Doctors are very powerful people. Properly used, their powers can lift the burden of sickness, relieve suffering, and do enormous good. Used wrongly, their power can do great harm. These truths are part of common knowledge, but most often the power of doctors is associated with their science and technology—with the tools that are employed in the care of the sick. Since doctors have been considered powerful during periods in history when we know that medicine's knowledge of the body and disease was largely nonsense and its therapies virtually useless, their power must reside not only in their technology but in themselves as well. Despite this obvious fact doctors are virtually never taught about their power. Indeed, many become uncomfortable at the word itself, which is a pity because the authority and influence that underlie that power is invested in the role of physicians whether they want it or not. Rather than shying away, it is important to learn where the power of doctors comes from, how to employ it and maintain its effectiveness, what are its dangers and restraints, and the responsibilities it entails.

In the present era we have come to act as though all doctors are equal before the mysteries of disease and in the halls of scientific medicine. In patient care, however, this is not true because kinds of knowledge are required that are not covered by the science of medicine and have not yet been subjected to systematic exploration. Make no mistake about my meaning: medicine would retreat into chaos were it not for science. And no doctor with any sense would even want to go back to simpler technology or lessened effectiveness. This book presumes, however, that scientific doctors who lack developed personal powers are inadequately trained. Another way of wording this is to say that, in addition to the tools placed at their disposal by science, doctors are themselves instruments of patient care who must be refined by knowledge and training to be maximally effective.

It is universally accepted that doctors' education must continue for their lifetime if they are to keep abreast of advances in medicine. It is less well known, but equally important, that a physician continually work at refining the instrument of medical care that is himself or herself, the personal power and effectiveness essential to the very best medical care.

For physicians, in the care of the sick, these personal powers are often called the art of medicine. The art of medicine is composed of abilities in four different but interrelated areas. The first is the ability to acquire and integrate both subjective and objective information to make decisions in the best interests of the patient. The second is the ability to utilize the relationship between doctor and patient for therapeutic ends. The third is employing the knowledge of how sick persons and doctors behave. Finally, the central skill on which all the others depend is effective communication—the subject of this book.

The reader may think that, after the emphasis on the personal power of doctors, the list of the abilities that make up the art of medicine is pretty tame. With increasing experience, however, it will become clear that while one end of the very long spectrum that makes up each of these abilities is anchored in the mundane and obvious, the other end extends to most arcane, and sometimes almost mysterious, aspects of the work of doctors. For example, the seemingly stuffy subject of information acquisition, evaluation, and decision making concerns a difficult but vital skill. Doctors take information about the symptoms and signs of illness, demographics, and the influence of personal characteristics and apply it to sick patients. For the treatment of any but the most trivial illness, however, it is obvious that patients must be considered as complex, changing, psychological, social, and physical beings who are different in different times. To understand them and their illnesses, objective data alone will not suffice, especially since decisions are meant to be in the best interests of the patient and what is in the best interests of one may be deleterious for another. Instead, subjective and value-laden information must enter the decision-making process in equal partnership with objective information. Such a partnership is extremely difficult to achieve, especially since most of us find that "hard" data seems always to win any competition with "soft" data. Yet we know it can be done, because there are doctors who seem able to account in their decision making for the disparate things that make up patients' existences and impinge on their care; such as their beliefs and fears, liver chemistries, family constellation, barium enema findings, hopes for the future, drug eccentricities, immediate needs, cardiac arrhythmias, the kinds of people they are, pain threshold, and the myriad other details of medicine.

It is in the category of subjective information that we begin to approach the borders of our knowledge. For example, students are commonly advised to use their "feelings." But less commonly are they shown precisely what is meant by feelings and how they are to be used. On one occasion a student and I went to the bedside of a man who had suffered so many complications of his diabetes that one could serve a rotating internship caring for him alone. In addition to his other troubles, the patient was swamped by hopelessness. As we left the room the student said, "I really felt hopeless in there." That feeling of hopelessness had been acquired from the patient—the student felt hopeless because the patient felt hopeless. The student was entirely unaware of the origin of his feeling of hopelessness. In fact, there were many things that could be done for the patient. In like manner we may feel anxious when our patient is anxious, angry when our patient is angry, and so on. These are the feelings that physicians are meant to use in the decision-making process. But it is obvious that, at least early in their careers, doctors are going to have difficulty deciding when the anger (or anxiety, sexual arousal, hopelessness, sadness, or any other feeling) is theirs and when it was acquired from their patients. To go a step further it seems reasonable to ask how people acquire feelings from others; how they are transmitted? Similarly, where does the information come from that allows one to walk from a room and report, "There was so much tension in the room, you could cut it with a knife." I do not mean to answer these questions, I merely raise them to point out how subtle the arts of medicine can become, even though in their simplest form they seem so obvious.

In the same manner the art of communicating with patients begins with the obvious fact of listening to the patient's words. But at the other end of a spectrum, which includes hearing not only what is said but what is unsaid, of being aware of nonverbal as well as verbal communication, is the use of the spoken language and nonverbal communication as therapeutic tools of enormous power. As with all these arts, learning begins with the simplest aspect of the skill. But no matter how adroit and sophisticated a doctor may become in the use of the spoken language, the basic techniques can never be abandoned or left to chance; they must constantly be honed.

One of the things I hope that you will learn from this book is that it is possible to explore these aspects of doctoring, just as it is possible to explore cardiac function. The arts of medicine have not been subjected to the intense systematic and disciplined study that has been

applied to human biology. But there is no reason, apart from custom and habit of mind, why such investigation should not be undertaken. Although the methodologies that must be employed are different from those that are so useful in medical science, research in this area can be fruitful and exciting, especially since so little has been done thus far. Sometimes one discovers things that have not previously been described, while on other occasions one comes to understand the reason why we do what we do. When I teach the material in this book to experienced practitioners, they frequently tell me that they already do many of the things that I describe, but they have never known why. It is their experience, as it will be yours, I believe, that knowing the reason something is done makes the skill more effective and more consistently under one's control.

The spoken language is the basic tool of doctor-patient communication, the more one knows about it, the more effective is the tool. A companion volume, Talking with Patients: The Theory of Doctor-Patient Communication, describes how the spoken language works in medicine: how words do their work and can have meanings and impacts at many different levels, affecting even the body itself; how the attentive listener can know not only what speakers mean but what kind of people they are by their word choice; how all normal speech is logical, and what that knowledge can do for the physician. Readers wishing to enhance their communication skills further will find this information valuable.

This volume is devoted to the actual process of talking with patients: the formal tasks required for the exchange of information between doctor and patient. In these chapters the speaker and listener are considered as an inseparable pair. Here the dyad is always "doctor and patient" (or, "patient and doctor"); there cannot be one without the other. The doctor is not a remote inanimate object talking to a flesh and blood patient. They are both real and exposed to one another—and often both are changed by their interaction. Consequently even when we physicians ask questions, the structure of the questions and their wording provides information about ourselves, our intent, our beliefs about patients and diseases, as well as eliciting such information from patients; "taking a history" is unavoidably and actually an exchange of information. This is why I place such stress on the form of questions and the choice of words. The principle that applies is simply stated: the spoken language is our most important diagnostic and therapeutic tool, and we must be as precise in its use as is a surgeon with a scalpel.

Another basic principle will be illustrated in these pages: the illness

the patient brings to the physician arises from the interaction between the biological entity that is the disease and the person of the patient, all occurring within a specific context. Here we come upon the true difference between medical science and clinical medicine. For medical science to achieve understanding of the biology of diseases, the disease must be separated from patients: it must be abstracted and generalized. For clinicians to be most effective, on the other hand, we must grasp both abstract pathophysiology as well as how that pathophysiology is modified within a particular sick person. These two kinds of knowledge are equal partners in clinical medicine. To the extent that either mastery of pathophysiology or knowledge about sick persons is slighted, the efficacy of the clinician is diminished.

Understanding that the manner in which an illness develops and presents itself to the patient—and then the doctor—results from the interaction of the particular person (in all the dimensions of that word) with the biological process of disease, aids in focusing the task of taking a history. Too often students are not taught what it is they are after when they take a history. But it makes sense that if one is about to spend an hour asking questions of someone, one should have a pretty good idea of the object of the pursuit. The usual answer, that history taking is done in order to make a diagnosis, is not adequate unless the meaning of "diagnosis" is spelled out. The usual meaning of diagnosis, the identification of a disease, is clearly inadequate to the clinicians task. For example, ulcerative colitis, pneumococcal pneumonia, adenocarcinoma of the bowel, myocardial infarction, are all disease diagnoses that are quite specific. But as much information as each one of these names provides, so much more information would be required about each patient with these diseases before a clinician could formulate a plan of action. What is the patient's gender and age, how long has the process gone on, has previous treatment been given, does the patient have a long-term trusted doctor or an equally enduring distrust of physicians, is the place of residence rural or urban, what other diseases are present, are a few among many factors that have a bearing on the immediate and long-term treatment decisions. Therefore the emphasis in these chapters goes beyond diagnosing disease. Adding the name of a specific disease should be a late step in diagnostic thinking. Here let me speak of my own practice. What I am always trying to do is to find out what the problem is: what has gone wrong in the patient, and why. As part of this I attempt to determine what I am going to be able to do about what has gone wrong. I think of this process as looking for the place to put the lever so that I can exert maximum force to make things better.

In going through this diagnostic process, I am not particularly concerned whether things are awry in the patient's body or the patient's person. If a patient has chest pain, I am interested in knowing whether the pain arises from the heart, the lungs, the chest wall, or by some other pathophysiologic mechanism; I am equally interested in whether the problem is the pain itself, the patient's loss of function because of impaired organ function, the patient's beliefs about the pain, the patient's perception of self (into which beliefs about the pain might fit), or all of the above. I also want to know why this particular problem arose at this time: is it progressive narrowing of the coronary arteries that finally became sufficiently stenosed to result in ischemia; has blood flow remained the same, but demand increased; did something impinge on a cervical nerve root to result in radiation of pain, perhaps because of heavy lifting or a change in sleeping arrangement; is something injuring the muscles of the chest wall; did the patient's father recently die of a heart attack; does the patient believe that this chest pain represents heart disease and so is avoiding any effort (in which case it is the patient's beliefs that are impairing function); does the patient have overwheming body fears into which this pain fits, although it is not particularly intense; and so on. All of this is another way of saying that in taking a history one should be attempting to discover the process by which a well person became a sick patient in order to devise another process whereby the patient can be returned to maximum possible function. Processes are a series of events that occur over time, whereas diseases are often dealt with as though they were timeless objects-statues in the park. Looking for disease diagnoses, however, has one enormous advantage over the search for the process of illness—diseases are easier to write down, a few words usually suffice. On the other hand, processes are difficult to describe, because a language for process still eludes us. This is why good clinicians usually use disease terms as a shorthand for the process taking place in or around the patient. But one should not be fooled, clinicians write in static terms but base their thinking and action on a dynamic conception of illness.

While taking a history, the doctor should be forming an hypothesis about what is the matter. Because the null hypothesis—the falsification of the hypothesis under consideration—is easier to "prove," since it requires only one solid piece of contradictory information, you should always attempt to "prove yourself wrong." As difficult as it may be, one wants to stop and search for the question that will reveal the weakness of one's ideas. A story is being constructed from the facts being elicited that will explain what has happened to the patient. We

want it to be an airtight story, so we have constantly to attack it—we would rather have it fail then us!

Searching out the clues, putting them together, and testing the premises can be very challenging. When I get on the scent of the process that has made the patient sick, I become single-minded in my pursuit. If I am in an examining room, I begin to pace back and forth as I ask my questions. Nature and the human condition reveal themselves in the operations of sickness, and I find this discovery endlessly exciting and consuming. But the person did not come to see me in order to pique my curiosity or excite my interest, the patient has come to me in order to get better. Therefore no matter how carefully the history has been taken, no matter how thorough the diagnostic evaluation, no matter how certain the diagnosis appears, there is one further question that we must always ask ourselves: "What if I am wrong?" The constant possibility of error, and thus of doing terrible harm to someone, is what distinguishes clinical medicine from most other occupations. Thus the diagnostic process cannot end when an hypothesis has been chosen that holds up under test. There must be a concrete plan in case of error. A few years ago I admitted a man to the hospital whom I believed had a pulmonary embolus. The resident disagreed, feeling that pneumonia was more likely. When I returned in the morning, I was dismayed to find that the patient had been treated for pneumonia with no consideration of the possibility of thromboembolism—a possibility that was subsequently confirmed. I was not upset because of the diagnostic error; that happens many times to everyone. The real error was in failing to protect the patient in case the diagnosis was wrong. The object of all diagnostic thought and effort is that the patient be better, not that the physician be proved correct.

When I have gathered sufficient information concerning both pathophysiology and patient, I may in fact be able to make a disease diagnosis. But "arteriosclerotic heart disease," "ischemic heart disease," or "coronary artery disease" (our terms for it have changed in recent years) may be the only disease name entertained. It is also conceivable that the only way diagnosis will enter this case is with the statement "This patient does not have ischemic heart disease." Such a statement might comfort the patient; it might even resolve the issue. On the other hand, the patient does not yet know what the matter is, only what the matter is not. It is frequently difficult to solve a problem when the only thing one knows is what it is not! Patients are often puzzled, rightly I believe, when they discover that the doctor is not trying to find out what is their problem but instead is attempting only

to make a diagnosis of disease. And they are also perplexed, when no disease is found, to be told that nothing is wrong or that the problem is emotional, as if when there is no disease, they are well!

My object here is not to belittle disease diagnosis. If I am sure the patient does suffer from ischemic heart disease, then I can bring to bear on this patient's problem all that has been learned by medical science throughout the years about this (reasonably) well-defined concept known as ischemic heart disease. It is useful to remember, however, that for clinicians, making a diagnosis provides a basis for treatment and prognostication and is not an end in itself. This is especially true today, when medicine has become a profession of intervention. For more than a hundred and fifty years since disease concepts, as we know them now, were first formulated, medicine has been primarilya profession of discovery. Medical science discovered things about the body and about diseases, and doctors discovered what disease a patient suffered from. However, until the 1930s there were very few effective treatments; consequently physicians had very little in the way of specific curing actions open to them, and surgery was the only real specialty of effective action. As we are all aware, enormous changes have taken place since then. But, as is so often the case in an era of transition, these changes have not yet altered many basic habits of thinking in medicine. As a result, though we now have fantastic tools for effective action, we are still talking and teaching as though the greatest achievement of a physician is to make a diagnosis of disease! Nonsense. Clinical medicine, with the aid of medical science, has become a profession of effective action. The best thing to do for sick persons is to make them better. To the extent that making a disease diagnosis (naming the disease) aids in that process, it is useful. Much more useful, I believe, is the knowledge of how the body works in health and sickness. When you know what has gone wrong, where function has become malfunction, then you know where to intervene on the patient's behalf.

It is important to realize that intervening on behalf of a patient implies that you knows what is best for that person. With blood pouring from a wound, it is not difficult to know that stopping the flow is in the patient's best interests. Similarly there is little dispute about what actions to take in curing acute pyelonephritis. But although acute situations, such as trauma or infectious diseases, are often used as the model for medical practice, in many situations in modern practice it is not so clear what is in the patient's behalf. Therefore in this book you will find an emphasis on discovering what the patient believes to be the problem, what are the patient's major

concerns, and what the patient believes would be a good solution to his or her problem.

In this discussion of taking a history, we have uncovered three basic reasons that suggest why it is so difficult to become a good diagnostician. The first is the usefulness of putting off naming the disease until the last possible moment. This seems counterintuitive; one would expect that naming the disease is what diagnosing is all about. The second reason is that instead of trying to prove yourself correct, you must attempt to defeat your hypotheses. This too goes against the grain. The third reason is that, after all that effort, you should not be concerned with being right but only with making the patient better. This last step, disengaging one's personal and professional pride, is perhaps the most difficult of all. I can remember well an occasion when I hoped the patient had carcinoma of the lung because that was the diagnosis I had made, and I was appalled at myself for feeling that way. It has happened more than once to me, and I am aware that it happens to other physicians—perhaps all. But as the years go on, the competitiveness can be tamed or turned to more productive uses. Until such personal traits can be subdued, diagnostic excellence remains to be achieved. Since controlling competitiveness and vanity seem to be tasks of a lifetime, the goals suggested here require constant effort. I believe that for physicians, at least, the game is worth the candle.

The examples that form the basis for the text were drawn from more than a thousand hours of tape recordings of naturally occurring doctor-patient interactions. Over eight hundred separate patients (not just visits) are represented. The recordings, the bulk of which were made in 1974 and 1975, come from private offices, hospital rounds, and to a far lesser degree from clinics. I recorded every interaction between myself and consenting patients in my office and the hospital for more than a year. My research staff then chose segments that seemed best to illustrate the points being made and whose sound quality (which was generally very good) would permit them to be used as recorded examples. They were then edited for clarity, with every attempt made not to alter the essence of the transaction by the process of editing. The method of transcription, chosen from among the many that were tried, approximates conversation as much as possible without being impossible to read. Except where indicated, the roughness and redundancy of the spoken language have not been smoothed—the "warts" have been left in place.

The examples, besides illustrating issues in communication, also involve actual cases and approaches to the care of patients. The

reader will become closely acquainted with how I practice medicine, what I believe the nature of the relationship between patient and physician should and should not be, and even how I treat certain illnesses. In addition the personal approaches of other physicians are exemplified.

When I first started listening to recordings of other physicians in their offices, I was pleased to hear that the same things, some of them quite strange, happened in their offices as in my own. Doctors who have listened to me with my patients have expressed the same sentiment. The practice of medicine is a very private matter. The most intimate aspects of a patient's life are revealed in physicians' offices, ranging from what kind of underwear is worn (or not) to what the person secretly thinks about other family members, as well as the overtly sexual matters that are usually associated with the word "intimate." At times the doctor is as exposed as the patient; for this reason I admire the doctors who put aside their reservations to wear my microphone. Because of this readers should understand that they are privy to information shared by few in the past. For the same reason and also because it has a single author, this book will be unavoidably idiosyncratic. Despite the drawbacks of this personal quality I hope you will find learning about how another doctor works as interesting as I do.

Because this approach is neither quantified nor treated statistically, it may cause discomfort to physicians who have been raised on numerical "data" and taught to avoid the "anectdotal." These readers should be aware, as the philosopher of science, Alfred North Whitehead, has made clear, that it is impossible for a methodology to discover or demonstrate something that does not exist within the system of ideas on which the methods are based. So it is with the personal and subjective qualities of patients, which are illustrated in this book and which play such an important part in medicine. The fundamental cannons of modern science do not recognize issues of subjectivity and values, so we are forced to use other ways, besides quantification and statistics, for demonstrating and teaching these aspects of patient care. In fact I believe that there is no other equally effective or realistic manner to approach the study and teaching of communication between doctor and patient in the clinical setting than the use of examples. Indeed, the recitation of cases—telling stories—has been a method of teaching aspects of clinical medicine that has survived through the ages because nothing else does the job as well. Recently scholars have begun to direct attention to the stories

about patients that are used in teaching because they carry a kind of information that can be transmitted in no other way.

It is appropriate that a book about how the spoken language is used to know what has gone wrong, and how to make it better, should start with a patient's story.