discourse about some kinds of work.¹²

A web of suffixes entangles this long tradition of inquiry about industrial societies and subtly alters the content of the discussion. Of these suffixes, professionalization, professionism, and professionalism are the

¹¹William J. Goode, "Encroachment, Charlatanism, and the Professions," American Sociological Review 25 (February 1960): 902-14; Eliot Freidson, The Profession, chapter 4; Everett C. Hughes, "Professions," in The Professions in America, ed. Kenneth S. Lynn (Boston: Houghton Mifflin Company, 1965), pp. 1-14; Terrence J. Johnson, Professions, chapter 2; Morris L. Cogan, "Toward a Definition of a Profession," Harvard Education Review 23 (Winter 1953): 33-50; Howard M. Vollmer and Donald L. Mills, eds., "Editors Introduction," in Professionalization, pp. v-ix.

¹²See especially Howard S. Becker's discussion of profession as a folk concept, "The Nature of a Profession," Sociological Work: Method and Substance (Chicago: Aldine Publishing Company, 1970), pp. 87-103.

most common. Professionalization refers to the process by which an occupation acquires professional status as well as to the process of becoming a professional. Professionism refers to the ethical orientation, or what is sometimes called "the service ideal" of a profession, and also to the ideology of a profession, its professional claims. And professionalism defines the professionism of a person.¹³ A problem of definition always lingers, however, as the core meaning of profession remains unclear.

The categorization of occupations for comparative purposes is not at all like the description of the conduct of work, that is, what people are doing. Nor is the description of work, what people are doing, in comparative terms like a description of work in its own terms. The essential activities of work also require description. Eliot Freidson, whose long and important contribution to the study of medicine is frequently cited, argues by contrast:

In order to illuminate all professions by the close examination of one, however, it is necessary to remain at a level of abstraction that prevents confusing the unique with the general. This means that one's guiding concepts may not stem from the peculiarities of the concrete profession one is studying. It means that one must in some sense stand apart from and outside of the specific profession one is studying. . . . Thus, in order to study medicine in such a way as to clarify and extend our understanding of professions in general,

¹³Even these definitions are unstable. Compare H. Vollmer and D. Mills, Professionalization, pp. vii-viii.

one must not adopt medicine's own concept of its mission, its skill and its science. Since professions are collective human enterprises as well as vehicles for special knowledge, belief, and skill, sociology can focus on their common organization as groups quite apart from their different concepts, providing the general concepts by which they may be made individually comparable.¹⁴ (Emphasis mine.)

The particularity of medicine, however, is its complex relation to the life process and especially to personal suffering. Its unique contribution to the construction of the human world lies here. Yet Freidson fails to describe it for methodological reasons. He argues instead that medicine should be described in general terms, terms which make it comparable to other occupations. In his most recent book, Doctoring Together, he fails even to mention illness as the basis of the relationship between physicians and patients, confining himself instead to the description of a physician as an expert, or a merchant, or a bureaucrat.¹⁵

A small and unassimilated ethnographic literature exists on the activities of occupations rather than the status of occupations in a social structure.¹⁶ Although

¹⁴Freidson, The Profession, p. xix.

¹⁵Freidson, Doctoring, pp. 44-48, 87-98.

¹⁶See, for example, ethnographic descriptions of work relations, Fred David, "The Cab Driver and His Fare: Facets of a Fleeting Relationship," The American Journal of Sociology 65 (September 1959): 158-65; James M. Henslin, "Trust and the Cab Driver," in Sociology of Everyday Life, ed. Marcello Truzzi (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968), pp. 138-58.

it is descriptively rich, this literature is intrinsically anomalous because the terms of ethnographic description are not articulated as "categories" in the comparative study of work as an occupation. Ethnographic descriptions do not aim at abstract comparisons of work as an occupation, but at concrete descriptions of different kinds of work in their own terms. Studs Terkel's moving account of the kaleidoscope of human activities, Working, illustrates both the complexity and diversity of work as a human activity and the difficulty of constructing a scheme classifying it.¹⁷ His own scheme is very modest, no more than a Table of Contents: Book One, "Working on the Land," farmer, miner, heavy equipment operator; Book Two, "Communications," receptionist, switchboard operator, professor of communications, etc.¹⁸

In the instance of medicine, a number of studies, some of which are ethnographic, illustrate not the expert knowledge of physicians but their uncertainty and ignorance,¹⁹ not their technical competence but their

¹⁷ Studs Terkel, Working: People Talk About What They Do All Day and How They Feel About What They Do (New York: Pantheon Books, 1972).

¹⁸ Ibid., pp. xxv-xxx.

¹⁹ For example, Renée Fox, "Training for Uncertainty," in The Student Physician, ed. Robert K. Merton, et al. (Cambridge: Harvard University Press, 1957), pp. 207-41; Renée Fox, Experiment Perilous (Glencoe, Ill.: The Free Press, 1959); Renée Fox and Judith Swasez,

moral equivocation,²⁰ not their professionalism but their mercantilism, not their ethical conduct but their inhumanity.²¹ These studies lie around as the odds and ends of an otherwise "orderly" subject matter.

Renée Fox's studies of physicians at work are particularly noteworthy because they describe clinical uncertainty as well as clinical expertise. In an early paper on the training of physicians, she identified two basic medical uncertainties: first, the uncertainty which results from incomplete mastery of available knowledge; and second, the uncertainty which results from the limitations of current medical knowledge.²²

The Courage to Fail: A Social View of Organ Transplants and Dialysis (Chicago: The University of Chicago Press, 1974); Julius Roth, Timetables (New York: The Bobbs-Merrill Company, Inc.).

²⁰For example, Fred David, "Uncertainty in Medical Prognosis, Clinical and Functional," American Journal of Sociology 66 (July 1960): 41-47; David Sudnow, Passing On: The Social Organization of Dying (New Jersey: Prentice-Hall, 1967); Julius Roth, "Some Contingencies of the Moral Evaluation and Control of Clientele: The Case of the Hopeful Emergency Service," American Journal of Sociology 77 (March 1972): 839-56; Donald Light, "Psychiatry and Suicide: The Management of a Mistake," American Journal of Sociology 77 (March 1972): 821-38; Freidson, Doctoring, especially chapters 7, 11, 12, 13, 14.

²¹Marcia Millman, The Unkindest Cut: Life in the Backrooms of Medicine (New York: William Morrow & Company, Inc., 1977); H. R. Lewis and M. E. Lewis, The Medical Offenders (New York: Simon and Schuster, 1970).

²²Fox, "Training For," p. 208.

She has continued to explore problems of uncertainty in her studies of practicing research physicians. In her ethnography of Ward F-Second, an experimental metabolic unit, uncertainties in both diagnostic and therapeutic work were endemic.²³ These uncertainties were one of a number of sources of stress to both research physicians and their patients. For example, the physicians of this research-therapy unit were constantly faced with the limitations of current medical knowledge in the treatment of complex disorders, and their patients were often treated at a highly empirical level.

Her most recent book, The Courage to Fail, describes the evolution of the experimental frontiers of hemodialysis, kidney transplantation, cardiac replacement, and the use of a mechanical heart along with the sharp tensions of developing extremely hazardous and new procedures in the treatment of patients with catastrophic illnesses.²⁴ While her studies have consistently depicted clinical uncertainties and many other problematic features of the practice of medicine, her work has had little impact on the abstract portrayal of medical work as a profession, a field of expertise, an applied science, or a technical activity.

²³Fox, Experiment.

²⁴Fox, The Courage.

Donald Light has commented very succinctly on much of the sociological literature on the professions including medicine:

If expertise and error lie at the heart of the professions, most sociologists write from the periphery. Sociological literature concentrates on gross structure, such as professional organization, licensing, relations to complex organizations and government, and external organization of work as exemplified in the structure of a hospital. Although these features are important for handling disputes over competence and mistakes, that perspective is not given them. . . . Instead of being seen as problematic, technical competence is assumed. Reviewing over 850 books and articles on professions, Wilbert Moore (1970) found no reason to devote much space to this perspective.²⁵

"Expertise and error" as a core idea of "profession" is much more telling than expertise, ethical conduct, or control of the terms of work. It is also, of course, much more accurate. At the same time, the phrase is difficult to utilize because it is so ambiguous. It requires a great deal of precise analysis--expert in relation to what? erroneous in relation to what?--just the kind of close work which is unnecessary in a comparative study.

In summary, the sociological literature is bound by an image of work as occupation, i.e., a way of being occupied in a social structure. Furthermore, the comparative focus of the literature makes it difficult to establish a description of work on other terms. In

²⁵Light, pp. 821-22.

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the instance of medicine, the very categories in use make the articulation of medical uncertainty, medical ignorance, and medical mismanagement improbable.

Occupation, as a way of being occupied in a social structure, is also often a static concept. It does not readily connect with a dynamic description of what people are doing in working or with the use of work as a term of embodiment and effort. Both the kind of abstraction and the content of the dominant sociological abstraction of work are at odds with the description of medical work as an error-ridden activity.

A Preliminary Sketch of the Diagnostic and Therapeutic Process

A characterization of medical work as an error-ridden activity is also abstract. Like profession, technical activity, or applied knowledge, error-ridden activity depicts the terrain of clinical work in a particular manner. It has the advantage of being an abstraction of activity, of movement and transition, development and transformation. In addition, it is an abstraction of the central activity of medical work, the diagnostic and therapeutic process. The phrase is intended as a representation, a short hand. What matters here is the nature of the illumination achieved; just how much, with this simple expression, is explained.

Chapter III animates my description of medical work; I emphasize clinical action as it presses into the unknown. Here the diagnostic and therapeutic process is described in general terms, terms which outline the essential developmental nature of clinical work. The description intends to answer two questions: what is clinical work about? and how is it done?

Clinical work is about human illness. Illness as a term has no fixed referent; the very character of the concept has changed radically in recent years under the impact of new biological, psychological, and sociological perspectives. But speaking for the moment as though this were a simple matter, speaking plainly, clinical work is about the disorders of the body and the human spirit.

In the nomenclature of the modern period, although not of contemporary medicine, illness is identified with disease, an abnormal change in the structure of a person's body. The clinical lexicon of illness, so to speak, is a nosology, a classification of illness as diseases and disease mechanisms. That term, "lesion," is illustrative. It refers to an anatomical abnormality which can be detected.

Originally, diseases, like lesions, were anatomically defined and disclosed. Anatomy was, in fact, the first clinical science. But the disorders of the body have become increasingly more subtle, dynamic, microscopic,

interacting, and interdependent as the life sciences have developed. The essential point, however, again, speaking plainly, is that illness is identified with disease. In an elementary sense, the existential experience of being ill is translated by physicians into a biomedical language which is a variant of scientific language.²⁶ Illness then becomes intersubjectively interpretable as disease, or as disease mechanisms.

Disease, the concept, has no fixed referent in contemporary medicine. In fact, the nosology of clinical medicine has broken down. Jean Hamburger has made a very clear statement of this matter. "In ordinary language," he says,

. . . a "disease" is defined by the conjunction of a particular cause, specific clinical manifestations, identifiable evolution, and perhaps characteristic pathological lesions. This definition which grew out of the basic principles of the anatomic-clinical method proposed by Laennec in 1826, has provided a convenient basis for the description of infectious diseases. But today it is no longer possible to group all the observed cases into clearly independent categories because there is no longer a convergence of criteria: patients can be classified in totally different ways according to whether the doctor bases

²⁶For an excellent discussion on the language of disease, see Horatio Fabrega's "Disease Definitions: Traditional Perspectives," in Disease and Social Behavior (Cambridge: The MIT Press, 1974), pp. 119-41. Also see Thomas S. Szasz's discussion of translation in medicine in The Myth of Mental Illness: Foundations of a Theory of Personal Conduct (rev. ed.; New York: Perennial Library, 1974).

his criteria on the causal agent or its mechanism of action, the clinical symptoms, the anatomic lesions, the development process, and so on.²⁷

This lack of convergence of criteria also means that "one and the same lesion can be the result of a number of causes" and can have a number of different treatments.²⁸

Yet even though a classificatory crisis has developed in medicine, the task remains the same: to discover the underlying pathological processes of illness and affect them if possible. This task transcends its articulation in clinical language because human illness is not only identified with disease in a classificatory scheme, however it is constructed. Illness is also identified with a person or, rather, persons who have it and carry it around knowingly and unknowingly.²⁹

Illness, or to speak more exactly, illnesses are manifested not as diseases, disease mechanisms, molecular disorders, or electrolyte imbalances. They are manifested

²⁷Jean Hamburger, The Power and the Frailty: The Future of Medicine and the Future of Man, trans. Joachim Neugroschel (New York: Macmillan Publishing Co., Inc., 1973), pp. 35-36.

²⁸Ibid., p. 36. See especially Chapter 1 of his book for a description of three alternative clinical images of illness. See also Alvan R. Feinstein, M.D., Clinical Judgment (Baltimore: The Williams & Wilkins Company, 1967).

²⁹See especially Henry E. Sigerist, "On the Special Position of the Sick," in On the Sociology of Medicine, ed. Milton I. Roemer, M.D., foreword by James M. Mackintosh, M.D. (New York: MD Publications, Inc., 1960), pp. 9-22.

as signs and symptoms. The task, the work, as it attempts to respond to illness, encompasses a complex reality: (1) languages of disorder (to use a more neutral term than disease), biomedical, social-psychological, psycho-analytic and (2) an existential context, the experience of illness. Symptoms are idiosyncratic reports of the existential experience of being ill. Pain, for example, is a symptom. Signs are observable manifestations of disorder. They are disclosed through the senses. An enlarged kidney is a sign. Signs and symptoms form the data, so to speak, of an inquiry into the existential experience of illness. One moves, clinically speaking, from signs and symptoms to underlying processes. And one makes inferences about the causes of these processes, their etiology, their development, and their impact. One gathers evidence.

The diagnostic and therapeutic process is a way of gathering and sorting evidence about underlying disorders in order to affect an existential experience. It is a way of thinking-and-acting. Again, pain is a useful illustration because it is so common. "What kind of pain?" (type) "When do you have it?" (onset) "Where?" (location) "How long do you experience it?" (duration). The words in parentheses are some of the clinical parameters of pain. They transform the experience into

a usable clinical form.³⁰ This is a simple illustration of gathering a bit of evidence. Nevertheless, I believe it illustrates the diagnostic and therapeutic process, not in all its complexity, but in its essential elementary complexity as an act of translation. For here, and elsewhere, an appropriate translation of a symptom is essential to get on a path which tracks into the great storehouse of clinical knowledge. Heartburn is a vastly different chest pain than Angina Pectoris.

The diagnostic and therapeutic process is sequentially organized as a series of activities which can be re-enacted again and again: a history, a physical examination, related diagnostic tests, diagnostic and therapeutic plans, and patient education. Typically, it begins as a conversation about the disorder of experience and evolves as a history of an existential experience including a chief complaint or complaints, a history of present illness, a past medical history, a social-psychological history, a family history, and a review of the organ systems of the body.

³⁰George L. Engle, "Pain," in Signs and Symptoms, eds. C. M. MacBryde and R. S. Blacklow (5th ed.; Philadelphia: Lippincott, 1970).

The acquisition of a history of illness is a special skill taught (sometimes) and acquired.³¹ A physical examination, which is either general or highly specialized, depending on the circumstances of the instance, follows or runs concurrently with a history, then related tests, the construction of a diagnostic niche or niches (differential diagnosis) and the establishment of related diagnostic and therapeutic plans, the essence of what is called patient management.

A diagnostic niche is especially important since the vast therapeutic armamentarium of medicine cannot be utilized without it. Without an appropriate diagnostic niche in relation to the patient, clinical medicine is extremely dangerous. Indeed, the bio-technology of medicine can be lethal.³² I am using diagnostic niche rather than diagnosis because it implies less precision and for that reason is more often phenomenologically

³¹See, for example, Allen J. Enelow, M.D., and Scott N. Swisher, M.D., Interviewing and Patient Care (New York: Oxford University Press, 1972), or Tumulty, pp. 9-48, on communication.

³²"Formerly, in the days when medical technology and treatment were not so advanced, it was not so essential that a physician be accurate in his diagnosis, and a brilliant diagnosis might have been regarded only as a display of clinical erudition. Today, however, with the availability of a wide variety of therapeutic agents, and methods, many of which are highly specific in action, the greatest possible accuracy in diagnosis is essential to the future health and possibly even the life of a patient," Tumulty, p. 189.

accurate. A problem, a disorder, even a lesion, as Jean Hamburger suggests, may have vastly different etiologies and consequences and vastly different therapeutic modalities depending on the patient. Labels, disease-labels, are not as helpful as they seem although they permit orderly thinking. Ironically, the greatest possible accuracy in diagnosis is essential for a patient at just the point in time in history that the disease paradigm has broken down.³³

The diagnostic and therapeutic process has been presented as a set of discrete activities. But these activities may be recapitulated again and again and reordered in any number of ways. Furthermore, they may extend out over a longer period of time as an illness evolves, or they may occur as a brief episode in the unfolding life of a person, or they may be aborted prematurely for any number of reasons.

The process is recorded in a medical record which summarizes the interaction of a physician and a patient. And the character of medical records is changing rapidly.

The classic record called the SOR, The Source Record, is divided into historical data, current data, and varying statements of the problem and therapeutic proposals. The information is chronologically ordered,

³³See Ivan Illich, Medical Nemesis: The Expropriation of Health (New York: Pantheon Books, 1976), for a critique of iatrogenesis.

and data about more than one illness often are undifferentiated. Indeed, this is the problem with this record: it commonly does not disentangle "elements of multiple, etiologically unrelated but interacting illnesses that occur simultaneously, even though it is clear that the skilled physician does just this as his first step in processing the data he receives directly from the patient."³⁴

The new record, The Problem Oriented Record, the POR, utilizes a very extensive and systematic format. Although it begins with a data base like the SOR, it lists every problem a patient has, often initially in ordinary language, for example, abdominal pain, cough, numbness in right leg. Each problem is then evaluated, assessed, in the language of this record. Diagnostic and therapeutic plans are written separately for each problem as are progress notes. A Master Problem list records and tracks all problems. The use of the POR in some sense circumvents the classificatory dilemma of contemporary clinical medicine since problems, not necessarily diseases, are listed and tracked.³⁵ On the other

³⁴Enelow and Swisher, p. 69.

³⁵On the POR see its originator's work, Lawrence L. Weed, M.D., Medical Records, Medical Education and Patient Care, The Problem-Oriented Record as a Basic Tool (Cleveland: The Press of Case Western Reserve, 1969). For a discussion of the POR written for patients, see Lawrence L. Weed, M.D., Your Health Care and How To Manage

hand, the POR lists a wide range of problems, e.g., depression, indigent, alone, not all of which are clinical and, for that reason, may expand the scope of medical activity unnecessarily.³⁶

I have been emphasizing the acquisition of medical information. The diagnostic and therapeutic process, both an activity of investigation and an activity of intervention, has the aim of affecting the existential experience of illness. This is an especially distinctive characteristic of clinical work--it intends to make a difference. It is not disinterested in the way that science is said to be disinterested. Indeed, the intention to respond lies at the depth structure of the project. A clinical intervention may be very elementary

It (Essex Junction, Vermont: Essex Publishing Company, Inc., 1975). For a discussion of the use of the POR in teaching the diagnostic and therapeutic process, see Lawrence L. Weed, "Medical Records that Guide and Teach," New England Journal of Medicine 278 (March 1967): 593-600, 652-57. See also Peter O. Ways, M.D., and Jack Jones, M.D., The Problem-Oriented Medical Record: A Self-Instructional Unit (East Lansing, Mich.: College of Human Medicine, Michigan State University, 1974). See also the discussion of medical records in Enelow and Swisher, pp. 66-101.

³⁶See Renée Fox, "The Medicalization and Demedicalization of American Society," Daedalus 106 (Winter 1977): 9-22. Also see Ilich's discussion of social iatrogenesis in Medical and Rick J. Carlson's The End of Medicine (New York: John Wiley & Sons, 1975). See also Thomas Szasz's critique of the extension of the idea of illness into psychological experience, The Myth.

and banal or it may be very elaborate and startling. Yet the word "intervention" is somewhat unfortunate since it implies actively having an effect. The appropriate response in many instances may not be intervention at all, but observation. This is an instance of a continuing dilemma of description. The term intervention is used here because the dominant style of contemporary medicine is interventionist, not because it always occurs.

The process intends to make a difference, and the difference intended is not abstract but concrete. The process intends to make a difference with respect to this particular instance, this particular set of signs and symptoms, this particular person's existential condition. In this sense especially, clinical medicine is a project of personal illness and existential experience.³⁷ It intends toward particular persons. A general category like systemic lupus, which is a diagnostic category, requires elaboration and interpretation with respect to

³⁷On the distinction between individual care and public health, see Carlson, The End. This distinction is not widely made and leads to serious confusion in discussions of the crisis of health care in the U.S.A. For a description of the great antiquity of the difference between individual care and public health, see Henry E. Sigerist's oeuvre, especially On the History of Medicine, ed. and with an introduction by Felix Martin-Ibanez, M.D., foreword by John F. Fulton, M.D. (New York: MD Publications, Inc., 1960), and Medicine and Human Welfare (New Haven: Yale University Press, 1941). See also René Dubos, The Mirage of Health (New York: Harper & Row, Publishers, 1959) and Eric J. Cassell, "Disease as a Way of Life," Commentary 55 (February 1973): 80-82.

this person's systemic lupus and a therapy which is entirely for this person. The process thus culminates in therapeutic acts for a very distinctive and unique expression of an existential disorder. This means, quite literally, that the process is uniquely adapted to each instance, each case.³⁸ The process is also a kind of eternal creation of a practitioner, and it succeeds and it fails with respect to a particular disorder of experience. Clinicians often identify the diagnostic and therapeutic process with the test of a hypothesis because the process culminates in a test of its accuracy.

It is this process which I characterize summarily as error ridden: the process of acquiring, interpreting, and managing the disorders of personal experience. And my more lengthy description of the process remains very crude, in need of qualification and elaboration at almost every turn. At the outset, I indicated that I would describe the process plainly. I have, in fact, not at all emphasized the dynamic nature of illness, nor the interpenetration of social, psychological, and biological processes. I have generally used the language of disease, which does not depict the extraordinary transformation in

³⁸ Many errors occur when this adaptation is not made. See Roth's description of the standardization of treatment of tubercular patients, Timetables. See also Erving Goffman, Asylums: Essays of the Social Situation of Mental Patients and Other Inmates (Garden City, N.Y.: Anchor Books, 1961).

clinical work which the bio-technical armamentarium of contemporary medicine has produced. However, my description suffices for my purposes. A more lengthy description would not alter my characterization of medicine as an error-ridden activity. Indeed, it would only press my case more fully.³⁹

The Semantic Sense of Mistakes

In calling clinical medicine an error-ridden activity, I have departed considerably from an everyday understanding of (1) mistakes and (2) mistakes in medical work. I have especially undermined the sense in which mistakes are thought of as uncommon, aberrant, or culpable acts--in saying this, I do not wish to imply that medical mistakes are never aberrant, culpable, and uncommon acts. Rather, it is the whole activity which is exceptional, uncommon, and strange because it is error-ridden, inexact, and uncertain and because it is practiced on the human body.

It is especially difficult to find an acceptable language here. The meaning of mistakes is debased in calling medical mistakes ordinary, common, or normal. Neither normal nor abnormal, ordinary nor exceptional works here. Although this approach is curiously common,

³⁹Reading the literature on the problem-oriented record is an excellent place to get a sense of the error-ridden nature of clinical work.

classifying mistakes or counting them or ranking them or placing them on a continuum of more or less misses the point. Medical mistakes are not items in the same sense that height and weight are items. And they cannot be described as if they were items without violating their special human significance. Rather, they require a language which recognizes their special meaning, a language which, quite frankly, I do not know, although I have begun to try to construct one.

Mistakes are curiously neglected phenomena of study. No general literature exists on this topic. The very brief sociological literature is either explicitly or implicitly bound by a language of blame just as it is explicitly or implicitly bound by a language of expertise, competence, and technique.

An early paper by Everett C. Hughes, "Mistakes in Work," established the general terms of the sociological discussion of mistakes in medicine and much of the existing nomenclature, although his own thinking has been oddly selected by others.⁴⁰ From Hughes' point of view, mistakes are a contingency of any line of work. They occur simply by virtue of working. They are in this sense "normal" and routine. Since mistakes occur simply by virtue of working, every occupation has a

⁴⁰Hughes, "Mistakes at Work," in Men and Their Work, pp. 88-101.

mistake calculus, a calculus of the probability of making mistakes. The variables of skill and frequency of performance can be used in constructing a calculus. Hughes' frame of reference is, of course, comparative. Occupations are bundles of skills distinguished by routines and emergencies, rituals and rights, mistakes and failures.

Eliot Freidson, Joan Stelling, Rue Bucher, Marcia Millman, and Donald Light follow the logic of Hughes' perspective, although each takes up a different aspect of his thinking. Stelling and Bucher emphasize his initial distinction between lay and professional attitudes. They argue that mistakes are not in the frame of reference of physicians.⁴¹ The very concept of mistakes, they say, fades away or becomes redefined in the process of socialization. Physicians acquire instead two vocabularies in which they describe their work: "doing one's best" and "the recognition of limitations." Eliot Freidson adopts Hughes' idea of mistakes as a contingency of any line of work, particularly in his last book Doctoring Together.⁴² His major concerns have been the organization of professional authority and the control of professionals.

⁴¹Joan Stelling and Rue Bucher, "Vocabularies of Realism in Professional Socialization," Social Science and Medicine 7 (September 1973): 661-75.

⁴²See especially Freidson, Doctoring, pp. 127-37, 161-66.

It is in this context, the context of professional authority, that medical mistakes have been important. They are identified as significant examples of failure of professional regulation.

Marcia Millman has almost exclusively considered the license of physicians to define their work.⁴³ "The very definition of what constitutes a medical mistake is carefully controlled."⁴⁴ Millman's study describes the everyday world of three hospitals as it adversely affects the quality of patient care. Mistakes are perpetuated and ignored in the "everyday work world" by physicians and this response is built into the organization of life and the professional training and outlook of physicians.⁴⁵ Finally, Donald Light emphasizes the ritualization of the problematic features of work, especially mistakes and failures.⁴⁶ He is closest to describing the moral order of work which is an especially neglected feature of Hughes' thinking.

Mistakes are linguistic phenomena, and it is perfectly appropriate to approach them in this way. As linguistic phenomena, they are, for example, elements or

⁴³Millman, especially part II "Overlooking Medical Mistakes," pp. 90-151.

⁴⁴Ibid., p. 91.

⁴⁵Millman, p. 10.

⁴⁶Light, pp. 821-38.

terms in use in conversations between persons. Although I know of no systematic study of this sort, Eliot Freidson's polemical statements about mistakes as excuses are illustrative of the possibility of this approach. The reader will recall that he describes mistakes as excuses.⁴⁷

Excuses, like explanations, alibis, rationalizations, justifications, apologies, and yarns, are accounts of events. They are members of a family of conversational phenomena which answer back or respond to inquiries. Marvin B. Scott and Stanford Lyman call excuses "accounts." Accounts are linguistic devices employed whenever action is evaluated, statements made by an actor to explain unexpected or unanticipated events.⁴⁸ Since they answer inquiries, they order the unexpected, in the sense of making order possible. They answer the Hobbesian question of how social order is possible. Their perspective suggests the power of excuses in ordering social life.⁴⁹ What is it that excuses do, practically speaking? They provide a fuller description of events in their context.

⁴⁷See pp. 17-19 of Chapter I.

⁴⁸Marvin C. Scott and Stanford Lyman, "Accounts," in Life as Theater: A Dramaturgical Sourcebook, ed. Dennis Brissett and Charles Eigley (Chicago: Aldine Publishing Company, 1975), pp. 171-91.

⁴⁹See a related paper by John P. Hewett and Randall Stokes, "Disclaimers," American Sociological Review 40 (February 1975): 1-11.

In an early paper on excuses, J. L. Austin distinguishes between excuses and justifications.⁵⁰ Excuses, he argues, acknowledge wrong acts but deny responsibility for them. Justifications, on the other hand, acknowledge responsibility for acts but deny that they are wrong.⁵¹ Justifications transform the evaluation of the act in a positive manner. While an adequate discussion of responsibility would take me very far from my own topic, I do not often use the term because it is infected with legalisms: being liable, being accountable for, being the source of or cause of something. Responsibility thus engages with the language of blame and culpability and is a more appropriate term in discussions of the jurisprudence of mistakes. When it is used, it is intended in its archaic sense of responding or answering. The term comes from respond which means to answer, in old French respondre, to answer back, in Latin respondere, to promise back or in return. To give an answer is

⁵⁰J. L. Austin, "A Plea for Excuses," in Essays in Philosophical Psychology, ed. Donald F. Gustafson (Garden City, N.Y.: Anchor Books, 1964), pp. 1-29.

⁵¹Ibid., p. 2.

distinct in meaning from being blamed for answering, just as to answer back is distinct in meaning from being liable for answering.⁵²

The difficulty with Freidson's polemic about mistakes as excuses, then, is that mistakes are not excuses; they are wrong acts. They are elements of an activity going wrong. Furthermore, they are intersubjectively, knowably wrong acts being articulated in a language after the fact of their happening. Although they may be excused, they are not excuses. They are elements of social discourse in this sense; they are responding to events which have already happened, that is to say, they are naming events. And they almost always require discussion for this reason. What they name, however, is not a phenomenon but a quality of diverse phenomena, i.e., incorrectness or wrongness. Mistakes are, in this sense, elements of discourse in a more fundamental and metaphysical sense. They are elements in a meta-language, a language about abstractions of abstractions: good and bad, right and wrong, correct and incorrect. Social discourse names, in any case, a more primordial process, the making of mistakes. It articulates something which exists and is more

⁵²On the ascription of responsibility see H. L. A., "The Ascription of Responsibility and Rights," in Essays in Logic and Language, ed. Antony Flew (New York: Philosophical Library, 1951), pp. 145-66.

fundamental. It catches up to events. It reconstructs them in afterthought. Naming is, in this sense, a piece of the fabric of making mistakes. Mistakes unfold in an extended dialectic of acting and acting wrong, recognizing a wrong act, naming it, and reacting. Naming is a piece of a lengthy social process.

While mistakes are not excuses, they are sometimes excused. This is, of course, one way of reacting to them. Eliot Freidson's account of mistakes suggests the transformation of mistakes into excuses, what might be called a process of the legitimation of mistakes.⁵³ And Marcia Millman's study very clearly describes this process both as it occurs in conversation and as it occurs in "ceremonies of legitimation" in medicine.⁵⁴ She calls the process by which physicians "legitimate" mistakes, a process of neutralization. Her account is very disturbing because it depicts a pervasive redefinition of apparently negligent conduct in the hospitals she studied.

Like Freidson, Millman regards mistakes as excuses. She does not describe them as elements of an activity going wrong. Her description fails to locate them in the work process, although she does capture

⁵³Freidson, Doctoring, especially pp. 123-37.

⁵⁴See especially her description of Medical Mortality Review, pp. 96-119; Millman. See also Light's description of a suicide review conference, Light,

irreparable "errors" as they are being discussed, "justified, or made to appear inconsequential" in Morbidity and Morality Conferences.

Sigmund Freud has written the only systematic account of mistakes that I have seen. In The Psychopathology of Everyday Life⁵⁵ and in his A General Introduction to Psychoanalysis,⁵⁶ he analyzes a wide range of mistakes: slips of the tongue and pen, the forgetting of names and places, the forgetting of impressions and intentions, bungled actions, errors made in spite of knowledge, and so-called chance events, a classification which he regarded as somewhat arbitrary. The scope of his analysis of mistakes is very clear. It is limited to momentary and temporary disturbances which, if corrected by someone else, would at once be recognized.⁵⁷ Furthermore, his illustrations are inconsequential and unlikely to pose serious social issues. There are several references to medical mistakes, the slips of the pen of a physician. They are again inconsequential. There are also several references to his own mistakes.

⁵⁵Sigmund Freud, The Psychopathology of Everyday Life, trans. Alan Tyson, ed. James Strachey (New York: W. W. Norton & Company, Inc., 1965).

⁵⁶Sigmund Freud, A General Introduction to Psychoanalysis, trans. Joan Riviere (New York: Pocket Books, 1952).

⁵⁷Freud, Psychopathology, p. 239.

I have included a description of a "misdiagnosis" as an appendix because it illustrates the extraordinary power of the interior dialogue of self-recrimination, a kind of deranged attack on the self. I have rendered it a little by italicizing key words. It also suggests the richness of the internalized social world which is beyond the scope of my study.

The general term in use by Freud's translator for the concept of mistake is "parapraxis," a term coined for translation.⁵⁸ The original term is Fehlleistung (faulty function). The term parapraxis is intriguing: "para" presumably referring to false or wrong and "praxis" referring to action--para praxis, like wrong action, like bad praxis, like mal praxis and even bad practice. Freud used the term "bungled action" to describe "all the cases in which a wrong result--i.e., a deviation from what was intended--seems to be the essential element."⁵⁹ This is exactly what I mean by the concept of mistakes. He employed the term "error" to refer to an objective reality which has been forgotten and is recallable.⁶⁰

⁵⁸Freud, "Editor's Introduction," Psychopathology, p. xi.

⁵⁹Freud, Psychopathology, p. 162.

⁶⁰Ibid., p. 211.

The apparent diversity of these phenomena of mistakes is descriptive. In Freud's view, such diversity runs counter to the inner unity of the phenomenon, i.e., repression. Mistakes are, from Freud's point of view, symbolic representation of the unconscious and, especially, of repressed thoughts. It is always crucial in discussing Freud's thought to be clear about what he means. A repressed thought is not necessarily a thought about nor directly linked with the content of a mistake, although it may be.

Freud engaged in such a detailed description of mistakes because they communicated to his audience the realm of the unconscious in an easy and immediately understandable way. His project is very different because it is about the unconscious and about the interior world of the self. Mine is about the interpersonal work of persons, although I assume that the interpersonal world is recapitulated in the interior dialogue of the self. There is a natural affinity of thought which arises because my concept of mistake is very similar to his concept of a bungled action. A wrong act is like a deviation from an intention. An adequate understanding of mistakes, in fact, requires a grasp of human intention. I take up this matter in Chapter IV.

Summary

In considering the topic of mistakes, I have interrupted an everyday understanding of the semantic sense of mistakes. The term has become increasingly problematic as I have used it as a term of description rather than moral disapprobation or blameworthiness. It denotes a wrong act and necessarily a wrong actor. But the sense in which I have employed the term "wrong" is much contracted. I have in fact been trying to confine the meaning of the term without destroying its power as a sign signifying wrongness or incorrectness. This would perhaps be a less awkward and disturbing task if my topic were something other than medical mistakes. I have done something more. While making the term quite circumspect, I have expanded considerably its significance. Mistakes have become signs not of blameworthy acts nor incompetent actors, but of the work itself. Medicine has become an error-ridden activity.

My review of the literature on occupations, Professions, work, and mistakes suggests that my description of clinical medicine as an error-ridden activity is a radical departure from both common sociological understanding and the wider cultural context. I have begun a description of medical work, emphasizing especially the diagnostic and therapeutic process. Chapter III continues this description and enlarges

upon it by emphasizing the meaning of clinical action.
Then, Chapter IV creates a picture of clinical work
from the point of view of reconstruction of the act.

CHAPTER III

THE CHARACTER OF CLINICAL ACTION

Introduction

The phrases "mistakes are inevitable" and "everybody makes mistakes" are condensations of experience, highly edited reports of the evolution of human activity. These phrases carry a code because they are universal representations of experience. Although they suggest nearly the same meaning, they differ in their style of portraying meaning.

"Mistakes are inevitable" is more remote and ponderous than "everybody makes mistakes." It leaves no trace of the evolution of activity or of an acting subject. Mistakes are, i.e., they exist at all times and in all places. It is as though they have their own fixed realm independent of the persons who make them, a reified manner of speaking which is all too common. By contrast, "everybody makes mistakes" is more active and clear. It catches hold of a human subject, "everybody," meaning everyone, every person, makes mistakes. A certain kinship is established here between everybody

and each of us. Everybody is standing in for and representing each of us. In addition, makes as a verb in "everybody makes mistakes" is very different from are in the phrase "mistakes are inevitable. It is active. A subject, everybody, makes, actively constructs, puts together, and shapes mistakes. It is almost possible to catch hold of an image of a person forgetting, for example, in the haste of the moment to take the keys from the car's ignition. This phrase is also closer to the more revealing and concrete statement, "I made a mistake the other day," I here referring to a particular person and mistake to a particular mistake.

In this chapter, I introduce a "text" of a discussion of medical mistakes. It is an almost uninterrupted response to two questions: "what do you think about and do when you make a mistake, and what do you think about and do when you observe other physicians making mistakes?" These questions were neither unexpected nor new to the physicians being interviewed, since they had been asked at least once before when these physicians were fourth-year medical students. Some variation occurred in the ways in which these two questions were asked as they were fitted to the occasion and content of the preceding discussion.

Joan Stelling and Rue Bucher in their study "Vocabularies of Realism in Professional Socialization"

report a great deal of awkwardness among the physicians they interviewed in answering their inquiries about mistakes.¹ And they assume that such awkwardness indicates that the physicians they were interviewing lacked the concept of mistake in their frame of reference, that is to say, that the very idea of mistake is a lay rather than a professional idea. Their position is paradoxical, however, for even while some of the residents they interviewed used the term "mistake" with facility, they assume that the word was not in their frame of reference.

Part of the difficulty with the Stelling/Bucher analysis is that the term "mistake" is charged with associations which may create awkwardness: blame, malpractice, guilt, harm, anxiety, regret. Another part of the difficulty is that the term's meaning must be negotiated and distinguished from the concept of failure. It must be understood both as a word being employed to refer to something in the world and as an idea about such things. But Stelling and Bucher's use of the term "mistake" is insufficiently differentiated from failure. Here is an example of a question they asked:

"I: What's a failure in internal medicine?

Or what's a mistake?

¹Stelling and Bucher, pp. 664-65.

R: I really don't know. I never thought of it that way."²

It is answers like this one, "I really don't know; I never thought of it that way," which led them to assume that the concept of "mistake" was not in their frame of reference. Yet the juxtaposition of mistakes and failure, common to both the authors and some of their respondents, provokes confusion since these terms are not synonyms in ordinary language. Their undifferentiated association thus promotes difficulties rather than identifies the absence of an idea about mistakes.³

I have underlined certain sections of the "text" which follows. These sections are connected with the conception of action developed in this chapter. Certain words are also emphasized, words I regard as idioms of their linguistic community. These physicians speak

²Ibid., p. 664.

³Physicians who also write about clinical medicine refer to mistakes. See William A. Nolen's account of medical mistakes in William A. Nolen, M.D., The Making of a Surgeon (New York: Random House, 1968), especially pp. 71-81. Also see his description of errors in his own care as a patient in William A. Nolen, M.D., Surgeon Under the Knife (New York: Coward, McCann & Geoghegan, Inc., 1976), especially pp. 70-73, 112-25. Also see Joshua S. Horn, M.D., Away with All Pests: An English Surgeon in People's China: 1954-1969, Introduction by Edgar Snow (New York: Modern Reader, 1971), pp. 54-58. Horn says the following: "In China the attitude to medical mistake is: prevent them, admit them, learn from them," p. 54. It is also a common American attitude.

something like a regional dialect of the English language. Their "dialect," full of specialized meanings which can easily escape notice, is borrowed from everyday speech, from the language of science, from the nosology of medicine. It is indigenous to their work world, and their common effort to capture it is discourse.

I interpret this "text" by concentrating especially on this physician's description of mistakes. My interpretation emphasizes the time structure of mistakes which this physician captures pointedly with the phrase, "the errors are errors now, but weren't errors then."

I follow his example closely. I employ terms like acting as if, thinking and acting, and interpreting and experimenting in order to describe mistakes, not as they are being identified, but as they are being made in action. The language of my interpretation does not readily connect with sociological language which is not at all concrete, but rather abstract and impersonal.

But I then reformulate my interpretation at a more abstract level by creating a second description of clinical action. This second description attempts to connect my interpretation with the more abstract and often reified sociological language of knowledge and action. Finally, I remind my reader of how far my study has come from its point of origin, the language of blame and the rhetoric of expertise and skill.

The Data of Experience

Well, all mistakes are relative. They're relative to the setting in which they are made, and they're relative to the intent of the physician, I think. Mistakes about, for example, placing an individual on oral hypoglycemics with maturity onset diabetes--that wasn't a mistake five years ago, and it might not be a mistake now, but it's certainly suspect. A mistaken diagnosis: the threat, the constant threat, the constant nightmare of many people. The commission or omission kinds of errors: there are conflicts there too, whether you, whether you, resected the wrong breast for carcinoma. That, that certainly is a different order of, excuse me, a different level or dimension of error as opposed to putting an individual on the wrong medication or giving him an inadequate dosage or something like that.

I think, dealing with mistakes, I think, we see mistakes all the time. But the errors are errors now but weren't errors then. If someone comes in with an obvious primary typical pneumonia, and he's being treated with Ampicillin, you can hardly fault someone for that, because the, because the, fact that it was a mistake was brought to light after the therapeutic procedure was effected. Similarly, in preventive medicine, you destroy the evidence of your efforts by being successful--so is it a mistake, too, to put an individual on a low cholesterol diet after you first suspect that he had, that he has, hyperlipoproteinemia of one kind or another? You don't know whether that's a mistake; some people will think it's a mistake because you deprived him of all those steaks.

Mistakes, the issue of mistakes, that's, that's all relative, and, and, I, I don't deal with it in--you know, it's very popular, very common, and very easy just to, when you're, when you're happy, that someone, finally, finding out what was wrong with this guy, to say--"Man, that stupid M.D. was treating him with such and such and he's been walking around with this for a long, long time."

We happen to, to live, and we happen to be in a profession where the risk of error is tremendous. I, I, I go back to experiences in, in research. I would do a procedure five, sometimes, five, or six times before the darn thing worked; I would make every conceivable error before I finally, you know, ran out of things that could possibly go wrong. I controlled most of the variables before the darn thing worked: chromatography, column setting, and

really technical things. I did many, many runs before they would work out. I think, to a certain extent I, this is the practice of medicine, you know, you see an individual with a variety of diffuse ill-described, ill-defined vague kinds of things. There's nothing really that you can put your finger on. There's nothing that you can objectively point to as being conclusive or even, highly suggestive of anything in particular. This is, this is, you're out there, and you see many patients during the day, your whole office space is crowded, individuals parade in, they erroneously present symptoms of one kind or another, you see them two or three times, and it still doesn't make much sense, and it finally, it turns out months later, or weeks later, or even the next day, that, that, this is what was going on.

Different responses to my own mistakes? Sometimes I do, and sometimes I don't, depending on the error. I've made errors, I've made terrible errors, errors that sometimes I discover, sometimes they're discovered for me, sometimes I've never discovered and only suspected them, and sometimes those are the hardest to accept. I can think of a number of patients, without being anecdotal, that have, ultimately, proven to have entirely different, to be entirely different, to have entirely different situations than I suspected. I lost a patient just recently, as a matter of fact, because of a pulmonary embolism. It turned out to be a pulmonary embolism, and I really didn't clinically suspect it until it was too late. Maybe this was just an agonal phase of the illness, I really don't know, but, anyway, the patient had an embolus and died. Another patient expired after a long, long difficult course, just within the last couple of months, a 40-year-old man with a carcinoma of the small bowel. I admitted him twice to the hospital, did a lot of things on him that most people thought were foolish, many people thought were foolish, expensive and not indicated. I persevered, kept going after his diagnosis, finally diagnosed a very small tumor in the small intestine, malignant but not metastasized; he underwent a resection for this--this is after gastroscopies, so many IVPs and barium enemas, upper GIs and colonoscopies that you couldn't imagine--the next day he died of a pulmonary embolus. He hadn't been, he hadn't been anticoagulated. There was a good reason why we should not have anticoagulated him. Some people, now within the last five or six months, advocate anticoagulation for all--it was a prerogative before--for all surgical

procedures. Maybe that was a mistake. I don't think it was a mistake, then, and I don't, maybe I will five years from now, say, "Damn, probably I should have been doing that a long time ago." My own mistakes, I, I misdiagnose, miss things that ultimately turn out to be? (trails off) Sure I, I accept my mistakes as regrettable, reprehensible, too bad, but if I went, if I cried after each mistake and felt terrible and dealt with myself harshly, as an inadequate doctor, I don't think I'd be able to ever rely on anything that I ever said or thought about another patient, and I, I would become paranoid.

Maybe it is, maybe it is, and I think it is probably inextricable from my own view of myself, how I practice medicine; but whether that is what I'm saying in total or not, I don't think so. I think that, I think that every individual, whether he feels inadequate or not, some days will feel more inadequate and stupider than others, you know? Every individual who practices medicine very long sees the product of his errors, and you either accept that or you don't. I think we have an example in our own class of an individual who was incapable of dealing with or tolerating his own ignorance in even miniscule areas of patient care, and, this is, this is maybe what I'm saying. I'm not, I'm not trying to sound haughty or egotistical or self-sufficient or, or, or never wrong or anything like that because, heaven knows, I have my own feelings of inadequacy.

What makes an individual want to consult, to be a consultant? Based on the situation of the neurosurgeon, the neurosurgeon has a high percentage of his consults, consultations, simply, for the single motivation of avoiding malpractice claims. This man is where the buck stops, so to speak--patients seen in the office, questionable problems neurologically, not properly evaluated or, let's say, from what subsequently occurs, perhaps not adequately evaluated, not, not being, not being critical of the practitioner at the particular time but in relation to subsequent events, perhaps something could have been done or something like this. If the patient ultimately develops some kind of, of lingering neurological difficulty, he wants then, the practitioner then becomes aware of the problem, and he immediately wants to be sure that everything is done for the sake of the patient as well as for the sake of his own conscience. So he sends him off to a consultant. I think most consultations, a large number of consultations, are motivated on, partially on, the feeling of inadequacy of the physician that is taking care of this patient, and partially on--"I

want to have this covered so that the, the individual will have been evaluated by a notarized, card-carrying specialist in that particular area." But look at, look at the poor guy that sits at the end of the line, the consultant, the guy with a neurosurgical specialty or in the specialty of internal medicine or pediatrics or whatever he happens to be in. He's got to be able to live with his errors. He's got to be able to live with the errors of other individuals. He's got to be able to, be willing to, accept shabby medicine, good medicine, excellent medicine on the part of the people who refer, the referring physicians. He also has to be pretty damn self-sufficient. He has to be able to lay his hands on this situation and say--"Well now, that seems to be what, what is going on, and I recommend such and such be done." And, if this individual is skittish or inadequate or really skeptical of his own medical competence, he's not about to embark upon this kind of a program. Or if he is, he's going to get into a non, a covertly culpable practice, such as psychiatry or something like this, where you know, the relationship between the doctor and the patient is not one of mutilation or, you know, really bold action.

Now, I've seen myself in the situation at night. At 2:00 in the morning, somebody comes sailing through the emergency room, a young--I had one not too long ago, as a matter of fact--a 36-year-old male, massively obese, history of rheumatic heart disease. This guy had a supraventricular tachycardia of about 190 or 200, and he was in heart failure. The decision was to act immediately and to convert this guy, cardiovert this guy. Now it would have been easy for me, the decision, well, not, not easy, easier, if he were someone else's patient, but he was my patient. I was the guy and, and the full weight of the responsibility of this kind of action was mine. I had no idea of his previous drug status. He wasn't sure what kind of medication he was taking, could have been a heart pill. There's certain liability and danger in cardioverting under these circumstances, but I went ahead and I cardioverted the guy. And it turned out that he had abnormal glucose tolerance, hyperurachemia, obese, hypertensive, rheumatic heart disease, and tachyarrhythmias and probably coronary vascular disease of various, of unknown staging, and cardiomegaly. Now this is a problem. This is a real, this is a sticky wicket. Could I have lived with my error if I had cardioverted him and he had gone into sinus arrest and died? I could have, I would have lived

with that. I thought there were justifiable, justifiable reasons for initiating this potentially hazardous and lethal course of action because, on the other hand, he could have been in very serious trouble and or died without it.

Well, this kind of an error is, it's certainly different than the errors I described before, and the ante goes up, the higher your degree of specialization goes. No one really faults the general practitioner--well everyone faults, but it's easier to fault the general practitioner for committing an error in judgment, knowing one minute that he's delivering a baby and the next minute he's sewing or taking out tonsils and the third minute he's admitting someone for rheumatoid arthritis and the next minute he's doing a circumcision, you know? These kinds of things, a one-man band kind of thing. But when you've limited your area of expertise, you are really on the final path to the golden state of pure knowledge, you know. This, this is difficult. So living with errors, committing errors, and accepting errors by other people is part of medicine, a very important part. (Emphasis mine.)

An Interpretation

Here a particular person is speaking about mistakes and giving an account which is both concrete and personal and abstract and universal. This physician, although he never uses either phrase, illustrates again and again the inevitability of mistakes: "We see mistakes all the time"; "Mistakes, the issue of mistakes, that's, that's all relative"; "The risk of error is tremendous"; "I've made errors, I've made terrible errors"; "Every individual who practices medicine very long sees the product of his errors." (This last being a version of "everybody makes mistakes.") "So living with errors, committing errors, and accepting errors by other people

is part of medicine." He moves back and forth from "we" to "I" to "he" to "every individual" as he illustrates the inevitability of mistakes in medicine. His account is unequivocal in this respect. It is not hedged in and qualified by "buts" and exceptions. It is at the same time a lengthy statement filled with nuance, tension, and perplexity.

He begins with a short inventory of mistakes, an effort at classification which is full of overlapping categories. He searches here for some categorical order: oral hypoglycemics, mistaken diagnosis, errors of commission or omission, resection of the wrong breast. His search includes a psychological universe, "threat," "constant threat," "nightmare," "conflicts there, too." Feeling permeates the underside of his thinking as he attempts to construct an order for mistakes. And he returns to the world of feeling when he says, "if I cried . . . dealt with myself harshly . . . I don't think I'd be able to ever rely on anything that I ever said . . . I would become paranoid." Still later, he says, "I have my own feelings of inadequacy . . ."; and again, "I think most consultations, a large number of consultations are motivated on, partially on, the feeling of inadequacy of the physician that is taking care of this patient . . ."; and finally, "skittish or inadequate or really skeptical of his own medical competence."

Sometimes his account borders on an entirely private and interior dialogue as he speaks and hears himself speaking: "So is it a mistake, too," he asks himself. "You don't know whether that's a mistake; some people will think it's a mistake . . ." He illustrates here and elsewhere; then he comments on his illustrations. He finishes a line of thinking and takes it up again and goes further. He is interrupted in a train of thought and returns to complete it.

While occasionally defensive, his statement is never glib or cynical, and it moves with a certain relentless analytic power. I think of this person as a fully informed physician with a gift for speaking. He is like an expert witness or "a good informant" in the anthropological sense of the term. He also has an assuredness which enables him to peer in on the interior of his conduct in an area which can be painful.

He leaves off classifying mistakes very soon after he begins and shifts to a dynamic description full of the perplexities of time and action. He opens with "I think, dealing with mistakes, I think, we see mistakes all the time. But the errors are errors now but weren't errors then." This idea of now and then, prefigured in his first example, oral hypoglycemics--"That wasn't a mistake five years ago, and it might not be a mistake now, but it's certainly suspect"--introduces a long

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string of illustrations about the perplexities of time and action. His is a time-haunted account: "Because the, because the fact that it was a mistake was brought to light after the therapeutic procedure was effected"; "It turns out months later or weeks later or even the next day, that, that this is what was going on"; "Ultimately proven to have entirely different . . . situations than I suspected"; "I didn't clinically suspect it until it was too late"; "Not properly evaluated or, let's say, from what subsequently occurs, perhaps not adequately evaluated not, not being, not being critical of the practitioner at the time but in relation to subsequent events."

Time references here are signs of a complex paradox which is that mistakes are known always after they are made, that is to say, they are known now rather than then. "It turns out," "ultimately," "too late," "subsequent events," "then" mark out this paradox in an elementary way. His illustrations suggest the full power of the paradox because they provide a context and a stage for the evolution of mistakes as mistaken acts. For example, "I lost a patient just recently, as a matter of fact, because of a pulmonary embolism. It turned out to be a pulmonary embolism, and I really didn't clinically suspect it until it was too late. Maybe this was just an agonal phase of the illness, I don't know. . . ." "I don't know" here means not only

that he does not know now, but also, and more pressing, that he didn't know then either, although he might have thought he knew then. "Then" is a fulcrum of meaning. Then in "the errors are errors now but weren't errors then" or in the phrase "I didn't think it was a mistake then . . ." is paradigmatic: it captures the essence of the paradox. In these phrases, then does not mean just then as opposed to now. It means then when an act or a sequence of acts was becoming, emerging in time.

The act of becoming is especially difficult to capture. Indeed, language itself is an encumbrance because the English language already contains an order for the expression of things, a grammar which is far less ambiguous than the movement of events in time. Furthermore, language chronicles the past, the world as it has already happened, rather than the world happening, although this is of course much more true of written language.

A mistake follows an act. It identifies an act in its completion. It names it. An act, however, is not a mistake--it becomes mistaken. Seen from the inside of action, from the point of view of an actor, an act often becomes mistaken only late in its development. As it is unfolding, it is not becoming a mistake at all. It is moving and evolving in time. The archaic image of taking the wrong path from mistaka is helpful here.

In taking the wrong path, we go astray without awareness. But phenomenologically stated, that is, from within the experience, we become aware in traversing the wrong path that we have already gone astray. We take the wrong path not at the time, but in retrospect. The terrain is unexpected, the journey too long, our arrival at the proper destination curiously postponed. Recognition comes upon us. To speak with the greatest possible precision, we take the wrong path as a cognition only after already having taken the wrong path in fact. Reflection returns to the act of becoming mistaken and embraces it with hindsight.

I have been speaking with a certain simplicity here. An act does not unfold as a ball arcs across a field. An act is embedded in a sequence of acts, or an activity, a sport, a game, or a project. It is not a solitary event, but a relation, a response to something, and an attempt to do something, being described as though it were a solitary event. Not only is an act embedded in a sequence of acts, or an activity; it also presses into the unknown of that activity. It is, as it presses into the unknown, unpredictable, some acts being more unpredictable than others. Clinical acts are especially unpredictable because they are forged in the uniquely constituted instance with uncertain and irregular knowledge. This does not mean that they are entirely

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unpredictable. Physicians work with probabilities, for example, that certain illnesses are present in particular age groups or with probabilities that several diagnostic cues suggest a particular disease.⁴ The difficulty is that these probabilities do not predict in the specific instance, and it is the specific instance which matters.

Action occurs in the present and intends or stretches toward the future. It attempts to shape the future in a particular manner and engages a sentient being in the execution of a pattern. "To be on the wire is life; the rest is waiting," Karl Wallenda's description of action, as Erving Goffman recounts it, is particularly vivid and dramatic.⁵ Here compressed into a brief span of time, filled with risk which is potentially irrevocable, a high wire artist moves in the air. Wallenda was a connoisseur of risk. He both transcended the ordinary world of activity and practiced this transcendence as a performer. Clinical action transcends the ordinary world in a similar manner, and

⁴See Arthur S. Elstein, Lee Shulman, Sally Sprafka, et al., Medical Problem Solving: An Analysis of Clinical Reasoning (Cambridge: Harvard University Press, 1978). Also see Arthur S. Elstein, "Clinical Judgment: Psychological Research and Medical Practice," Science 194 (November 1976): 696-700.

⁵Goffman, Interaction, p. 149.

clinicians practice this transcendence when they attempt to deny or defy death. As the physician I have been quoting suggests:

Could I have lived with my error if I had cardioverted him and he had gone into sinus arrest and died? I could have, I would have lived with that. I thought there were justifiable, justifiable reasons for initiating this potentially hazardous and lethal course of action because, on the other hand, he could have been in very serious trouble and or died without it.

The risk here is great. It is taken with respect to a patient's existence. Furthermore, it is taken with uncertain knowledge of what is happening to this person, although his problem can be characterized broadly as heart failure. (The retrospective repose of the actor is also risky.) I call such acts, acts of knowing and consequential risk, action, a term which carries a specialized meaning. Ordinary language does not make a distinction between the evolution of an act and the evolution of a risky act. But I follow Goffman's usage: "Action is to be found wherever the individual knowingly takes consequential chances perceived as avoidable."⁶

The dramatic instances of clinical work, moments when the urgency of events compress medical care into a compact and urgent segment of time, represent a particular version of clinical action, a special distortion. These brief and urgent intervals really distract attention from

⁶Ibid., p. 151.

the crucible of everyday action where knowing and consequential risks are woven much more subtly into the fabric of the work. Action in medicine occurs as a response to diffuse, ill-described, and vague kinds of things. As this physician suggests:

You're out there, and you see many patients during the day, your whole office space is crowded, individuals parade in, they erroneously present symptoms of one kind or another, you see them two or three times, and it still doesn't make much sense and it finally, it turns out months later, or weeks later, or even the next day, that, that, this is what was going on.

Clinical action is practiced "on the human body" as a response to illness. I do not want by this metaphorical "on the human body" to suggest that clinical work always carries a threat to a patient's existence. There are many acts which are entirely innocuous and routine. But these acts do not define clinical work; they express only an aspect of the work's range. Clinical work has to be seen as a totality which encompasses the ordinary and the extraordinary, the mundane and the momentous.

As I have indicated, action becomes and unfolds in time. And action as it is acted out, that is to say, in the moment of its externalization, is called acting as if. Acting as if is a leap across the abyss of unknowing. It is an act of faith and confidence which is described more fully later in this chapter. Here I want to summarize what this physician has been saying

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about mistakes. Mistakes depict the work in retrospect. This physician captures this retrospective identification repeatedly as he alludes to time: "too late," "subsequently," "it turned out," and, particularly, "now and then." He says, "the errors are errors now but they weren't errors then," and "I didn't think it was a mistake then." But the now of mistakes collides with the then of acting with uncertain knowledge. Now represents the more exact science of hindsight, then, the unknown future coming into being. Then as an act of becoming is especially difficult to capture in language. This physician succeeds in his anecdotes which mime the evolution of action. They tell the story of action, not the story of the reconstruction of the act.

Knowledge and Action

There is an antinomy in discourse about knowledge and action which is difficult to overcome. It is that knowledge and action are entirely distinct universes of meaning, knowledge referring to a state of knowing, awareness, or understanding and action referring to a state of acting or doing. This antinomy arises because knowledge and action are separated from knowing and acting subjects who embody them and are the source of their integration in knowing-and-acting and knowing-in-acting. Analytic language depicts the integrity of knowing and

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acting subjects as knowledge and action. Yet the concrete referent to persons is taken up and lost in the general statement, and the vitality and unity of persons thinking and acting and acting and thinking settles into the repose of knowledge and action, as either one or the other.

The description of clinical work which follows will try to overcome a language of analytic dichotomies like knowledge and action, mind and body, pure and applied, and art and science, first, by a description of the character of clinical "knowledge" which emphasizes method and practice, and, second, by a critique of a common conception of clinical medicine as an applied knowledge.

Knowledge in clinical medicine is embedded in a particular context, the care and treatment of the sick. It is practiced as a way to do something, i.e., to act. It is not a form of knowledge, but a method of acting-and-thinking about illness. In use, it takes characteristic shape in as if acts, acts which are experiments with knowledge, trials, as it were. These trials of knowledge are purposive. They are externalized as events in the world. They are also fateful: first, because they are externalized and, second, because they are practiced on the human body.

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These trials, which I refer to as acting as if, aim at some effect: altering biological phenomena, limiting disability, restoring function, relieving pain, controlling a disease process, or stopping plague. They are not disinterested, for example, in the sense that hypotheses are said to be disinterested. Rather, they aim at going beyond understanding and testing propositions: they intend a difference in the world of others. Furthermore, unlike hypotheses, they are responding to the disorder of existential experience, not to the test of a proposition or the replication of a finding. They are enclosed within the obligation to care for people, even, and especially, those whose problems are not clinically resolvable. This obligation, although it is not always enacted, is legally enforcable as a principle of contract. The therapeutic aim of the effort of responding often goes beyond what can be achieved, just as acting as if goes beyond understanding. Medical work is a practice in a very special sense of practicing with knowledge which is finite, practicing as practicers, as practitioners.

An archetypal image of clinical work will be helpful in overcoming the prison of analytic dichotomies. In Ingmar Bergman's film, The Seventh Seal, a knight,

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Antonius Block, sits playing chess with Death.⁷ Death, who comes as plague to claim everyone, is momentarily diverted by the game and the knight's guile in overturning several pieces. A few prescient individuals, Jof, Mia, and their child, slip away in the night. This image does not sufficiently capture action for here action is in the game and in the knight's guile. But it is otherwise accurate. In the end, Death is only momentarily diverted; the knight's victory is small, yet heroic. Clinical medicine is like a game of chess with Death: it practices knowing and guileful responses in the face of the vicissitudes of the body and the human spirit.

I have suggested that analytic language tends to break up the unity of a sentient figure thinking and acting and acting and thinking. It also tends to exaggerate the importance of knowledge often by describing action as though it were a kind of knowledge. In many instances, action is transformed into knowledge. It becomes, for example, knowledge about action, or an applied knowledge, or applied science, or technique or skill. Characterizations of medicine often de-emphasize and transform the meaning of action. For example:

⁷Ingmar Bergman, Four Screenplays of Ingmar Bergman, translated from the Swedish by Lars Malmstrom and David Kushner (New York: Simon and Schuster, 1960).

As opposed to medical knowledge which is medicine as such, there are the practices which grow up in the course of applying that knowledge to concrete patients in concrete social settings. The pure medical knowledge is transmuted, even debased in the course of application.⁸

Here the practices of medicine, the methods of thinking and acting, are described as a debasement of what medicine "really is"--medicine really is medical knowledge, even more puzzling, it is "pure" medical knowledge. But the practices of medicine are medicine, i.e., the practices which grow up in the course not of applying knowledge, but of treating patients. These practices, some of which are entirely new and some extremely ancient, describe the work as a historically situated project evolving in time.

Applied knowledge which has arisen as a contrast to pure knowledge does not describe action. It makes action a matter of technique, i.e., the application of knowledge. It thus effaces the uncertainty of action. Parenthetically, practice has a long history as a word. It denotes, among its many meanings, customary activity. Very commonly, it connotes ignoble activity in contrast to refined, noble, and often theoretical activity. In fact, the source of the shibboleth of pure and applied probably lies here in the denigration of practice as ignoble activity.

⁸Freidson, Profession, p. 346.

Terms like applied knowledge and applied science or, for that matter, terms like technical skill and expertise do not describe action. They efface its meaning as a practice of thinking which is acted out in the world. Medical work begins with particular phenomena: the expressed symptomatology and signs of illness. Knowledge is not applied to these phenomena. Rather it is interpreted and experimented with in the act of working on the problems of patients. Knowledge in the sense of a reservoir, or stock of knowledge, is remembered and referred back to. But it is also acted upon dynamically by a remembering and referring person. It is then interpreted and experimented with. Instances of illness are concrete, idiosyncratic, and personal in their expression, and the stock of knowledge is abstract and encyclopedic. Interpretation and experimentation engage the concrete, idiosyncratic, and personal with the abstract and impersonal.

Ralph L. Engle, Jr., M.D., has put this matter very concisely. "In medicine," he says, "the reality of the individual patient and the abstraction of the diagnosis form two poles of an axis along which the physician's mind shuttles during the process of making a diagnosis."⁹

⁹Ralph L. Engle, Jr., M.D., "Medical Diagnosis: Present, Past, and Future: II. Philosophical Foundations and Historical Developments of Our Concepts of Health, Disease, and Diagnosis," Archives of Internal Medicine 112 (October 1963): 116.

He is speaking here with a certain simplicity, for a physician's mind "shuttles," as it were, not only between the concreteness of a patient and the abstraction of a diagnosis, but also between the concept of a disease entity, an illness as it is being manifested, and a nosology of disease, not one of which is stable. Neither the concrete manifesting disorder, nor the diagnosis, nor the nosology is stable.

"Shuttles," while it captures movement from the particular to the abstract and from the abstract to the particular, is unfortunately mechanical. A physician's mind does not so much shuttle back and forth as it invents possible explanations of a disorder, explanations which in clinical language are called differential diagnoses. They are a list of possible alternatives often in order of likelihood. One of the differential diagnoses is also the decision reached, that is, the diagnosis.

Invention does not mean that the process of making a diagnosis is ungoverned by method. Invention is a minded activity. It means that a physician's mind invents with a method governed by rules of procedures and logical thinking about clinical inferences and underlying disease processes.¹⁰

¹⁰See Chapter II, pp. 38-50.

The diagnostic and therapeutic process is a way of thinking and acting, of interpreting and experimenting with the instance, or rather instances, of care, cases. It unfolds as a sequence of activities being acted out: as tests, procedures, plans, prescriptions, and advice. The process is acted out in a double sense. A diagnosis is an interpretive act which tests the meaning of this particular illness and of knowledge of human illness in this instance. It is also an interpretive act tested in acting as if it were accurate or plausible or revealing. The act, in other words, is tested in a second sense of being acted out in the world. But the only way it can be tested is in acting it out, acting as if it were accurate or plausible or revealing. A diagnosis, in other words, is not a diagnosis until it is tested. It is a hypothesis of a diagnosis being acted on. In this same sense, a therapeutic plan is not the therapeutic plan. In fact, until it is tested, it is a hypothesis of an appropriate therapeutic plan being acted on as if it were indeed the appropriate plan. A procedure is a procedure being tested, presumed to be appropriate until further notice.

Acting as if requires a leap across the abyss of unknowing. It risks error. The physician whose account of mistakes is presented early in this chapter illustrates this leap graphically in his description of an emergency

room patient in heart failure. Acting as if is also an art form. It is both acted out and performed. Props, staging, costumes, and lines support its performance in the microcosm of the care of patients.¹¹

The experimental nature of clinical work is rarely discussed. Acting as if, in the nomenclature of medicine, is called clinical judgment, a term which transforms action into a cognition. Action is seen, as it were, through the prism of "a decision." Terminology here is especially important. A decision reached is a manner of speaking abstractly about the myriad decisions which occur in the process of responding to a patient's disorder. It is not "a decision" but a sequence of acts of deciding being described as though it were a single decision. Language is always reducing complexities. Furthermore, "a decision" is not a matter of reflection. Acts of deciding are events which appear in the human world and are fateful in their consequences. The ordinary language sense of judgment, as a mental ability to perceive and distinguish relationships or alternatives, masks the entire problem of the act of judging. And it does so because ordinary language fails to address the

¹¹For a description of a surgical performance, see Erving Goffman, "Role Distance," in Encounters: Two Studies in the Sociology of Interaction (Indianapolis, Ind.: The Bobbs-Merrill Company, Inc., 1961), pp. 110-43.

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exercise of judgment as an event in the world. It states the meaning of judgment entirely as cognition.

The most carefully presented statement of the experimental nature of clinical work which I have seen is Alvan Feinstein's study, Clinical Judgment. I want to quote his work at length.

In caring for patients, clinicians constantly perform experiments. During a single week of active practice, a busy clinician conducts more experiments than most of his laboratory colleagues do in a year. Although clinicians do not usually regard ordinary patient care as a type of experiment, every aspect of clinical management can be designed, executed, and appraised with intellectual procedures identical to those used in any experimental situation. The experiments of bedside and laboratory differ fundamentally not in their basic intellectual construction but in their materials and modes of inception.¹¹

The experimental focus of "ordinary" clinical work, in Feinstein's view, is a patient rather than tissue, or some segment of a patient, or an animal. The mode of inception of an experiment is a patient's request for care. Here is how he describes it.

In clinical treatment, the material initiates the experiment, which begins when a patient decides to seek medical aid, thereby volunteering as a subject for therapy and choosing the time, place, and clinician who will serve as investigator.¹²

Neither patients nor physicians sufficiently acknowledge the experimental nature of clinical medicine.

¹¹Feinstein, pp. 21-22.

¹²Ibid., p. 22.

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Patients are often poorly or falsely informed of the character of clinical work. And physicians commonly disassociate and transform the experimental nature of their work, for example, by calling it an art. They also critique it and attempt to transform it into a science for the same reason. Physicians work under the peculiar burden of having to believe in their conduct even while it is experimental and having to mask many primitive feelings of fear and anxiety, in both themselves and their patients, in order to execute the work, as it were. Several popular films, for example, M.A.S.H. and The Hospital, portray the masks of action very well along with the black humor of medicine which is so effective in drawing on these masks.¹³

Feinstein is concerned with creating a framework for the orderly production of therapeutic experiments in order to make them more intelligible and replicable. Clinical work, in his view, while it is experimental, is insufficiently ordered by scientific method. This is especially important since the armamentarium of Twentieth Century medicine is so dangerous. He calls this armamentarium, the new therapeutic world of medicine, a world of "wonder" drugs, profound surgical interventions, and

¹³M.A.S.H., directed by Robert Altman, 20th Century-Fox (April 1970); The Hospital, directed by Arthur Heller, United Artist (December 1971).

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intensive care. In the new therapeutic world of medicine, not only has the range of potential errors increased, but the deleterious effects of such errors have also grown enormously.¹⁴

Conclusion

Terms like "applied knowledge" and "applied science" mask the intrinsic uncertainties of action because they substitute an inappropriate and mechanical metaphor for a description of emerging events. Knowledge, as it were, is applied like paint. The application is a matter of technique or dexterity or skill.

Clinical knowledge is uncertain and unpredictable in action. It is interpretive and experimental. As suggested, it is not applied but constructed within the instance, the many instances, which describe this work as a practice. The work is a discipline of thinking and acting and acting and thinking. And knowledge grows out of the instance as it is being interpreted and tested.

What, then, is action? Making a diagnosis is a very telling expression. Like committing an error, cleansing a wound, making an incision, giving a prescription, it refers to doing something, something which appears in the human world as a deed or event. Unlike

¹⁴See his comments on the impact of diagnostic procedures also. See also Hamburger, Tumulty, and my earlier comments, pp. 38-50, Chapter II.

thinking or contemplating, activities which have no necessary representation in the world as it is experienced by the senses, action takes a shape and form. Clinical action doesn't intend a materialization, an artifact, or, exclusively, a performance. Rather, it intends a therapeutic effect. And it is mediated by a social relation out of which it develops and to which it responds.

Clinical work unfolds as a dialectic of thinking and acting and acting and thinking. I have called this dialectic--as it takes shape and risks a shape for events--acting as if. The term is a bridge across the analytic chasm of knowledge and action, a way of capturing acting with knowing and consequential risks.

Acting as if represents the work as a plethora of risks and stands as a particular condensation of clinical action, an archetype. It is bold as the high wire is bold. It is simultaneously a test of an interpretation and a risk of the other's existence, the other being a subject being objectified in clinical work. Acting as if, while it does not always risk the existence of the other, carries this risk in embryo, so to speak, because the work is practiced on the human body. It is also performed as a dramaturgical art.

Clinical work risks a therapeutic response with finite knowledge and all the contingencies of the hour,

setting, and available resources. The time structure of the work is open and uncertain. Clinical action forges into the unknown. It is quite different from the time structure of the reconstruction of clinical action, the latter being the more exact science of hindsight.

A mistake follows an act. It identifies the character of an act in its aftermath. It names it. An act, however, is not mistaken; it becomes mistaken. There is a paradox here, for seen from the inside of action, that is, from the point of view of an actor, an act becomes mistaken only after it has already gone wrong. As it is unfolding, it is not becoming mistaken at all: it is becoming.

The long "text" introduced at the beginning of the chapter attempts to capture the paradox of mistakes: "The errors are errors now but weren't errors then." This physician struggles to express not the act in hindsight as it is being named, but the act in its evolution in the care of a patient. He uses illustrations which mime the evolution of action. They tell the story of action.

In examining action, I have been emphasizing those aspects of medical work which are exclusively the province of clinicians. I have neglected entirely the many errors which arise in the organization of work with allied health personnel, or laboratories, or equipment,

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or records, or patients themselves. Furthermore, I have neglected entirely the physiology of errors: tiredness, inattention, carelessness, lethargy, haste, and fear, some of which are explored in Chapter V.

My argument has moved a long way from its point of origin: the language of blame and the rhetoric of expertise, special knowledge, technical skill. In Chapter IV, terms like attention, intention, and regret are introduced. Intention suggests an elementary classificatory distinction of great importance between reparable and irreparable errors. Then, the reconstruction of action in retrospect is examined. The chapter also presents another "text" about mistakes, the interpretation of which emphasizes the experience of regret.

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CHAPTER IV

A LANGUAGE OF INTENTION

Reparation and the Irreparable

Shaping a response to an evolving disorder unfolds in time as a process, not as an event. It is language which constantly collapses the complexity of the process, the innumerable small increments of its development into an event E with antecedents a b c and consequences m n o. It is language users who call this complex process, the diagnosis, or the differential diagnosis, or the management of a patient (management here being, perhaps, an articulation of the desire to manage patients).

The complexity of the work process led Philip Tumulty to suggest that a diagnosis is not a "one shot affair" and to go on to observe that, as a physician's observations and study of a patient's illness advances, his or her list of pertinent facts will be revised repeatedly.¹ And pertinent facts here are not the verities of some eternal realm. Rather, they are truths of the moment as it is advancing. The process unfolds.

¹Tumulty, p. 191.

Physicians attempt to engage an evolving disorder. "Data considered of little or no import today may become of prime significance as new developments occur."² Here data also develop and take shape. They become in time.

Mistakes are embedded in the work process. And they mark its character and quality at particular points in time. They mark it as wrong rather than right, incorrect rather than correct. Mistakes do not usually appear as such, that is, qua mistakes. Usually, they appear as wrong results. It is inquiry, then, that captures their identity, the wrong result connected with a wrong act which brought it into being and which now requires correction. And yet, some mistakes cannot be corrected. They are irreparable. Furthermore, others, while correctable, go unnoticed. I can do no more than mark this as a dilemma of an abstract description of the work process. Irreparable errors end the work process. They identify the special jeopardy of work on the human body. They may initiate an inquiry into what went wrong. They may require an act of compensation. They may invite duplicity. And they may provoke uneasiness, regret, uncertainty, guilt, anguish, or moral indifference. Irreparable errors tell a story, each its own unique very human tale.

²Ibid.

Eliot Freidson does not describe mistakes from the point of view of the work process. He frees them of their context in action and intention. Mistakes, in his view, are not mistaken acts. They are excuses (Chapters I and II), alibis or rationalizations of medical misconduct.

In Doctoring Together, Freidson classifies mistakes as normal and deviant errors, "normal" and "deviant" being synonymous with "excusable" and "inexcusable."

Normal errors are understandable mistakes which anyone might make in the course of the work. Deviant errors, on the other hand, are glaring errors, errors due to a practitioner's negligence, ignorance, or ineptness or to his failure to follow widely agreed-on rules of good practice. He says, for example:

"Normal," excusable mistakes, then, are those that every physician could conceive of making because of lack of information, the uncertainty of medical knowledge, the limitation of available techniques, and the uniqueness of the case. Many physicians would not even call these "mistakes"; in the interviews some called them "so-called mistakes." Such normal mistakes are less mistakes than they are unavoidable events; they are not so much committed by the doctor as they are suffered or risked. They do not reflect on the physician's competence so much as on his luck. Thus, one should not judge or criticize a colleague's apparent mistakes because "there but for the grace of God go I."

In contrast to normal mistakes are deviant mistakes. Essentially, deviant mistakes seemed to be those that are thought to be due to a practitioner's negligence, ignorance, or ineptitude, reflecting upon his lack of basic or reasonable competence, ethicality, conscientiousness, and judgment. They consist in failures to follow the widely agreed-on rules of good practice. These

are the mistakes that are frequently called "blatant" or "gross," "serious" being an adjective more often used to delineate the consequence of a mistake rather than its analytic character.³

But there is something semantically unsound about the notion of a normal error. It does not capture the existential significance of a clinical error. A normal error connotes a common misadventure, not a wrong result, connected with an act which was wrong, but a frequently occurring event. But is a medical error a common misadventure? Is an error in a practice on the body like an error in addition, and is the activity of practicing medicine like the activity of adding your checkbook? This classificatory scheme suffers from a reduction in meaning. It is not an indigenous scheme. The language of "normal" and "deviant" has two sources: statistics and the literature on social pathology, the classic focus of which is aberrant, exceptional, and uncommon conduct. Freidson, in following the logic of the latter literature, comes to characterize the medical community as a delinquent community, a community of rule breakers.⁴

In separating mistakes from the work process, however, Freidson does not enter into the subjectivity of the work. Mistakes, therefore, never become problematic

³Freidson, Doctoring, p. 131.

⁴Ibid., Chapter 15.

features of the very process of attempting to respond to medical problems. They lack a certain existential weight. Further, in considering them "normal" or "deviant," or "excusable" or "unexcusable," that is, as either one or the other, he fails to raise the pressing issue of just what this work is like if mistakes are "normal" or "excusable." His attention is drawn away from the implications of his own summary remarks. "Many physicians would not even call these mistakes . . . some called them 'so called mistakes.' Such normal mistakes are less mistakes than they are unavoidable events; they are not so much committed by the doctor as they are suffered or risked." His attention is focused instead on deviant and exceptional failures of conduct. The problem here, however, is not so much the exceptional and aberrant nature of some medical mistakes which are inexcusable, although some mistakes are aberrant, grotesque, and inexcusable, but the inherent tension of work which is error-ridden.

Freidson's characterization of mistakes lacks embodiment, an attending person or persons creating a path to the resolution of a problem. It is as if physicians do this work without really noticing what it entails. But intention aims at something. It is purposive, grounded in the physiology of sentient and aware beings. Intention is manifested as attention, the ebb

and flow of perceiving, apprehending, and analyzing perceptions, discretely disassembling them into their component parts.

Attention is especially important because it is a dynamic which shapes much of medical conduct. Attention notices, for example, or it slips imperceptibly out of focus. It discovers something or it overlooks it. Attention is a form of caring. It is not a matter of being in charge of care, but of consciously noticing. (Physicians whose patients are hospitalized are called Attendings.)

The physiology of intention is rarely discussed. Intention is usually grasped as having a purpose or plan. It does not denote the act of turning toward and noticing something, but of already having that something in mind. It presumes the physiology of apprehending or seeing something or failing to notice it. But much of the weight of medical work, the burden of it, lies here in the act of turning towards and apprehending and analyzing an existential disorder. This weight is exacerbated by the experience of coming to see the disorder of your own understanding.

Intention is also grounded in a sensorium of feeling engaged with action: fear, triumph, despair, anger, surprise, compassion, and sorrow. An error registers its own discordant range of feeling. Some

errors, furthermore, cannot be corrected. It is the experience of not only being wrong, but of also being irreparably wrong which marks medical work; it is a universal clinical experience.

The difficulty with irreparable errors is their stark finality, the way in which they absolutely contradict and negate acts of intention. But this is too analytic a statement because it does not capture the anguish, regret, or remorse of the irreparable. Regret means to be sorry, disappointed, or distressed, to have a sense of loss and longing for something or someone, or to grieve or mourn. It comes from Middle English regretten, from Old French regreter which means to lament. But this elementary statement of meaning is too objectified. Regret, as a human experience, is much more precise. Regret belongs. It is either my regret, the regret of my own engagement in the irreparable, or yours. Remorse is, psychologically speaking, more complex than regret. It denotes moral anguish arising from misdeeds, that is to say, bitter regret. Remorse comes from the Middle English remorse, from Old French remors, from Medieval Latin remorsus, from Latin "a biting back," from the past participle of remondere, "to bite again": re meaning "again" plus mordere, "to bite." The ancient source here is

descriptively rich, to bite again, to re-experience regret. Capturing the engagement of feeling, it is both dynamic and precise.

Anguish is known as the experience of agonizing physical or mental pain, torment or torture. It is from Middle English anguisshe, from Old French anguises, from Latin angustia, "straightness," "narrowness," from angustus, "narrow." Its root, Angh, is also the root of "anxiety," a state of uneasiness and distress about the future, and "anger," whose obsolete meaning is trouble, pain, affliction.

These terms are reviewed here in order to capture their manifestations in experience as it is happening (i.e., tight, narrow, choking). The Indo-European root Angh means tight, painful, constricted. In Germanic, Angh is compressed, hard, painful; in Old English angnaegh, "a painful spike"; in Latin, angere, to strangle, draw tight; in Greek ankhone, a strangling. It is almost as if modern terms have come to impersonate existential experience rather than illuminate it.

It is difficult to grasp the place of reparation in the work process because medical work is rarely described as an unfolding activity. Thought largely accords the idea of reparation a place in the aftermath of activity. It is seen as a separate event, for example, as war reparation is seen as a separate event

from combat. Yet, it is an aspect of the very activity of responding to the experience of illness. Indeed, it is one of the many acts of the discovery process. Physicians are continuously making and correcting errors.

If reparation is an intrinsic aspect of the work process in an error-ridden activity, some acts are irreparable. They create a compelling contradiction in the work process. Later in this chapter, another "text" on mistakes is introduced. It is about an "irreparable error" being named. The inner experience of regret, the long reach of regret, and the problem of anxiety structure my interpretation of the "text" which is not about a mistake, but an "act" which might have been mistaken. Finally, since considerable ambiguity has infected my use of mistake in this chapter, the meaning of the term is reviewed.

The Reconstruction of Action

In calling medical work an error-ridden activity, I have had in mind the problem of reparable and irreparable errors. I have also had in mind the problem of corrected and uncorrected errors. In following out the disharmonies of the reparable and the irreparable, the corrected and the uncorrected, it is important to retain a sense of the work process, the inside of action as it unfolds. The work process in medicine is a discovery process. And the progressive discovery of the meaning

of an experience of illness leads often to the discovery of errors in the work process. What is wrong medically, then, can be expressed not as a medical problem, but as an error in the diagnosis or management of a medical problem. The work process requires these acts of discovery; it is itself an instrument of understanding and knowing, a self-conscious use of knowledge in action.

Errors corrected and uncorrected, reparable and irreparable, are identified in ward conferences, teaching rounds, autopsy reports, suicide reviews, morbidity and mortality conferences, clinical pathology conferences, and medical audits, although they are not always called errors. They are objectified and taken up in the work as aspects of understanding what requires work. Such conferences are formal arenas for the discussion of medical problems, individualized cases. Everyday medical interactions are also filled with the exchange of information about medical problems, with talk about the management of this or that, or the mismanagement of this or that. I remember vividly a moment when I interrupted a resident in internal medicine to ask just how much of his day he spent talking and he said, "Most of it."

(Most of it?)

Yah, well most of it, it's either, you know, directly involved or indirectly involved because it's, it's interesting, you find out that certain people are interested in certain areas of medicine or surgery, and, therefore, usually, they're better at it than anyone else, and so, if you have a

problem, you go ask them, and that's what I do. Much of the day, someone else is asking me to see somebody because they have a problem that they know I'm interested in. In many cases, they think it's being mismanaged and so they think that I will try to intercede for them which I usually do.

Talk, inquiry, an exchange of information, is part of the work process. Talk attempts to get to the point of understanding what is going wrong or what has already gone wrong. It examines an inquiry as in a dialogue.

Eliot Freidson and Buford Rhea, in "Processes of Control in a Company of Equals,"⁵ structure their description of talk about medical problems very narrowly: after an offense has already come to light. They asked physicians what they would do about an "offending" colleague (to which physicians usually responded, "Nothing"), or what they would do if an "offense" were repeated (to which physicians usually responded, "I'd talk to him"). Freidson and Rhea presume intersubjective agreement already exists about what X is. It is an "offense." Medical talk, however, is a much more generalized phenomenon. It attempts to get to the point of understanding what X is. It does not presume that it is an offense.

Talk usually begins with what is disclosed as the wrong result, and then it examines and inquires. The

⁵Freidson and Rhea, "Processes of Control," pp. 119-31.

wrong result poses a problem of understanding, that is, it poses a problem of understanding what has gone wrong.

Clinical talk, especially when it is about the reconstruction of events, attempts to grasp the wrong result as a particular sequence of acts and activities which became wrong. (This is not to say that it either always or necessarily occurs. But when it does not occur, the essential intention of the work, an appropriate response to an existential disorder, has been broken.) Talk is intrinsically problematic because the reconstruction of clinical activity in retrospect, when it attempts to identify an error, begins with the result which is now known, and it is shaped by that knowing.

Not all understandings of the character of a wrong result are shaped by discussion. Sometimes errors are immediately known when, for example, the wrong artery or muscle has been severed. Such errors, however, those known in their immediacy, do not represent the errors of clinical work. They represent one kind of error in the work. Many errors cannot be known in their immediacy, cannot be observed. Instead, they are inferred in complex reviews of a multiplicity of small diagnostic and therapeutic trails which at the time may have seemed appropriate and later wrong.

The transcription which follows is particularly ambiguous for it is never clear that a mistake has

occurred. It is clear only that a mistake may have occurred. It has been chosen because it describes a lingering doubt about the meaning of an act, a doubt which is never quite effaced in reflection. While it is taken from psychiatric work, it illustrates a common clinical experience, the impossibility of knowing sometimes, even in the "end," whether a mistake has been made. The language of "mistakes" is a limited language for a mistake contains always the implicit structure of right and wrong. Such a structure of meaning fails to capture the many possible rights and wrongs, the many efficacious and inefficacious turns in human experience which sediment out in time as either right or wrong, or as neither right nor wrong, or as both right and wrong.

The "text" is rather remote from the plan of action happening. It emphasizes the reconstruction of an experience of an "error," the suicide of a psychiatric patient. It also describes the ways in which such an experience is taken up in discussion which attempts to get to the point of understanding what has happened.

The Reconstruction of Experience

That's a protection in a way, as far as energies are concerned, but I, I have had people who I haven't needed to hospitalize that I've gone, sat through psychotic episodes with, which has been tough. It's, it's, it's a strain because you're not sure what is going to happen, and, and depressive episodes. I had a patient who killed herself last year and that was a real tough thing for me to take, and, obviously, it was tough for her, too.

She didn't give anybody any warning. All the kinds of things that they teach you, that people are supposed to say, you know, before they feel that depressed that they are going to kill themselves. That was, that was very hard, and that made me very uncomfortable, when people start feeling suicidal. And I feel, I have hospitalized people that may not have needed it actually, just for the protection, for my own comfort, as far as feeling like they're not going to kill themselves. But I'm getting more comfortable as I get more experienced with sitting through things like that with people without having to put them in the hospital, which is kind of a nice thing, because, I think, just the fact that someone's been in the hospital is, can really affect their self-image and make them feel bad.

Oh God, yes. Very much so. Definitely, at the time, and it's going on, too, in that I, as I, that was my, that was the beginning of my first year. It happened, you know, right when I started, and, as I've learned more, I, I reexamine it again, I guess, trying to understand it. I spent a lot of time with the supervisors, too, going over it because it's a hard experience to go through.

At the time, yeah, I was her primary therapist. She had been in the hospital. She'd been in the day center. But at the time, she was doing well supposedly; it just seemed [trails off].

Not at all. No, they were just extremely supportive. Some, I've talked to a number of people about it and they, initially, they were so supportive that I just couldn't buy it, you know. I said, "Look I've got to look into this a little more--Don't just tell me everything is all right, you know--and kind of think about what was happening." And we, I've gone over it with people in a group, gone over the whole, you know, case, and the hours and the, you know, and the clues, if there were any, and asked [voice very low], and it's a real, it's something that, at the point I was, I couldn't, you know, there was someone that I asked weekly, if she was feeling suicidal because it was a chronic problem, but she was feeling much better at the time, which is something they all say, "Yeah, when they get a little better, they want to go out and kill themselves," which is true. But it's, you can't just because someone gets better, you can't say, "Well, they're going to kill themselves." At least that has become clear to me and, I don't know, they, no one was accusing, which was helpful, and it was also helpful to me

to go over it point by point and try and find if something, if it was something that I had done.

No, I think there are lots and lots of mistakes, and the ones we worry about most are the ones with suicide or homicide or something like that. The rest of it is not so clear, and that's part of the problem. There is no lab value that tells you, you know, you're making the right diagnosis or the wrong diagnosis and even, you know, the diagnosis doesn't make a whole lot of difference. It's the way you treat people, and then you've got the people part of it added in there. In other words, the person, I can, I hear from my patients how bad they were treated in this and such situation, and how happy they are here; and they, they may go on to tell someone else the same thing, about how badly they were treated with me because you have that, their interpretation involved in it, and what it means to them, which is not at all clear. It's not something that we can look at from the outside, and you decide that indeed Dr. X goofed, you know, when he treated somebody. There are some things, of course, that are clearly mistakes, I think, that people do, but [voice low] most of it's not so clear and you're not clear yourself. I don't think, I'm not at this point anyway, in knowing, until I see how something comes out or how a person reacts to it, what's a mistake and what's not.

Oh, yeah, I think so. All the time. I mean, you know, all, every minute there is some kind of judgment going on about what you're, and, indeed, the thing that saves you from getting, you know, in hot water a lot is being able to look at what happens. If it's a mistake, you can talk to the person about it and examine it and even get their reactions and these kinds of things. That can be something that you both can learn from, I mean being chalked up to a mistake.

I was thinking about talk therapy when I mentioned it. In pharmacology, it's a lot more clear-cut usually, and you can always say, "Well, your body is just reacting differently than the average or something"; you have a lot more excuses. In talking that you're involved in, too, there aren't as many excuses.

It's, it's some things that I can think of are things that I thought might be a right way to react to a situation, and then, by the patient's reaction, I've thought, "Ah, maybe that's not so good." And then, talking it over with the supervisor, they'll say, "Well, maybe you should have done something a little differently," and then, you don't often say,

"Ah, I made a boo boo," you know, to the patient, but you go back and say, "I was wondering how you were feeling, felt last week about this and that and the other, and if something I said might have upset you, or if it might be more helpful to look at it or something." And you talk about it in kind of general terms. I don't think it's particularly helpful for them, if you go and say, "Well, I made a mistake." Well, sometimes it can be very helpful; but if you can look at it and examine how you were feeling at the time, you can let them know. Sometimes, I guess what gets involved is your own feelings which sometimes affect how you're doing something that might not be right for the patient.

Yes, or your judgment. What would a mistake of judgment be like? Hmm, setting up, well, in talking, I've had patients, a patient asked me if I liked him and that, I didn't know how to handle it, at the time. No one had ever asked me anything like that before, and I wasn't at all sure of what to say. I felt like I couldn't just blindly say, you know, "Oh sure," you know, that's too casual, and it wasn't a social relationship. So I tried to talk about it with the patient, and the patient got upset because anything I was saying was like I was responding negatively, and you have to feel that your therapist likes you, I feel, I think, in order to be able to talk to them so that was really kind of a big problem. It, it was something I didn't know what to do with, so it was a judgment that I made to not, not respond positively but just analytically, and my supervisor suggested that I could have been more reassuring initially and let him know, you know, "Of course," or something, you know, just "spontaneous" and then gone ahead and looked at that. You're really sort of accomplishing the same thing, but the person is more reassured because it took a few weeks after that for him to relax again and feel like talking.

An Interpretation

The mind remembers, the mind turns back. It reflects and recreates the past. And feelings recur. Regret resonates with other feelings of the spectrum of sorrow, with other losses. Sadness swells, pressing for release. "Definitely, at the time, and it's going on,

too . . . that was the beginning of my first year. It happened, you know, right when I started and as I've learned more, I, I reexamine it again, I guess, trying to understand it." "It happened," "it" being the suicide of a patient in standard time, on day x of year y, and, as it is reexamined in the present, it is recreated. But the present as a moment in time is not a particular moment which marches dutifully into history. The present does not just represent standard time, clock time, but inner time as well. It stretches into the past and into the future. It describes the many moments in which the experience is relived again in time.

The irreparable is broached with the suicide of a patient, an act of great complexity, an act which is always a particular and unique suicide, an interpersonal story. From a therapeutic point of view, the failure is clear, that is, a therapeutic failure has occurred when a patient commits suicide. Donald Light, after a lengthy review of psychiatric literature, reports that most psychiatrists regard suicide as a therapeutic failure.⁶ The question Light notes is not whether a failure has occurred when a patient commits suicide, but whether a mistake has been made.⁷

⁶Ibid., p. 826.

⁷Ibid.

I've gone over it with people in a group, gone over the whole, you know, case, and the hours and the, you know, and the clues, if there were any and asked [voice very low], and it's a real, it's something that, at the point I was, I couldn't, you know, there was something that I asked weekly, if she was feeling suicidal . . .

There are several transitions which are important to mark here. "It's something that at the point I was, I couldn't, you know, there was someone that I asked weekly if she was feeling suicidal. . . ." The first transition being "at the point I was at I couldn't," "I couldn't" means I could not have known then, then being, at that point in time. The paradox of action intrudes again; the paradox of attempting to shape events colliding with the shape of events, then and now.

Second, his statement goes from "I couldn't" to "there was someone that I asked weekly, if she was feeling suicidal because it was a chronic problem, but she was feeling much better at the time. . . ." This transition marks the intrusion of anxiety. And anxiety infects the present and the future: his conduct with another patient. The anxiety of the irreparable thus wells up in other experiences which have a certain symmetry and resonate and remind. This second patient was feeling much better--a patient feeling better, "She was getting better, supposedly," then the contradiction, death, and a perception and a prognosis being renamed, suicide. His

first patient's death came without warning. "There was someone that I asked weekly if she was feeling suicidal. . . ."

Ambiguity permeates his description of his work. For example, "You're not sure what is going to happen." "The rest of it is not so clear and that's part of the problem. There is no lab value that tells you, you know, you're making the right diagnosis or the wrong diagnosis. . . ." As Donald Light points out, suicide is not even a diagnostic category.⁸ There is, therefore, no therapeutic regimen for the suicidal as there is a therapeutic regimen for the tubercular. Suicide is a stark social form retrospectively naming an act, often, of rage and despair.

"The diagnosis doesn't matter a whole lot. It's the way you treat people." Treat has been underlined because the term has an elusive meaning. It does not refer to handle, manipulate, cut, sew, or operate. Rather, it refers most often to talk. Treatment, then, is a talk therapy, a therapy not of words, but of what is being said and heard.

She was feeling much better, which is something they all say, "Yeah, when they get a little better, they want to go out and kill themselves," which is true. But it's, you can't just because someone gets better, you can't say, "Well, they're going to kill themselves." At least that has become clear to me. . . .

⁸Ibid., p. 825.

"At least that has become clear to me," "the rest of it is not so clear," "you're not sure what's going on," capture the ambiguity of the work process. The indeterminacy of his experience of his work is much like the indeterminacy known in everyday life, when our plans shatter in unexpected ways and we are left with a lingering wish that things might have been different, sometimes without even a sense of knowing how they might have been so.

His regret is clear. It is not the regret of a decisively wrong act, but of an act which cannot quite be named as a wrong act. The problem of meaning here is diffuse and encompassing. The whole interpersonal field of his action is unclear; its elusiveness, haunting. His regret is linked with his conduct, she was his patient, but it is linked with his conduct in unknown ways. No therapeutic act, I surmise, caused this patient's suicide, directly led to it. No therapeutic act, if it had been initiated, could be assured to have prevented it. He is left with a series of if-thens and maybes. In everyday life, the language of mistakes is invoked, in just such moments, when we mean, not that we are to blame, but that we are sorrowful.

Regret recurs. Here it is re-experienced in the act of speaking about the suicide of a patient. It

comes forth in the tremor of a voice, in the weight and struggle for words, in gestures of grief, especially in the sorrow of eyes.

Feeling is animated and altered in speaking. It is objectified in talk. "Initially, they were so supportive that I just couldn't buy it"; "No one was accusing and that was helpful. . . ." Everyone can imagine here the importance of circumscribing the boundaries of the inner experience of a "mistake"; the angst of the moment can become paralyzing. This physician is poised between the past and the future of many acts and many patients and many errors. "You know," I said, "Look, I've got to look into this a little more--don't just tell me everything is all right, you know--and kind of think about what was happening."

This resident wanted to talk. Victor Bloom, in a study undertaken at the Lafayette Clinic of thirty-two suicides, found that therapists there did not want to talk.⁹ They were, for example, never the first to inform the author of a suicide and often either could not find time for an interview or missed appointments.

The boundaries of the experience of the suicide of a patient are marked mostly by others. "I've gone over it with people in a group, gone over the whole,

⁹Victor Bloom, M.D., "An Analysis of Suicide at a Training Center," American Journal of Psychiatry 123 (February 1967): 919.

you know, case, and the hours and the, you know, the clues, if there were any. . . ."; "I've talked to a lot of people." Talk here does not intend to fix blame. It attempts something much more elementary: to get to the point of understanding what went wrong. It examines and inquires in order to discover what went wrong. "No one was accusing. . . ."; "They were just extremely supportive." Talk also attempts to preserve the possibilities of action, some viable place from which to act again in an error-ridden activity.

Donald Light describes very vividly the professional talk that followed the suicide of a patient in a psychiatric hospital. This talk began informally with the communication of information about the suicide of a patient while away for the weekend. A formal inquiry into the circumstances of his death began Monday with a ward conference, a conference which, Light notes, was filled with a search for clues about what had happened even though "everyone knew" this patient planned to kill himself.¹⁰ His therapist, at this conference, explained his reasons for allowing this patient to leave the hospital. They were "therapeutic": the patient, he felt, would benefit from contact with his friends; the patient enjoyed his work; he and his patient had a good

¹⁰Light, p. 830.

therapeutic relationship, "as good as you get in three weeks." The ward conference was followed immediately by another conference at which the patient's former therapist was the main speaker. His position was that this patient had planned suicide for a long time.

Light observes, of these two conferences, that substantial evidence existed of a fatal error. (I have underlined those words which structure his observation.)

There was substantial evidence that a mistake had been made. If Kent the therapist and the chief believed that Dan Forman the patient would kill himself soon, they had no reason to let him out everyday. Nor can one assume that a patient like clockwork will attempt suicide on the day announced and not 10 days before. To take this risk based on a deep therapeutic bond is unreal when the patient and the therapist have known each other for a few weeks.¹¹

Light is reasoning with this patient's suicide in mind, after the fact of his act. His therapist, however, was acting as if. He was reasoning with this patient's therapy, not his suicide, in mind.

The impressive point, as Light notes, is that, despite substantial evidence of an error, no one blamed his therapist, "no one blamed Dr. Kent."¹² But blame is not the central issue in an inquiry into an "error" in an error-ridden activity; understanding what went wrong is. Inquiry accounts not for an error, but for an

¹¹Ibid., p. 831.

¹²Ibid., p. 832.

activity which has gone wrong. Light suggests this in reporting the final review of this patient's suicide, a review held some four months after his death. "The review must strike a precarious balance between the individual and the profession. It may protect the practitioner in question from blame, but only at the risk of jeopardizing the general standards and cohesion of the profession."¹³

There are distinct differences in those clinical activities which are primarily biological and those which are primarily psychological. I am speaking here with a certain necessary simplicity. In psychiatric work, action is expressed as talk, and little technology exists to objectify the work's tasks and problems. The resident I have been quoting expresses this, for example, in saying, "There is no lab value that tells you, you know, you're making the right diagnosis or the wrong diagnosis, and, even, you know, the diagnosis doesn't make a whole lot of difference. It's the way you treat people." Treatment is a regimen of abreaction, interpretation, catharsis, transference, and working through intrapsychic conflicts, in an interpersonal milieu. Or, to

¹³The review left Light disappointed and confused. The reviewing psychiatrist squarely placed the fault, "We were the next to brush him off," and then excused it very kindly saying that "Heaven knows, I've made so many mistakes. . . ." Ibid., p. 834.

adopt another useful language, it is a regimen of re-learning, breaking up bits of behaviors, and learning new modes of conduct.

While talk therapy can be bold, it is not often bold in the sense that surgery or intensive care or chemotherapy is bold. Psychiatric work, while it is intrusive, does not intrude into the body as a matter of course. The work has its drug therapies and surgeries. They are, however, much more circumscribed, though they are dangerous.

Its accomplishments are also much more difficult to mark. Time is rarely compressed into moments of dramatic notice. Rather, it is stretched out. Therapy is commonly months and years long, and contact is defined by regular appointments of specific duration. An image of the work is not of a high wire artist walking a tight rope, but of a listener intermittently questioning, clarifying, reacting, enabling, cajoling a companion in a fifty-minute hour.

In psychiatric work, one reacts wrongly, meaning that one's manner is inappropriate, not therapeutic, and one misinterprets, not biological processes but symbolic meanings; one misjudges remarks, events, or incidents. "Every minute there is some kind of judgment going on. . . ." Or, "It's, it's some things that I can think of are things that I thought might be a right way to react

to a situation, and then, by the patient's reaction, I've thought 'ah, maybe that's not so good.'" Or, "I've had patients, a patient asked me if I liked him and that, I didn't know how to handle it at the time. . . ."; "I felt like I couldn't just blindly say, you know, 'Oh sure,' . . . so I tried to talk about it with the patient, and the patient got upset . . . because anything I was saying was like I was responding negatively. . . ."

Talk links psychiatric work with sociability. Indeed, it is a form of sociability, the exchange and ceremony of communication between persons. Since so much of the work is talk, the interpersonal skills of observing and listening are highly developed. These skills are at the heart of much of the work; but they are very different from cutting or sewing, or palpating or advising surgery.

Errors are corrected as they occur in a therapeutic milieu (sometimes). For example, "I was wondering how you were feeling, felt last week about this and that and the other, and if something I said might have upset you or if it might be more helpful to look at it or something." Or, "I don't think it's particularly helpful for them, if you go and say, 'Well, I made a mistake,' well, sometimes, it can be very helpful . . . you can let them know." Or, "Talking it over with the supervisor, they'll say, 'Well, maybe you should have done something

a little differently.'" Or, "The thing that saves you from getting, you know, in hot water a lot is being able to look at what happens." "Look" here means re-examine and re-do. "So it was a judgment that I made to not, not respond positively, but just analytically, and my supervisor suggested that I could have been more reassuring initially and let him know, you know, because it took a few weeks after that for him to relax and feel like talking."¹⁴

Suicide is uncommon in psychiatric work, as is homicide, although these acts always hover as possible responses to the disorder of experience. They are irreparable acts which end the work process. They are not, however, therapeutic acts. They are patient acts which initiate a chain of inferences about a patient's therapy, a chain of inferences which rarely leads to some decisive therapeutic act with which a suicide can be linked. Irreparable errors are much more common in clinical medicine just because it is so bold, compressed in time, defined by the urgency of events and the vicissitudes of the body.

Irreparable errors are also clearer because the vicissitudes of the body are more fully articulated. (I am speaking here relatively. Greater clarity in clinical

¹⁴The more difficult issue of error is deciding when an entire therapeutic strategy is wrong or, for that matter, when it is correct.

work does not mean that the work is clear, only that the work has greater clarity.) Many irreparable "mistakes" are not clearly right or wrong. They do not have a precise and telling time structure which permits an inference that another sequence of acts would, in fact, have been correct then. Sometimes there are no rights and wrongs; sometimes there are a multiplicity of rights and wrongs. They sediment out in time as mistakes, not in the precise sense of a wrong act, but in the diffuse sense of possibly having been wrong. One, then, just doesn't know.

I have introduced an additional ambiguity in my interpretation of mistakes. In Chapter III, I argued that mistakes are an indigenous feature of the work process as it unfolds. They are inherent in the risk of action. In the "text" I have just presented, a "mistake" lacks a clear shape. It is not something that was made, but might have been made. It is not something which was wrong, but something which might have been wrong. I have introduced this ambiguous example because such opaque "acts," those which might have been wrong or might not have been wrong, or were neither right nor wrong, are still thought of as "mistakes." They are not mistakes in the precise sense of having made a mistake, but in the broad sense of having failed to make the difference intended. Such "mistakes" still require

inquiry, understanding, and a name. In Chapter V, I describe mistakes which are not only wrong acts but acts directly caused by a physician, i.e., the problem of negligence.

Conclusion

The phrase "mistakes are inevitable" is a condensation of experience; not an ontological statement, but an ordinary language idiom physicians are making do with in their descriptions of their work. Like the common phrase, "everybody makes mistakes," it is a surface expression of a far more complex and disturbing actuality, that irreparable errors are inevitable. Such errors violate the spirit of the work in an absolute way. They are for this reason immensely undermining of the efficacy of the conduct of physicians. There is no adequate language here, no way to code good intentions and deadly acts, nor even entirely understandable inattentions and deadly acts. The language of tragic experience is in disuse. It seems cant in an age of overwhelming human tragedy. There is the language of blame and the jurisprudence of negligence, yet this language is appropriate for only a small number of the errors of the work. The whole project seems to transcend our understanding of moral meaning. It lies beyond our categories of thought about good and evil and good and bad.

In calling clinical work an error-ridden activity, I have been arguing that mistakes are an indigenous feature of the diagnostic and therapeutic process. Because they are such, reparation is an intrinsic feature of the work. Reparation has its origin in the progressive refinement of understanding of what requires work. It adheres in the intention of finding an appropriate therapy for a patient. Yet, nothing requires reparation. Nothing assures its occurrence. On the contrary, an act of will by a specific physician forges the correction of an error or fails to do so.

Uncorrected errors exacerbate considerably the disorder of the work and add immeasurably to the suffering of patients. I cannot here add up a set of figures and identify which proportion of the errors of the work are reparable and which are irreparable, and which, while reparable, are corrected and which are not, and, of those, which are grave and which are trivial. Nor can I disclose how many errors of work are the lot of physicians in a week's time and whether there are differences between this physician's errors and that physician's errors. These issues, while they are extremely important, are beyond the scope of my analysis.

My topic is the concrete experience of errors, the making and meaning of mistakes in time as it unfolds. I have pressed into the experience of making mistakes

because it lies at the heart of the project and because I believe it is a source of many of the social forms which organize the work: the conferences, the autopsies, the audits, the professional reviews, the curbside consultations, the ubiquitous and relentless talk about medical problems, and also the duplicity in the work.

CHAPTER V

THE COMPLEX SORROW OF CLINICAL WORK

Introduction

Statements like "mistakes are inevitable" and "everybody makes mistakes" are situated in time. Often used in explanations of particular mistakes, they make a particular mistake under discussion a member of a universal class of human errors. "I made a mistake, everybody makes mistakes, everybody's human" is an example. These statements, however, do more than suggest that a particular mistake is a member of a universal class of human errors. They express a horizon for human conduct. "Everybody makes mistakes" and "mistakes are inevitable" also suggest that everyone will make mistakes, too. The time perspective of these statements is infinite: mistakes are endemic and universal in both the past and the future of human conduct.

It is this inevitability of mistakes which creates the complex sorrow of medical work. The work is error-ridden and, as such, mistakes cannot be

avoided. Although much of the work intends to avoid them, they will happen; and they will happen again and again.

As mistakes are known in the aftermath of clinical action, they are complex cognitions of the experience of now and then. They identify the too-lateness of human understanding. But this too-lateness is always the too-lateness of a particular person's understanding. It is the too-lateness of my understanding or of your understanding or of his or her understanding. And this "too-lateness" means that it could have been different if, or might have been different if, I or you or he or she had understood then rather than now.

The too-lateness of human understanding also may be expressed as a wish that it had been different, a wish that I or you or he or she had known then rather than now. This latter portrayal of the cognition of an error expresses human feeling; wish expresses feeling as desire or want expresses feeling.

Mistakes are complex cognitions of the too-lateness of understanding in the yesterdays and tomorrows of medical work. They are complex sorrows of action going wrong. Complex sorrows are not unmediated expressions of grief. They are hemmed in by thinking about the character of action in time and very often by highly analytic thinking. They are intellectualizations of

action. They are also bounded sorrows, situated in periods of reflections, between a multiplicity of other clinical acts, other patients, other problems, and other thoughts about the work and the problems of the work. Unlike more elementary expressions of sorrow which are spent in periods of grief, they are too common, too endemic to be released.

Many "texts" about mistakes are brought together in this chapter and create a picture of the error-ridden nature of medical work. While sometimes extraordinarily detailed, these statements also veer off in unexpected directions. They do so because the essential content and style of elaboration of this topic was theirs as respondents rather than ours as interviewers. Not all of the statements on mistakes have been included. Those which have been excluded are by no means different, though they are, in general, briefer.

Responses did not generally provoke further inquiries, except to clarify what was being said. At the time, no one, including myself, knew that they would become the focus of an analysis.

A wide range of medical specializations are represented: Surgery, Internal Medicine, Psychiatry, Pediatrics, Family Practice, Anesthesiology, Radiology, Obstetrics and Gynecology, and Orthopedics. In every

area, these texts confirm the existential reality of mistakes and are evidence of that reality.

There are common themes among these accounts. First, everyone, of course, makes mistakes. Everyone is often a foil set down alongside a revealing and personal disclosure, "I make mistakes." Second, mistakes are common. They are not exceptional, but everyday acts.

It is the simple mistakes that bother me most, the obviously avoidable things. . . .

I am capable of a lot of mistakes. . . .

I made a mistake the other day, one of the agents, it sounds like I make an error every once in a while, it's quite frequent. . . .

When I make a mistake in patient care, usually, you know, I, first of all, I try not to, but it's inevitable.

Well, after a while, you come to deal with them rather, rather easily because they're usually quite frequent.

I don't think I've made any major mistakes yet. I think certainly their hospital stay may have been prolonged because I didn't do something when maybe I should have and so forth.

This is nothing that is profound and not known, but everybody says that the mistakes in medicine are of omission rather than commission. I saw one mistake of commission yesterday that, maybe, could have been partially responsible for this guy's, this guy's death. . . .

.
I make a lot of mistakes of omission, too.

The commonality of the experience of making mistakes forges a clinical attitude, an attitude of inquiry. Making mistakes is not at issue; recognizing

mistakes, understanding them, correcting them, and avoiding their repetition is.

I try to go back over the x-rays and find out what caused it and, in a sense, not allow myself to forget it.

I try to find out what I did wrong and sort of work it out from there.

I try to figure out if I made a mistake, you know, or if someone else made a mistake, why they made it and exactly what the events were leading up to a mistake so I, I won't be put in that position again.

When you do make a mistake, I think, first of all, I think, you know, you have to, the primary thing in my mind is, did I do at the time what appeared to be correct, you know, and if I didn't give it one hundred percent, I'm mad at myself.

Physicians talk about errors, and their talk is characterized by considerable neutrality.

Some people continue to make the same mistakes and in one way or another, I try to get through to them, you know, if I can help them, if there is any way I can help them, if they are making an ignorant mistake, when they do make a mistake, and if I'm right and it can be corrected.

If another physician makes a mistake, it is really hard for me sometimes to talk to them because I am not sure what to do. First of all, it takes me a while to understand whether I am right or wrong on an issue on what went on, and sort out the facts, and then it takes a little while to sort of get through the bullshit of him being defensive and me being aggressive and vice-versa. . . .

We make our share of mistakes, too, and, by and large, I think we all recognize them when we make them. If not, you'd point it out. I, I've had a couple times where, you wouldn't call it a mistake necessarily, but you walk in and see something happening that shouldn't be happening. You know, you point it out.

Regularly, as a training physician, I'm constantly exposed to those with less training than myself, and I have to, as a teacher, remind them that they are in error and so on and so forth.

I think I usually go through the accepted way here which is usually just tell them, you, like I say, well, if you are involved in it, and it depends on what the circumstances are, you know.

Well, you know, I think, you talk to that physician and I expect them to talk to me, you know.

I think he made a mistake in doing it. I don't think the guy's neck should have been extended, but I may be wrong, maybe it had something, I don't think I'm wrong, but I told him about that. I don't think he'll ever do it again, but that, of course, doesn't help the guy very much.

Talk may seem a rather banal and inappropriate response to mistakes, and, yet, talk is central to the discovery of what is or has gone wrong. Most medical mistakes are not simple phenomena. They are not like slips of the tongue or pen which, once made, anyone can recognize. Many arise in complex diagnostic and therapeutic activities undertaken to discover the character of a particular illness and are not disclosable to the naked eye.

Talk facilitates the identification of an error. And the even-handedness of talk has much to do with the possibilities of achieving both understanding and correct care. Medical work is diagnostically and therapeutically private, and, unless physicians are willing to inquire, consult, and refer difficult cases, many medical mistakes go undetected and uncorrected. The neutrality of talk

in this sense facilitates the possibility of finding the appropriate care for a patient, and the neutrality of talk also teaches a great deal about proper care in any given instance.

Yet, even if talk is central to the work and the efficacy of the work, it is not always clear how it proceeds. The data presented here are inconclusive and often difficult to interpret for, at the same time that these physicians suggest that they talk to others and wish that others would talk to them, they report that many physicians do not acknowledge their errors.

So many times people will make a mistake like that and rush out, and at least outwardly never seem to think about it, or show any signs that they're not closing it out of their minds.

I think the important thing is that they have to admit that, and they're not always willing to do that, and they're not always willing to change. Sometimes they're not very willing to learn by their mistakes.

I think a lot of times, guys see a mistake, and they just never do anything about it.

You don't feel free to admit that you made a mistake.

An interpretation follows this series of "texts." It emphasizes the complex sorrow of the mistakes of now and then. The interpretation includes negligent conduct which, I argue, can also be a complex sorrow of the work. Negligent conduct, however, is not only a complex sorrow; it is also negligent conduct. Finally, I examine closely the legal meaning of negligence in medicine.

The Experience of Mistakes: A
Collective Representation

(1)

Well, I don't know really; maybe it is the simple mistakes that bother me most, the obviously avoidable things, not the errors that are made in ignorance. Probably the things that bother me most are the obvious ones.

I think it is important to be honest with yourself in things like this and not, it is not so bad, well, I don't know which is worse, to make a mistake that makes a person crippled or making a mistake that kills them. They are both terrible things. [pause] So many times people will make a mistake like that and rush out, and at least outwardly never seem to think about it, or show any signs that they're not closing it out of their minds. I think that I would, those cases stand out--post-surgery incidents or death from surgery. I try to go back over the x-rays and find out what caused it and, in a sense, not allow myself to forget it.

No, I don't think so; I think that some people continue to make the same mistakes, and, in one way or another, I try to get through to them, you know, if I can help them, if there is any way I can help them, if they are making an ignorant mistake, when they do make a mistake, and if I'm right and I think it can be corrected. I think this is one reason I work very much independently if I can. Many times, I've seen people making mistakes, and I've waited until 5:00 and everybody goes home and I go around and make the corrections. But, you know, it's not going to be a catastrophic type mistake at the moment. It is very hard, ah, to see a surgeon, for instance, somebody who is 75 years old who shouldn't be operated on, make a mistake, and you are compelled to correct them, if he's at the operating table. But, you know, even though it creates hostilities, it has to be done, and I try to go ahead and do it. But I think many times, particularly when, where I was at before, there were many foreign physicians who weren't as well trained as Americans, and they made mistakes, and many times the nurses called me to verify them or to correct them or to ask what to do, and we worked out some kind of arrangements so that the patient wasn't jeopardized. Sometimes you have to do it by confrontation, and sometimes you have to use a more devious means. But I think, I try to work, I,

for some reason, I don't know whether it was before or after I'd got into medicine, I try to work pretty much alone, as alone as I can.

Well, it's, it, of course, it varies, but I think one of the things that medicine does that is sort of a self-policing practice, many times there will be a post-mortem conference, and, if it is a good hospital and if it is a good chairman of the department, the post-mortem conference will be very pointed and it will not beat around the bush. As I said before, about so many surgeons, their egos are so big that many of them take great delight in pointing and taking the opportunity of presenting another surgeon's case at post-mortem conferences, death, mortality, and morbidity conferences. And this really is a very effective policing method. Surgery has as good as any.

(2)

Okay. First of all, I know that I am capable of a lot of mistakes, okay? I tend to be hypercritical of myself, and I tend to look for a lot of reassurance when I don't need to. I made use of a lot of people that are around. I don't believe the bullshit about, you know, being stoic or resistant to asking questions or playing stupid or any of that--that is not my game--you know? Like if you have a hesitancy about something, rather than asking somebody, you sort of go ahead and stake your reputation on the line, you go ahead and make a decision and do it. Me, I'll go in the other room and say, "Hey listen, you know, I've got, it looks like a little bit of tibetorsion but, I guess, I am not sure about it, and I'm not going to be here three months from now. Would you mind looking at it, since you are an attending, and see what you think about it." I guess that's the kind of issue that comes up. [pause]

I've made two serious mistakes this year. I sent two patients to surgery, one that died and one that didn't. The chief of surgery, the chief resident, he was also at the V.A. last year, so he and I are good friends, he's just an incredible human being. Anyway, I guess the case doesn't make much difference. It took me a long time to deal with the fact that I had made a mistake, except that I really realized that I am confronted with a lot of decisions everyday and a certain percentage of those are based on, on facts, some are based on judgment, some are based on situations, on how tired I am, how tired they are, what the situation is. There are going to be a certain number of mistakes. I do the best I can and

I don't flagellate myself for it. I try to find out what I did wrong, and sort of work it out from there.

No, one, one was a diagnostic mistake that he and I made together, along with the attending, sent a man in respiratory distress to surgery with bullous disease. It turned out not to be that. It turned out to be a pneumothorax with air between the lung and the body wall. His emphysema made the films look, he was breathing so hard, he blew air outside his lung. It looked like a large bullae of air, and, if surgically it could be corrected, it would be easy. We operated. He was asymptomatic. It turned out what it was. He recovered, he's fine, he's doing okay, but I had a lot of guilt feelings. And the other mistake was a, was a Chicano guy who came down from a migrant work camp, he came down with no blood pressure, very little pulse, and in septic shock. It turned out to be secondary to an infection, but he had a rigid, hot abdomen, and I thought it was a surgical abdomen and I had him go in; and the guy wasn't really in prime condition to go; one, and two, it wasn't a surgical abdomen and he died. [pause]

The third one involves other people's mistakes, and this one took me a long, long time to get over. Danny is a seventeen-year-old Black kid that came in who had a strep throat with a heart murmur. He got really sick and came in. We weren't really sure what was wrong with him; we didn't know what was wrong with him. Anyway, we weren't able to diagnose it, and there were 15 different consultants' opinions, and I was the resident in charge. That was the first time I realized what a resident was. I realized that just because they were attendings didn't mean they knew everything. My own judgment was just as good as that. So he ended up going down hill and wasn't getting any better, and I made a decision to stop his antibiotics for 24 hours to get cultures on him and then start them up. I made the order and the nurses did not restart the antibiotics for 24 hours after that. During that time he went into pulmonary edema, heart failure, and died. [pause]

Danny was a special kid to me, for a couple of reasons [voice very low]; he, well, one of the residents used to call him [pause] Big Chief, anyway, and Danny used to say, "My name is not Big Chief, my name is Danny." And about an hour before he died, Steve and I went in to see him, and he was in pretty bad distress. He, he looked up at me, you know, and he said [pause], "You can call me Big Chief and I love you." [pause] I was pretty angry cause I felt like he didn't get his antibiotics and it made a difference and he died. [pause] I was pretty angry because I

didn't check it and I was pretty angry because somebody else made a mistake. [pause] I was angry for another reason, too. His parents were divorced, and his father was in Pennsylvania. His mother had not called him until 24 hours before he died. His father got here about 4 hours before Danny died, and he was out in the hallway and had been back from Nam. We started crying together, you know, and he said, "I have never wanted anything in my life to live before, never, but I want that boy to live."

I wanted to get out of there but I also wanted to spend time with the family. Anyway, his grandmother fainted at the bedside, she weighed about 260, and I tried to catch her, and she fractured two fingers on her hand; and the other resident taking over for me that night on call went up to see the x-rays and came down and he said, "I thought you would be interested in seeing the films, they're really interesting fractures." I said, "Mother fuck, that boy just died and you want to tell me about some medically interesting fracture." And I am supposed to be one of the more sensitive residents and one of the radical residents, you know? I said, "That's just crap." [pause] You know, like I'm hurting inside so bad, and nobody gave a shit, nobody came to me and talked to me, nothing, you know, and I really hurt, and I hurt bad. [pause] Anyway, I was able to finally work that out. I talked a lot with the nurses that were involved, and I realized where the mistakes took place and stuff. I think I have been able to work it out. I still feel bad about Danny.

I guess, I don't feel like it's just life and death issues, and I don't feel like physicians are infallible; they are like other human beings. I think the important thing is that they have to admit that, and they're not always willing to do that, and they're not always willing to change. Sometimes they're not very willing to learn by their mistakes. [pause] So, I, I don't, I think my biggest criticism is, is the kinds of mistakes in terms of general health issues, how somebody deals with an individual patient, how they interact with them, and what they do to them or what they miss. I guess those kinds of things that I am personally involved in, I am not so concerned about; but when other people make, when other people that aren't physicians make mistakes, I don't have difficulty. If another physician makes a mistake, it is really hard for me sometimes to talk to them because I am not sure what to do. First of all, it takes me a while to understand whether I am right or wrong on an issue or what went

on, and sort of get through the bullshit of him being defensive and me being aggressive and vice-versa, the games people play [pause], and letting him feel okay about himself, being a human being and making decisions and letting me feel okay about myself and then being able to figure out what we need to do differently so it doesn't happen again. That's, that's sort of a hard thing for me, because I tend to be very hypercritical sometimes. [pause] I really get pissed off when my patients are mishandled by other residents; like, if we are on the same service together, most of the residents [pause], I sort of put all my eggs in one basket. I really spend a lot of time on my patients, and I'm very sort of hypercritical about what happens, that kind of thing, and they, they tend to be a little bit more, they sort of take care of the patients, and crank them in and out, and get in and out of the hospital, and do their other trips, and [pause] I guess I get pissed off sometimes. I throw temper tantrums.

Anyway, I get upset about that. I am just now beginning to deal with that, being able to realize that other people have their ups and downs, and so maybe they don't give a shit about their work, you know, it is like any other job, not everybody, you know, it is a way to earn money, and they come from 8:00 to 5:00 and that's it, or 7:00 to 3:00, or 3:00 to 11:00 and that is it. They don't give a shit, or they give a shit some of the time and then sometimes they don't, and I don't always give a shit either now, so I am beginning to be a lot more understanding in that kind of situation. I am usually able to go back and talk about it with them, try to talk to the person personally and find out what is going on and work it out, that's what I usually do. I, I'm usually able now to leave it at work and not worry about it. I used to worry about it a lot; now I don't do that anymore.

(3)

There are two things that really bother me about this. One is, I suppose, I was going to say the patient's attitude, but I guess the doctor's attitude bothers me first. You don't feel free to admit that you made a mistake, you know, you can't admit that, the average doctor can't admit that. I saw this, just yesterday where they were, they were going to do eye surgery, and they cut the wrong eye muscle, and one of the guys on the way out of the room says, "Well, do you generally tell the parents?" and he said, "No, just tell them we had to do some work on

one of the other muscles to fix the eye, but don't tell them you did it by mistake." Well, now, that kind of thing bothers me a little bit, but equally bad is the patient's attitude. He says, "Aha, I got the bastard; he made a mistake." You know, sure I make mistakes. Everybody makes mistakes, but so far in the year here the calamities have not resulted from mistakes.

I may talk to him. Well, it just depends on what kind of error it is. I have had a couple where I've had, seen a pre-op chart that just had a total goof on it and called up and said, "Hey, did you really mean to do this, because of this, did you want to do that?" But that was all before it happened, you know, say, the wrong pre-op had been ordered, and the patient was given these medicines. Afterwards, if I'd noticed it, it would have come up in our M and M conference probably, morbidity and mortality, we'd all have talked about it. But I'm not in the position where I see too many things like that. We're pretty well isolated down here. If it's really grossly bungled, then I have to get involved because the law says that I made him hold still for it; but generally I don't get too involved.

Well, there is no one way to do this, and this person may have a perfectly valid reason for having done what he did, or it could be such a glaring error that you don't have to point it out. So you're just sort, sort of sitting there, you know. We make our share of mistakes, too, and, by and large, I think we all recognize them when we make them. If not, you'd point it out. I, I've had a couple times where--you wouldn't call it a mistake necessarily-- but you walk in and you see something happening that shouldn't be happening. You know, you point it out, this, you know, and you expect the same from them. I'd really be ticked if a guy knew I was doing something wrong and he didn't tell me.

Well, yes. We pretty much, it's pretty well thought in this institution that you never give pen-tathol to people with asthma, and occasionally you forget and you zap it to them, and then they start to wheeze and that's a glaring error and no one has to say, "you dummy"; you know, it's right there, you're the first one to know it. We had a fellow several months ago who thought he was preoxygenating a patient and he hadn't turned the oxygen on; he'd turned the nitrous on, and the patient turned blue, and, you know, he knew something was wrong right away, and he looked over and obviously he hadn't looked when he turned on his machine. Well, no consequences of that at all. It couldn't have been more than

30 seconds and everything worked fine. Nobody would have to say, "You dummy, you'd better look next time." You know, this is the kind of thing that happens through carelessness, or sometimes things happen through mechanical failure--machine just plain craps out on you. I made an error the other day, one of the agents--it sounds like I make an error every once in a while, it's quite frequent--but one of our agents has a preservative in it that's nonvolatile and it builds up in the canister, in the vaporizer, and I shook the machine and I saw the little level wiggle so I assumed that there was enough agent in there to get me through the case; and about halfway through, the patient started to move and wiggle, and the surgeon was getting a little bit upset. The darn thing had run dry. That was an error. It could have been disastrous if they had, had been doing another kind of surgery. I could have been in bad shape, you know. Nobody had--it will be a long time now before I, you know, don't look in that canister and make sure what I think is in there.

I think what you're getting at is maybe if one of us would find that another patient or another doctor had done something similar to malpractice, that he didn't know about. I'd come down and point it out to him, just like I'd expect--or I probably wouldn't point it out. What I would do is say, "You'd better go see that patient. You'd better go up and see what's going on up there," rather than coming down and saying, "Hey look, this dude can't move his leg." I would send him up and have him find it for himself because I'm not about to get into this whole deal with the patient and the parents, if I weren't involved in the first place.

No, I'd say, maybe I'm saying that I think we're pretty perceptive. You know, if, well I guess we could carry this a step further. We have some old machines that don't hook into the overhead for oxygen. They work on tanks, and if I walk in and I see the patient is turning blue and the guy is apparently doing nothing about it, then I wouldn't be very subtle, I can assure you. You know, it may even have a string of expletives in front of it, just to get his attention. You know, the fact that he's run his tanks dry or something like this and he'd best start pumping some air. There's no subtlety there at all, but we try and keep things quite hushed. You wouldn't, you wouldn't, as you were walking down the hall with patients or visitors or somebody standing all around, say, "You sure butchered that guy the other day." You just don't

do that, just as I'm sure that the educators wouldn't walk down the hall and say, "Joe Doe is really a clutz." You know, they do it behind a closed door. Well so do we.

(4)

Well, I think I use, you know, old clichés, I suppose more than anything, the standard old line of, first of all, everybody's human, everybody makes mistakes, you know, whether they're in medicine or in a car or in an airplane; and then I try to figure out if I made a mistake, you know, or if someone else made a mistake, why they made it and exactly what the events were leading up to a mistake so I, I won't be put in that position again. I get very irate, very critical.

Well, I think everyone, you know, that's sort of an institutional function. Every place you go has a little different way that's official, well, not official or nonofficial, but it's the professional and socially accepted way of telling other people that you made a boo-boo. It varies with what field you're in, what, what the accepted way is. I think I usually go through the accepted way here which is usually just tell them, you, like I say, well, if you are involved in it, and it depends on what circumstances are, you know. There have been a lot of occasions when I've been on call at night and I've seen a patient that has some cardiac problems, and she, you think, should be treated in a different way; well, first, if you really think it should be treated a different way, most of medicine is, at least, empirical, if not based on some data or scientific evidence, so you try and make sure you can convince them. Sometimes you're put in a bad situation where you know that they're going to decide against you, so then, in that case, you really, it's a pure matter of will, whether you want to treat them without calling and then call them later or not. Sometimes I do that, taking the chance that, see, here it's very interesting, it's especially as a resident, well as an intern, too, you have relatively large leeway, one way or another. You don't have to call the attending every time you treat them necessarily, although they may be mad that you didn't, some attendings especially.

(5)

Usually, that's, you know, I think, when you make a mistake or when I make a mistake in patient care usually, you know, I, first of all, I try not to, but it's inevitable, you know, you've got to make some mistakes. And, you know, when you do make a mistake, I think first of all, I think, you know, you have to, the primary thing in my mind is did I do at the time what appeared to be correct, you know, and if I didn't give it one hundred percent, I'm mad at myself. I think, the second thing is, I think, you know, I think if there is that much uncertainty, that I'm worried about making a mistake, I get somebody else to look, too, you know, try and minimize the chances of making a mistake. But I think, you know, when a mistake does occur, I think it is something, you know, that you have to own up to and I think you have to, you know, if I've made a mistake which is, usually I, usually, it's one which, you know, is a rational sort of a mistake, understandable, and usually, I don't, I don't find it extremely difficult to cope with it or something like, like, do I lay awake at nights? No. You know, I think I can live with my mistakes primarily because, you know, I usually try to be very conscientious and do the best I am able. You know, if I made a mistake because of ignorance and didn't look it up in a book or I could have had a source of information--that would be very upsetting--but, you know, when I make a mistake and I feel it was a legitimate one, it's not hard to live with.

Well, you know, I think, you talk to that physician, and I expect them to talk to me. You know. I usually, I, I don't try to be insulting or anything like that because, you know, because I realize I'm not any better than they are, you know. I tell them I saw, you know, maybe, "Remember that patient you saw a few weeks ago or something with this or that, you know, I saw her the other day and I could feel a big lump in her belly or something and the x-rays showed a tumor or something like," you know. And I just tell them what showed up and I think often times guys, you know, next time they feel that abdomen a little more closely and, you know, well, like one fellow here way overdosed a patient with a medication. You know, I just made a comment to him that I saw so and so and she was having this set of symptoms and I looked in the book and, and well, she was, the recommended dosage was that, and, you know, she had, she was given that much and probably, I try not to make them feel bad, I mean. Usually I top it off with something like I probably would have done

the same thing, but I just thought you might be interested in hearing that when I saw her I checked the dosage and it turned out, it, you know, we'd overdosed her twice. You know, instead of saying you, put it in a we or something. I think you can tell people things without being inflammatory and derogatory.

I think a lot of times, guys see a mistake and I think they just never do anything about it, you know. But I think a guy ought to know, and I certainly want to know if I've done something wrong, you know, so that I don't do it again.

(6)

I saw one mistake the other day. I've only seen, I really kid you not, and this is nothing that is profound and not known but everybody says that the mistakes in medicine are of omission rather than commission. I saw one mistake of commission yesterday that, maybe could have been partially responsible for this guy's, this guy's death, not Daley, this was another guy that we had last night that had another problem, and again, the head and neck surgery thing, that big artery in your neck, the carotid artery. This man had a wound infection in his neck where the surgery was performed and the carotid artery burst, and I think one of the main reasons that this happened was, you know, we were, we were in kind of a bad situation anyway. The guy has, it's kind of complicated, but essentially what happened is that the guy has a hole that goes from the top, the base of his neck into his windpipe, and this was made because most of the tumor had to be resected from his neck. Well, he has a wound infection right above that, and the stuff from the wound infection kind of falls into the hole in his neck, and he gets very difficult to manage from that. Well, at any rate, he breathed in some of this stuff and was having trouble clearing it. Either that or, he had what's called a mucous plug and was having trouble clearing that. He had very short breath. At the VA, we don't have a machine which is very flexible and very thin, and we had to brochoscope the guy, we had to stretch his neck out like this, this is a guy who has a gigantic wound infection that bled from this area, to put the brochoscope down and clear his airway, and the guy started bleeding at that time, right after. I'm sure, that's what caused his bleeding last night--at three o'clock in the morning, and we were up all night.

But what can you do? He was forced to do something that he thought was right to help the guy. He didn't do it out of any malice or anything. I think he made a mistake in doing it. I don't think the guy's neck should have been extended, but I may be wrong, but I told him about that. I don't think he'll ever do it again, but that of course doesn't help the guy very much. That's virtually the only mistake that I feel of commission, I mean, serious mistake of commission, I've ever seen in medicine. I've heard about one or two of them, when I started in.

Yeah, I see a lot of those. I mean, they're just, they're just incredible. They're usually minor. Medicine doesn't get stopped after a long time, culture results don't get picked up, and somebody is getting the wrong medicine for their culture and they don't get discovered. I must admit, I haven't done a heck of a lot about them, because there's not too much to do. I mean it's a very imperfect system that we work under, and I have talked to the nurses, the nursing supervisor around here. I mean, they range from things that are minor, which I don't even think they're minor; guys coming in with nosebleeds that can't be stopped, and you order blood pressures four times a day because you want to find out if the guy is hypertensive or a labile hypertensive, and they may have one blood pressure on the chart and the guy gets discharged. You have to take them yourself, if you want them done. The problem is that you make, I'm sure that I make a lot of mistakes of omission, too. I think the main problem is that there isn't enough time to do everything and still leave. You could live there and never leave, and you'd probably increase your batting average maybe up to 900 or 950 or something like that.

(7)

Certainly, frequently, practically once a week. Regularly, as a training physician, I'm constantly exposed to those with less training than myself, and I have to, as a teacher, remind them that they are in error, so on and so forth.

Well after a while, you come to deal with them rather, rather easily because they're usually quite frequent. I think any physician who doesn't admit that he makes mistakes is making an error because it's an opportunity certainly for learning and we learn by our mistakes. Every physician has to know that. I deal with my mistakes by hopefully recognizing them, trying as best I can to understand the

reason why I made the mistake and make some kind of in course correction; but as far as going home and sobbing, I feel about this kind of thing, I don't think I've lost too much sleep. This is not to say that I don't have, that I don't feel bad. I think St. Peter has got a list, you know, he's going to ask us all about along the line; some lists are longer than others; I certainly have some names on mine already that I know about.

No, it's something I've always accepted. A certain amount of compulsion goes along with that. I think you have to realize that, at the outset, that you are going to make mistakes.

Well if I, for example, happened to be doing a liver biopsy, and I went through the liver and perforated the hepatic artery and the patient exsanguinated within ten minutes and I knew exactly the reason, and a post-mortem examination found a needle track through the hepatic artery and that was it, you know, I was directly responsible; I'm certain this would have an effect on me. I would feel very, very bad. On the other hand, I don't think I would, I would feel so bad that I would contemplate quitting medicine or anything to this effect because I'm egotistical enough to think that I do an awful lot of good and I feel that, that the only people who don't make mistakes are people that don't commit themselves, who don't, you know, get out there and really try.

(8)

I don't think I've made any major mistakes yet. I guess, they always said that, when you read the books about training programs and so forth, that you have to accept the fact that you're going to kill patients, you know, that's the word that's used, that you're going to make mistakes and patients are probably going to die as a result of what you do. Again, you have no way of knowing if they would have survived if you'd done something else, in most situations. I don't think there's been a case since I've been here where I could actually say someone died because of what I did. I think, certainly, their hospital stay may have been prolonged because I didn't do something when maybe I should have and so forth. I don't have anything immediate that comes to mind, but I know it has to have happened. What do you do when that happens? Again, I think you have to realize that it happened, number one. You have to be able to pick it up yourself or accept the fact that someone else is, that when they tell you, you

know, be able to accept that fact, accept the criticism that, that's being given you, and then just use it so that it doesn't happen again. I think, you know, you can't allow yourself to become so involved with the mistake that you're afraid to, to go on from there and you have to accept the fact that you won't do everything exactly correct and just integrate what's happening and not let it happen again. It's easy to do here because very often the same type of situation will come up again, it's very easy to have the same thing come up again, and it's very important to have gone over the mistakes you've made so that you know you're ready when it happens again.

Well, certainly everyone has times when they're, you know, you're ready to leave the hospital, ready to go, you're supposed to get away, and the last phone call comes. It's somebody who may need something, and I guess everyone says, "Well, we'll do such and such, you do this tonight, and if it's still bad tomorrow, you call me back," you know, that type of thing. I suppose, I may be dodging the issue, but I think again that's one of the things that you learn in the course of constant exposure, when those nuisance calls--quote, unquote--that you get, and many of them are nuisance calls who just need reassurance.

Well, I can't remember exactly where I left off, but I think it related to the point that this is also something you learn with repeated exposure, to recognize when that patient really does need to be seen and when it can be a matter of reassurance. It certainly, it helps, it would be easier in your own practice where you know the patient to begin with. Frequently, in this situation we're dealing with patients we don't know--they're someone else's patient--calling in for information, and it's a little harder in that respect, and you tend to be a little more conservative perhaps; but I think in essence that, you know, that can be a problem, whether you really just, you want to go home, you're fed up, you're tired, you want to go and something like that happens, it takes practice, too, and I'm sure mistakes are made in, in terms of that.

(9)

Well, I've made some mistakes and, you know, if it's somebody who doesn't make, that I know, doesn't make a lot of mistakes, I'd say, well, he made a mistake, that's, that happens. I, you know, it's kind of, I can shrug that off as kind of, well, you know, everybody makes mistakes, everybody makes mistakes. I don't care how, how good you are, and I, you know, I run the mortality conferences at General as part of my role and look through and go through the charts

of people who have died and see what happened to them, and bad doctors make mistakes and really good doctors make mistakes. It just happens. I don't have trouble dealing with that.

There are mistakes of neglect and mistakes of ignorance. The mistake of ignorance, nobody knows everything, and I, I find those easier to accept than mistakes of just gross neglect. You see, I think a lot of doctors make mistakes because they're too busy, and they're, they may have 25 patients in the hospital, they just don't, they just don't have the time to really go over the charts of the patients or the patients themselves; and I think sometimes that's how they make mistakes, that's how a lot of the good doctors make mistakes.

An Interpretation

Mistakes as Complex Relations

When a physician says he made a mistake, he means that his action mis-became, became mis-begotten, mis-shapen. It failed to achieve a proper shape, an intended form. He made something mis-shapen. Physicians speak this way. For example, he made a diagnosis, a term of action, doing, construction. He made a wrong diagnosis, a misdiagnosis, a mistake. "No, one was a diagnostic error that he and I made together, along with the attending. . . ."; "I made the order. . . ."

To make a mistake, to mistake x and y, to misunderstand or to misinterpret, or, even more subtly, to misapprehend something, to mis-look or mis-see, which we, in a curious way, call overlook, is also to miss something. A misdiagnosis or a mismanagement is a missed diagnosis or a missed management. It is also a wrong diagnosis.

Mis means wrong, too. A mistaken diagnosis or a mistaken management is a wrong diagnosis or a wrong management. There is something else here. It is also a physician's wrong diagnosis or wrong patient management: he made it; he enacted a wrong diagnosis; he made a mistake.

I had a lot of guilt feelings.

This is not to say that I don't feel bad.

I don't know which is worse, to make a mistake that makes a person crippled or making a mistake that kills them. They are both terrible things.

I shook the machine, and I saw the little level wiggle so I assumed that there was enough agent in there to get me through the case. . . .

He made a mistake, mistook something, took wrongly. Take is a term of motion, gesture, reception, and selection. What he mistook is by definition mistakeable. What is the relationship between what he mistook and its mistakeability? The difficulty here is that the work is constructed rather than seen. It is not about an apparent reality, but an underlying discoverable reality. Even the signs and symptoms, with which inferences about underlying disorders are made, require discovery and may be mistaken.

A mistake is a complex relation between a person, a physician, who is mistaken and something mistaken, a patient's illness. Its complexity arises because of the many dualities of the relation: "mis" meaning miss, "mis" meaning wrong, "mis" meaning take wrongly. It is

also a complex relation because of the many dualities in its construction, the movements and transitions in the misfortune of illness and the misfortune of mistaking human illnesses in time. A mistake is not normally conceived of as a complex relation constructed in time and action. It is thought of quite simply as an event, a slip in the execution of a routine activity like addition. A mistake is, however, a complex dialectic about a discoverable reality, and a misapprehended reality which requires discovery.

Going-Bad; Going-Wrong

A physician is situated between the past and the future, a conduit for the shape of events, a figure of poise and dissolution, an actor engaged, aware. Attention is a process which interacts with the shape of events. Attention in medicine occurs not only because one has to pay attention in order to do the work well (this is, of course, true), but also because physicians have to discover what the work is they must do in order to make a difference. And they must discover how to make a difference. They must test diagnostic and therapeutic possibilities in instances of care.

Attention is a process which interacts with events which have been tested. Yet this is a peculiarity of a language of expression because the "events" tested are also acts tested, a duality which is difficult to capture

in language. What requires notice is that physicians must give way to the possibility of being mistaken in order to act, and they must pay attention to the kind of difference their acts have made.

So he ended up going downhill and wasn't getting any better, and I made a decision to stop his antibiotics for 24 hours to get cultures on him and then start them up. I made the order . . .

He had a rigid, hot abdomen, and I thought it was a surgical abdomen, and I had him go in, and he wasn't really in prime condition to go; one, and two, it wasn't a surgical abdomen and he died.

Physicians are engaged in medical work. They are not outside of it, but in it. They thus shape medical acts. And because they do so, they experience the shape of these acts personally. They are connected inexorably with events and acts, not detached and neutral, but caught up, existentially engaged.¹ And their existential engagement means that they experience the totality of acts and events as an aspect of their own conduct and their own experience. Their involvement requires acknowledgment, "I made a mistake"; "If I knew what I know now, I would have acted differently." Physicians experience the too-lateness of their understanding which is, sometimes, the too-lateness of their understanding for a patient, a duality, a complex sorrow.

¹See especially Renée Fox's studies of clinical medicine for a description of existential engagement, Experiment and The Courage.

I try to go back over the x-rays and find out what caused it and, in a sense, not allow myself to forget it.

I try to figure out if I made a mistake, you know, or if someone else made a mistake, why . . .

I try to find out what I did wrong and sort of work it out from there.

Nobody had, it will be a long time now before, I, you know, don't look in that canister and make sure what I think is in there.

I deal with my mistakes by recognizing them, trying as best I can to understand the reason why I made the mistake and make some kind of incourse correction.

It's very important to have gone over the mistakes you've made so that you know you're ready when it happens again.

Physicians are engaged in medical work, in work on the body, for somebody, with respect to something going-bad, going-wrong. They are sometimes mistaken, a complex sorrow of awareness and involvement. They are sometimes not mistaken and cannot make a difference: the going-bad, going-wrong of a body cannot be altered, another complex sorrow of awareness and involvement. In this case, their work does not alter the body's fate, going-bad, going-wrong, "going-sour," "going-out." Their efforts fail. Rather, to be more concrete, their own efforts, projects in which they are engaged, fail. They fail. But "I tried and I failed" need not mean "I was mistaken or at fault." It may mean "I was defeated by events, by unalterable disease processes, by the contingencies of setting or time, by a plethora of

possibilities beyond human control." "I tried and I failed" is, nevertheless, a personal experience, a failed project of engagement and effort, a project which came to a bad end, a bad "result" for the other.

Being Mistaken

(1)

A mistake is situated in the conduct of medical work. It is discovered in the aftermath of action and activity, in reflection about medical action. "I made a mistake. If I knew then what I know now I would have done x, but I did not know then. If I had it to do all over again I would do x, but I do not always have it to do all over again. I mistook x for y. Was I distracted? Was I "misled" by the patient?"

The primary thing in my mind is did I do at the time what appeared to be correct . . .

I realized that I am confronted with a lot of decisions every day and a certain percentage of those are based on, on facts, some are based on judgment, some are based on situations, on how tired I am, how tired they are, what the situation is.

It is difficult to capture the many nuances of this work as it unfolds, the many ifs which condition its enactment which might make a difference if they were done or tried or known, or could have been done or tried or known, but were not done or tried or known. The infinite number of ways of being mistaken overwhelms imagining like the infinite number of diseases numbs

and frightens. It is also difficult to capture the paradox of their discovery, for they are made before they are known. They are sometimes known too late for their restitution, the risk of this work which is so fateful in its enactment. And they are sometimes never known.

"I made a mistake"--being mistaken is a category of reflection which follows making a mistake, but making a mistake, as I have already suggested, is really misnamed. It describes already having made a mistake. A mistake follows an act, an act which is already past and has already happened. Acts mistaken are acts already mistaken. When a physician says that "the errors are errors now but weren't errors then," when he says that you cannot fault a man for treating pneumonia with Ampicillin though it was wrong to do so in an instance, he attempts to express this paradox: mistakes are known after they are made, and they are made after their making, after acting-as-if, a point which sometimes describes being irreversibly committed and mistaken.

Discovering a mistake has a logic. A discovered mistake requires correction. This is not a metaphysical statement, but an aspect of this work's intention. The aim of medical work is not omniscience; it is not reflection; it is not understanding. It is, rather, a response to the experience of illness of others.

(2)

A mistake is situated in the work as an aspect of understanding what requires work, what will make a difference or, as it happens, would have made a difference in this instance or in others. It describes medical work as a practice of human knowledge and human ignorance, of human effort and human distraction.

A mistake is discovered. But there is a difference between what is discovered and what is seen. What appears phenomenologically is the disintegration of a project. Something happening-happened which should not be happening or happened. A project of care in which a person is personally engaged failing-failed. Events going-wrong, action or activity going-wrong, an actor going wrong, a project going-wrong. Why? "Could it be that I made a mistake?"; "Did he or she make a mistake?"; "What if I had known?"; "Could he or she have known?"; "Would it have made a difference?"; "Could I have done x?"; "Could he or she have done x?"; "Would it have made a difference?" All these questions arise in the past of medical acts.

A mistake is discovered in action or activity. It is found, named, identified, and known through inquiry into the disintegration of a project. And the paradox of such an inquiry is not only that it follows a project's disintegration, but also that it reasons with its

disintegration in mind. It reasons with knowledge of events as they now are, but events as they-now-are are not like events as they-once-were. Acting-as-if uses reasoning about events as they-may-be. It opens out into the future. Reflecting on and naming a mistake involves reasoning about events as they-already-are. It opens back on the past, the more exact science or hindsight.

The only thing that I can say is, and I really mean this, the only thing I can say is there is, you know, there is a lot of uncertainty. There are many times you can't make a diagnosis, and you, you know, putter and fiddle and follow that patient for a given length of time. You know, you usually, like I put, let's say like this afternoon a lady came in with what seemed like a bursitis. She's pregnant; so, do I expose her to radiation to find out if she's got a calcific tendonitis or do I not do anything and treat her like it's a bursitis and hope it gets better? Well, I felt that I should not expose that child, at least when she is only 4 months pregnant, that I shouldn't be exposing her to radiation, so I say, you know, I'll treat it like it's a bursitis because clinically I've diagnosed it as a bursitis, but I'm not certain, you know, it could be something else, it could be a calcific tendonitis, it could be arthritis, it could be, you know, a septic joint, not probable, but you, there is a lot of uncertainty, and I think you know, you treat it that way, and, like I told her, you know, if things get worse or if you start to have problems, call me or come back and see me.

Acting-as-if means "I'll treat it like it's a bursitis because clinically I've diagnosed it as a bursitis but I'm not certain"--x is treated as if it is bursitis because it is most likely to be bursitis. This diagnosis and its implied management proceed until further notice, until the diagnosis breaks under the weight of an

existential experience: "If things get worse or if you start to have problems, call me." Nothing assures its accuracy, but it is likely to be accurate. There are several alternative possibilities which might be more quickly excluded if an x-ray were taken. But in this instance, an x-ray may be harmful. The diagnosis and its plan are for this particular person, a four-month pregnant woman.

Assume for the moment that this woman returned a week later because her pain did not diminish and because she also developed difficulty moving her arm and shoulder. Would we want to say that this physician was mistaken because he treated her as if she had bursitis when it became clear that she has calcific tendonitis? Would we assume that he was at fault?

(3)

"I made a mistake"; "I misinterpreted x and y"; "I was at fault, I failed to, I forgot to, I didn't notice." These phrases express something about the character of a person's actions. Acts have a past, and they become part of the past. They also have a future: they occur again, are re-enacted. A physician is situated between the past and the future, a conduit for the shape of his or her projects. A physician's work moves from instance to instance, from case to case. Between the past and the future, a physician learns, integrates

experience, grows or diminishes. Being mistaken leads not only to blame; it also leads to understanding, just as ignorance leads to knowledge and distraction returns to attention (or should I say may lead here, for it is also true that being mistaken may lead to being continuously mistaken in the future).

It's very important to have gone over the mistakes you've made so that you know you're ready when it happens again.

I think any physician who doesn't admit that he makes mistakes is making an error because it's an opportunity for learning, and we learn by our mistakes.

(4)

Medical work does not shape events, but risks a shape for events which are already going-wrong. The misfortune of disease sometimes becomes a double misfortune, the misfortune of unnecessary harm or mutilation or disfigurement, or pain or death. Unnecessary harm is a term with presuppositions, a term in use about the past, a term which describes events which have already happened and conduct which has already been enacted. It is a term of evaluation which describes what could have been otherwise, a term with a time structure which describes experience which at one time began with becoming, acting-as-if, and became, unwittingly, wrong and is now being reflected and remembered. Unnecessary harm, then, is a description of being mistaken: reflecting, paying attention, knowing now, knowing now as a

contradiction of what was intended then. Being mistaken describes reflecting-as-if-you-knew-then what you know now, like acting as if describes acting-as-if-you-know now what you do not yet know.

Suppose a mistake is not discovered; what is left? The going-bad, going-wrong of the body, a person, known, met, worked with, named, situated in a web of relations and significations. A mistake is a failed instance of medical work, the disintegration of a project. There are other failed instances of medical work.

Well, I think, one of the things is that you have too many failures. You know, it is nice to treat the common cold, knowing that, no matter what you do, it is going to go away in four or five days, and the patient is going to be thankful. In this area, you know, there are, of course, you can, you know, restrict yourself to treating simple fractures and, you know, be very satisfied with the good result. But to be really committed to an area and to practice that type of medicine to the fullest degree, there are many failures and you have to take them along with the good, and, of course, if I had it to do, I would change the failures. You know, the degree in anybody's hands, there are going to be a certain number of failures in big operations. This is one of the things I would change.

Well, the thing now that is really involved, take the so-called total hip, take out almost the whole hip and put a prosthesis in with glue. Now, if everything goes well, the patient walks home and, you know, it's a miracle. But if it doesn't for any number of, hundreds of reasons, it's a failure, and the patient is then worse off than he was before, many times. If he has an infection or the glue becomes unglued or it is loose, develops a pulmonary embolus or any one of many, many things from the results of the surgery, and it happens to everybody, unfortunately. Every doctor has a certain amount.

Being at Fault

(1)

It is difficult to capture the significance of things going-bad, going-wrong because the disintegration of medical projects is not thought of as a common medical experience. The indeterminacy of clinical work--its essential concreteness, work with a person in a context of limited contact, enacting knowledge rather than applying knowledge, looking after life processes which are moving errantly--goes unnoticed. It is also difficult to capture its significance because the many ways in which conduct naturally goes awry, also goes unnoticed. To be at fault, to be personally responsible, to fail to enact care properly, to contradict the aims of this project, is not an alibi for negligence nor incompetence (although it can be that, too). It expresses the limits of human will and attention, human knowledge, and human memory. Yet there is no adequate language here, no way to capture conduct going awry with an even hand. Instead, human weakness, or inadequacy, or neglect, is spoken of as if personal conduct were ultimately an aspect of one's own omnipotent control of a world which is personally shaped. Being at fault does not imply the existence of an autonomous plane of human conduct. It is one form of the living experience of indeterminacy, indeterminacy

within the self, the other form being indeterminacy beyond will and intention, beyond the self.

A mistake is an act. It has a trajectory; its making and its being made; its being made and its being known. It has consequences, miniscule or grave. It has causes: ignorance, carelessness, recklessness, neglect, uncertainty, risk, urgency. It expresses life modes: sorrow, depression, anger, fear. It provokes responses: resignation, separation, blame, duplicity, compensation.

(2)

Conduct moves. It is vital, purposive, relational. It is complex, touched by moments of chaos, desires and needs, secret duplicities, transcendent aims, and complicated interests. And it always expresses meaning and the negation of meaning. Conduct is grounded, embedded, embodied in persons: in physical effort and its dissipation, in attention and distraction, in knowledge and ignorance, in will and resignation. Human conduct requires a language of living experience, a language which captures being an embodied rather than a disembodied species.

Conduct goes bad, goes wrong, breaks down. Physicians are at fault. Being at fault means that a physician did something wrong which could have been right and would have been right if he or she had done it in a

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right rather than a wrong way. Did something wrong means that he or she acted in a wrong way when there is a known right way. And since an activity could have been done in a known right way, a mistake is a person's fault. Being at fault thus describes personal misconduct. It is a term of moral disapprobation. But a mistake in any of its senses is always a term of moral disapprobation because it always implies a transcendent aim or wish, although it does not usually state it, as correct conduct.

Should not have happened, which encompasses being mistaken, also sometimes means very pointedly, someone should not have done something. Should not have happened does not mean that mistakes will not happen, because they do happen, although they should not. Should not have happened in its personal form, he or she is at fault, means he or she could have known better. But that he or she could have known better does not mean that he or she did know better, only that he or she could have.

Being at fault has all the perplexing aspects of being mistaken. It describes something which has already happened, an activity which has become misshapened or ill-formed, and which requires correction and may not be correctible. Its distinctiveness is its precise link with personal conduct, its clear, direct causality. For this

reason it requires the correction of conduct. "If I knew then what I know now I would have not done x. I will not do it again."

"I made a mistake" in the sense of "I was at fault" also means "I saw through the disintegration of an instance of my work to my own misconduct." "I made a mistake" reads like "I am paying attention now to my own misconduct then."

Nobody has, it will be a long time now before I, you know, don't look in that canister and make sure of what I think is there.

You have to be able to pick it up yourself or accept the fact that someone else is, that when they tell you, you know, be able to accept that fact, accept the criticism that, that's being given you and then just use it so that it doesn't happen again. I think, you know, you can't allow yourself to become so involved with the mistake that you're afraid to, to go on from there, and you have to accept the fact that you won't do everything exactly correct and just integrate what's happened and not let it happen again.

A certain amount of compulsion goes along with that. I think you have to realize that, at the outset, that you are going to make mistakes.

Acts of negligence have a clear causality. They can be traced to specific and inappropriate acts which are the fault of a physician or of several physicians. Some are entirely understandable, even though they are wrong: memory failed; diagnostic cues coalesced in an inappropriate diagnosis; haste permeated a decision to act. Even apparently grotesque errors, of which there are a number in clinical medicine, are often understandable, though wrong and negligent.

Some acts of negligence, however, press the limits of human understanding. They are Kafkalike aberrations of human conduct. An example will be helpful here. A patient, following three operations for treatment of a fractured hip in 1951 and 1952, was bedridden at home until her death in 1962. Throughout this long period, her operative incisions remained open and continued to drain. Dressings were changed twice daily. Her physician during this time did not probe the incision nor try to determine the cause of the continued drainage. In May of 1961, threads were seen coming out of the incision. Her physician was called, but was unavailable. His associate came to the patient's home. The wound was probed, and portions of an embedded sponge were removed. An Orthopedist subsequently removed remaining parts of the sponge. Within a few days the incision healed completely.²

Such an act of negligence, and, in this instance, continuous negligence, is not a common nor an ordinary act in clinical medicine. It does not describe the errors to which I have been referring. It shares the features of other negligent acts, and, yet, it surpasses them. It tells a unique and grotesque tale of human

²The case Frazor vs. Osborne reported in Sagall and Reed, pp. 170-71.

suffering and human deception. All negligent acts tell a story, each its own human tale.

Negligence

Negligent acts share all of the perplexities of time and action in medical work. They arise in time as it unfolds. They are known after they are made. They are known, however, usually too late for their reparation. But negligent mistakes have special features which make them the focus of litigation. First, they involve irreversible damage. Second, they result from a dereliction of duty. Third, they are the direct effects of specific acts. They are known to directly cause personal damage. This means that they can be specifically linked with a sequence of wrong acts.

Negligence is a tort, a civil wrong, and acts of medical negligence are subsumed along with other kinds of negligence under this tort. A tort is a civil wrong, a violation of the personal or property rights of another individual. The torts include assault, defamation of character, fraud, trespass, nuisance, and negligence. The essential difference among them is the specific right which has been violated. Negligence, however, is also distinguished from the other torts in matters of proof. Most torts can be shown to have occurred without expert testimony. In the instance of medical negligence,

however, standards of medical practice are involved and expert testimony regarding these standards is usually required.

The essence of negligence is the failure to exercise due care, and the standard of due care is that which one might expect a reasonable and prudent person to exercise under like circumstances. In medical negligence, the essence of a negligent act is the failure to exercise such care and skill as might be expected from the average practitioner under like circumstances.³ Negligence, then, describes a failure in professional conduct which other physicians would recognize as wrong in a particular instance. It does not refer to the highest possible standards of conduct, but to the average standard of care in a given locality at a given point in time.

Malpractice is often employed generically to refer to a wide range of bad practices: breach of contract, assault and battery, fraud, and negligence. When used in this broad sense, it does not suggest a specific violation of professional standards of medical care and does not necessarily require expert testimony. Professional liability is a generic term. Its native domain

³The above description is taken from Shindell, Chapter 4.

is insurance: all those insured acts which may produce a damage suit of any sort are classed as professional liability.

Claims of negligence are inevitable; so, too, are acts of negligence. And these claims are an entirely appropriate response to personal and often tragic experiences of patients. The torts, including negligence, are concerned with the rights of injured people, and they attempt some elementary compensation for personal or property damage. An award for damages, however, is only a compensation for damages. It cannot restore a damaged condition. The jurisprudence of mistakes thus cannot right a wrong. It shares the too-lateness of the damage of a negligent act.

Negligent mistakes are a small number (however large claims of negligence may loom at this point in time in legal disputes) of the total number of mistakes which occur in the care of patients. Negligent mistakes cannot be corrected; they mark a terminus in the care of a patient, a final breach in the healing of the body which is medically caused.

Malpractice suits have risen dramatically in the last ten to fifteen years. There are, at this time, great regional differences in the numbers of such suits. California, New York, New Jersey, and Florida have the highest incidents of malpractice litigation. In 1975,

in California alone, D. S. Rubsamen estimated that one-fourth of all physicians were notified of a claim of negligence.⁴ This does not mean that incidents of malpractice are highest in these areas. On the contrary, it means that expert medical testimony is more easily acquired in these areas.

Yet most medical mistakes do not involve negligence. Many involve no dereliction in professional duty. They arise in the crucible of action as it unfolds. Many are errors in acts of judgment, in coming to understand the particular and special features of a patient's illness. They suggest no violation of professional standards. Further, many cannot be said to directly damage patients; many are corrected and leave no irreparable or residual damage. Even the courts have repeatedly held that honest errors do not constitute negligent acts. "Mere mistake in diagnosis is not negligence. Honest error in judgment is not negligence. Nor is negligence necessarily neglect."⁵ Furthermore, the courts have also repeatedly held that honest mistakes in diagnosis, even though they may delay proper treatment or result in unnecessary treatment, are not automatically negligent

⁴Rubsamen, M.D., L.L.B., pp. 334-41.

⁵Shindell, pp. 53-54.

acts.⁶ In some jurisdictions, however, courts have begun to identify substandard judgment as a category of negligence.⁷

It is not the presence of negligence which defines the error-ridden nature of the work. It is the special and uniquely constructed response to illness which marks this work as error-ridden. It is the problem of acting as if, acting in time. Clinical work must be constructed, and its construction always risks error.

The problem of negligence is not only the act, but also the repetition of the act. In saying this, I am suggesting that negligence can occur systematically and repeatedly because of failures in knowledge or because of failures in conduct, in the personal execution of the work. Consistently inappropriate medical care describes medical incompetence which is not a global characteristic of a person but of a person's work in particular instances and through time. Incompetence often leads to the exclusion of a physician from a referral system, or to the curtailment of hospital privileges. It rarely leads to public censure and even more rarely to disliscensure.

⁶Sagal and Reed, p. 120.

⁷Rubsamen.

My study has, in any case, not been about professional negligence nor professional incompetence, but about making mistakes in a more general sense. Its focus has not been being at fault, but being unavoidably caught up in the contingencies of the work as it unfolds in time. The physicians in this study in talking about medical mistakes rarely had acts of negligence in mind. Instead, their descriptions were of the intrinsic errors of the work as it unfolds in time although these errors may include negligent acts.

The errors of now and then, the inevitable and unavoidable errors of action and time, create the complex sorrow of clinical work. It is these errors which forge a common clinical attitude and perspective on medical work and mistakes in medical work.

Mistakes are made in action as it unfolds. They are named in the reconstruction of acts in a particular instance of care. The identification of an error, in contrast to its making, is a matter of discourse, and, as such, it is subject to all the potential duplicities of the construction of language.⁸ Mistakes, while they are not excuses, may be excused. They may be subtly disguised in the interior of the mind as honest errors. They may not even be identified.

⁸Millman.

The presence of so many errors in the work has its impact. It leads often to the redefinition of the meaning of making mistakes. Those mistakes, for example, that are not irreparable tend to lie at the periphery of awareness. The ones at the forefront of the mind are the irreparable ones. A number of these "texts" suggest that physicians do not count the multiplicity of errors which occur in the diagnostic and therapeutic process as errors. They count them as progressive approximations of their understanding of the character of illness. One "text" even suggests that attention is more intensely focused on errors of commission than omission, as though errors of omission are in some way less grave.⁹

The absence of a stable classification of errors in clinical work contributes to the possibilities of duplicity. But is a stable classification of errors possible? Can one be constructed apart from the contingencies of time and action and circumstances? An error is constituted not as such, but in an instance of care as it unfolds and becomes mistaken. As it happens, the issue seems to be not whether it is an honest error or a negligent act, but whether it is a reparable or an irreparable error; not whether it is someone's fault, but whether it is correctable and, of course, whether it

⁹This perspective on negligence is embedded in our legal tradition.

is corrected. It is true that when no differentiation of honest errors and negligent acts occurs, no systematic and differentiated response to a medical mistake may occur. And a systematic response of a rather different kind is required. The latter kinds of errors (negligent errors) require the correction not only of the work, but also of the conduct of particular working physicians.

I have called mistakes complex sorrows of action going wrong. Some of these complex sorrows are negligent acts. Most are not. Those mistakes which are negligent acts require compensation. And when they systematically occur, they require not only compensation, but also professional discipline. It is here that the work fails most, for discipline is rarely sufficient to assure the correction of conduct, and errors of ignorance and carelessness continue to occur.

Conclusion

The overwhelming presence of medical mistakes forges a clinical attitude towards medical work, an attitude of inquiry rather than judgment. The error-ridden nature of medical work is the basis of much medical talk about what is happening in the care of patients, what their illnesses are, how they can best be treated, whether they can be or have been adequately treated. The special tension of medical work is between the "no man's land" of exchanging information on medical

problems, referring patients for treatment, consulting on difficult medical issues, and exposing yourself, for example exposing the weaknesses of your own thinking and your own work while doing so. It is equalled by the tension of discovering the deficiencies in the care and knowledge and skill of those physicians with whom you work and are associated and the tension of discovering your own errors.

Talk is very revealing, for it always signals something about the knowledge and ignorance of the respective speakers. The neutrality of medical talk, the absence of judgment which is implicit in much medical talk, is a necessity of the communicative act itself. First, it preserves the possibilities of discourse about the care of patients, not only at a particular moment in time, but also through time. Second, it facilitates establishing the possibility of appropriate care of particular patients. Talk is, too, a necessity of the complexity of the work and of the impossibility of either always having the knowledge required or your own conduct under adequate control. There is always more to a medical error than its mere presence. Even a gross error does not automatically tell its tale. A sponge left precipitously in an abdominal cavity, while it requires and initiates inquiry, does not necessarily suggest negligence.

Procedures are in use to count sponges just because they may be lost in the carnage of an open and bleeding abdomen.

What I have called an attitude of inquiry rather than judgment is not only a learned disposition. It is an objectification and intellectualization of medical experience which is sustained in everyday exchanges. Furthermore, it is an intellectualization recapitulated in the interior of the self as a dialogue between the acting and the reflecting self.

Patients need not and should not defer judgment on their care or the care of members of their families. Their aim is or "ought" to be preserving the possibilities of the best care they can acquire. The complexity of clinical work, the commonness of mistakes in the work, the impossibility of achieving a correct understanding all at once, and, of course, the difficulty of adequately articulating and interpreting a set of symptoms, require vigilance. It is not passive involvement, but studied inquiry and education which are necessary. Further, while physicians of course care about your illnesses and mine, they cannot care in the ways we care, for our illnesses are our own, while, from a clinical point of view, our illnesses are among the countless others. The courts can and do confirm the inherent rights of patients as persons in their contractual involvements with physicians.

But they cannot assure proper care. They enter only after some error has come to light as an instance of irreparable damage, very late indeed. The courts, in any event, are another arena of human conduct. They address not all aspects of the diagnostic and therapeutic process but only those aspects which imply inappropriate care.

The inevitability of mistakes is not an idea about reality. It is an existential reality. It is not an excuse. It is an elementary truth of the deepest sort. The sorrow of this work is not only that mistakes are inevitable, but that they will go on happening in the tomorrows of medical work also. Physicians must act in the face of this great looming presence of mistakes. They must also dwell, it seems, in a strange linguistic silence of this realm of being mistaken, for there is no adequate language here to capture their work nor their conduct going awry with an even hand. Everyday discourse suggests a language of mistakes, and, yet, this language is infected with a veneer of blame, and the work as it occurs is not shaped by blame, but by the intention of an appropriate response which risks error.

The inner logic of medical mistakes in any case lies not in blame, but in time as it unfolds in action, in the press of circumstances and the immediacy of the tasks and the knowledge at hand. The inner logic of

mistakes suggests not a practice of good and evil, but a practice of better or worse, given the circumstances, or of equally grave and unfortunate alternatives, given the circumstances, or of equally efficacious possibilities which may or may not, in the "final" analysis, be correct. It is a practice of choice, conflict, and sorrow.

CHAPTER VI

THE UNITY OF MISTAKES

Bearings-Markings

Limits to an Analysis of Mistakes

A study of mistakes in the work process of medicine creates a particular angle of vision on the work. The topic exposes what is not often visible in the ongoing activity, the risk of action, but it exposes the risk of action retrospectively. However, medical work is not about mistakes; it is about the care of the sick. An intense focus on mistakes thus distorts a report of the work process. Such distortion is unavoidable.

My study has not described the routines of the work, the ongoing repetitive and inconsequential aspects of the care of the sick, the tedium of the work, the boredom of the work, the callowness and banality of the work. Almost nothing has been said about the masks of the work, or the black humor of its execution, or of the highly elaborated props and staging of the work. Furthermore, the work process has been described as if it were

a single process. It has been given an eidetic description which does not attend to the special and distinct differences in clinical work as it is shaped by different kinds of medical problems and different methods of treatment.

Nevertheless, the intense focus on mistakes has illuminated the character of clinical action. It may, in fact, be that mistakes expose the depth structure of action which is not available in the unfolding work process; that is, the mistakes expose what action is, but what action is may not be visible in the act of acting. The act, for example, acting as if, is not self-conscious. Rather, the act is conscious of the problem of the other. It intends toward the other. Mistakes in this sense may magnify the entire significance of action in the work process.

In the description of mistakes, too little has been said about what this work aims at. The focus of attention is human illness. It is the great abiding presence, and the eternal press of the work. Clinical work responds to something fundamental in the ontological inventory of human experience: it responds to pain. In this respect, the word care deserves attention. While it has many meanings--distress, uncertainty, worry, suffering, and grief--its expressive root is to call or cry out from the Old English caru, cearu. And although it has come to be thought of as something which can be

delivered, care is not something delivered; it is something accomplished in pain and in response to pain. The delivery of care is a transformation in meaning, one among many such transformations in contemporary American society. As such, it can best be understood in connection with another project, the project of a just community. It makes little sense otherwise. In other contexts, the delivery of care seems a callow and dehumanizing lingo.

There are many work processes, some of great plasticity and inventiveness, some of extreme repetitiveness. Any work process always includes certain activities which sustain the work and others which extend the work in new ways. The extensions imply the possibility of action (although not always in the precise sense used here). And there are many modes of action, not just one, but many projections into the unknown tomorrows of human conduct. There is also much inaction and the related phenomenon of inactivity.

In the examination of mistakes in the diagnostic and therapeutic process, little has been said of the errors in the utilization of the technologies of the work, although this problem was briefly referred to in Chapter II. Nothing has been said about the plethora of errors in the organization of the work, nor has much been said of the patient's position in an error-ridden activity. The work process unfolds as a series of approximations and attempts

to discover an appropriate response. And because it unfolds this way, it is error-ridden and requires continuous attention to reparation and to the patient's condition.

But a patient is more than a condition. A patient is a person experiencing the symptoms of a disorder, experiencing the details of a subjective experience, and, of course, at the same time, experiencing the degree of attention of attending physicians. If care is something which is constructed at every point in the evolution of an illness, then the evolving dialogue between a physician and a patient is quite central. This dialogue creates the condition of an understanding of appropriate care, the best care of this particular person. But the work cannot be guaranteed. It doesn't always achieve an effective resolution of medical problems under the best of circumstances, and it often doesn't do so under the worst of circumstances either. However, clinical work does achieve its aim much of the time.

The Limitations of an Interpretation

An interpretation is a limited statement of meaning, bound by its sources, the "texts" being interpreted, and by an interpretive language, a language which is expressive of some strata rather than all strata of experience. It is important here to delineate the limitations of both the data as "texts" and the interpretation as a hermeneutics.

The data are transcriptions of interviews, a series of discussions of medical mistakes outside of the arenas of the work. These discussions occurred off-stage. Thus, they do not express the character of clinical talk in the context of evolving illnesses in the theaters of the work. In fact, the depth of thinking which is characteristic of some of these "texts" is possible precisely because these physicians are off-stage. Such thinking externalized in discourse is not common in the arenas of the work; it would be an interference. These physicians have been freed of the press of the work as it is happening and of their many obligations to sustain it as it is happening. Some of their discourse would probably be inaccessible in the contexts of the work. These conversations also are remembrances, and, as such, subject both to the special hazards of human memory and the special feelings associated with remembering.

A more complete representation of mistakes in medical work would require a description of clinical talk in the theaters of the work. But the theaters of medicine, the many stages on which the work is performed, are not all there is. The stages of the work create yet another representation of the work process. The work process is both visible and invisible, both acted out and thought out.

The physicians interviewed were young and often affiliated with teaching programs. Their work context was academic. This has special significance because an academic context, a context in which clinical care is being taught and learned, is maximally open to inquiry, review, and thought. And these physicians were, in general, maximally open to inquiry, review, and thinking. If they were not in academic settings, they had just left them and carried with them much of the ethos of their recent involvements in training programs. This study does not describe a practitioner's thinking twenty years into the practice of medicine. Nor do I know how these physicians will think about mistakes twenty years into their own practices, or what they will do about mistakes in their own work or in the work of other physicians. In this respect, physicians who also write provide some insight into a medical practitioner's world, and they are important for just this reason.¹

Malpractice did not shape the thinking of the physicians interviewed primarily because they have not yet been involved in malpractice suits. It would be extremely useful to know how their involvement in malpractice litigation might affect their thinking about medical work and medical mistakes. I continued to

¹Nolen, The Making, Chapter 4; Nolen, Surgeon Under.

interview physicians for two years after these data were acquired, and, in the course of those two years, the problem of professional liability became very prominent. It was mentioned in the course of talk about mistakes, and, while the talk was not different, there was a little jesting about what I intended to do with my tape recorder. There was, then, an acknowledgment that this topic had grown more difficult.

These data describe not a single diagnostic and therapeutic process, but many different diagnostic and therapeutic processes, for these physicians do many different kinds of medical work. Yet while I have been throughout aware of these differences--there are many medicines and no single medicine--I have treated these statements as though they described a single kind of work. A more refined analysis would have portrayed the differences in the visibility of errors, the frequency of errors, the repercussions of errors in Internal Medicine and Surgery, or Anesthesiology and Psychiatry, or Pediatrics and Orthopedics. A more refined analysis would have portrayed the ways in which different kinds of medical problems shape the diagnostic and therapeutic process in different specializations of medicine.

My study has been abstract in many important senses. The competing interests of the care of many patients, the complex work contexts, the work hierarchies,

the technology and the organization of the technology, the insurance forms, the fees, the drugs--the very medical-industrial complex has been removed. In order to illuminate the time stream of medical work, the diagnostic and therapeutic process, much has been eclipsed. Even the patient has been only minimally portrayed. Mostly, I have worked with no more than the signs and symptoms of the patient.

I have tried to examine a way of thinking and acting in time. And the language of my interpretation has sometimes been intensely objectified. It is as if I have been portraying moving silhouettes, mere shadows, doctoring in the interior of the mind. This was a necessity of the importance of forcing attention to the data, what was being said, and of forcing attention to the ways in which language shapes human understanding. It was also important to make the data maximally readable.

Language is a screen through which we express and perceive meaning. It is a great simplifier. The syntax of language structures the portrait drawn of human experience. English is an adjectival language, and for this reason, a difficult language in which to portray action happening. This is, in part, why it becomes important to tell the story of action, the story form permitting the unfolding experience of action. English is also an abstract language and often far removed from the subtle details of human communication, the details which make it

possible to understand what is being said, the many ways in which the saying creates an understanding.²

But the English language is also often approached too simply. It is not a language. It is a mother tongue with many dialects, and the dialects require respect. They mark out more than regional boundaries between English speakers. They mark out the boundaries of inner experience as well. Idioms of a dialect require careful study for they suggest special nuances of experience. The idiomatic expression "going bad" is an example. Like a whole series of such expressions, "going wrong," "going sour," "going out," "going bad" expresses the dynamism of a disorder out of control.

Something more needs to be said here. Analytic languages, especially academic analytic languages, are often stripped of their emotional currents. Yet this stripping, intended to create clarity, produces a picture of the human world devoid of the feelings of the human world. Yet human feeling is central in understanding the nature of human experience. Some integration of analytic and sentient discourse was thus required in order to retrieve the emotional content of the experience of making mistakes.

²Harold Garfinkel, Studies in Ethnomethodology (Englewood Cliffs, N.J.: Prentice-Hall, 1967).

The use of these data as "texts" made it possible to address the problem of what was being said in a new way. The reader was exposed to the data in nearly raw form and asked to follow both the data and the interpretation. The data are, first, evidence of the authenticity of the inevitability of mistakes; second, they are the basis of an interpretation of the meaning of mistakes.

There have been two central problems in this interpretation. Most everyone assumes that medicine is a field of expertise and technical skill, an applied science or a profession. This is, of course, true in an abstract way. But medicine is also a practice, a praxis, and, in this latter sense, an activity of knowledge and ignorance, of expertise and error, of improvisation, artistry, failure, and ineptitude. Ideas of expertise, technical skill, competence, and technique are associated with a very narrow understanding of the meaning of making mistakes--medical mistakes are thought of as exceptional acts, rather than as "commonplace" acts in the work. The use of the data in nearly raw form made it possible for the reader to assimilate the ideas with which I have worked, for example, the idea of error-ridden activity, or the idea of action in time.

The other central problem in the interpretation is the common connotation of the meaning of a mistake: being at fault and being blameworthy. Many people assume

that the mistakes of the work must necessarily be someone's fault. And this idea engages with a discourse about blame and punishment. It is as if attention is constantly drawn to who's at fault, for surely someone must be. The presentation of the data made it possible to approach being at fault and of being blameworthy as problems with which the reader would be concerned, for these associations are culturally situated. They describe a Western, contemporary, American, ideational structure. I have throughout also tried to pay attention to another set of associations about mistakes: the associations of having regrets and being sorry.

The Being of Being Mistaken

Three pictures of mistakes in the diagnostic and therapeutic process have been constructed. These pictures describe the evolution of mistakes in action, the identification of mistakes, and the complex sorrow of mistakes. These pictures create different perspectives on acting in time.

Considerable ambiguity infects these descriptions of clinical work. The unfolding act is sometimes ambiguous because its trajectory is unknown. It intends and aims at an appropriate response and presses into the unknown in order to achieve it. Clinical action risks error and sediments out in time as appropriate or mistaken, as efficacious or harmful, as misguided or ineffective.

An act, or a sequence of clinical acts, re-examined in an inquiry after the fact, is also sometimes ambiguous. An inquiry uses the prism of the wrong result to peer back in time. And it reasons with knowledge of that result. But reasoning with knowledge of what is now knowable is very different from reasoning with knowledge of what was then known. A retrospective inquiry attempts to overcome the advantage of hindsight by retracing the evolution of clinical action in time: it asks, for example, what was known then, how was it known, and so forth. Sometimes the evolution of a mistake can be discerned with great clarity; sometimes it cannot. Yet an asymmetry in understanding remains, for a retrospective inquiry cannot capture the subject's own experience of acting in the stream of time. This asymmetry is inherent in the retrieval of all subjective experience.

A particularly ambiguous description of an "error" was introduced in the fourth chapter. Here, the suicide of a patient could not be decisively linked with a wrong act, although it could be linked with the difference between the intended and the achieved. The "text" permitted a brief exploration of the inner experience of an "error." The haunting, reawakening, uncertainty of a physician's conduct continues to intrude into the present and to engage his feelings.

Many clinical acts cannot be adequately encompassed by the language of mistakes, although the language

is nonetheless used. Many acts are both right and wrong, or neither right nor wrong. The chasm into which discourse stumbles, then, when, for example, the language of mistakes is used, suggests a denial of moments of randomness, unguidedness, and accidentalness which are also embedded in human conduct.

The sorrow of mistakes is sometimes very diffuse and sometimes very pointed. It is sometimes the sorrow of failed action and sometimes the sorrow of failed conduct. The sorrow of mistakes has been expressed as the too-lateness of human understanding as it lies along the continuum of time, and as a wish that it might have been different both then and now. Sorrow depicts the subject's experience which showed through in the "texts" being interpreted.

Taken together, these pictures of acting in time depict the extreme ambiguity of the position of a clinician who not only acts, but also acts mistakenly, and yet goes on acting in the face of the errors of the past and of the errors yet to come. The work process encompasses both the ambiguous and the clear, the mistaken and the negligent, just as it encompasses both the reparable and the irreparable and the corrected and the uncorrected. And this complex totality must be grasped in order to understand the conduct of physicians and the organization of medical work. I will return to this point late in this chapter.

In calling clinical work an error-ridden activity, I had in mind the many modifications in the work process as it occurs in time and as it sediments out, modifications which are adjustments in both thinking and acting. Clinical work cannot be accomplished all at once, as it were, but requires experimentation, reflection, and observation within the press, the urgency of illness in time. Sometimes it is irreparable in its practice.

Mistakes are part of the fabric of the evolution of clinical activity. They identify and name a phenomenon as wrong rather than right, as incorrect rather than correct. And the naming, the linguistic act, suggests that it might have been different if I, or you, or he, or she, had known then rather than now. The naming of an error, the linguistic act, also implies a story, although it does not always tell it, of action and activity becoming wrong. Becoming wrong is always a study of someone's, or of several persons' becoming wrong, the journey of action as it unfolds and takes on a definitive form of being wrong.

Becoming wrong, as it occurs in the now of knowing, is a distinct experience of being. It can be stated simply as "I was wrong," or "I was mistaken."

The being of being wrong, the nature of the was of being wrong, is a place in which any subject dwells in relation to the past. As a subject, as an I among many Is, my understanding of my mistake is different from

your understanding of my mistake. My understanding of my mistake, for example, is accessible to me in a way in which it is not accessible to you. Indeed, it is only as accessible to you as you and I allow and desire.

There is always an infinite regress to the story of my mistake but, at some point in time, for all practical purposes, the story has been told. Its telling resonates with your own experience of the trajectory of acting in time when the character of action has been identified and when it has been understood that we, you and I, are alike in the unfolding of our experience.

The being of being wrong, however, is not only about the I was of being mistaken, the "I know now what I did not know then," but about the horizon of my conduct, the I will of "being mistaken." Time winds on, and, in the tomorrows of human conduct, action again unfolds. Speaking again as a human subject, I, like you, will again be mistaken, if I act, and I will continue to dwell in the strange realm of the yesterdays, todays, and tomorrows of my knowledge of my acts.

I suspect, speaking as a human subject, that I can act again only if the blamelessness of my experience of acting can, at least, be acknowledged as a human possibility, for I can act tomorrow only in uncertain ways, and sometimes I will be correct and sometimes I will be incorrect. But if the blamelessness of my acts cannot be

imagined, there are few grounds from which I can project myself into the unknown. For I, like you, can be an object rather than subject of my acts, and I, like you, can make myself an object of blame, and I, like you, can condemn myself to blame. But blame creates a derangement in my understanding of my own existence in time. Blame does not arise on the plane of my acts; fear, hope, anger, and surprise do. Blame is always a response to action as it turns out, one of several human responses and perhaps the least efficacious.

The fault of an error, the experience of being not only mistaken, but also at fault in being mistaken, the fault of having done something wrong which could have been right and "should have been right," is, of course, a fault which belongs: it is my fault or yours; perhaps it is ours together. What is the nature of this fault?

The fault of an error is, of course, a human possibility, a searing possibility of human conduct in the world. It is also an idea about our conduct in our consciousness, an idea with presuppositions, an idea that we can, at all times (or even most of the time), take the right path--a curious idea, as though there is such a thing as the right path, as though we can recognize it, as though it were marked, as though there is such a thing as at all times or even most of the time. Rather, there is each time, the many times we make our way through time in action and activity.

The fault of our conduct is part of our freedom to make our way into the future, and we cannot have a faultless freedom with significant purposes. In relinquishing the possibility of being at fault as an intrinsic human possibility of your and my conduct, we relinquish significant purposes and often our very capacity to act in the world. The fault of an error requires discovery, then. There was indeed another way which is known now rather than then. It also requires an explanation, an answering, but the fault of an error of conduct also requires an understanding of the breadth of our freedom in the world of action. It is a mark of our freedom.

The Unity of Mistakes

Objectivity is not a characteristic which people have as a possession. It is a characteristic acquired, often in a long and difficult struggle. In phenomenological work, objectivity does not mean that one apprehends a phenomenon objectively as out-there. On the contrary, it means that one apprehends it subjectively; one acquires an understanding from the inside. It means that one has grasped, or at least aimed to grasp, the essential nature of the experience with which one is concerned. The reader has been sharing a phenomenological experience here, a descent into the ideational content of an everyday understanding of the meaning of mistakes and of mistakes in medical work.

Phenomenology does not assume that there is a phenomenon apart from a perception of the phenomenon, and since the phenomenon under study is in the human world, a phenomenology means relinquishing many preconceptions about the nature of the world of everyday life about which the phenomenologist, too, has ideas. "Objectivity" is a portrait from within the portrayed. It is expressive of the integrity of subjective experience. What makes a phenomenology "objective" is that it comes to stand apart from the world which everybody knows and describes the world as it has not yet become known. It is difficult to do phenomenological work. A phenomenology requires a complex use of the self, the phenomenologist's self, the self as a subject attempting to understand other subjects.

What has been explained here? A small inroad has been made into the description of the subjective experience of acting in time. A mistake is a sediment of action in time. It is also a term in use in language. As a term, it marks the wrong, the incorrect, and the unintended. It expresses and communicates a cognition, a knowing of what is now knowable. But it is more than a term in use in language, or even an idea or a concept in a meta-language; it is a transmission of focused meaning. The very word is a way of speaking, a manner of speaking, about the unspoken, the then of now, the past

out of which the present has emerged and stands at hand as wrong and unintended. A mistake, then, is a tongue of time. And what is unspoken in the naming of a mistake is the long story--sometimes only dimly remembered, sometimes indelibly recorded, sometimes seriously distorted--the then of now, the story of how it happened in the path of time.

"Everyone makes mistakes," everyone acts mistakenly in time as it unfolds. The range of mistaken acts is as wide as the realm of human activity, its scale as great or small as the possibilities of human conduct. Everyone lives in time as an unfolding current. Everyone knows what is unspoken. "If I knew then what I know now, if I had it to do all over again, I would have done something else." Everyone knows also the haunting possibility that "I should have known then" what I know now. The time structure of an honest error and a negligent act are identical; so also is their unintendedness. What is different about a negligent act is that the "should have known then" is not a should of the human heart, but an intersubjectively affirmable should. But the "should have known then" does not alter the sediment, the mistake. It marks it as an irretrievable fault of the then of someone's conduct in time and activity.

"Mistakes are inevitable"; mistaken acts are inevitable. Living in time is an unknowing becoming

known. What is unspoken about the inevitability of mistakes is the horizon of human conduct. It is a ponderous representation of the unfolding path of our conduct. Mistakes have happened, are happening, and will happen (although they are not willed).

How does anyone take his or her bearings with respect to the fault of a mistake? How wide or narrow is a human understanding of the geneology of fault? The fault of the other as an object, a you, is not like the fault of the other as a subject, an I like the I that I am. The fault of the other as an object is beyond my recognition of the intersubjectivity of our human experience, for the other as an object is unlike me. Ironically, the fault of the other as an object unlike me is like the fault of my own conduct which is unlike me. I am not a faultless subject, but a subject with the faults of my freedom. And to the extent that I cannot acknowledge my own faults as a subject, I can neither recognize myself in others nor experience myself in the fullness of my existence as a free person. I am, then, a stranger to myself as the other is a stranger to me. I am also a stranger to my freedom.

Blaming the other does not remove the fault of the other. It sets the other apart. But the apartness of the other is like the apartness of the self who has disowned his or her own faults. Blame masks the tragic

possibilities of human conduct. It also masks the existence of human freedom, for the "should have known then" cannot mean that one did know then. On the contrary, one did not know then. "Should" is a transformation in meaning of the experience of acting in time. It is an imposed, a reconstructed, meaning.

The Shape of Medical Work

Clinical work is shaped both by the tensions inherent in responding to uniquely situated and expressed medical problems and by the difficulty of discovering an appropriate therapy for them. No one has at hand the knowledge required. Rather, a method, which interprets both the stock of human knowledge on illness and the details of the phenomena being presented, is used, a method which moves through many layers of meaning and makes many inferences. Cues assert themselves, problems surface, a differential diagnosis develops, procedures and tests occur, a diagnosis takes shape; right or wrong, effective or ineffective, a therapeutic plan is acted on.

The diagnostic and therapeutic process is error-ridden, and considerable compulsiveness attends its use. Attention to detail is characteristic of physicians, an attention that is taught and learned, engrained as a discipline, then sometimes washed away in moments of urgency, or moments of irritation, or moments of tiredness

or indifference. Attention here and elsewhere intends the reduction of errors.

The ubiquitous and incessant talk which is characteristic of clinical work also attempts the reduction of errors. Clinical talk about patient care attempts to get to the point of understanding what is or has gone wrong. The issue at hand is the particularities of this or that complex of medical problems. Talk about patient care always includes the possibility that the problems of a patient have not yet been understood. Indeed, a delicate balance between disinterest and excessive interest permits examining the possibility that an illness is or rather has been misdiagnosed or mismanaged, just as it allows the possibility of continued conversation in the future.

There are many occasions and contexts of clinical talk, just as there are many subcultures of talk with their own special styles of discourse. Both the occasions and the contexts of clinical talk require careful attention. Furthermore, the surface and the depth structure of clinical talk must be understood.

Clinical talk does not attempt to bear down on someone's conduct as an act of interrogation (although it can). Nor does it intend to create a paralysis of conduct. It does intend to get to the point of understanding what went wrong. And the intention of

understanding is the integration of experience and its use in the future. Clinical talk is always situated along the horizon of the conduct of the work. And talk teaches and minds for the future. In fact, many clinical inquiries do not establish an error, but show the intrinsic limitations of the method as it is situated in a particular moment in the evolution of clinical medicine.

Talk also attempts a release of the inner tensions of the work.³ The inner experience of regret, remorse, uncertainty, or of anger and anguish is often taken up in a collective re-examination of a failure of the work and absorbed by the collective. In this way, both a release and an integration can be achieved (attempted).

Both Donald Light and Marcia Millman describe formal arenas of clinical talk. In Light's study, the successive reviews of a patient's suicide appeared to preserve the efficacy of the project while protecting the individual practitioner from blame.⁴ In Millman's study, however, such reviews appeared to "justify" and "trivialize the mismanagement" of a patient's care.⁵ In one of three Morbidity and Mortality Conferences she extensively

³See Renée Fox's discussions of the black humor of medicine in Experiment or in The Courage.

⁴Light.

⁵Millman, pp. 90-151.

describes, physicians laughed their way through the re-examination of the mismanagement of a patient's illness.⁶ This macabre report, this staged review, supported by props, enacted with a dramaturgical flare, which she noted, must be understood as a staged performance, an on-stage performance. It is a very precisely located occasion of talk in the evolution of the care of a patient, after the fact of a long and odd illness which included twenty-five hospitalizations and was "mismanaged."

At some level of human understanding this performance, as Millman reports it, is barely thinkable. But the acts which led to such an occasion are also sometimes barely thinkable. These reviews (not always this macabre, but often strange) illustrate the grotesque passage of the work. A reviewer presents the case (it passes, as it were, in review across another stage), in this instance the attending physician. Many actors report their impressions, at particular points in time, on the management of the patient's illness. The discussion winds on, with an air sometimes of a "who-done-it"; the "real" diagnosis has not yet been revealed. At last a pathologist reports his findings: having the last word, pathology here representing the more exact science of hindsight.

Behind these reviews, behind the many occasions of clinical talk about what is or has gone wrong, lie

⁶Ibid., pp. 109-19.

the work's traumas, the work's contradictions, the inner disharmonies and tensions of knowing the perilous potential of clinical conduct. Behind these reviews lie also the reciprocities of a clinical perspective: the "I know, too, and have known such moments," and "I know also that I will again know such moments." And behind these reviews lie the difficulties of finding a way to speak; for no language exists which is not infected with the invective of blame. And the practice of medicine exists beyond our categories of thought about good and evil and right and wrong.

In attempting to characterize the inner logic of the organization of an aspect of clinical work, I do not wish to suggest that physicians are free of duplicity. But if the aim of clinical talk were only the discovery of fault, or if the aim of clinical talk were establishing blame, clinical talk, conferences, and reviews would be organized differently. The shocks of the work, all too easily assumed to be routinely accepted--the cutting and cleansing, the bandaging of wounds, the bullet holes, the addictions, the chronic and unresolvable illnesses, the disabling and crippling accidents, the intensity of pain, the presence of death--are not beyond the notice of physicians: they are a source of their practice. The aim of discourse, then, is the intellectualization and integration of experience including the reduction of errors.

Clinical talk also intends the preservation of clinical medicine. What is being guarded in many moments of the work is not merely the particular interests of physicians, but their very capacity to act. And their capacity to act, and the quality of their response, is extremely important. Responding structures a clinical experience of meaning; and the capacity to act describes clinical work as a project of caring. Acting against the press of pain, and illness, acting in the presence of death, requires support.

Responding is a profoundly primitive human impulse. But the re of respond, like the re of react, or of review, or rethink--which is to say, the again of re-act (again act), or re-view (again view) or again examine, or again think--the turning back again is a choice, a journey into the future of being mistaken.

APPENDIX

An Excerpt of a "Mistaken" Diagnosis from The Psychopathology of Everyday Life.

For many years a reflex hammer and a tuning fork have been lying side by side on my writing table. One day I left in a hurry at the end of my consulting hour as I wanted to catch a particular suburban train; and in broad daylight I put the tuning fork in my coat pocket instead of the hammer. The weight of the object pulling down my pocket drew my attention to my mistake. Anyone who is not in the habit of giving consideration to such minor occurrences will doubtless explain and excuse the mistake by pointing to the haste of the moment. Nevertheless I preferred to ask myself the question why it actually was that I took the tuning fork instead of the hammer. My haste could just as well have been a motive for picking up the right object so as not to have to waste time in correcting my mistake.

"Who was the last person to take hold of the tuning fork?" was the question that sprang to my mind at that point. It was an imbecile child, whom I had been testing some days before for his attention to sensory impressions; and he had been so fascinated by the tuning fork that I had had some difficulty in tearing it away from him. Could the meaning be, then, that I was an imbecile? It certainly seemed so, for my first association to "hammer" was "Chamer" (Hebrew for "ass").

But why this abusive language? At this point we must look into the situation. I was hurrying to a consultation at a place on the Western railway line, to visit a patient who, according to the anamnesis I had received by letter, had fallen from a balcony some months earlier and had since then been unable to walk. The doctor who called me in wrote that he was nevertheless uncertain whether it was a case of spinal injury or of a traumatic neurosis--hysteria. That was what I was now to decide. It would therefore be advisable for me to be particularly wary in the

delicate task of making a differential diagnosis. As it is, my colleagues are of the opinion that I make a diagnosis of hysteria far too carelessly where graver things are in question. But so far this did not justify the abusive language. Why, of course! it now occurred to me that the little railway station was at the same place at which some years before I had seen a young man who had not been able to walk properly after an emotional experience. At the time I made a diagnosis of hysteria and I subsequently took the patient on for psychical treatment. It then turned out that though my diagnosis had not, it is true, been incorrect, it had not been correct either. A whole number of the patient's symptoms had been hysterical, and they rapidly disappeared in the course of treatment. But behind these a remnant now became visible which was inaccessible to my therapy; this remnant could only be accounted for by multiple sclerosis. It was easy for those who saw the patient after me to recognize the organic affection. I could hardly have behaved otherwise or formed a different judgment, yet the impression left was that a grave error had been made; the promise of a cure which I had given him could naturally not be kept.

The error of picking up the tuning fork instead of the hammer could thus be translated into words as follows: "You idiot! You ass! Pull yourself together this time, and see that you don't diagnose hysteria again where there's an incurable illness, as you did years ago with the poor man from that same place!" And fortunately for this little analysis, if not fortunately for my mood, the same man, suffering from severe spastic paralysis, had visited me during my consulting hour a few days before, and a day after the imbecile child.

It will be observed that this time it was the voice of self-criticism which was making itself heard in the bungled action. A bungled action is quite specially suitable for use in this way as a self-reproach: the present mistake seeks to represent the mistake that has been committed elsewhere.

SOURCE: Freud, Sigmund. The Psychopathology of Everyday Life. New York: W. W. Norton & Company, Inc., 1960, pp. 165-67.

SELECTED BIBLIOGRAPHY

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Books

- Ackerknecht, E. W. A Short History of Medicine. New York: The Ronald Press Co., 1955.
- Arendt, Hannah. Between Past and Future: Six Exercises in Political Thought. Cleveland: Meridian Books, 1963.
- _____. The Human Condition. Garden City, N.Y.: Doubleday Anchor Books, 1959.
- Arms, Suzanne. Immaculate Deception: A New Look at Women and Childbirth in America. New York: Bantam Books, 1977.
- Becker, Ernest. The Revolution in Psychiatry: The New Understanding of Man. New York: The Free Press, 1964.
- _____. The Birth and Death of Meaning: A Perspective on Psychiatry and Anthropology. New York: The Free Press, 1962.
- Becker, Howard S. Sociological Work: Method and Substance. Chicago: Aldine Publishing Company, 1970.
- Becker, Howard S.; Greer, Blanche; Hughes, Everett C.; and Strauss, Anselm L. Boys in White: Student Culture in Medical School. Chicago: University of Chicago Press, 1961.
- Bensman, Joseph, and Lilienfeld, Robert. Craft and Consciousness: Occupational Technique and the Development of World Images. New York: John Wiley & Sons, 1973.
- Berger, Peter L., ed. The Human Shape of Work: Studies in the Sociology of Occupations. New York: The Macmillan Company, 1964.

- Berger, Peter L., and Luckman, Thomas. The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Garden City, N.Y.: Anchor Books, 1967.
- Bergman, Ingmar. Four Screenplays of Ingmar Bergman. Translated from the Swedish by Lars Malmstrom and David Kushner. New York: A Clarion Book, 1960.
- Bernstein, Richard J. Praxis and Action: Contemporary Philosophies of Human Activity. Philadelphia: University of Pennsylvania Press, 1971.
- Bodenheimer, Thomas; Cummings, Steve; and Harding, Elizabeth, eds. Billions for Band-Aids. An Analysis of U.S. Health Care System and of Proposals for Its Reform. San Francisco: San Francisco Bay Area Chapter Medical Committee for Human Rights, 1972.
- Brenner, Charles, M.D. An Elementary Textbook of Psychoanalysis. Revised Edition. Garden City, N.J.: Anchor Books, 1974.
- Brissett, Dennis, and Edgley, Charles. Life as Theater: A Dramaturgical Sourcebook. Chicago: Aldine Publishing Company, 1975.
- Buber, Martin. I and Thou. Translated by Walter Kaufmann. New York: Charles Scribner's Sons, 1970.
- Carlson, Rick J. The End of Medicine. New York: John Wiley & Sons, 1975.
- Carr-Saunders, A. M., and Wilson, P. A. The Professions. Oxford: Clarendon Press, 1933.
- Castro, Fidel. "History Will Absolve Me." The Moncada Trial Defense Speech. London: Janathan Cape Ltd., 1969.
- Coser, Rose Laub. Life in the Ward. East Lansing, Mich.: Michigan State University Press, 1962.
- Crane, Diana. The Sanctity of Social Life: Physicians' Treatment of Critically Ill Patients. New York: Russell Sage Foundation, 1975.
- Curtis, James E., and Petras, John W., eds. The Sociology of Knowledge: A Reader. New York: Praeger Publishers, 1970.

Davis, Fred. Passage Through Crisis. New York: Bobbs-Merrill, 1963.

Dewey, John. The Quest for Certainty: A Study of the Relation of Knowledge and Action. New York: Capricorn Books, 1960.

Doing Better and Feeling Worse: Health in the United States. Daedalus, Vol. 106, No. 1 (Winter 1977).

Douglas, Jack D., ed. Understanding Everyday Life: Toward the Reconstruction of Sociological Knowledge. Chicago: Aldine Publishing Company, 1970.

Douglas, Jack D., and Johnson, John M., eds. Existential Sociology. Cambridge: Cambridge University Press, 1977.

Dreitzel, Hans Peter, ed. Recent Sociology. No. 2. New York: The Macmillan Company, 1970.

Dubos, René. Man Adapting. New Haven: Yale University Press, 1965.

_____. Mirage of Health: Utopias, Progress, and Biological Change. New York: Harper & Rowe Publishers, 1959.

Durkheim, Emile. The Division of Labor in Society. Translated by George Simpson. New York: The Free Press, 1964.

Ehrenreich, Barbara, and Ehrenreich, John. The American Health Empire: Power, Profits and Politics. New York: Vintage Books, 1971.

Elstein, Arthur S.; Shulman, Lee; and Sprafka, Sally, et al. Medical Problem Solving: An Analysis of Clinical Reasoning. Cambridge, Mass.: Harvard University Press, 1978.

Enelow, Allen J., M.D., and Swisher, Scott N., M.D. Interviewing and Patient Care. New York: Oxford University Press, 1972.

Etzioni, Amitai, ed. The Semi-Professions and Their Organization. New York: The Free Press, 1969.

Fabrega, Horacio, Jr. Disease and Social Behavior: An Interdisciplinary Perspective. Cambridge, Mass.: The M.I.T. Press, 1974.

- Feinstein, Alvan R., M.D. Clinical Judgment. Baltimore: The Williams & Wilkins Company, 1967.
- Filmore, Paul; Phillipson, Michael; Silverman, David; and Walsh, David. New Directions in Sociological Theory. Cambridge, Mass.: The M.I.T. Press, 1972.
- Fletcher, Joseph. Morals and Medicine. Boston: Beacon Press, 1960.
- Foucault, Michel. Madness and Civilization: A History of Insanity in the Age of Reason. Translated by Richard Howard. New York: Vintage Books, 1973.
- Fox, Renée. Experiment Perilous. Glencoe, Ill.: The Free Press, 1959.
- Fox, Renée, and Swazey, Judith P. The Courage to Fail: A Social View of Organ Transplants and Dialysis. Chicago: The University of Chicago Press, 1974.
- Frank, J. D. Persuasion and Healing. New York: Schocken Books, 1963.
- Freidson, Eliot. Doctoring Together: A Study of Professional Social Control. New York: Elsevier, 1975.
- _____. Professional Dominance: The Social Structure of Medical Care. New York: Atherton Press, Inc., 1970.
- _____. Profession of Medicine: A Study of the Sociology of Applied Knowledge. New York: Dodd, Mead & Co., 1970.
- _____, ed. The Professions and Their Prospects. Beverly Hills: Sage Publications, 1973.
- Freud, Sigmund. The Interpretation of Dreams. Translated and edited by James Strachey. New York: Avon Books, 1965.
- _____. The Psychopathology of Everyday Life. Translated by Alan Tyson. Edited with an Introduction by James Strachey. New York: W. W. Norton & Co., Inc., 1965.
- _____. A General Introduction to Psychoanalysis. Authorized English translation of the Revised Edition by Joan Riviere. New York: Pocket Books, 1952.

- Freund, Julien. The Sociology of Max Weber. Translated by Mary Ilford. New York: Vintage Books, 1969.
- Gadamer, Hans-Georg. Truth and Method. New York: The Seabury Press, 1975.
- Garfinkel, Harold. Studies in Ethnomethodology. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967.
- Geertz, Clifford. The Interpretation of Cultures: Selected Essays. New York: Basic Books Inc., Publishers, 1973.
- Goffman, Erving. Interaction Ritual, Essays on Face-to-Face Behavior. New York: Anchor Books, 1967.
- _____. Asylums: Essays on the Social Situation of Mental Patients and Other Inmates. Garden City, N.Y.: Anchor Books, 1961.
- _____. Encounters: Two Studies in the Sociology of Interaction. Indianapolis, Ind.: The Bobbs-Merrill Company, Inc., 1961.
- _____. The Presentation of Self in Everyday Life. Garden City, N.Y.: Doubleday Anchor Books, 1959.
- Hall, Edward T. Beyond Culture. Garden City, N.Y.: Anchor Books, 1976.
- _____. The Silent Language. Greenwich, Conn.: A Premier Book, 1959.
- Halmos, Paul. The Personal Service Society. New York: Schocken Books, 1970.
- Hamburger, Jean. The Power and the Frailty: The Future of Medicine and the Future of Man. With a Preface by André Cournand. Translated by Joachim Neugroschel. New York: Macmillan Publishing Co., 1973.
- Harris, Ralph. A Sacred Trust. Baltimore, Ma.: Penguin Books, Inc., 1969.
- Harrison, T. R.; Adams, R. D.; Bennett, I. L., Jr.; Resnik, W. H.; Thorn, G. W.; and Wintrobe, M. M., eds. Principles of Internal Medicine. Seventh Edition. New York: McGraw Hill, 1973.
- Hellman, Lillian. Pentimento: A Book of Portraits. Boston: Little, Brown and Company, 1973.

- Horkheimer, Max. The Eclipse of Reason. New York: Seabury Press, 1974.
- _____. Critical Theory: Selected Essays. Translated by Matthew J. O'Connell and others. New York: Herder and Herder, 1972.
- Horn, Joshua S. Away with All Pests: An English Surgeon in People's China: 1954-1969. New York: Modern Reader, 1969.
- Hughes, Everett C. The Sociological Eye: Selected Papers. Vol. II. Chicago: Aldine-Atherton, 1971.
- _____. Men and Their Work. New York: The Free Press, 1958.
- Isheiser, Gustav. Appearances and Realities. San Francisco: Jossey-Bass, Inc., Publishers, 1970.
- Illich, Ivan. Medical Nemesis: The Expropriation of Health. New York: Pantheon Books, 1976.
- _____. Tools for Conviviality. New York: Harper & Row, Publishers, 1973.
- Jaco, E. Gartley, ed. Patients, Physicians and Illness. 2d ed. New York: The Free Press, 1972.
- Johnson, Terence J. Professions and Power. London: The Macmillan Press, 1972.
- Katz, Jay, and Capron, Alexander Morgan. Catastrophic Diseases: Who Decides What? New York: Russell Sage Foundation, 1975.
- Kornhauser, William. Scientist in Industry. Berkley: University of California Press, 1962.
- Krause, Elliott A. The Sociology of Occupations. Boston: Little, Brown and Company, 1971.
- Lasagna, Louis, M.D. Life, Death and the Doctor. New York: Alfred A. Knopf, 1968.
- Lévi-Strauss, Claude. Structural Anthropology. Translated by Claire Jacobson and Brooke Grundfest Schoepf. Garden City, N.Y.: Anchor Books, 1967.
- Lewis, H. R., and Lewis, M. E. The Medical Offenders. New York: Simon and Schuster, 1970.

- Lynn, Kenneth S., ed. The Professions in America. Boston: Houghton Mifflin Company, 1965.
- MacBryde, C. M., and Blacklow, R. S., eds. Signs and Symptoms. 5th ed. Philadelphia: Lippincott, 1970.
- Macgraw, Richard M. Ferment in Medicine. Philadelphia: W. B. Saunders Company, 1966.
- Mannheim, Karl. Ideology and Utopia: An Introduction to the Sociology of Knowledge. Translated by Louis Wirth and Edward Shils. New York: Harcourt, Brace & World, Inc., 1936.
- Marshall, T. H. Sociology at the Crossroads. London: Heineman, 1969.
- Marx, Karl. Early Writings. Translated and Edited by J. B. Bottomore. New York: McGraw-Hill Book Company, 1964.
- Marx, Karl, and Engels, Friedrich. The German Ideology: Parts I & III. Edited with an introduction by R. Pascal. New York: International Publishers, 1947.
- May, Rollo. Love and Will. New York: Dell Publishing Co., Inc., 1974.
- May, Rollo; Angel, Ernest; and Ellenberger, Henri F., eds. Existence: A New Dimension in Psychiatry and Psychology. New York: Basic Books, Inc., 1958.
- Merleau-Ponty, Maurice. Humanism & Terror: An Essay on the Commonest Problem. Translated and with notes by John O'Neill. Boston: Beacon Press, 1969.
- Merton, Robert, et al., eds. The Student Physician: Introductory Studies in the Sociology of Medical Education. Cambridge: Harvard University Press, 1957.
- Millman, Marcia. The Unkindest Cut: Life in the Backrooms of Medicine. New York: William Morrow and Company, Inc., 1977.
- Moore, Wilbert E. The Professions: Roles and Rules. New York: Russell Sage Foundation, 1970.
- Morris, R. Crawford, L.L.B., and Moritz, Alan R., A.M., Sc.D., M.D. Doctor and Patient and the Law. 5th ed. St. Louis: The C. V. Mosby Co., 1971.

- Navarro, Vicente. Medicine Under Capitalism. New York: Prodist, 1976.
- _____. Health and Medical Care in the U.S.: A Critical Analysis. Farmingdale, N.Y.: Baywood Publishing Company, Inc., 1973.
- Nietzsche, Friedrich. Beyond Good and Evil. Basic Writings of Nietzsche. Translated and edited with commentaries by Walter Kaufmann. New York: The Modern Library, 1968.
- _____. On the Genealogy of Morals. Basic Writings of Nietzsche. Translated and edited with commentaries by Walter Kaufman. New York: The Modern Library, 1968.
- Nolen, William A., M.D. Surgeon Under the Knife. New York: Coward, McCann & Geoghegan, Inc., 1976.
- _____. The Making of a Surgeon. New York: Random House, 1968.
- O'Neill, John. Making Sense Together: An Introduction to Wild Sociology. New York: Harper Torchbooks, 1974.
- Parsons, Talcott. Essays in Social Theory. Revised ed. New York: The Free Press, 1956.
- _____. The Social System. New York: The Free Press, 1951.
- Pavalko, Ronald M., ed. Sociological Perspectives on Occupations. Itasca, Ill.: F. E. Peacock Publishers, Inc., 1972.
- Psathas, George. Phenomenological Sociology: Issues and Applications. New York: John Wiley & Sons, 1973.
- Roth, Julius A. Timetables. New York: Bobbs-Merrill Company, Inc., 1963.
- Sagal, Elliot L., and Reed, Barry C. The Law and Clinical Medicine. Philadelphia: J. B. Lippincott Company, 1970.
- Sartre, Jean-Paul. Being and Nothingness: A Phenomenological Essay on Ontology. Translated and with an Introduction by Hazel E. Barnes. New York: Washington Square Press, 1966.

- Schutz, Alfred. Collected Papers: Vols. I, II, and III.
The Hague: Martinus Nijhoff, 1962, 1964, 1966.
- Selzer, Richard. Mortal Lessons: Notes on the Art of Surgery. New York: Simon and Schuster, 1974.
- Shindell, Sidney, M.D., L.L.B. The Law in Medical Practice.
Pittsburgh: University of Pittsburgh Press, 1966.
- Sigerest, Henry E. A History of Medicine: Vol. II.
Early Greek, Hindu, and Persian Medicine. New
York: Oxford University Press, 1961.
- _____. On the History of Medicine. Edited and with
an introduction by Felix Martin-Ibanez, M.D.
Foreword by John F. Fulton, M.D. New York:
MD Publications, Inc., 1960.
- _____. On the Sociology of Medicine. Edited by
Milton I. Roemer, M.D. Foreword by James M.
Mackintosh, M.D. New York: MD Publications,
Inc., 1960.
- _____. Landmarks in the History of Hygiene. London:
Oxford University Press, 1956.
- _____. Civilization and Disease. Chicago: The Uni-
versity of Chicago Press, 1943.
- _____, M.D. Medicine and Human Welfare. New Haven:
Yale University Press, 1941.
- Stevens, Rosemary. American Medicine and the Public
Interest. New Haven: Yale University Press,
1971.
- Strauss, Erwin W., and Griffith, Richard M., eds. Phe-
nomenology of Will and Action. Pittsburgh, Penn.:
Duquesne University Press, 1967.
- Sudnow, David. Passing On, The Social Organization of
Dying. New Jersey: Prentice-Hall, 1967.
- Szasz, Thomas S., M.D. The Myth of Mental Illness:
Foundations of a Theory of Personal Conduct.
Rev. ed. New York: Perennial Library, Harper
& Row Publishers, 1974.
- Tawney, R. H. The Acquisitive Society. New York:
Harcourt, Brace & World, Inc., 1920.

- Terkel, Studs. Working: People Talk About What They Do and How They Feel About It. New York: Pantheon Books, 1972.
- Thass-Thienemann, Theodore. The Interpretation of Language. Vol. II. New York: Jason Aronson, Inc., 1973.
- _____. The Interpretation of Language. Vol. I. New York: Jason Aronson, Inc., 1968.
- Thomas, Lewis. The Lives of a Cell: Notes of a Biology Watcher. New York: Viking Press, 1974.
- Toulmin, Stephen. Human Understanding. Vol. I. Princeton, N.J.: Princeton University Press, 1972.
- _____. Foresight and Understanding: An Enquiry into the Aims of Science. New York: Harper Torchbooks, 1961.
- Truzzi, Marcell, ed. Verstehen: Subjective Understanding in the Social Sciences. Reading, Mass.: Addison-Wesley Publishing Co., 1974.
- Tumulty, Philip A., M.D. The Effective Clinician: His Methods of Approach to Diagnosis and Care. Philadelphia: W. B. Saunders Co., 1973.
- Visscher, Maurice B., M.D., ed. Humanistic Perspectives in Medical Ethics. Buffalo: Prometheus Books, 1972.
- Vollmer, Howard M., and Mills, Donald L. Professionalization. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966.
- Waitzkin, Howard, and Waterman, Barbara. The Exploitation of Illness in Capitalist Society. Indianapolis, Inc.: The Bobbs-Merrill Company, Inc., 1974.
- Weber, Max. The Theory of Social and Economic Organization. Translated by A. M. Henderson and Talcott Parsons. Edited and with an introduction by Talcott Parsons. New York: The Free Press, 1964.
- Weed, Lawrence L., M.D. Your Health Care and How To Manage It. Essex Junction, Vt.: Essex Publishing Company, Inc., 1975.

- Weed, Lawrence. Medical Records, Medical Education and Patient The Problem-Oriented Record as a Basic Tool. Cleveland: The Press of Case Western Reserve University, 1969.
- White, Robert W., ed. The Study of Lives: Essays on Personality in Honor of Henry A. Murray. New York: Atherton Press, 1966.
- Wittgenstein, Ludwig. On Certainty. Translated by Denis Paul and G. E. M. Anscombe. Edited by G. E. M. Anscombe and G. H. von Wright. New York: Harper Torchbooks, 1969.

Articles

- Austin, J. L. "A Plea for Excuses." Essays in Philosophical Psychology. Edited by Donald Gustafson. Garden City, N.Y.: Anchor Books, 1964.
- Basso, Keith H. "To Give Up on Words: Silence in Western Apache Culture." Southwestern Journal of Anthropology (Autumn 1970): 213-30.
- Becker, Howard S. "The Nature of a Profession." Sociological Work: Method and Substance. Chicago: Aldine Publishing Co., 1970.
- Berger, Peter L. "Some General Observations on the Problem of Work." The Human Shape of Work: Studies in the Sociology of Occupations. New York: The Macmillan Company, 1964.
- Berger, Peter L., and Pullberg, Stanley. "Reification and the Sociological Critique of Consciousness." History and Theory 4 (1965).
- Berger, Peter L., and Pullberg, Stanley. "The Concept of Reification." New Left Review 35 (1959): 50-71.
- Bloom, Victor, M.D. "An Analysis of Suicide at a Training Center." American Journal of Psychiatry 123 (February 1967): 918-25.
- Blum, Alan F., and McHugh, Peter. "The Social Ascription of Motives." American Sociological Review 36 (February 1971): 98-109.

- Bucher, Rue, and Stelling, Joan. "Characteristics of Professional Organizations." Journal of Health and Social Behavior 10 (March 1969): 3-15.
- Bucher, Rue, and Strauss, Anselm. "Professions in Process." American Journal of Sociology 66 (January 1961): 325-34.
- Burkett, Gary, and Knafl, Kathleen. "Judgment and Decision-Making in a Medical Specialty." Sociology of Work and Occupations 1 (February 1974): 82-109.
- Callahan, Daniel. "Health & Society: Some Ethical Considerations." Daedalus 106 (Winter 1977): 23-33.
- Cassell, Eric J. "Disease as a Way of Life." Commentary 55 (February 1973): 80-82.
- Cogan, Morris L. "Toward a Definition of Profession." Harvard Educational Review 23 (Winter 1953): 33-50.
- Currie, Ian D. "The Sapir-Whorf Hypothesis." The Sociology of Knowledge: A Reader. Edited by James E. Curtis and John W. Petras. New York: Praeger Publishers, 1970.
- Davis, Fred. "Uncertainty in Medical Prognosis." The American Journal of Sociology 66 (July 1960): 41-47.
- _____. "The Cab Driver and His Fare: Facets of a Fleeting Relationship." The American Sociological Review 65 (September 1959): 158-65.
- Dibble, Vernon K. "What Is and What Ought To Be: A Comparison of Certain Characteristics of the Ideology and Legal Styles of Thought." American Journal of Sociology 79 (November 1973): 511-49.
- _____. "Occupations as Ideologies." The Sociology of Knowledge: A Reader. Edited by James E. Curtis and John W. Petras. New York: Praeger Publishers, 1970.
- Elstein, Arthur S. "Clinical Judgment: Psychological Research and Medical Practice." Science 194 (November 1976): 696-700.

- Emerson, Joan. "Behavior in Private Places: Sustaining Definitions of Reality in Gynecological Examinations." Recent Sociology. No. 2. Edited by Hans Peter Dreitzel. New York: The Macmillan Company, 1970.
- Engle, George L. "Pain." Signs and Symptoms. Edited by C. M. MacBryde and R. S. Blacklow. 5th ed. Philadelphia: Lippincott, 1970.
- _____. "A Unified Concept of Health and Disease." Life and Disease: New Perspectives in Biology and Medicine. Edited by Dwight J. Ingle. New York: Basic Books, Inc., Publishers, 1963.
- Engel, Gloria V., and Hall, Richard H. "The Growing Industrialization of the Professions." Professions and Their Prospects. Edited by Eliot Freidson. Beverly Hills: Sage Publications, 1973.
- Engle, Ralph L., Jr., M.D. "Medical Diagnosis: Present, Past, and Future: III. Diagnosis in the Future, Including a Critique on the Use of Electric Computers as Diagnostic Aids to the Physician." Archives of Internal Medicine (October 1963): 126-39.
- _____. "Medical Diagnosis: Present, Past, and Future: II. Philosophical Foundations and Historical Development of Our Concepts of Health, Disease, and Diagnosis." Archives of Internal Medicine 112 (October 1963): 116-25.
- Engle, Ralph L., Jr., M.D., and Davis, B. J., M.D. "Medical Diagnosis: Present, Past, and Future: I. Present Concepts of the Meaning and Limitations of Medical Diagnosis." Archives of Internal Medicine 112 (October 1963): 108-15.
- Foote, Nelson. "The Professionalization of Labor in Detroit." American Sociological Review 58 (January 1953): 371-80.
- Fox, Renée C. "The Medicalization and Demedicalization of American Society." Daedalus 106 (Winter 1977): 9-22.
- _____. "Training for Uncertainty." The Student Physician: Introductory Studies in the Sociology of Medical Education. Edited by Robert K. Merton, et al. Cambridge: Harvard University Press, 1957.

- Freidson, Eliot. "Professions and the Occupations Principle." The Professions and Their Prospects. Beverly Hills: Sage Publications, 1973.
- _____. "Client Control and Medical Practice." American Journal of Sociology 65 (January 1960): 374-82.
- Freidson, Eliot, and Rhea, Buford. "Knowledge and Judgment in Professional Evaluation." Administrative Science Quarterly 10 (June 1965): 107-24.
- Freidson, Eliot, and Rhea, Buford. "Processes of Control in a Company of Equals." Social Problems 2 (Fall 1963): 119-31.
- Goffman, Erving. "The Medical Model and Mental Hospitalization: Some Notes on the Vicissitudes of the Tinkering Trades." Asylums: Essays on the Social Situation of Mental Patients and Other Inmates. Garden City, N.Y.: Anchor Books, 1961.
- Goode, William J. "Encroachment, Charlatanism, and the Emerging Professions: Psychology, Sociology and Medicine." American Sociological Review (December 1960): 902-14.
- Halmos, Paul. "Sociology and the Personal Service Professions." The Professions and Their Prospects. Edited by Eliot Freidson. Beverly Hills: Sage Publications, 1973.
- Hart, H. L. A. "The Ascription of Responsibility and Rights." Essays on Logic and Language. Edited with an introduction by Antony Flew. New York: Philosophical Library, Inc., 1951.
- Henslin, James M. "Trust and the Cab Driver." Sociology of Everyday Life. Edited by Marcello Truzzi. Englewood Cliffs, N.J.: Prentice Hall, Inc., 1968.
- Hewitt, John P., and Stokes, Randall. "Disclaimers." American Sociological Review 40 (February 1975): 1-11.
- Hughes, Everett C. "The Professions in Society." The Sociological Eye: Selected Papers. Vol. II. Chicago: Aldine-Atherton, 1971.
- _____. "Professions." The Professions in America. Edited by Kenneth S. Lynn and the editors of Daedalus. Boston: Houghton Mifflin Company, 1965.

- Hughes, Everett C. "Psychology, Science and/or Profession." Men and Their Work. New York: The Free Press, 1959.
- _____. "Mistakes in Work." Men and Their Work. New York: The Free Press, 1956.
- Leake, Chauncey D. "The Humanistic Tradition in the Health Professions." Humanistic Perspectives in Medical Ethics. Edited by Maurice B. Visscher, M.D. Buffalo: Prometheus Books, 1972.
- _____. "Theories of Ethics and Medical Practice." Journal of the A.M.A. 208 (May 1969): 842-47.
- Lévi-Strauss, Claude. "The Sorcerer and His Magic." Structural Anthropology. Translated by Claire Jacobson and Brooke Grundfest Schoepf. Garden City, N.Y.: Anchor Books, 1967.
- Light, Donald W., Jr. "Psychiatry and Suicide: The Management of a Mistake." American Journal of Sociology 77 (March 1972): 821-38.
- Lindesmith, Alfred, and Strauss, Anselm. "A Sociological Conception of Motives." Life as Theater: A Dramaturgical Sourcebook. Edited by Dennis Brissett and Charles Ergley. Chicago: Aldine Publishing Company, 1975.
- Marshall, T. H. "The Recent History of Professionalism in Relation to Social Structure and Social Policy." Sociology at the Crossroads. London: Heinemann, 1969.
- Martin, Michael. "Understanding and Participant Observation in Cultural and Social Anthropology." Verstehen: Subjective Understanding in the Social Sciences. Edited by Marcello Truzzi. Reading, Mass.: Addison-Wesley Publishing Co., 1975.
- May, Rollo. "Contributions of Existential Psychotherapy." Existence: A New Dimension in Psychiatry and Psychology. Edited by Rollo May, Ernest Angel, and Henri F. Ellenberger. New York: Basic Books, Inc., 1958.

- Merton, Robert K. "Some Preliminaries to a Sociology of Medical Education." The Student Physician: Introductory Studies in the Sociology of Medical Education. Edited by Robert K. Merton, et al. Cambridge: Harvard University Press, 1957.
- Natanson, Maurice. "Man as an Actor." Phenomenology of Will and Action. Edited by Erwin W. Strauss and Richard M. Griffith. Pittsburgh, Pa.: Duquesne University Press, 1967.
- Parsons, Talcott. "Definitions of Health and Illness in the Light of American Values." Patients, Physicians and Illness. Edited by E. Gartly Jaco. 2d ed. New York: The Free Press, 1972.
- _____. "Professions." International Encyclopedia of the Social Sciences. Vol. 12. Edited by David L. Sills. New York: The Free Press & Macmillan, 1968.
- _____. "The Professions and Social Structure." Essays in Social Theory. Rev. ed. New York: The Free Press, 1956.
- _____. "Illness and the Role of the Physician: A Sociological Perspective." Personality in Nature and Society. Edited by Clyde Kluckhohn and Henry A. Murray. New York: A. Knoph, 1953.
- Powles, John. "On the Limitations of Modern Medicine." Science, Medicine and Man 1 (April 1973): 1-30.
- Reiser, Stanley Joel, M.D. "Therapeutic Choice and Moral Doubt in a Technological Age." Daedalus 106 (Winter 1977): 47-56.
- Romanell, Patrick. "Medical Ethics in Philosophical Perspective." Human Perspectives in Medical Ethics. Edited by Maurice B. Visscher, M.D. Buffalo, N.Y.: Prometheus Books, 1972.
- Roth, Julius. "Some Contingencies of the Moral Evaluation and Control of Clientele: The Case of the Hopeful Emergency Service." American Journal of Sociology 77 (March 1972): 839-56.
- Rubsamen, D. S., M.D. L.L.B. "The Evolution of Medical Malpractice Litigation in the United States." Canadian Medical Association Journal 113 (August 1975): 334-41.

- Scheff, Thomas J. "Decision Rules, Types of Error and Their Consequences." Behavioral Science 8 (April 1963): 97-107.
- Scott, Marvin B., and Lyman, Stanford. "Accounts." Life as Theater: A Dramaturgical Sourcebook. Edited by Dennis Brissett and Charles Edgley. Chicago: Aldine Publishing Company, 1975.
- Stelling, Joan, and Bucher, Rue. "Vocabularies of Realism in Professional Socialization." Social Science and Medicine 7 (September 1973): 661-75.
- Szasz, Thomas S., M.D., and Hollender, Marc H., M.D. "A Contribution to the Philosophy of Medicine." Archives of Internal Medicine 97 (June 1956): 585-92.
- Weed, Lawrence L. "Medical Records that Guide and Teach." New England Journal of Medicine 278 (March 14, 1967): 593-600 (March 21, 1968): 652-57.
- Wilensky, Harold L. "The Professionalization of Everyone?" American Journal of Sociology 70 (September 1964): 137-58.
- Wolff, Kurt H. "The Sociology of Knowledge and Sociological Theory." Symposium on Sociological Theory. Edited by Llewellyn Gross. Evanston, Ill.: Row, Peterson and Co., 1959.

Unpublished Materials

- Elstein, Arthur S. "Human Factors in Clinical Judgment." Paper presented at the Fifth Transdisciplinary Symposium on Philosophy and Medicine USLA, April 14-16, 1977.
- Olmsted, Ann G. "The Professional Socialization of Medical Students: Research Plan." September 30, 1969.
- Paget, Marianne A. A Brief Introduction to My Research Interests in Medicine. Presented to the Office of Medical Education Research and Development. October 24, 1974.
- Ways, Peter O., and Jones, Jack W. The Problem-Oriented Medical Record: A Self-Instructional Unit. East Lansing, Michigan: College of Human Medicine, 1974.

Films

The Hospital. Directed by Arthur Heller. United Artists,
December 1971.

M.A.S.H. Directed by Robert Altman. 20th Century Fox,
April 1970.

The Sorrow and the Pity. Directed by Marcel Ophuls.
Cinema V, March 1972.