

## THE SUBJECTIVE IN CLINICAL JUDGMENT\*

## INTRODUCTION

Someone telephones the doctor that he has had increasing dull pain in the right side of his abdomen and back for several hours. While not exactly nauseated, he is repelled by the thought of food. He thinks the pain is the same as that of his wife when she had her gallbladder attack. The patient's complaint is clearly subjective and of the type that most often initiates the medical act. Yet, in its subjectivity, the report lies in a domain of medical practice that is least understood, or more precisely that is least systematized. The deficiencies of medical practice in regard to the subjective are highlighted by the increasing use of the problem-oriented medical record as a tool of medical education. In *Medical Records, Medical Education, and Patient Care: The Problem-Oriented Record as a Basic Tool*, Lawrence Weed [4] points out the equal importance of patients' subjective experience with objective, measurable facts of medicine. Further, Dr. Weed gives excellent examples of the kind of profiles of patients' personal and social lives that should be included in any complete medical record.

It has been my experience, however, that the problem-oriented medical record *as actually used* by the medical students and house officers at the New York Hospital (many of whom trained at other schools) is a sterile instrument that rarely meets the goals set for it precisely because it is deficient in its recording of the subjective. It has also been my experience that many younger (and too many older) physicians distrust the patient's report of his own symptoms and experience.

One more comment seems necessary to document the problem of the subjective in medical practice. The social medicine movement of earlier decades succeeded in establishing the importance of the patient's social and personal history as part of any complete medical record. And yet, a generation later that aspect of a patient's history is usually confined to personal habits (tobacco, alcohol, etc.), job history and some marital and family facts. The movement was successful in getting some aspects of the patient as subject into his own care but in a fashion often uselessly sparse because only the objective facts of the patient's existence are recorded.

THE SUBJECTIVE IN MEDICINE<sup>1</sup>

I believe the subjective involves four aspects: the sociologic person, the unconscious, experiencer, and assigner of understandings. The sociologic person includes the patient's past and present cultural set, his roles (attorney, mechanic, father, son, etc.), the unfolding story of his life and his important others. The subjective also includes the unconscious self, generally considered to be conflicts, repressed materials, drives and motivations – matters involitionally available to the conscious mind. Then there are the things experienced by the body or person of the patient. These may be objectively non-confirmable as in the instance of abdominal pain or objectively confirmable as in the instance of fever. In all instances, after the experience has passed it is non-confirmable, although subsequent objective evidence may allow it to be inferred. Lastly the subjective includes the meanings assigned by the patient to the experience and events he reports. This includes feelings evoked, beliefs about the nature of disease or illness as well as its causes, and extends to feelings, perceptions and beliefs about physicians and the world of medicine.

Obviously these four aspects of the subjective in medicine are not truly separate and cannot be made to remain separate except for purposes of explication, as I am doing here, and except for action as when the physician asks questions. Together they are the subject *in* medicine and the subject *of* medicine. They are, in other words, the patient.

Indeed it would be difficult, for example, to distinguish that part of the patient that assigns meanings from, say, the unconscious, or even from the perceiving experiencer. But I hope to show that these domains of the subjective can be kept apart, if only in action, well enough to serve the physician as he makes his diagnosis and treats his patient.

## THE SOCIOLOGIC PERSON

Two domains of the subjectivity of the patient have received the most attention in medicine: the sociologic person and the unconscious. There is ample evidence that the sociologic person is important in medicine. Diseases as disparate as tuberculosis and coronary heart disease are influenced in their occurrence by the life history of the person who has them. The malnourished black child from a large ghetto family has a much higher probability of acquiring tuberculosis than the white suburban child of a Bell Telephone supervisor, especially if there is an old person with tuberculosis in the crowded ghetto apartment. And the Bell Telephone supervisor has a greater

probability of dying of a myocardial infarction than the unemployed father of the black child, especially if the supervisor smokes cigarettes, is sedentary and has a family history of coronary heart disease. Modern medicine has made much of the contribution of sociological variables to disease production (although even Virchow was politically radicalized by his awareness of the contribution of social factors to typhus prevalence in Silesia). But while probabilities may be crucial to directing the diagnostic thinking of a physician, probabilities are often not as necessary in making a diagnosis as what the sick person *says*. More important, however, is that probabilities are objective parameters of the sociologic person, not subjective. The probabilistic person is seen as propelled towards his expected pattern of disease by facts of his existence which he (usually) did not create and over which he (often) has no control. In other words it is not that the sociologic person cannot be construed as a part of the subjective domain of medicine – part of the domain of the consciousness of the patient, but rather that its current use by medicine is primarily in the objective domain: measurable or at least objectively confirmable personal facts linked to confirmable facts about the lungs or the coronary arteries. Even Weed's use of the subjective in the profiles of patient examples is aimed towards useful objective information. This kind of information might help in the interpretation of other diagnostic information (in the sense that "divorced women with young children are often . . ." and so on). But such data, while undoubtedly helpful and even often vital in clinical decision making, are part of the subjective of the physician more than of the patient. Sociologic parameters do not tell us about *this* divorced woman, but rather about the class of divorced women. In a sense the use of these facts to speak for the person so much occupies the physician's head (not to say his or her preconceptions) that they prevent the physician from hearing what *this* divorced woman has to say.

#### THE UNCONSCIOUS

The other aspect of the subjective that has received widespread attention in medical practice is the unconscious. It is fair to say that one of Freud's major contributions to medical practice was to put the person as subject back into medicine. It is not necessary to detail the evidence to support the belief that there are unconscious determinants of symptoms and disease. The widespread acceptance of psychosomatic medicine is an acceptance of the influence of the mind on the body. Oddly, it is conceived of as the influence of the *unconscious* mind on the body: a mind not available to the volition of the

person and almost always conceived of as causing illness or symptoms. It is somewhat interesting, if only historically, that this view maintains the Cartesian duality but gives the (separate) mind some control over the body. This view of the duality is not nearly as meaningful or useful as the view of mind and body as a polar duality discussed by Guttentag [1]. Much as North and South cannot exist without each other and mutually influence each other, so also do mind and body. Of more immediate importance to our discussion is that the way the unconscious domain of the subjective is most often used in medical practice excludes the subject. That is to say, the patient is seen as not knowing what his unconscious contains or is doing. It is not under the patient's control and even the patient's words are an untrustworthy guide to its contents and its actions. We, the physicians, take it that we know better than the patient what are the unconscious determinants of his symptoms or his disease. While that may well be the case, it is an uncharitable view of the patient since that view bypasses the consciousness of the patient just as effectively as does the dominant view of the sociological person.

To view the unconscious as solely an inaccessible domain with only negative effects on the body is also, I believe, an uncharitable view of the unconscious. This is not the place (nor am I the person) to attempt a summary of the various views of unconscious process. Nonetheless, it seems important to point out that any such summary would have to include the understanding that the patient's unconscious is part of his subjective aspect that is able to communicate to another person. And, the unconscious and its communication are legitimate expressions of that person. Unconscious communications are not merely unsuspected leaks of inadequately repressed material but purposeful expressions. As the unconscious can speak, it can also be spoken to [2]. Finally, and of more direct importance to medicine, the unconscious appears able to communicate with the body. These phenomena which can be glimpsed in biofeedback techniques, hypnosis and certain yoga feats suggest a relationship of the subjective person to the body that is at present minimally understood.

Thus, just as the sociologic person is often used and viewed in medicine as an objective thing apart from the consciousness of the patients, so too is the unconscious used and viewed. For both sociologic person and unconscious, such understandings tend to diminish the potential importance to medicine of those aspects as factors of subjectivity.

## EXPERIENCER AND ASSIGNER OF UNDERSTANDINGS

I believe I am warranted, if only for methodological reasons, in making a distinction between the experiencer and the assigner of understandings within the subject. When the patient reported the dull pain in the right side of his abdomen and back, which he thought was similar to his wife's gallbladder attacks, he was actually reporting two distinctly different things: first, the *experience* of a body sensation; and, second, his *understandings* - the meaning attached to the body sensations. The assignment of understandings was on at least two levels; that the sensation was painful, and that it might be gallbladder disease. Considerable attention has been paid to the "subjectivity" of reports of pain, (for which, the way it is usually used, you may substitute the word "unreliability"). It has been shown that what patients say, or that their behavior in response to pain, is influenced by their ethnic group [5]. But that is merely another way of saying that the report of pain generally includes some kind of meaning to the patient. On the other hand, I do not know of studies which show that what some people call "pain," others label "itch" or "tickle." And that seems to be because what people call pain are sensations arising from a discrete group of nerve fibers called pain fibers. What is shown by differing reports of what is presumed to be the same kind of pain, is that valuation by the patient is part of the report. A seemingly different kind of the assignment of understanding is that which implies that the pain is from a gallbladder attack. Indeed, many patients when reporting their illnesses never tell of symptoms but simply use diagnostic terms. "First I got a cold and then it turned into bronchitis." Or, "last week I had a virus and then it started my colitis off."

The dominant voice of the patient with abdominal pain was the voice of the assigner of understandings (the pain is gallbladder disease) rather than the experiencer. And it is common to say that the patient's understanding might not be an accurate reflection of the meaning of his symptom. But meaning in whose terms? It must indeed be an accurate reflection of the meaning of the symptom to the patient (unless he is lying - the unusual case). Rather when we speak of the patient's understandings being inaccurate, we mean inaccurate by the doctor's standards. To dismiss the importance of the patient's understanding is to dismiss him as subject. After all, whatever the actual disease, its importance to the patient, even if it is fatal, will depend on how it meshes back into the subjective - the collectivity of his meanings. Thus, to deal adequately with the subject of the patient we must find within the patient's report of an experience two things: what is the matter in our terms,



and who is the patient. Since the patient's report of an experience is so heavily influenced by his understandings, careful questioning about the report of the experience offers the opportunity of finding out about *both* the disease and the patient.

To understand the process of the assignment of understanding it may be useful to view it in the same manner that has been used to relate a speaker to what he says [3]. A speaker, in relating a sentence, is saying something about something; the speaker is thus the *coupler* between *what* he says, and what he says it *about*. Thus when the patient tells us about a symptom, he does the same thing. He is the *coupler* between the experience and his verbal report of the experience. As we have already seen, to assign language to the report is to assign meaning, and to give meaning is to give his understanding of the experience.

But it is obvious that the report of experience is not the experience itself and that the memories and sensations that constituted the original experience remain available for reinterpretation. This is not to deny that perception is to some degree guided by the assignment of meaning, and that what steps the patient takes to broaden his perception of an event – for example, taking his temperature, feeling his abdomen, trying to remember what was eaten and so forth – are also guided by the assignment of understanding. But, if the raw sense data of an experience remain available for re-interpretation, then a new coupler – the questioning doctor – can be introduced between what is *said* (the assignment of meaning), and what it is said *about* (the raw sense data of the experience). To put it another way, the doctor can insert himself between the patient as experiencer and the patient as assigner of understandings. This may seem a complicated way of saying that to obtain the story of an illness, the doctor asks the patient questions, but I think more is being said. Since by eliciting answers the physician is forced to continue to use the patient as coupler (someone saying something about something), how does he disengage the patient as assigner of understandings? The classic answer is that the physician offers (at least to himself) an alternative hypothesis. That is to say, if the doctor believes the man with abdominal pain does have gallbladder disease, he asks questions about the pain, its relationship to food, previous episodes, associated symptoms, and so forth, until he has enough evidence to support his tentative diagnosis. Or if such evidence is not forthcoming, he rejects that diagnosis, proposes (to himself) another diagnosis, and repeats the procedure. In doing this, he is using the same reasoning that will guide his physical diagnosis, choice of diagnostic tests or other diagnostic aids. If he is a good physician, he will use strict standards for hypothesis testing, and if he is a poor physician, he will use loose standards.

The classic picture I have just provided of the physician as *history taker* is inadequate for several reasons. First, the physician will only find what he already knows. Each case may flesh out his conception of the disease as the patient describes somewhat different expressions of symptoms, but he cannot find that for which he has no diagnosis. Second, he will miss in the patient's symptoms the unfolding process that the disease represents within the patient. Thus he will be held to basically static or structural views of disease rather than as a process occurring through time. After all, the patient, as the container of the memory of succeeding events influenced by the abnormality within him, is virtually the only source of information about such a process (reinforced by the physician's observation of the change in physical findings and laboratory tests over time). Third, in that classical method of questioning, the doctor will emerge knowing little about the person who has the disease, the subject of his work. The idiosyncratic differences presented by different patients are seen by some physicians as *obstructions* to the diagnostic process rather than as an inherent part of the diagnosis. Finally, the doctor will not learn how the person of the patient interacts with basic pathologic mechanisms to produce the illness that is *this* person with *this* disease.

I would like to expand somewhat on those four points in a somewhat different vein. The classic understanding of the physician taking a history from the patient by extracting those, admittedly subjective, facts of the illness in order to make a diagnosis of disease is deficient because it excludes the person from the diagnosis. It is by now cliché in medicine to speak of the importance of the "person of the patient" to diagnosis and treatment. We do not label as cliché the saying "a coin lesion of the lung is a carcinoma unless proven otherwise." Why is the former a cliché but the latter not? Because "treat the patient as a person" is more a wish than agreed upon necessity and does not rest on established facts and procedures which lead to a defined course of action. It is more an ethical imperative than a medical directive. I would like to point out, however, that the clinical expression of the primary diseases of our time, arteriosclerotic heart disease, hypertension, diabetes, degenerative joint disease, and perhaps the malignancies depend on the individuating characteristics of the patient. Further, in marked contradistinction to the infectious diseases or the surgical diseases, the patient is the primary agent of his own treatment. That is to say, the patient must change his life style or behavior and comply with often complicated treatment requirements. This was brought home to me the other day as I tried to discuss with a Chinese-speaking patient the use of insulin, diet, and exercise for the treatment of diabetes through an inadequate interpreter.

Contrary to directives based on analogy to the infectious diseases, what is needed are directives for obtaining information about the patient as person now necessary because of the change in the disease pattern and the preponderance of chronic disease. This involves some understanding, in methodological terms, of how understandings are assigned by the patient to the sense data of experience - the meaning of experience. An experience is given meaning along four planes, or conversely in reporting sense data, the patient modifies it to conform to his understanding along four planes. They are: a) the space-time continuum - when and where things happened; b) the assignment of value in relationship to other values of the self - the process of adjectivization; c) the assignment of causality - where did the thing come from and what is it expected to do; and finally, d) the relationship of the experience to previous experiences of the self or of significant others.

When patients feel pain, or experience fever, diarrhea and abdominal pain, they interpret it to themselves along those four planes. I believe that virtually no alien body sensation can go uninterpreted although the degree and complexity of the interpretation may vary widely - as in dismissing a twinge or conversely building a case for cancer on the twinge. What I am describing is a process in which the original body sensations can lead to interpretation which is followed by a search for other data in memory or at the moment that aids in, confirms or disconfirms the interpretation. In this process some sense information will be dismissed as irrelevant, and other sense data perhaps will be elevated in importance within the patient. The assigner of understanding (within the patient) takes a history from the experiencer (within the patient) in much the same manner that the physician questions the patient.

The importance of examining the various dimensions along which the experience is given meaning is not only that by so doing the physician will obtain a more accurate picture of the original experience, but also a more accurate understanding of the subjectivity of the patient.

#### THE SPACE-TIME CONTINUUM

People seem to vary enormously in their ability to report details about the time and place (including place on the body) of experiences. In part, this appears to be idiosyncratic -- some remembering in great detail events of the distant past and some assigning everything before yesterday to the hazy past. It is my impression that the future may be handled by different individuals in a manner similar to their handling of the past. Time and place are often related . . . "It must have been 1975 because that was the summer we were in



New Hampshire." Time may be used as a mechanism of denial so that the events become difficult to recall because they cannot be located in time. In an opposite manner, "I remember it as though it were yesterday" becomes a means of maintaining the largeness of the event. Some handlings of time do not seem to be due to individual variation. Terribly threatening events that are remembered seem to remain, for most people, close in time - "that accident couldn't have been a year already." Similarly, a far future but bad prognosis is often handled as though the threat were immediate. In all of this time seems to be dealt with as though it were a spatial not a temporal dimension. The more important the event is considered the closer to the present self it is perceived. An understanding of this is important to the physician both in obtaining the history of an illness and in discussing prognosis, future therapies and so forth. A patient with a right-sided abdominal mass and fever was considered to have an ameboma because his symptoms started while on an Asian journey. In fact, however, the first episode of abdominal pain had started a month earlier in London but was attributed by the patient to carrying a heavy suitcase (to borrow from a later topic). Careful questioning that related times and places on the trip to body sensations produced the classic story of an appendiceal abscess. The original appendicitis, the relief of pain with its rupture, a few days of fever, then quiescence, followed by a return of fever, pain, and a perceived mass.

From what we know of the patient's subjective use of the time-space dimension in relating a story, we may be able to tailor our description of his future as we think it will happen. The basic point is that an objective outline of the future temporal relationships of a disease process will be necessarily reprocessed by the subjectivity of the patient in terms of his past use of that dimension. And that reprocessing influences the course of the patient's illness. For example, one patient with rheumatic heart disease, told that an operation will probably be required in two years, lives in constant and continuing dread of the surgery, behaving as though it is imminent. For another patient, saying that the medication he is taking now is to forestall an event that might occur many years in the future (as in the prevention of stroke or heart disease in hypertension) is the equivalent of removing any sense of the importance of the event and therefore of taking the medication. Thus, the objective time scale of a disease or a projected course of action provides *merely the language for time, only the patient's subjectivity can provide its meaning to the patient* and the meaning is what the patient will use to direct his actions and his fears. As with all the dimensions of the subjective, the person's subjective sense of time-space can change. Indeed, some changes in

time sense from childhood to old age appear developmental but events in one's life also can produce change in an individual manner. "What my illness taught me is that I have to value each day."

#### THE ASSIGNMENT OF VALUE

A second plane of subjectivity is the assignment of value to experience, or the process of adjectivization. Adjectives used by the inner assigner of understanding do not merely modify nouns such as for example pain, swelling, dizziness, or nausea, rather they give those experiences a value relative to other values of the self. A pain may be described as mild, or excruciating, uncomfortable or sore. One patient describes the pain as merely discomfort while for another patient the same kind of pain is unbearable. The assignment of value is both idiosyncratic and held in common. Certain kinds of pain, for example, pressure on a nerve root, will be described with the same kinds of adjectives by most people and this commonality allows adjectives to enter the diagnostic process much like an objective referent. On the other hand, the experience of the pain may be adjectivized differently. In this context, I can point out that physical behaviors such as writhing or grimacing, or conversely sitting stoically, add to the process of value assignment. For some people experiences are either black or white — things are terrible or simply fantastic. For others, things are more varied but the colors of their adjectives are always intense. Every experience, bad or good, is assigned a strong term. For others everything is subdued, nothing is fantastic, nothing is terrible. Pain may be awful but never terrible. Their weakened leg is not "useless" but "rather awkward." Their whole, near fatal illness was "a bore." The ethnic or cultural contribution to the assignment of value is well known.

The experiences of life enrich adjective use because these are values assigned relative to the other values of self. Since it is virtually impossible to speak without using adjectives, speakers quickly display their palette of value terms. On the other hand, many phrases or utterances do not include adjectives but their voice pitch, inflection and modulation emphasize or deemphasize the words, serving the same valuative function as the adjective in displaying the weight the speaker assigns to the words or thought. Consequently, as the physician obtains the story of an illness, he has available to him the scale of value assignment used by the patient. Consciously or not, those adjective usages and speech inflections (as well as clothes and body motion) allow him not only to understand the patient's value scale but also to revalue in his own terms the experience being reported. Similarly, since values are assigned

relative to other values of the self, the physician has the opportunity to find out how important a symptom or possible consequence of an illness may be. Mild diminution in vision may be well tolerated by a patient who does not like to read but the same loss would be "intolerable" to an avid reader.

The pattern of valuing of a person is a basic constituent of that person. When the patient complains that something is "terrible" it is useless for the physician to say that it is not terrible. For the patient the thing is "terrible", "useless", "hopeless", "sad", "wonderful", "amusing", "interesting", "dirty", "smelly", etc. It is part of their understanding of the thing. And as it is part of their understanding of the thing, it is part of them as a person for we are constituted by our meanings and our meanings include the values we assign. For the physician to argue with his patient in order to change the valuing of something from "terrible", for example, to "mild" is not to change a word but the person himself. When two people look at a plate of six raw oysters one sees six oysters revolting and the other six oysters delicious. Induced to eat those oysters, a person may change his valuing of oysters from "revolting" to "delicious" because he has changed in regard to oysters. (The six remains a constant, however, and that is the infinite advantage of the number in the realm of value.) The patterning of value may change with experience and with that change comes a new understanding of experience and an alteration in the person himself.

This is an appropriate place to point out again that dividing the assignment of understandings into four planes and even separating these dimensions from the sociologic person or the unconscious is a useful procedural device for a physician but does not correspond to the person as he lives and thinks.

The person is a functional unity and these planes and dimensions interpenetrate. The assignment of value is heavily influenced by the sociologic person, by the cause of a symptom as perceived by the person (pain that is heart disease versus pain from a sore muscle), as well as by repressed unconscious material and even by the inner relationship of person and body. That these levels are a nexus rather than discrete does not detract, however, from finding out how a person assigns value. On the contrary, understanding how a patient assigns value is an important clue not only to the complete entity but to how the interpenetration occurs.

#### THE ASSIGNMENT OF CAUSE

A third plane of subjectivity is the assignment of cause to the sense data of experience. No event can be experienced without a search for cause. I have

called this the dimension of causality, rather than cause and effect, because as every event is understood in part by understanding its cause, it is also given meaning by a conception of what will follow from the event, in other words, what it will subsequently cause. As is the case with space-time and the patterning of value, understanding the cause of one individual event does not occur apart from the person's whole pattern of causal understandings. To believe that his pneumonia was caused by a bacterium or virus, the patient must conceive of micro-organisms as existing and as being part of the general class of causes. If that understanding exists, it may be applied by the patient to a whole range of phenomena experienced in his body. Thus, alien body sensations may be subsumed under their cause as in "I had a virus last week." The physician also has such a causal nexus but his understandings may be different. To him virus may mean for example coxsackie, varicella-zoster, or mumps virus in their most specific technical sense as well as a more general and vague sense he shares with the patient of viruses as a cause. This distinction should allow me to make clearer what I mean by cause as part of subjectivity. The mumps virus is in the physician's understandings, an objective technical thing having among other specific characteristics physical shape, and also a distribution among the population or in the tissues of the host. By that general class of cause called "a virus" no such specific virus is meant, although specific viruses remain the objective referent on which the subjective is based. Rather, the subjective allows experience to be classified and put at rest, so to speak. Causes within subjectivity such as "viruses" always have antecedent causes such as "I was run down", which may have its own antecedent such as "I was under a lot of strain" and so forth. Viruses, in subjectivity, are not considered serious and so they usually are not seen as causing other serious events. The important thing for this discussion is to realize that when the patient says "I had a virus last week", he is saying very little about the sense data of the experience but a great deal about his causal nexus. For the information to be meaningful in classic diagnostic terms, the doctor must inquire of the experiencer within the patient for the specific symptoms to which the understanding "virus" was applied. To accept that the word "virus" means to the patient what it means to the doctor may lead to serious diagnostic errors, as may acceptance of the patient's words "bronchitis", "sinusitis", "stomach upset", or what have you. (Those words contain not only cause but also value assignment and time-space information since they are often more specifically inclusive than "virus".) However, not to listen to those words and to hear only the specific sought after symptoms is also to miss valuable information about the person. The causal relationships tell not

only how the patient views this illness, but how all illness may be perceived in terms of cause. The train of antecedents I suggested before may ultimately have led to some psychological conception of disease causality. In another person the ultimate nexus may be self-blame and sin. The first words of a patient of mine who was found to have a cancer of the breast were, "I knew it, I'm being punished." As it is useless to argue with people about their time-sense or valuations, it is equally useless to tell them that carcinoma of the breast is not punishment for illicit behavior. Rather, it is important to see the disease and its treatment within the causal network of the patient. And that network is revealed in the words of the patient when symptoms are related. The patient's conception of cause may have to be sought but to understand the subjectivity of the person (indeed the person himself) that search is as vital as the hunt for symptoms.

#### THE ASSOCIATION OF EXPERIENCE

The fourth plane helpful in assessing the subjectivity of the patient is that in which an experience is given meaning by its association with the experiences of significant others. The patient has noted pain and stiffness in his fingers. The cause is not readily apparent - that is, he cannot remember doing something to the hand that might cause pain. His knowledge of the word includes the conception of arthritis, but, at age forty, he seems too young. His mother had arthritis, and remembering her, he concludes he also has arthritis. The experience of the mother appears to be dealt with as though it is part of his experience. Many other examples could be given to show the influence on the patient's assignment of understanding that is exerted by the experience of family. That a young woman with an elevated cholesterol interprets every pain in her chest as angina may seem reasonable to a physician since many of her relatives died at an early age of coronary heart disease. We find it reasonable because we know the relationship between familial hypercholesterolemia and premature coronary heart disease. While the patient may use those objective facts to support her fears, the fear is part of her subjective experience of her parents. For example, another person with normal blood pressure and headache worries always about stroke and we are not surprised to find that a parent died of a stroke. The fear of the patient that he has the disease of the parent is believed by many to arise from unconscious determinants such as unresolved oedipal conflict, or unresolved guilt. Such interpretations may be correct, but whatever the reason, patients behave in a manner suggesting that the experience of significant others is part of their



own experience when they assign understanding to their own experience. Further, I am frequently surprised at how difficult it is to dislodge the patient's belief that he has the same problem as the parent even in the face of considerable counter-evidence. As the physical therapist was working successfully on her previously painful knees, the patient was sure the therapy would be useless because her mother had been crippled by arthritis. Two different lines of thought are suggested by these observations. The first is that subjectivity, the collectivity of meanings, extends beyond the physical confines of the person. Such a conclusion, which is neither new nor world shaking, achieves its importance in this context because when the doctor talks to the patient he generally acts as though he is facing a unique free standing individual. The physician does not see the continuity of the patient with the parents or siblings and neither may the patient. The continuity might not even be important if it did not so color the assignment of meaning to experience. But more striking, *that continuity tends to determine the experience*. It is in this area that the relationship of the unconscious domain of subjectivity to the assignment of understanding seems most obvious. The relationship to parents and other important people does tend to occupy the content of repressed or conflictual material making much of that content unavailable (except by inference), to even the most skilled questioner in the limited time available to the physician taking a history.

On the other hand much of the continuity of experience is available to the patient on reflection and so also is the patient's belief that the experience of significant others may determine his own experience even if he does not consciously know why that should be the case.

Where the physician obtains a family history he generally obtains facts of family disease, such as diabetes, as well as who is alive or dead and their ages and so forth. That the mother may have had diabetes influences the probability that the patient has diabetes but does not help in the diagnosis. On the other hand the fact that the mother had diabetes may have a great influence on how the patient interprets and reports increased urination or other symptoms of diabetes. It may have even more influence on how the patient behaves after he is told of his own diabetes. I should like to stress that this frequent clinical observation should not be confused with interpretations as to its psychological cause. The subjectivity of the patient influences not only the assignment and report of the meanings of an experience but the patient's interpretation of subsequent events in the illness. It cannot be overstated that the interpretations of the patient help determine the way the disease will be expressed in the patient and the patient's behavior towards the disease. Not

only the symptoms but also the totality of meanings, and actions that follow these meanings, are the illness.

Another line of thought follows from these observations. Patients do not only borrow from the experience of family but also from that of friends and associates as they give understanding to their own experience. Physicians are sometimes frustrated to discover that the misinformation of friends or even casual acquaintances is given more weight by the patient than the doctor's knowledge. Why should this be? It seems to me that uncertainty is the primary impetus for the assigner of understandings. Uncertainty is intolerable. Where the previous experience or knowledge of the person is inadequate to give meaning to the events, others must be consulted. The fact that opinion from the unknowledgeable is influential cannot be because they lack knowledge, but rather because they have knowledge. But what knowledge can that be? I suspect that the associates have two advantages over the physician in the service of certainty. First, they *know cause* in the same terms as the patient, and second, the patient thinks they *know him* because they are like him. That is to say that the experience of the associates is useful in giving meaning to the patient's experience because the associates and the patient are similar. As one's subjectivity includes parents and siblings, it also includes the surrounding group. In providing their experience or knowledge the members of the group do two things: they give understanding to the events of the patient and they assure that what is happening to the patient does not exclude him from the group. The myths of the group are part of the subjectivity of the patient. It is often the case that the physician is not part of the group and further that his knowledge is seen as threatening whereas the knowledge of the group offers security.

#### CONCLUSION

For the purpose of understanding I have divided the subjective of the patient into (1) the sociologic person, (2) the unconscious, and (3 and 4) the experiencer and the assigner of understandings. Further, I suggested that understanding is assigned along four planes — (a) timespace, (b) value, (c) causality and (d) association. I think that the physician who is trained to hear in those dimensions will learn how the patient represents his symptoms to himself and assigns them meaning. But further the physician will also learn how the patient will understand future events including what the doctor will tell him of his illness. The patient does not have the option nor an *interest* in seeing things objectively, at least as far as his illness is concerned, because processing the

sense data of experience *requires* the subjectivity of consciousness. Details of timing and causality and the adjectives that describe and modify the description of things to come only have meaning to the patient in his own spatio-temporal, causal and value terms. A month may have thirty days, but which is longer, thirty days of health or thirty days of pain caused by my own carelessness?

Two important things remain. First, my division of subjectivity is entirely artificial. Even for the purposes of understanding, these realms and planes should not be seen as parts of a whole. They are not like the muscles, nerves, blood vessels or bones of a limb—things in themselves. Perhaps at their most discrete they are reflecting facets of the whole, a way of beginning to know and appreciate the whole. To see them separately, to listen for them as the patient tells the story of his illness has methodological advantages since the person as subject is so hard to grasp as a whole. The pianist practices the concerto by working out parts of it until those segments are part of him sufficiently so that he can present the whole concerto to himself and then to others. I stress this because two previous attempts to get the subject into medicine represented by the unconscious and the sociologic person foundered because those aspects of person entered medicine as separate and unique entities. Nor have I said what in the person is the assigner of understandings. I do not know and I do not think it is necessary to know. It has been said that a spoken utterance is unique because it can mean literally anything. It achieves its meaning in the moment, the context of other utterances, situation and place and by who says it and who listens. Here also the meaning of events is relative. My divisions and planes of the subjective, as my colleague Dr. Skopek has pointed out, are merely schemes of relationships and in those terms are not totally artificial. But what in the person untangles the relationships is irrelevant.

Finally in this discussion, the interpreter of particulars of the subjective is the physician. Earlier I suggested the image of the physician interposing himself between the experiencer and the assigner of understandings. If he listens only to the sense data of the experiencer he will hear only about disease and will miss the person. If he hears only the subjectivity he will miss the disease. To listen to both without knowledge of disease and knowledge of persons is to miss everything. Have I assigned a role to the physician that I deny to the patient—the ability to keep separate his observation of what the patient says (including how he says it) from his own assignment of understanding or interpretation? Yes, I have done that because I believe that to make *use* of the subjective (rather than just to live it in the everyday) the physician must

learn to separate his observation from his interpretation. A difficult task but one that can be taught and learned. We teach the same art in physical diagnosis because we know what we want the student to see and provide a schema with which to evaluate it. Then we hope he will go on to see not only what he has been taught but also, for example, how the skin looks and feels; how the patient walks and how he moves – the endless details of the visible body. The analogy to physical diagnosis is important because there, as in the subjective, we do not expect very much in the beginning. It is our hope, as teachers, that having provided the reason and the tools to see the body, time and the student's ability will enlarge both his knowledge and his views. With the subjective we can only do the same. Provide the reason and the tools to listen and then hope that the physician will hear the person much as the pianist first reads the music and practices individual parts of the concerto. The art of physical diagnosis, then laboratory diagnosis and even clinical thought itself has evolved over the years in a reciprocating relationship to knowledge of disease. The place of the subjective in clinical judgment has rested on intuition for too many centuries. But now it is emerging in response to the demand for a medicine of persons rather than a medicine of disease – a whole medicine, not merely a medicine of the body.

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#### NOTES

\* This work was supported in part by a grant from the Henry L. Blum Research Fund and the Robert Wood Johnson Foundation. With the assistance of Nancy McKenzie.

<sup>1</sup> This essay deals primarily with the subjective of the patient, not the physician. It is concerned with the subjective information that is obtained from patients, not with how that information is processed by the doctor.

#### BIBLIOGRAPHY

1. Guttentag, O. I.: 1969, 'Medical Humanism: A Redundant Phrase', *The Physician*, January, 12-15.
2. Harley, J. (ed.): 1967, *Advance Techniques of Hypnosis and Therapy: Selected Papers of M. H. Erickson*, Grune & Stratton, New York.
3. Percy, W.: 1975, *The Message in the Bottle*, Farrar, Straus and Giroux, New York.
4. Weed, L.: 1969, *Medical Records, Medical Education, and Patient Care, The Problem-Oriented Record as a Basic Tool*, Press of Case Western Reserve University, Cleveland.
5. Zborowski, M.: 1969, *People in Pain*, Jossey-Bass Inc., San Francisco.

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The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the laws of quantum mechanics are based on the principle of the conservation of energy.

The second part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of matter. It is shown that the theory of the structure of the atom can be used to explain the properties of matter, and that the properties of matter can be used to determine the structure of the atom.