

Bilateral Consensus in Doctor-Patient Transactions

By

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PREFACE

The major objectives of this study were two:

- (1) to determine whether a perceived imbalance in the informational transaction between patients and doctors is real or only apparent;
- (2) to suggest the need for routine follow-up procedures in the practice of general medicine.

If the ideal doctor had an ideal fairy godmother who would grant him three wishes toward the attainment of an ideal patient, those three wishes probably would be:

- (1) a patient who would present only relevant symptoms;
- (2) a patient who would follow the doctor's advice;
- (3) a patient who would call him or return to his office only when necessary.

If the ideal patient had an ideal fairy godmother who would grant him three wishes toward the attainment of an ideal doctor, those three wishes would probably be:

- (1) a doctor who would reassure him;
- (2) a doctor who would tell him what to do in order to regain his health;
- (3) a doctor who would be available when he was uncertain about the changes that he perceived in the state of his health or about the methods that he was using to regain his health.

Despite the shortage of fairy godmothers, the doctor is in a far better position to approach his ideal than is the patient. By skillful questioning and modern instrumentation, the doctor can pry the relevant symptoms from the patient. He cannot make the patient follow advice, but he can protect himself from unnecessary demands upon his time through use of a whole host of intermediaries which include receptionists, nurses, and answering services. If the imbalance that this researcher suspects occurs in the exchange of information between doctors and patients, then some attention to this exchange might move the doctor closer to attainment of his other wish; for patients who follow advice.

Aside from the two major objectives of this study, minor objectives emerged during the process of thinking through the problems and coping with the data. One of these was the development of a practical technique for classifying and analyzing the diffuse activities that occur during a doctor-patient interaction.

Another minor objective that emerged was the intention to pay some heed to the communication process, an area which sociologists for the most part ignore. The sociologist's lack of interest overlooks the role that communication plays as a component in the ongoing process of socialization, his own as well as that of his subjects. Communication is easily dismissed as more properly belonging to those hybrid social scientists, the social psychologist and the linguistic anthropologist, yet each time a sociologist sets out to write an interview schedule he is making assumptions about the language norms of his target population. Peter Berger claims that the sociologist enjoys the discovery of the extraordinary within the ordinary of everyday life (1963:21). It would

seem that communication is so ordinary that even the sociologist overlooks it.

A final minor objective that emerged concerned the presentation of the data. Powdermaker, echoing an earlier point made by Merton, commented that the process of research is seldom presented in enough detail to enable the reader to distinguish between the ideal world of textbook research and the real world of research done with live people. She says:

Little record exists of mistakes and of learning from them, and of the role of chance and accident in stumbling upon significant problems, in reformulating old ones, and in devising new techniques, a process known as "serendipity" (1966:10-12).

In the presentation of the data, an effort was made to include the compromises that had to be made. This method carried with it its own complement of hazards; a balance had to be struck between chronology, logic, and the stylistic demands of traditional dissertation formats. The details of tabulation and analysis attempted to adhere to the intention to be explicit.

The approach to medical data used resembles content analysis. In that respect it differs from the only comparable research, studies done by Ley and Spelman (1967) and studies done by Pratt, Seligmann, and Reader (1957). Neither of these two sets of researchers concerned themselves with the need for making the different areas of discourse comparable nor with criteria for making a decision that a patient was poorly informed. They did, on the other hand, touch on critical problems which this study had neither the funds nor the time with which to deal. They dealt with the levels of medical knowledge on the part of the patient, the presumptions of the physician about the patient's level of knowledge, and the problems of forgetting. This study, without

discounting the importance of those factors, chose to deal with an area that seemed to have a chronologically earlier priority; i.e., what in fact does a patient remember, and how can it be consistently measured.

The content analysis approach itself may have some advantages in a medical setting that it does not enjoy in its use in areas such as propaganda analysis. Alexander George comments:

Propaganda analysis is cumulative in character. "New" content features encountered in the second (larger) body of communication material may force the investigator to alter his hypothesis or to employ additional or different content categories. Moreover a skillful propagandist changes his strategy to preclude his future plans being easily read from the pattern of his past conduct (Pool, 1959:31).

Presumably the medical setting has more regularities built in. Approach and procedures are more standardized, and the intention to be novel or to deceive are not an integral part of the communication content.

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Abstract of Dissertation Presented to the
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BILATERAL CONSENSUS IN DOCTOR-PATIENT
TRANSACTIONS

By

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Chairman: Dr. Gerald R. Leslie
Major Department: Sociology

A comparison was made between black patients' verbal accounts and medical records' accounts of the same doctor-patient transaction. A coding form was developed to assist the comparisons. Consensus was found for slightly more than 50 per cent of the total responses. The comparison excluded, with a few exceptions, physical and examination findings and limited itself to information garnered through conversation and questioning. The transaction appeared to be a unilateral exchange of information. Only 25 per cent of the patients' information was unrecorded, while 60 per cent of the doctors' information was not mentioned in the patients' accounts.

The concept of coding as developed by Bernstein was used to explain the communication difficulties between doctors and patients. The doctor has access to two codes, a flexible elaborated code acquired with middle-class socialization and a restricted occupational code available only through specialized training. The patient has access to only one code, an elaborated code if he is a middle-class patient, and

probably a restricted, gemeinschaft-type code if he is a lower-class patient. Coding norms are stringently circumscribed by group pressure and by the coder's desire to be understood.

Respondents from seventy-two out of seventy-six households in a black community were interviewed. Questions were asked of all respondents about whether they would seek medical care for a list of seventeen symptoms developed by Koos. All of the symptoms require medical attention. The findings suggest an overall rise in level of health knowledge and an intraclass difference not focused upon by Koos.

Information gathered about the black community indicated that family patterns were relatively stable. Twenty per cent of the household heads are female heads living with their children, their grandchildren, or boarders. Twenty-one per cent of the household heads live alone. Forty-nine per cent of the community's households are headed by marital pairs. A need for dental care and freedom from parasites are two obvious health problems. Sixty-nine per cent of the childbearing experiences by the residents had been non-hospitalized deliveries suggesting that maternal and infant care has been a health need.

The socialization process of the doctor is briefly discussed as a balance for the discussion of the patient's community, and as an aspect of the acquisition of the doctor's occupational code.

CHAPTER I

SAMPLE, DATA COLLECTION, METHOD DEVELOPED FOR COMPARISON OF DOCTOR-PATIENT TRANSACTIONS

Sample and Data Collection

Circumstances Which Permitted the Research to Take Place

A unique set of circumstances offered an opportunity to examine the exchange of information between doctor and patient. The University of Florida elected to introduce into the program for their medical students a period of training devoted to community medicine. The community chosen for this new program is the seat of a rural county whose population amounts to slightly under 3,000, about 600 of whom live in the county seat.

A medical clinic had been built with federal funds within the community but had remained unopened for lack of personnel. The University Medical School, with the cooperation of the community, chose to use this site as a part of the rotation of fourth year medical students through the various services of the medical specialties. The students spend three weeks living and working at the clinic site where they are supervised by a resident physician. They gain experience performing in the role of a general practitioner, in the same way that they gain experience by working on the other teaching hospital services, such as pediatrics, obstetrics, or surgery.

The community, referred to in this study by the pseudonym Meccaville, had been without a practicing physician for several years. The nearest medical care had been twenty-five miles away in one direction or twenty-seven miles away in another direction.

The clinic directors, who were innovative in developing this original training program, were equally flexible in encouraging this research. Equally fortunate was the existence of a small enclave of black residents, known locally as "The District" (also a pseudonym), which had been untapped in earlier research done in the white community of Meccaville. The fortuitous coincidence of a clinic willing to permit research and a black community that might be willing to talk with a researcher provided a setting in which an idea might be investigated.

Idea to be investigated and location of investigation.--The idea to be investigated had been gained by the researcher in eight years of paramedical working experience within general and psychiatric medicine. The idea was that patients often emerged, from interviews with a doctor, exhibiting signs of uneasiness. The uneasiness seemed to center upon whether they had told the doctor all the important symptoms and, if they had not, whether the omission would critically affect the treatment they were to follow.

Substantial literature supports the fact that patients often do not follow treatment. Ley and Spelman provide a bibliography of the literature dealing with this topic. (The bibliography is included in Appendix F of this study 1967:41-43.) Other literature deals with what Roth calls the "management bias" of medicine and social scientists which assumes the patient will be motivated to conform to the medical model of a "good" or "cooperative" patient who follows advice. (See Roth, 1962;

Roth and Eddy, 1967; Goffman, 1961; Braginsky, 1969.) This bias assumes that it is possible for the patient to follow the advice given, and it assumes that the patient has no conflicting needs.

Still another related area, the retention of information, has been explored by Ley and Spelman (1967:Chapter 6), and Pratt, Seligmann, and Reader (1957:1277-83). Both sets of researchers found that patients' retention of information was relatively low.

With the intention of investigating the cumulative impression mentioned above and the leads provided by the literature, it was proposed to interview each patient from the black community in his home, shortly after his clinic appointment with the student-physician, to see:

- (1) whether the patient felt that he had been given sufficient time to tell the doctor everything he had wanted to tell him;
- (2) whether the patient felt that the doctor had understood him;
- (3) whether the patient had understood the doctor;

and to have

- (4) the patient repeat what had transpired during the transaction.

Then the patient's version was to be compared with the medical record's version to see:

- (1) if the patient's version of what had transpired would reveal that the patient who felt rushed had omitted symptoms that he considered important;
- (2) and, if the "rushed" patient would be inaccurate in his remembrance of the treatment he was to follow.

As it happened, study of the problems of the "rushed" patient

was effectively thwarted by the halo the black community has erected around clinic personnel. The halo was made manifest by the obvious displeasure interviewees displayed toward the interviewer in response to questions that might be considered critical of the clinic's doctors. The comparison of the two versions of the medical transaction also proved to be sufficiently taxing that the problem of the "rushed" patient was postponed until another time without regret. The study concentrated upon asymmetry in communication between patients and doctors.

Reasons for study of the records instead of the doctors.--The choice of the medical record rather than the student-physician as the other half of the doctor-patient transaction was based on three factors.

1. The same physician might have to be interviewed several times.
2. The student-physician might have been rotated off the community service before he could be interviewed, particularly if the patient of interest was seen toward the end of the physician's three-week service.
3. Awareness of the possibility that being interviewed might change the behavior of the student-physician.

Beyond these three reasons, the medical record prepared by a student-physician was deemed a particularly good comparison source because the student-physician works under the constraint of preparing a record to be reviewed by his instructors.

There is a risk that the medical student will include procedures in the record that he did not do and items that he did not tell the patient. (See Becker, Reader, Kendall, 1961). The contraindication to this possibility in this setting is the more leisurely pace of this

rural practice and the close supervision given by the resident in charge.

Reasons for choice of the black community as a patient source.--The black community was chosen as the source of the patient population for two reasons:

(1) to provide as homogeneous a patient population as possible.

The black community is predominantly lower class by reason of income, occupation, and housing. This social class homogeneity contrasts with the social class homogeneity of the student-physicians who can be construed as middle class by origin or aspiration;

(2) because the black community, which had not been studied before, was intrinsically interesting to the researcher.

Comparison of patients and non-patients.--The possibility existed that residents of The District who sought medical care were different in some respect from residents who did not seek care. Reasoning that this difference might include their attitudes toward medical care, the researcher proposed to administer a symptom list, developed by Koos (1954), which contains seventeen symptoms usually considered to require medical attention, to all patients and to a random sample of non-patients. The list involves asking each respondent whether he would or would not seek medical care for each of the seventeen symptoms. Koos found that the perceived seriousness of the symptoms varied by social class, with the lower class viewing the symptoms as less serious. The wording of the list was revised to make it more suitable for the community. Koos does not specify any specific wording for the symptoms.

He merely says that the respondents were asked to indicate "whether each of a selected list of readily recognizable symptoms was significant and should be called to the attention of a doctor" (1954:32). See Appendix C for the original list and the revised list.

Semifocused Interview and Tape Recorder as Instruments

The tools chosen for data collection were simple. A semi-focused interview was preferred to a structured questionnaire in order to permit the flexibility in language choice that was warranted by the local vocabulary and dialect. The questions to be asked were written on a small pack of three by five cards which were flipped unobtrusively as questions were covered. The order of questions sometimes varied slightly to keep the interview conversational. The order of the seventeen symptoms was not varied, although comments sometimes intruded between them. Other data were gathered at the same time. Questions were included about where people had been born, and lived; who lived in their household; and what their previous health care had involved. The entire list of questions and the introductory statement are included in Appendix E.

Interviews lasted twenty to forty minutes, occasionally stretching to an hour, but for the most part they were brief. Residents were not voluble. On the other hand, they were not aloof. They seemed to enjoy the interview.

To allow additional flexibility, each interview was tape-recorded. Expecting some reluctance to be provoked by the tape recorder, each interview was prefaced with comments that said, in effect, that the respondent was to refuse any question which he did not

want to answer and that if he became unhappy with the interview, the tape would be erased in his presence. Only one respondent out of seventy-two refused to permit taping. Once the recorder was set up, the researcher ignored it and the respondents seemed to forget its presence. Ignoring the recorder sometimes caused later grief because of the wide variability in the quality of the tapes. The flexibility, however, was well worth these minor problems.

Surprisingly, the small pack of cards provoked more problems. Respondents would look at the pack and say, "That's a lot of questions you got to ask." Subsequently, this was circumvented by splitting the questions into smaller packs of different colored cards and tucking them into various pockets. The color helped the researcher to keep the questions in an orderly sequence and the smallness of the packs seemed to reduce their threat.

Data Collection

Problems.--Several problems were encountered in the actual collection of data. Trying to find the patients provided the first of a number of "rural-urban cultural shocks." A box at the post office is just not the same as living on a street that has a name and in a house that has a number. Obtaining directions was a second shock. Directions came replete with assumptions that everyone knew where the "MacStein's place" was. It was just down the road, the road being a choice of several. "Down" meaning one, two, five or ten miles. It seemed reasonable, after being lost a few times, to postpone seeing patients who lived outside The District proper until the area became more familiar.

In The District expectations were even higher that everyone

knew where the Johnsons lived. In time; we learned that there might be five or six Johnson households. Whatever house was settled on as being the correct house was frequently one where no one was home. There was no way of verifying that it was the correct household until someone was found at home who could be asked if a household member had recently been to the clinic. The search for that specific patient had to be halted until verification was made.

During the period of planning this research, the researcher had been introduced to the elementary school principal. She had worked in The District for eighteen years and knew almost everyone. When the search bogged down, an appeal was made to her for help. Time out was taken to make a map. Then the principal helped to label as many households as possible. Later more labels were added, as additional households were discovered, tucked away out of sight behind trees. In time, it became clear that only ten black households in the entire county lived outside of The District proper.

Forced revision of research plan.--Even with the map and the security of having the right house, the "not-at-homes" made the lengthy trip from the university impractical without a revision of the original research plan. The revision called for inclusion of the whole community by house-to-house interviewing as people were found at home. Household members were asked whether anyone in the house had been to the clinic or not. Patient households were considered to be those households where someone had been to the clinic by the time they were interviewed. The "not-at-homes" were revisited until they were found at home, and all but one of them were ultimately contacted.

Respondents, patients, and households sampled.--The distribution of interviews that was obtained is included in Tables 1 and 2.

TABLE 1

PATIENT AND NON-PATIENT HOUSEHOLDS
INTERVIEWED IN THE DISTRICT

Interviews in patient households	47
Interviews in non-patient households	25
Households not interviewed	<u>4</u>
Total households in The District	76

Whoever was willing to talk with the researcher was interviewed. Luckily, if anyone at all had been to the clinic, generally the spokesman had been too and, therefore, told us about his own visit. Among the ten spokesmen who gave information about another's visit, seven were parents talking about one or more of their children, one was an older sister talking about her younger sister, one was a husband talking about his wife, and one was an infirm, elderly lady talking about her more infirm elderly boarder.

Only one visit per household was recorded, with three exceptions. The exceptions were relaxed conversational interviews where the additional visits were covered as a natural part of the conversation. The exceptions amounted to four additional records. Consideration was given to eliminating these extras but it seemed to introduce as much bias to eliminate them as it did to keep them. They were somewhat balanced by six visits which had to be eliminated.

Explanation of uncommon interviews.--One of the non-patient household interviews was incomplete. The respondent was the oldest man

in the community, aged ninety-nine. He considered himself the merry-maker of the senior set. For every question he was asked, he asked one in return. Sometimes he answered the question, and sometimes he did not. His frolic was sufficiently reassuring to neighbor onlookers that four of them sat on his porch to be interviewed that same afternoon. A joint interview involved two brothers, one of whom lived in a patient household while the other lived alone in a non-patient household. They alternated answering questions.

TABLE 2

PERSONS INTERVIEWED IN CONNECTION
WITH 51 CLINIC PATIENTS

The patient himself	35
The patient's parent	7
The patient's older sister	1
The patient's husband	1
The patient's landlady	1
The patient's aunt	<u>2</u>
Total spokesmen	47
Total patients for whom data were available	51

Explanation for omitted households.--From the seventy-six households that comprise the community, someone from seventy-two households was seen. Only one of the four not seen was a refusal. She owns the only store within the confines of The District. During a visit to her store she asked for help to fill out a mailed health questionnaire. It was given, but when a later attempt was made to interview her it was met with the response that she had already answered enough questions. The second household not seen was mentioned above as just never having

anyone at home. The third household, if it could be considered a household, consisted of two teenage orphans who were living and working on the farm of a local white landowner under, what was reported to be, comfortable circumstances. It did not seem reasonable to jeopardize their stable arrangement by asking permission of their employer to talk with them, lest fears might be aroused in his mind about authorities coming to question the legality of his arrangement with the boys. The last household not seen was missed. Its existence was not discovered until long after data collection was completed. Three attempts to find the resident were the most that could be spared him since he lived an additional fifteen miles out of Meccaville.

Method Developed for Comparison of
Doctor-Patient Transactions

Paucity of Patients' Verbal Behavior

A possibility that had been anticipated was that The District residents' limited skill with language would cause communication problems in the doctor-patient transaction. A possibility only dimly anticipated was the problems this would cause the researcher in obtaining sufficient information about the transaction. At the same time, it produced the awkward position of achieving the objective of demonstrating an imbalance in the doctor-patient transaction simply by refraining from asking the dozens of questions that came to mind.

This problem resembled that of Schatzman and Strauss (1966) who talk about the difficulties they experienced in their analysis of 340 interviews taken following a tornado disaster. They found that lower-class interviewees often confronted the interviewer with fragments of a

narrative which the interviewer had to piece together with a barrage of "who?" "when?" and "where?"

This dilemma had still another facet. Having sometimes read the medical record before talking with the patient, the researcher often knew that more had transpired in the doctor-patient transaction than the patient was recalling. The temptation to probe was often strong. The obligation to refrain from any questions that might suggest a corroborative source of information was strong enough, however, to resist the temptation.

Questions Asked about the Clinic Visit

Essentially the patient's version of the transaction was obtained by asking seven questions. The questions were:

1. What was wrong? What made you go to the doctor?
2. What did you tell him?
3. Did he seem to understand you?
4. Did you understand him?
5. What did he say? What was wrong?
6. What did he tell you to do?
7. Do you remember how often you had to take it (the medicine)?

Questions three and four were usually interpreted as criticism of the doctor and elicited a prompt defense. The patient, fist on hip and head nodding in punctuation with the words, would say, "He examined me real good! He was real nice!" This was the "halo" that prevented examination of patients who might have felt that they had been rushed in their interviews. No doubt, the halo was well earned. Sometimes two or three additional questions were asked if the picture of what had

happened still was not clear. The additional questions most often asked were:

1. What did the doctor say was wrong?
2. Did he give you any medicine at the clinic, or did you have to go to the drugstore for medicine?

A Method for Making the Different Discourses Comparable

Before any statements could be made about the comparability of the two versions of the doctor-patient transaction, the versions had to be first cast into a form in which they could be compared. To this end, a coding form was developed. The form permitted an item to be coded into five different categories.

1. Items were considered matched if the medical record item and the patient's item referred to the same topic and agreed upon the details.
2. Items were considered contradictions if they pertained to the same topic but were opposed on details that would have led to behavior contrary to the intended behavior.
3. Items were considered ambiguities if they pertained to the same topic but details were such that they could be construed to either match or contradict depending upon the whim of a coder.
4. and 5. Items were considered unmatched if either participant offered an item that had no corresponding item in the discourse of the other. These were coded patient's unmatched (PUM) and doctor's unmatched (DUM). The researcher realizes that the abbreviations sound like a vaudeville dance team,

but alternatives that were considered were equally bad or caused semantic problems.

The Coding of an Actual Patient as
an Example of the Method

Presentation of the data from an actual patient's tape and medical record may make the procedure clearer.

Step 1: Transfer patient's version from the tape to notes.--

Patient's Version--Patient #4. "I had the virus last week. I felt terrible. My stomach was upset. I didn't have no energy." (Note: Patient was obviously six or seven months pregnant. She also mentioned the pregnancy elsewhere in the interview.) "He said it was a virus, just like I thought it was. There wasn't nothing to do except drink a lot of fluids and not eat till I felt better."

Step 2: Extract notes from the medical record.--Medical Record

Version--Patient #4. 6/7/69. Seven months gestation, being followed at _____ Obstetric Clinic. Presents today with a history of malaise for one day with one episode of vomiting and one episode of diarrhea. No one else in the family or neighborhood has similar symptoms.

Impression: 1) Viral Gastritis.

Disposition: 1) No food by mouth for 12 hours. Clear liquids for 12 hours, then normal diet.

2) Aspirin 6.5 milligrams by mouth every four hours as needed for discomfort or pain.

3) Return to clinic as necessary if nausea and vomiting or diarrhea returns.

The notes taken from the medical record included: (1) only those items that could be gained through conversation with, or questions to the patient; (2) the diagnosis; (3) treatment recommended, including requests to return or referrals elsewhere.

Step 3: The two versions sorted and arranged side by side.--

Patient #4.

<u>Medical Record Version</u>	<u>Patient's Version</u>
History:	History:
7 months gestation	Is pregnant, approximately six or seven months
Symptoms:	Symptoms:
Malaise for 1 day	Felt terrible
Vomiting, one episode	Stomach was upset
Diarrhea	Vomited
Diagnosis:	Diagnosis:
Viral Gastritis	Virus
Treatment:	Treatment:
1) No food by mouth for 12 hours. Clear liquids for 12 hours, then normal diet.	1) Not eat till I felt better.
2) Aspirin 6.5 milligrams by mouth every four hours as needed for pain or discomfort.	2) Drink a lot of fluids.

forced them to flip ahead to the history section since it is generally presented first in the narrative sequence of the patient, if it is going to be presented at all.

The precision of the doctor's approach to language created some difficulties. For example, if the doctor said that the patient had a periumbilical pain it was simply recorded under presenting symptoms; however, if the patient commented that he had a pain "around his navel" it was recorded as an attempt to specify the pain's location. (See specific coding instructions section D6.) A similar problem was touched on earlier in this chapter. If the doctor used an abstract term such as malaise, which covers a variety of symptoms, the patient needed several concrete terms to convey the same information. Neither of these kinds of incidents happened more than once or twice but the possibility of their happening forced the development of a rationale for coding. The rationale was to weight every effort of the patient to be exact. It was hoped this would offset to some extent the weighting built into the doctor's language.

Methods for circumventing patient's brevity

To cope with the dilemma of the patient's brevity, any information he might have given elsewhere in the interview with the researcher was included in coding his version of the interview. The reasoning was that the interest was not in whether he could neatly answer the researcher's questions but in whether he came away from the doctor-patient transaction informed. Patients often presented information while they were responding to the seventeen-symptom list. Having taped the interview proved invaluable in this respect. The coding form

was deliberately designed to give greater weight to the areas about which the patient was likely to know the most, that is, his history and his symptoms. These are the areas in which the information flow is presumably from the patient to the doctor, if one can assume that information is unidirectional at given moments in the transaction. Conversely the information flow presumably would be from doctor to patient during diagnosis, treatment, and follow-up.

Obstacles presented by
the diagnosis category

The diagnosis section of the coding form was kept small for two reasons, first because the patient was least likely to remember details in this area and, second, it presents difficult coding problems. The coding problems stemmed from the obstacles to the development of mutually exclusive categories. For example, a record might list separately a patient's heart condition and his swollen ankles while another record might list the heart condition and add "with swelling of the ankles." This makes it appear as if they vary in importance, one being considered a separate diagnosis and the other a contributing symptom when in reality they probably represent different stages in the writer's thinking. At one point he is likely to think of the swollen ankles as a contributing symptom that helps him to make a diagnosis, and at another a separate condition that will need medication. The range of possibilities was too great to permit simple coding rules to be written. The present diagnosis section was developed by trial and error methods using a sample of diagnoses taken from other records at the clinic.

Exclusion of physical examination findings

The presentation of the medical record version for Patient #4 indicated that notes from records included only information that could have been gained through conversation or questions. This was intended to exclude findings from physical examinations. The only exception to this was if the patient had said, "I had an earache," the record was not likely to repeat "The patient said he had an earache." It was more likely to have said something like "scarred tympanic membranes," a fact that could only have been discovered through examination. In this type of instance, an arbitrary assumption had to be made that the patient's ears were examined in response to the patient's complaint rather than as a part of a routine examination.

The use of an item of information only once

An item of information was not counted or recorded more than once on the coding form except where it would mean leaving an item unmatched when it had in fact been acknowledged by the other participant. Successive revisions eliminated this possibility as much as possible.

Six Eliminations from the Coding

Ultimately six transactions had to be eliminated from the coding because they could not be coded. Either information was lacking, or was so contradictory that reconciliation was impossible.

Coder Reliability

Because the coded material to be treated statistically was so dependent upon the accuracy of the coders, a search of the literature

was made to find a reliable method of computing reliability. The yield was sparse, but a method by Guetzkow was uncovered (1950:47-58). His method provides a measure of the relationship between the obtained agreement and theoretical agreement; and between theoretical agreement of coders and theoretical correctness of classification. See Appendix B for formula and computation.

Two coders coded all of the material. A third coder coded small segments of material to test the intelligibility of the coding rules, but her assistance was not used to compute reliability. The statistical comparisons on the doctor-patient transaction were made only on those items upon which both coders agreed. All other items were eliminated.

Small samples of the material were computed for reliability while the form was being revised. The increases in reliability were not dramatic from the revisions; therefore they were recomputed as a part of the overall reliability for the whole sample. The form revisions, instead of increasing reliability, appreciably decreased the time necessary to code a transaction.

CHAPTER II

COMMUNICATION THEORY

Objectives and Communication Overview

Postponement of Hypotheses and Restatement of Objectives

Formal hypotheses will not be stated until the theoretical assumptions underlying this research have been presented. This chapter will attempt to bring together relevant positions from communication literature. The chapter that follows will attempt to muster views from sociological theory. Until that task is completed, the researcher will simply present, as a reminder, the overall objectives of this research, which were: (1) to determine whether a perceived imbalance in the informational transaction between patients and doctors was real or apparent; and (2) to explore a need for follow-up procedures in the routine practice of general medicine.

Brief Overview of Communication

Communication encompasses, intrudes upon, or complicates most disciplines. For this reason, perhaps, its literature is widely dispersed. Communication and Culture, edited by Alfred Smith (1966) undertakes to bring together some of the scatter. He believes that there are three major theoretical approaches, any or all of which can be used to look at the three major dimensions of communication. The three theoretical approaches are: the mathematical, within which Smith includes

cybernetics and information theory; the linguistic-anthropological; and the social psychological. The dimensions of the field include syntactics, semantics, and pragmatics. To provide a brief glimpse of the scope of communication before trying to fit the interests of this dissertation within the field, the researcher will skim over some of the points which Smith covers in the succinct introduction to his book.

Action and reaction.--Language is behavior. Speaking is action and understanding is reaction. Interaction takes place not only through words but also through spatial relations, as when a couple who are attracted to each other can make their way furtively through the maze of a cocktail party toward one another. Interaction also takes place through temporal relations, as when an unwelcome salesman is kept waiting in an outer office. Communication involves a variety of methods of reciprocating and mediating meaning to sustain a communal dialogue.

Different concerns of the disciplines associated.--The mathematician is concerned with electronic signals with scant regard for meaning. The linguistic anthropologist concerns himself with human signals encompassing a world-wide range of data. The social psychologist is generally concerned with human communication in his own culture and in his own time.

Emphasis on syntactics.--Most empirical studies of human communication have involved syntactics which studies the relationship of signs to other signs. The arrangement of the sentence "Nancy kisses the boys," differs from the same words in the sentence "The boys kiss Nancy." In the latter, the position of the words and the form of the

verb have been altered; that is, the relationship of signs to signs has been changed.

Mathematicians and linguistic anthropologists are concerned with syntactics. Mathematicians may find that signs are redundant in being too predictable in their relationships with one another, or entropic in being too unpredictable in their relationships with each other. A linguistic anthropologist may find redundancy built into a language in which adjectives must agree with nouns.

Relationship between syntactics and semantics.--Meaning is largely dependent upon structure. Hence, there is a logical development between syntactics and semantics. Beyond structural meaning, there is assigned meaning, the relationship between a sign and its object. There is a relationship between the name, Nancy, and the object, the girl who is called Nancy.

Mathematicians generally are not concerned with the meanings of messages, only with their transmission. Meaning for them is simply a part of the process of encoding and decoding. Coding is a form of behavior that is learned and shared by the members of a communicating group. Meaning is a product of coding.

Pragmatics

The reactions people have to signs are pragmatics. This follows from the way they decode signs. How do policemen react to being called "Pigs," or "Fuzz"? Do people feel more positive if they are told they are "suffering from parasites," than if they are told they have "got worms"? (Smith, 1966:1-10)?

Coding

The Idea of Coding

From the above overview of the field of communication, the researcher believes that the most useful concept for her purposes is the idea of coding. In the introduction to a section of Smith's book that he calls "Codes and Culture," the general meaning of coding is summarized briefly as follows:

Coding is the process of translating between meanings and signals, and Bateson shows that it involves a psychological perception of configuration, the gestalt of the situation-behavior. Coding is meaning making and the meanings are configurational. Coding is also decision making, choosing between a figure and ground in a gestalt, and these choices involve evaluations and values (Smith, 1966:405-06).

Different Structures Develop Different Codes

More specific to the researcher's particular purpose is a paper by Basil Bernstein called "Elaborated and Restricted Codes: Their Social Origins and Some Consequences" (Smith, 1966:427-41). Bernstein's practical interest is the differential response of children from different social classes to educational opportunities. He suggests that the linguistic codes of different speech systems may be generated by different social structures through the specific principles of choice regulating the selections a child makes from the total number of options offered by a given language. Those choices, made from the total possible choices, strengthen progressively. In time those choices establish the "planning procedures" an individual uses in readying his own speech and in orienting him to the speech of others. As a child learns specific codes regulating his verbal acts, he learns the requirements of his social structure. Every time the child speaks or listens, the

social structure of which he is a part receives reinforcement, and constrains his identity. The critical choices, the preferred alternatives, become fixed through time and, in turn, regulate orientation.

Elaborated code environment

The environment within which an elaborated code user learns the code is one which permits, perhaps even requires, a flexibility in the speech system that allows it to deal with novelty. The structure of speech is such that an almost infinite set of theoretical arrangements can be made to transmit unique experiences. For example, if an advertiser wanted to coin a new word for femininity he could call it "she-ness." He could feel relatively safe that his audience knowing the separate meanings of "she" and "-ness" could comprehend the two meanings joined as one. The elaborated code allows the user to confront and participate in situations unanticipated by, perhaps even unknown to, his earliest socialization environment.

Distinctions among restricted code environments.--Bernstein subdivides restricted codes into "restricted codes (lexicon prediction)" and "restricted codes (high structural prediction)." He makes further distinction between verbal and extraverbal components of messages. The verbal component refers only to the transmission of words. The extraverbal component refers to what other authors call paralinguistics; that is, qualities of the voice, facial set, and physical movements.

Bernstein indicates that three kinds of cases fall under the heading of restricted code with lexicon prediction. The first variant involves messages in both verbal and nonverbal channels which are maximally redundant. This variant is most likely to be found where

social relations are rigidly prescribed, as in the military, in religions, and in legal transactions. Departures from maximal redundancy are likely to be regarded as profane. For the purposes of this research, this variation will be referred to as an "occupational code."

The second variant involves maximal redundancy in the verbal channel with less redundancy in the extraverbal channel. An example of this is a mother telling her child a story they both know by heart--"And little Red Riding Hood knocked on her grandmother's door," ceremonial pause, "and then what happened?" ceremonial question. The verbal options are limited. The only uniqueness the mother can add is through the extraverbal channels.

The third variant involves social relationships where participants have low predictability about each other's discrete intent. The verbal components come "prepackaged." Extraverbal channels carry the interpersonal aspects solely. The development of the relationship depends upon the decoding of the extraverbal messages. The example the author uses is a boy at a dance who has just asked a girl, whom he has never met before, to dance. The language exchanged is highly predictable as the two grope for cues to one another's intent.

Bernstein's second category of "restricted code with high structural prediction " is likely to arise in a context of assumptions the speakers hold in common. The structure of speech can be simplified and the vocabulary range narrowed to a degree that permits taking the intent of the others for granted. This diminished verbal elaboration and reduced lexicon range is likely to come into being in closed groups such as prisons, combat units, peer groups, and couples married for a length

of time. For the purposes of this research, this category will be referred to as a "gemeinschaft restricted code."

Differences in the socialization of elaborated code users as distinguished from restricted code users.--The flexibility of the elaborated code permits the user to achieve role distance and manipulate himself, as well as others and the situation, verbally. In Parson's terms ego can become alter, or in Mead's terms ego can become generalized other through elaborated code manipulation.

In contrast the individual socialized in an environment using a restricted code learns to use language as a more finite set of possibilities limited by the needs and activities of the group in which he is imbedded. Having a more or less stable status within the group there is less need for the expression of unique experience, or the achievement of role distance, or verbal versatility. Maximal redundancy is built into the code by the assumptions shared by the code users. Those assumptions may have been internalized by living all one's life within the group or by having been trained intensively within the group. To the uninitiated who do not share the assumptions of the group, the code may have no redundancy at all.

The Relevance of Code to the Concept of Social Class

The usual explanation that is evoked to explain the communication difficulties between middle-class professionals and lower-class laymen is a difference in class. This hardly explains what aspect of the class difference causes the problem; and it avoids the question of why a middle-class layman does not always come away well informed from his dealings with a middle-class professional.

A brief look at some medical research may help to delineate the aspect of class which creates the communication failure. In a study done by Pratt, Seligmann, and Reader (1957), 214 patients were given a multiple choice test about some routine facts concerning common diseases. The patients were able to answer correctly about 55 per cent of the questions. Eighty-nine doctors were given the same test and asked how much of the information they thought patients ought to know. Almost three quarters of the doctors thought patients ought to know at least 82 per cent of the information.

A breakdown by educational level revealed that those with less than an eighth grade education were able to correctly answer only one-third of the questions while those with a high school education could answer two-thirds of the questions correctly. Even two-thirds was below the level the doctors felt the patient ought to know.

The authors found through observation of the doctor-patient transactions that the patients in their sample interacted with the physicians at a very low level. Some did not ask a single question. However, with physicians who did offer information, the patients were slightly more likely to ask questions.

The physicians were asked to estimate the proportion of the clinic patient population who might know the thirty-six facts covered in the questionnaire. The estimates consistently underestimated the knowledge level of the patients, low as it was. Those physicians who did underestimate patient knowledge were less likely to discuss the patient's illness with him than were the physicians who did not underestimate or who overestimated patient knowledge.

The apparent paradox uncovered by Pratt, Seligmann, and Reader

was that the patients who were deemed most in need of explanations were least likely to get them. This observation was lent support through intensive observation by the authors of fifty physician-patient relationships. The dynamics were somewhat as follows:

. . . when a doctor perceives a patient as poorly informed, he considers the tremendous difficulties of translating his knowledge into language the patient can understand, along with the dangers of frightening the patient; and therefore avoids involving himself in an elaborate discussion with the patient; the patient, in turn, reacts dully to this limited information, either asking uninspired questions or refraining from questioning the doctor at all, thus reinforcing the doctor's view that the patient is ill equipped to comprehend his problem, and further reinforcing the doctor's tendency to skirt the problem. Lacking the guidance of the doctor, the patient performs at a low level; hence the doctor rates his capacities as even lower than they are (1958:226).

Returning to the relevance of code, one might suggest that the physician may have an option of translating for a middle-class patient from the restricted medical code to the elaborated code which he and the layman probably share in common. The middle-class layman is likely to have at least been socialized into elaborated code use during the educational process, if not at home. The physician may not have the option to translate for a lower-class patient socialized in a "gemeinschaft-type" restricted code. No matter how redundant the physician may sound to his own ears, he may not be at all redundant to the lower-class layman.

An effort to inform patients

In a study by Hugh-Jones et al. (see Ley and Spelman, 1967:31), doctors made a special point to inform patients. Despite their efforts, 39 per cent remained dissatisfied with the information given them, and 20 per cent had an incorrect idea about their diagnosis. One man with a heart condition thought he had tuberculosis. Studies by Spelman, Ley,

and Jones found no relationship between patient satisfaction, the knowledge patients had, and the information that they had been given (Ley and Spelman, 1967:32-35).

Ley and Spelman suggest that patient dissatisfaction may be due to the fact that the patient did not understand the information given to him. They point out that knowledge does not always include comprehension. They cite as an example a study done by Roth et al. (1962) in which only three out of thirty ulcer patients knew that acid was secreted by the stomach. Over half believed that it was ingested with food that was eaten (1967:35).

What options does the non-comprehending patient have?

Studies done by Roth and Eddy (1967), Goffman (1961), and Braginsky (1969) indicate that chronic patients learn to "live in the cracks," as Roth and Eddy describe it (see Roth and Eddy, 1967:Chapter 8). They find ways to compensate for their lack of power and lack of information by intervening in their own treatment and by pooling information.

The unilateral nature of the doctor-patient relationship being described in this research pertains more to the occasional patient who becomes ill and does not have the opportunity to learn the rituals and some of the jargon that the chronic patient through repeated exposure has learned to utilize. This is not to imply that the occasional patient has no options.

He has the option to do nothing or to resort to other sources of information such as television and his primary group's folk traditions. Lyle Saunders cites a New Mexico woman who was a regular cardiac patient

at an Anglo clinic. In addition to the professional care that she received, she treated herself, her family, and her neighbors from a pharmacopoeia consisting of Anglo preparations, household remedies drawn from both Anglo and Spanish folk traditions, and herbal preparations she had learned from her Indian uncle (Jaco, 1958:189).

A study by Roth, although not focusing on patient options, fits in with the reasoning above; i.e., where new information is lacking old substitutes for information will prevail. He found that protective devices for the control of contagion were most consistently used by lower status employees in a tuberculosis hospital. He reasoned that they were less likely to know that good evidence to support the efficacy of many contagious controls is lacking (1958:229-34).

The absence of dissatisfied patients.--The implication that middle-class patients are more likely to leave a doctor-patient transaction informed, comprehending and possibly satisfied, raises the question of why the patients in this sample, on the whole, were satisfied despite their lower-class status.

There are several possible explanations. Possibly the 50 per cent redundancy built into the structure of English, coupled with increasing exposure to television (see Silberman, 1970:31-41) may have been enough to overcome coding difficulties. Another possibility is suggested by Ley and Spelman (1967:35) who point out that patients have to remember what they are told in order to remain satisfied. Among the studies mentioned by Ley, Spelman, and Jones, the authors did a study in which people were asked during their first week in the hospital if they had been told what was wrong with them. They were asked the same

question a week later. Out of forty-three who had claimed that they had been told, 28 per cent denied it a week later.

The authors imply that comprehension and information are related. Comprehension and information in turn are related to satisfaction. If this is so, then the patients in this sample, given their class level and their satisfaction, are likely to have been informed and comprehending.

A third possible explanation as to why the patients in this sample were satisfied is one this researcher and probably most researchers would prefer not to entertain. It is made explicit in a comment by Warren Weaver in which he said:

If Mr. Y says, "Do you understand me?" and Mr. X says, "Certainly I do," this is not necessarily a certification that understanding has been achieved. It may just be that Mr. X didn't understand the question (Smith, 1966:16).

Any or all of these possibilities may have been operative, thereby contributing to the patient's apparent satisfaction. None of these possibilities rules out the value of the concept of coding differences as an aspect of class that contributes to communication difficulties between classes.

CHAPTER III

SOCIOLOGICAL THEORY

Communication Links with Sociology

Reality of Gestures Expressed in Action

Just as in fencing the parry is an interpretation of the thrust so, in the social act, the adjustive response of one organism to the gesture of another is the interpretation of that gesture by that organism--it is the meaning of the gesture.

At the level of self-consciousness such a gesture becomes a symbol, a significant symbol. The interpretation of gestures is not basically a process going on in a mind as such or one necessarily involving a mind; it is external, overt, physical or physiological process going on in the actual field of social experience (G. H. Mead, 1962:78-79).

Sociology Ignores the Role of Communication in Consensus

In an article which he called "The Search for a Social Theory of Communication," Hugh Dalziel Duncan criticized American sociology for its lack of interest in the process of communication among human beings. He reminded his readers that the specific social end of communication is consensus which is expressed in role performance that guarantees the social order. That end is reached by establishing and maintaining knowledge, beliefs, and attitudes. "To have" or "to have not" applies equally as well to the acquisition and use of symbols as it does to industry, or land, or money (1967:236-40).

Thomas Linked with Mead and the
1930's Linked with the Present

If one looks for literature under the label of communication, Duncan is apparently justified in his caustic complaint about the lack of concern on the part of American sociologists since the early thirties when work was being done by Mead, Burke, and Sapir. (The latter is variously categorized as a linguist, an anthropologist, and a sociologist.) Yet the time since the thirties has not been barren; communication links with the thirties are simply hidden under unexpected labels. A line of thought that can be traced to the more recent past requires a shift in consideration from the work of Mead to that of W. I. Thomas. A brief comparison of Mead and Thomas may make this seem reasonable.

New objects from communication; responses give meaning to gestures.--Mead has said:

. . . (1) that the social process, through the communication which it makes possible among the individuals implicated in it, is responsible for the appearance of a whole set of new objects in nature, which exist in relation to it (objects namely of "common sense"); and (2) that the gestures of one organism and the adjustive response of another organism to that gesture that exists between the gesture as the beginning of the given act and the completion or resultant of a given act, to which the gesture refers (1962:79).

Mead seems to be saying that two things happen from communication: a set of new objects arises as a result of the process; and the gesture of the first organism is given meaning by the response of the second organism.

The interplay of the present and the pre-existent.--W. I. Thomas
has said:

Every concrete activity is the solution of a situation. The situation involves three kinds of data: (1) the objective

conditions under which the individual or society has to act, that is the totality of values--economic, social, religious, intellectual, etc.--which at the given moment affect directly or indirectly the conscious status of the individual or the group. (2) The pre-existing attitudes of the individual or the group which at the given moment have an actual influence upon his behaviour. (3) The definition of the situation, that is, the more or less clear conception of the conditions and consciousness of the attitudes. And the definition of the situation is a necessary preliminary to any act of the will, for in given conditions and with a given set of attitudes an indefinite plurality of action is possible, and one definite action can appear only if these conditions are selected, interpreted, and combined in a determined way and if a certain systematization of these attitudes is reached, so that one of them becomes predominant and subordinates the others (Volkart, 1951:57).

Mead's focus differs from Thomas'.--Both Mead and Thomas seem to suggest that a new condition arises as a result of the interaction and that each participant influences the other. Their emphasis, however, seems to be different. Mead focuses on the transaction itself while Thomas focuses on the preconditions the participants bring with them into the transaction and the resolution by the participants of the interplay of existing objective conditions and their own pre-existing attitudes.

Sherif Extends Mead and Thomas

The general approach presented by Sherif in 1935 and 1936 seems to be an extension of Thomas' emphasis on preconditions as well as Mead's and Thomas' concern with the resolution of the actual transaction. Sherif, with others, has continued over the years to develop the line of thought which Shaw and Costanzo in Theories of Social Psychology (1970:294-301) classify under the title "Social Judgment Theory."

External and internal factors are complements.--Sherif claims that man structures situations that are important to him. This

structure includes: (1) internal factors of attitudes, emotions, motives, past experience; and (2) external factors of objects, persons, and events existing in his physical surroundings. Both external and internal factors operate in a given situation at any given time. Any given behavior can be understood only within the frame of reference which is the interaction of the internal and external factors. Internal and external factors are not additive in the sense of having cumulative intensity. In general, the more intense the motive state, and the greater the ambiguity of the stimulus structure, the greater will be the influence of internal factors. Conversely, the less intense the motive and the more structured the stimulus, the greater the influence of external factors.

The absence of an explicit standard or anchor leads to a less stable scale of judgments. Some anchors within a total frame of reference may be more influential than others. To discriminate or to categorize involves making comparisons between alternatives. A situation may force an individual, through lack of an external standard, to use or create an internal standard to use as one of the alternatives or to use as an anchor to assist in his comparisons. Evidence supporting the development of internal standards has come from a number of studies of autokinetic movement in which judgment of apparent movement becomes stabilized (Shaw and Costanzo, 1970:297).

Ambiguity forces the use of pre-existing attitudes.--Sherif seems to be making more specific the factors called for in W. I. Thomas' definition of the situation, which involves a combination of the pre-existing conditions the participants bring with them and the conditions of the objective situation in which they participate. For this

research, it is suggested that the participants, the doctor and the patient, bring into the medical interaction restricted language codes which have been structured by the differing circumstances of their lives prior to their interaction with one another. With these, they structure the objective situation at hand. The more ambiguous the situation, the more internal standards play a part in the outcomes and the more dependence the participants place on pre-existing norms and attitudes.

Ambiguity Encourages Use of
Internal Standards as Anchorage

Over the years, Sherif's work has moved from Thomas' definition of the situation toward Mead's meaning--making of the actual interchange. This later work seems to the researcher to provide additional explanation of the differential participation of patients and doctors in their communication exchanges. Sherif's work builds upon recognition of individual differences in acceptance or tolerance of positions other than one's own, and individual differences in the importance of issues to specific individuals. Observation of these differences has led to the development of the concepts of latitudes of acceptance, rejection, and noncommitment. When an individual is forced by the lack of an objective standard to use his own position as an anchor, he becomes involved and hence selective about the items he is willing to accept. Only items close to his position are absorbed into his latitude of acceptance. The threshold of acceptance which items must pass becomes high. The range of items that will be assimilated becomes inversely proportional to the degree of involvement. Conversely, the rejection threshold is lowered and the range of items that are unacceptable increases in proportion to the degree of involvement.

Patients lack a standard to assess symptoms or advice.--Relating this to a doctor-patient exchange, it can be posited that a patient comes into an exchange without an objective standard of health-related items other than that which his previous experience, the experience of his significant others, and his socialization through schooling and the mass media may have provided. Therefore, the likelihood exists that the number of symptoms offered in evidence will be limited by his past experience, as will the amount of advice he will accept from the physician. The more narrow his previous experience and socialization, the more narrow the range of offered symptoms and accepted advice he is likely to accept. The breadth or narrowness of the range is likely to be class-related, with the lower classes being more likely to have a narrower range. Conversely, the physician enters an exchange with an objective standard of health-related items by reason of his professional training. Therefore he has a low degree of involvement and a larger range of acceptable items.

Normative Influences

Another Communication Link with the 1930's

Another link in the line of thought traceable to the 1930's can be found in an article by Scheff, which he calls "Toward a Sociological Theory of Consensus" (1967:32-45). Scheff posits the existence of two traditional views of consensus. The first views consensus as common-sense agreement. The second can be found in Dewey and Mead who stressed the coorientation of individuals in a group, rather than the orientation of individual members of a group.

Reciprocal recognition.--Scheff relates his own work to

Schelling's concept of tacit coordination (1967:35). He quotes an example from Schelling which demonstrates the possibility of coordination, or coorientation, without direct communication. The example involves the Yalu River as a boundary in the Korean War. Each side of the conflict was aware of the other side's recognition of the boundary, and each side realized that their own awareness was understood by the other side. The first level of coorientation is "we recognize that they recognize it." The second level of coorientation is "we recognize that they recognize that we recognize," and so on.

Scheff remarks:

. . . The potentially endless mirror reflections of each other's recognitions is felt as something utterly final. From this formulation it follows that each actor feels the presence of the collective representation with a sense of exteriority and constraint, even if he as an individual is wholeheartedly dedicated or opposed to the representation.

A process similar to the mirroring above is suggested by Schutz's concept of "the reciprocity of perspectives." The similarity is clearly seen in Garfinkel's explication of the concept of "background of understanding" (1967:35-36).

The comparison made in this study, of the patient's description of his encounter with the doctor and the record's version of the same encounter, could be described using the above terminology as zero-order coorientation. The questions asked of the patient, "Did he (the doctor) understand you?" and "Did you understand him?" could be described as first-order and zero-order orientation, respectively. The design did not permit asking the other half of the dyad, the doctor, for his orientations.

Festinger's Specification of Coorientation

Similar to the notion of coorientation, Shaw and Costanzo, in the same chapter in which they discuss Sherif's work, consider

Festinger's "Social Comparison Theory" (1967:279-85). Festinger's early work considered the effects of social communication on opinion change in social groups. Later, he extended the theory to include the appraisal of abilities and the evaluation of opinions. The theory holds that social-influence processes and certain kinds of competitive behavior derive directly from: (1) a need for self-evaluation; and (2) the necessity for this evaluation to be based on comparisons with other persons. The theory is so well coordinated that Shaw and Costanzo are able to lay it out in numbered hypotheses, derivations, and corollaries. Below are only a few of the hypotheses and derivations relevant for the purposes here:

. . . the tendency to compare oneself with another decreases as the discrepancy between one's own ability and that of the other person increases. . . .

Given a choice, a person will choose someone close to his own opinion or ability for comparison. . . .

. . . a discrepancy in a group will lead to action designed to reduce the discrepancy.

. . . pressure toward uniformity will increase with an increase in the importance of an opinion or ability, or with an increase in the relevance of an opinion or ability to immediate behavior (1970:279-81).

Trend toward uniformity.--The import of the above seems to the researcher to be that the tendency to compare oneself with those who are similar, combined with the pressure of the group to reduce discrepancies, creates a trend toward uniformity or homogeneity. If one agrees that the patient's and the doctor's groups are important frames of reference for their respective members, then it becomes reasonable to assume that the patient's geographic isolation and the doctor's occupational isolation will permit each group's coding usage to become

more uniform. There seems to be support for Sherif's position on the range of acceptable items that can be expected. Sherif suggested that the range of acceptable items becomes narrowed as situations become more ambiguous. The standards of other groups are less well known and therefore more ambiguous than one's own group standards.

Group pressure.--Pursuing the idea of the existence of pressure toward conformity, Volkart, in his book about the contributions of W. I. Thomas (1951:8-9), comments about the influence of the group upon the individual. He says:

Of course, only the individual can ever define his own situations and behave in them accordingly, but the effort of the group is to have him define situations in its own terms so the behavior will conform to social norms. . . . In most cases the group succeeds. The individual does define most situations, most of the time, in a way which coincides with group norms. . . . In this connection it should be noted that even the most extreme radical in any society is radical in only a relatively few situations; in the rest he is a conformer.

If one thinks about language in the above light, then possibilities for rebellion are still narrower. The most radical rebel can only violate a limited number of the norms of his group's language. Beyond that limit he becomes unintelligible. If he chooses to use words the group considers unacceptable under certain conditions, he has to use words that are already part of the group's language, for if he invents new words the group is not likely to recognize his insult.

Theory of Correspondent Inferences

The theoretical position that most closely relates to the interest which prompted this study also appears in the same chapter in which Shaw and Costanzo discuss Sherif and Festinger. They label this position the "Theory of Correspondent Inferences." The theory was

developed by Jones and Davis as an outgrowth of earlier work done by Heider.

It assumes that a perceiver observes the overt action of another person, following which he makes certain decisions about the person's knowledge and ability. These decisions, in turn, permit him to make inferences about the person's intentions. If the observed person has no knowledge of the consequences of his own behavior, or lacks the requisite skill to perform adequately, in the opinion of the observer, intention cannot be inferred. The intentional significance of an action derives from a consideration of the alternatives open to the actor. If knowledge of consequences and ability to produce them are evident, intentions are inferred which can in turn be used to infer the stable attributes that Jones and Davis call "dispositions."

An example given by Shaw and Costanzo is that of A and B working together. If A is observed ordering and criticizing B's work, the inference can be made that A is domineering. But the inference can be made only in situations where A is free to regulate his behavior. If he had been ordered to play a directive leadership role then his behavior could not have been viewed as evidence of personal qualities or, in Jones and Davis' terminology, inferences about dominance would have been less correspondent.

Additional generators for inferences.--Other variables affect the perceiver's inferences about the actor. One of these, Jones and Davis label hedonic relevance. It has two levels of involvement. An action is relevant if it either promotes or interferes with the perceiver's goal. An action is personalistic if the perceiver believes

himself to be the intended target of the action. Correspondence and relevance generally increase together.

A striking conclusion to emerge from several studies is that only negative behavior provides unambiguous information about the true nature of the individual's intentions, since presumably everyone is expected to perform his appropriate role.

Efficiency, anxiety, and levels of inference.--In order to pursue the "correspondence" between this theory and the interest which prompted this study, an impression gathered from earlier working experience with patients will be repeated here. The impression was that patients often emerged from interviews with a doctor with a sense of unease about whether they had told the doctor all of their critical symptoms and, if they had not, whether the omission would affect the treatment they had been told to follow. Further, they were unsure if they remembered the details of the treatment they were to follow. It was suspected that this post-interview anxiety might be related to a facet of the current medical scene, that is, its efficiency orientation which:

- (1) uses an assembly line of cubicle examining rooms which make the patient very much aware that he is one of many who are impinging upon the doctor's time;
- (2) uses an intermediary by having a nurse or clerk collect information prior to the doctor's involvement with the patient;
- (3) does not allot a segment of time for translation from medical discourse to patient discourse.

Relating this to Jones and Davis' terms, it was the

researcher's impression that the behavior of the doctor and his team led the patient to make an inference about the intention of the doctor to rush the patient out of his office, without sufficient time being allotted to assessment of his problem. This thinking had not led up to the next level implied by Jones and Davis' theory; that is, that the patient having made a decision about the doctor's intention would then go on and make inference about the doctor's personal dispositions. The inference about the doctor's intention would be that he was uninterested in the patient's welfare. This, in turn, would permit an inference about the doctor's personal attributes; that is, he was not nice. The halo effect apparently short-circuited this sequence of patients' inferences and forced abandonment of the intention to examine the problem of the "rushed" patient. In answer to the questions (1) "Did the doctor give you enough time to tell him everything you wanted to tell him?" (2) "Did he seem to understand?" and (3) "Did you understand him?" the patients replied, "He examined me real good." The doctor's thorough examination was the behavior about which the patients had made inferences. From those inferences, they went on to the next level of inference; that is, the stable personality attributes of the doctor by saying, "He was real nice."

Summary

W. I. Thomas' "situation" and "definition of the situation" are closely related to Sherif's work, which involves the structuring of important situations. Structuring varies with the intensity of motivation, ambiguity, closeness to the person's own position, and the degree of involvement. The assumptions derived from W. I. Thomas' theoretical position and Sherif's theory and research lend support to

the contention of this study that doctors and patients bring into the situation differing frames of reference from their previous language experiences. These frames of reference structure the exchange that follows.

Scheff's work in levels of coorientation suggests a different design that this study might have taken. Festinger's "Social Comparison Theory" lends support to an assumption that it is inevitable that the patient population and doctor population of this study will tend to become more homogeneous in their behaviors, including their language behaviors, by reason of the tendency to compare oneself with those who are similar. Volkart pointed out how limited radical behavior is. The potential for radical behavior within language norms is limited by the desire to be understood.

Jones and Davis, building upon earlier work done by Heider, have developed the "Theory of Correspondent Inferences." This is based on the notion that observation permits an observer to make decisions about the ability and knowledge of the observed individual and, from these, to make inferences about his intentions. Where ability and knowledge of the consequences are evident, intentions are inferred which are used in turn to infer personal stable attributes.

Jones and Davis' theoretical approach was considered in relation to current medical practice. A trend in medical practice involves a rapid turnover of patients, the use of intermediaries between the patient and the doctor, and a minimum of time allotted to each patient. It was suggested that this trend might leave some patients with a sense of unease and lead to their making an inference that the doctor had failed to allow sufficient time for thorough assessment of their

problem. Having made this inference Jones and Davis' theory suggests that the inference may be carried one step further. From the inference that the doctor is disinterested in his patients' welfare, since he fails to allot them sufficient time, the next level of inference considers his stable attributes, i.e., he is a good or bad person. The patients in the present research made inferences from the behavior of the student-physicians which led them to the inference that the student-physicians were "nice people."

CHAPTER IV

THE PATIENT'S COMMUNITY

Preface

Group norms make possible communication among its members. People can act without any common body of norms but they cannot communicate in the sense of sharing meaning through their interaction. A cat and a canary can interact and so can a mother and her newborn child. . . . The norms of a group are equivalent to the filtering boundary of any system. The way in which members' roles are articulated at any point in time is equivalent to the state of any social system (Berrien, 1968:113-16).

Group norms do not just happen. They involve behaviors that are repeated often enough so that they come to have an air of inevitability about them. They become part of a pattern of behavior that, once begun, stimulates its own completion. In one sense this patterning is similar to Mead's idea that the meaning of a gesture is in the behavior of the organism which perceives it. Group norms whether they be language norms, courtesy norms, or economic norms become in time interlocking, interacting, and systematic.

This chapter moves from the specific normative behavior of coding and coorientation to the more general normative behavior of a community. The data have been arbitrarily divided into two rough categories which seemed to correspond without too much laboring with W. I. Thomas' definition of the situation.

The first category Thomas might have described as the pre-existing situation. Within it are included age; education; occupation;

kinship and family patterns. The second category Thomas might have considered to be objective conditions. Within it are included housing facilities and community health and health care.

The Community as a Pre-existing Situation

Problems with Language Norms Again

The same kinds of problems with coding style that beset the collection of the doctor-patient data equally hampered the collection of data descriptive of the community. Answers tended to be without elaboration. Respondents were anything but secretive. They were often simply puzzled by some of the researcher's questions.

Whenever possible, information was obtained about all members of a household. Sometimes other members of the household were present and supplied the information themselves. Some respondents and some household members were much more informative than others.

The comments and tables which appear in this chapter, for the most part, refer to households in order to indicate that the data include residents of The District other than the seventy-two respondents. Since all respondents were not equally skilled informants, the tallies of tables often do not add to seventy-six households or multiples of seventy-six. The tallies represent all the information the respondent was able to give the researcher about himself and other members of his household; and all of the information obtainable by other means such as clinic or school records and comments by other residents of the community.

The patient and non-patient households have been kept separate in order to determine whether they differed in areas other than their attitudes toward health care.

Age and Sex Distribution

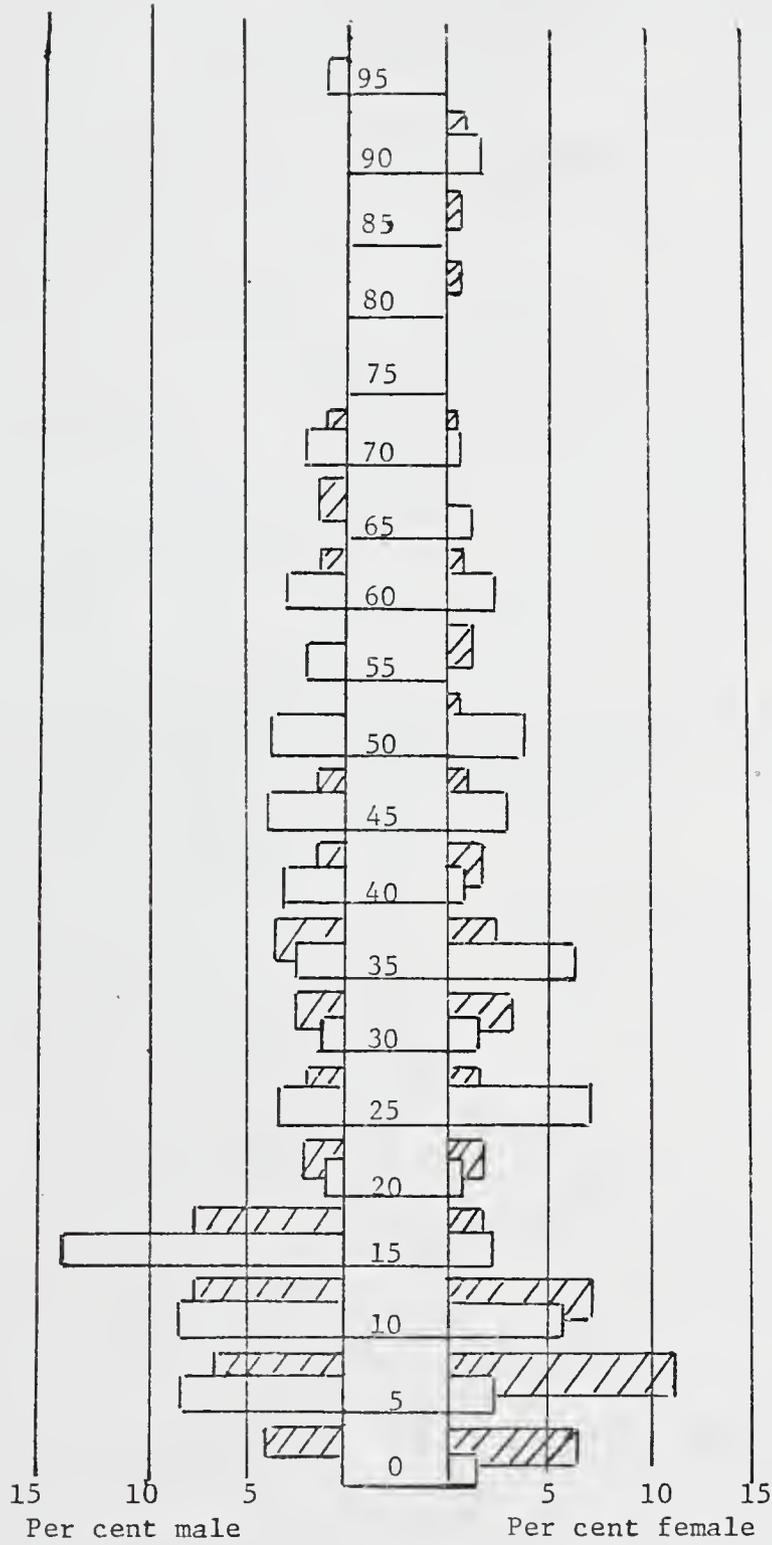
Children's role in clinic attendance

The age-sex pyramid for District residents (see Figure 1) suggested that the households of patients had more children. The possibility that the children might have introduced their households to the clinic seemed reasonable. Pursuant to this idea, the record of visits that had been accumulated for black patients over a period of seven months was checked. Of 142 individual black patients who visited the clinic, sixty-eight were under fifteen. The total number of black patients amounted to 285. The children accounted for only eighty-five of these visits, since in most cases the children had visited only once. Thus the children amounted to almost half of the individuals who visited the clinic but accounted for only one-third of the visits.

It is possible that the children served as an introduction to the clinic through the affiliation of the clinic with the school. Each morning the student-physicians and student-nurses held "sick-call" at the school. Teachers referred children for evaluation. If medical care seemed necessary, notes were sent home to parents advising them that they might bring their children to evening clinic.

Sex ratio differences

The sex ratio of the non-patient group is 141. This could indicate that more women than would be normally expected have migrated from this group; however, the absolute numbers involved are small and therefore the chance of error is large. The patient group has a sex ratio of eighty-two which is low considering the fact that this is a rural area. The sex ratio for rural area black populations has long remained near 100, reflecting a rural urban difference by a consistent disproportion of



82 Residents of non-patient households
 197 Residents of patient households

Figure 1. Age Distribution for the District: 1969

black women in urban areas (Bogue, 1959:158). The sex ratio for the patient group is even lower than the ratio of ninety-one which Bogue claims prevailed for four out of the five censuses preceding the 1960 census (1959:159). Bogue also mentioned that young men in the age categories twenty through thirty-four consistently seemed to be undercounted.

In an effort to discover where the sex ratio imbalance lay, age-sex percentages were shuffled through various assortments. The clearest pattern is arranged in Table 3. This pattern was sorted to examine the category mentioned above, the disappearance of males ages twenty through thirty-four. The outcomes suggest that either sex is about equally likely to be not present. The pattern also indicates that approximately half of both the patient and non-patient groups are under twenty. There are twice as many under-twenty males in the non-patient group as there are females.

TABLE 3
PERCENTAGE DISTRIBUTION OF DISTRICT RESIDENTS
BY AGE AND SEX CATEGORIES

	Non-Patients		Patients	
	Male	Female	Male	Female
0 - 19	33	16	23	32
20 - 34	7	7	8	11
35 - 64	17	15	8	11
65 and over	2	<u>3</u>	4	<u>3</u>
Total		100 (N=82)		100 (N=157)

The marked difference in fertility ratio between the patient and non-patient groups indicated in Table 4 can probably be explained by the greater likelihood of mothers to seek medical care for family members. Their being a part of the patient group is a reflection of this interest.

TABLE 4
FERTILITY RATIOS OF DISTRICT RESIDENTS

Ages	Women of Child Bearing Years	
	Non-Patients	Patients
15 - 19	3	7
20 - 24	1	7
25 - 29	3	5
30 - 34	2	7
35 - 39	3	4
40 - 44	1	4
45 - 49	2	2
Children under 5	$1/15 \times 1,000 = 66$	$20/36 \times 1,000 = 180$

Dependency and aging

The impact of the distribution of age and sex is reflected in the difference in dependency and aging presented in Table 5. The index of aging implies that the patient population is younger than the non-patient population. The dependency ratio for the patient population indicates that for every 100 persons in the active population there are 120 persons in the dependent category. The dependency ratio for the non-patient population indicates that for every 100 persons in the active population there are fifty-six persons in the dependent category.

TABLE 5
 PERCENTAGE DISTRIBUTION AMONG ACTIVE AND
 DEPENDENT AGE GROUPS*

	Dependent Children (14 yrs. and under) (1)	Active Population (15-64 yrs.) (2)	Dependent Aged (65 yrs. and over) (3)	Index of Aging $\frac{(3)}{(1)} \times 100$	Dependency Ratio $\frac{(1) + (3)}{(2)} \times 100$
Patient household residents	49	45	6	12.5	120
Non-patient household residents	30	64	6	20.0	56

*Cf 1970, Petersen:68.

Education

Educational levels did not demonstrate any remarkable difference between patient and non-patient households as had the dependency ratio. During tabulation of the information, it was subsorted into male and female to determine whether the often reported longer schooling for black females would be evident in the community. The results are in Table 6.

Table 6

PERCENTAGE OF RESIDENTS OF THE DISTRICT
BY YEARS OF COMPLETED SCHOOLING
FOR THOSE WHOSE EDUCATION HAD TERMINATED

	Patients		Non-Patients	
	Male	Female	Male	Female
No schooling	5	4	3	6
1 - 3 years	7	7	6	3
4 - 8 years	8	25	21	21
9 - 13 years	17	<u>27</u>	12	<u>28</u>
Total		100 (N = 59)		100 (N = 33)

Since there were more females than males and the numbers were small, the patient and non-patient categories were collapsed to determine whether females would retain their advantage when their greater number was controlled for. Table 7 shows that the advantage is still evident but it is not statistically significant. Surprisingly 42 per cent of the entire group had had at least a grade school education or better. Some of the older respondents were careful to explain that in "their time: school lasted only a few months out of every year. One woman explained it matter of factly. She said, "Five months for the white children, and

three months for the colored children. It cost the parents a dollar a head."

TABLE 7

PERCENTAGE OF TOTAL NUMBER OF EITHER SEX
OF DISTRICT RESIDENTS FALLING INTO
YEARS OF SCHOOLING CATEGORIES

	Male	Female	z
No schooling	11	7	.20 not significant
1 - 3 years	17	9	.14 not significant
4 - 8 years	33	39	.76 not significant
9 - 13 years	39	45	.46 not significant
Totals	100 (36)	100 (56)	

Employment and Sources of Income

Occupations of residents of The District fall into unskilled categories with only a few exceptions that might be called semiskilled. Table 8 shows that there were few remarkable differences between the patient and non-patient household, except perhaps that 22 per cent of the females from patient households worked in the tobacco fields while only 9 per cent of the females from non-patient households worked in tobacco. Since tobacco is a seasonal source of income, it may be the extra income that permits these households to obtain medical services.

The area of work designated "Lumber" includes a variety of jobs residents refer to simply as "in the woods." It includes driving a truck, chopping down trees, marking trees, and work in a saw mill. Among the miscellaneous jobs, the researcher included the jobs that

might have been considered semiskilled; a licensed practical nurse, a cook, a teacher's aide, a boat factory worker, and carpenter's helper.

TABLE 8
PERCENTAGE OF THE DISTRICT RESIDENTS
EMPLOYED IN VARIOUS OCCUPATIONS

Occupation	Patients		Non-Patients		Totals
	Male	Female	Male	Female	
Lumber	11		11		22
Tobacco	1	22	3	9	35
Domestic service		6	1	4	11
Farm and dairy	4	3	10	2	19
Miscellaneous	1	5	3	4	13
Totals	17	36	28	19	100 (N = 80)

Underemployment

The sorting problems for occupations or employment, and sources of income were troublesome. Some men picked up odd jobs when the mill had layoffs. Some women worked part-time during the growing seasons, and worked as domestics occasionally. Other women worked full-time during tobacco season, and now and then during other growing seasons. Other individuals worked full-time during the tobacco season and any other time that planting or harvest work was available. One young widow who supported five children had two full-time jobs. She reported to her job as a maid on her way home from the hospital where she worked. Thus Table 8 included many people who were likely to work, at least on occasion, at some other job.

Employment and education.--High school graduates worked in the fields or in the woods right alongside those who had had no schooling. It did not seem to the researcher that there would be much incentive for children to stay in school under those conditions. Indeed a question that proved puzzling to many parents was, "Why did your son or daughter leave school?" After a few minutes of mulling it over they usually shrugged and said, "I don't know. He wanted to get a job I guess." Some did go on though. Three or four had graduated every year since the high school was integrated three or four years ago. Before integration, high school students made a sixty mile round trip every day to a neighboring county. Those who go to junior college continue to make the sixty mile trip.

Non-employed

Not everyone in The District was able to work. Table 9 shows those whose major income was derived from nonoccupational sources.

The information in the first two columns of Table 9 came from statements such as: "I draw Social Security," or "I get 'ADC' for the children," or "The children's daddy sends me money." (Most Aid to Dependent Children recipients refer to it as "ABC" reflecting the tenuous nature of language ties even with agencies that are dealt with regularly.) Some of those people worked part-time. The last two columns included those who made statements such as: "Since my legs give out and I ain't able to work, I gets a check," or "I'm too old and wore out to work so I gets welfare." For this latter group, however they phrased it, the blow to their pride was obvious. Not all of this group "wore out." Some were hurt on the job. One man, for example,

TABLE 9

INCOME FROM NONOCCUPATIONAL SOURCES OF
HEADS OF HOUSEHOLDS OF THE DISTRICT

	Social Security		Aid to Disabled Old Age Assistance		Totals	z	Level of Significance
	Aid to Dependent Children Child Support		Male	Female			
	Male	Female	Male	Female			
Patients	2	6	9	6	23		
Non-patients	0	0	1	1	2	3.4	.01
Totals	2	6	10	7	25		

was working for a wildcat lumber company when a tree fell on him. A few weeks after he was hurt, the company went out of business.

Aside from the blow to their pride, the existence of a steady income, however small, for approximately half of the patient population may also have been a contributing factor in their having sought medical care. Another plausible explanation for the significant difference between the patient and non-patient groups is that the patient group contains more of the vulnerable who are more likely to need medical care, the old, the "wore out," and the children.

Interviewer Avoidance of Income Amount Question

Questions about amount of income were avoided since the combination of a white, female stranger who asks about money would become a social worker in people's minds. Sometimes people mentioned it anyway as a normal part of the conversation in specific enough terms so that a few comments can be made about it. One man who works at a saw mill in another county asked the rhetorical question, "What can you do with \$50 a week take-home pay?" Another commented about setting out pine tree seedlings, "You can make up to \$125 a week by beginning work at six o'clock in the morning and working six days a week." Beginning at 6:00 A.M. meant finishing at 6:00 P.M. For a seventy-two-hour week, that worked out to be about \$1.66 an hour. This sounded like a comfortable wage until two other facts were taken into consideration. The jobs in the community, with only a few exceptions, are subject to seasonal fluctuations and daily weather whims and are without fringe benefits such as health insurance.

When and Why of Migration
to Meccaville

The question of when residents had come to live in Meccaville was a puzzling question from which few respondents escaped since seventy out of seventy-two respondents had been born elsewhere. Many of the responses came in forms such as "When my sister and her husband came here," or "When my husband came to work on crossties." Questions about when other members of the household had come to live in The District were even more troublesome. Table 10 refers only to sixty-three respondents. Even to arrive at this many involved cross-checking of siblings. Residents tended to locate events in their lives by using bench marks such as the arrival of the turpentine factory, work making crossties, the closing of the saw mill, and the flood. None of these events were recent. The flood was during the thirties and the saw mill closed in 1925.

The non-patient respondents differ from the patient respondents only to the extent that a greater percentage of them have lived longer in The District. Almost half of the patient respondents have lived more than twenty years in The District. Almost three-quarters of the non-patient respondents have lived in The District more than twenty years. All of the non-patients have lived there more than five years. Two of the patient respondents had lived in The District as children and had returned within the previous two years to live in The District once again.

Migrants are sometimes characterized as having more initiative, ambition, and innovativeness. Since almost the whole community has migrated from elsewhere, this is not a particularly helpful explanation for distinguishing one group from the other. On the other hand, the

TABLE 10
 PERCENTAGE OF RESPONDENTS BY LENGTH OF TIME
 LIVED IN THE DISTRICT

Number of Years	Over Twenty Years	Under Twenty Years	Total	z	Level of Significance
Patients	47	53	100 (N = 39)	1.94	.0262
Non-patients	71	29	100 (N = 24)		

length of time that has elapsed since migration may make some difference. Thomlinson comments along these lines. He says:

Insofar as migrants differ from nonmigrants, how long after the act of migration do the differences persevere? . . . Answers to these questions are not fully known. . . . Usually migrants tend to adapt part-way; that is, they no longer resemble the stayers they left behind but fail to adopt completely the coloration of their new neighbors (1965:230).

Seventy-one per cent of the non-patients have lived in The District over twenty years while only 41 per cent of the patients have lived in The District that long. Statistically this difference is significant at the .02 level of significance. This difference may be reflected in a greater willingness on the part of the patient group to allow an innovation such as the new clinic to intrude upon their "folk" life style.

"Why did you come to Meccaville?" was almost as puzzling as "When did you come to Meccaville?" The answers filtered down to two categories: people came because there was a job here, or because there was a relative here. The jobs people had come for included; "Public Work" (road construction), making "crossties" (railroad ties), working in the turpentine factory or the saw mill. None of these jobs was available any longer. The second reason appeared to have more staying power. Kin are not lacking in The District. See Table 11 below for kin ties. Four of the households which appear in the "related to no other households" column have no blood-related kin, but their former spouses live alone in other households within The District.

TABLE 11
 CONSANGUINEAL TIES AMONG DISTRICT HOUSEHOLDS

	Percentage of Households Related to: Percentage of Other Households						Totals
	0	1	2	3	4	5	
Patients	25	20	4	5	2	9	65
Non-patients	8	17	5	1	2	2	35
Totals	33	37	9	6	4	11	100 (76)

Male-Female Roles in The District

Discussions about the lives of blacks often include comments about the subordinate role of the male, matriarchal dominance, and female-headed extended families. The researcher looked for the expected patterns.

Male dominance.--It was anticipated that the traditional taboos of the South that had in the past prevented black males from talking at length with white females would prevent the acquisition of interviews with males. However, males enjoyed being interviewed and were relaxed and informative. Ten men were interviewed with no one else nearby. A chair was dusted off and the researcher was invited to sit awhile. Another two men were interviewed with neighbors for company. Three male interviews were accompanied by wives, and one by an adult daughter. The women were silent for the most part. Two brothers were interviewed together and alternated answering questions. Five interviews with wives were accompanied by their husbands who ranged from silent listening to active participation. The men seemed unaware of their subordinate role if they have one.

Although a lady "Bishop" may suggest matriarchal dominance, only one of the four District churches was directed by a woman. Even she spoke in glowing terms of her gratitude to her husband for helping her to build the church that the Lord had wanted her to build. If females dominate this community they hide it well behind a role of a deferential female.

Family patterns.--Expected patterns did not coincide well with the patterns of family living arrangements that emerged. See Table 12.

Twenty-one per cent of the household heads in the community lived alone. Twenty per cent of the household heads in the community were female heads living with their own children, their grandchildren or boarders. Forty-nine per cent of the community's households were headed by a marital pair.

The augmented household had nonrelatives boarding or sharing living costs. Among the twenty-six households headed by females, four extended and two augmented household heads were beyond the childbearing years. Of the twelve female heads of household living with their children, only four fit the often-cited pattern of multiple common-law husbands and illegitimate children. Among the other eight were six widows, and two women separated from their husbands.

Among the marital pairs were some common-law marriages but they appeared to have lasted several years. Despite the stability of these marriages, the participants were embarrassed by them though they made no attempt to hide the common-lawness.

One-half of Thomas' Gestalt

The first half of this chapter has covered some of the variables

TABLE 12
LIVING ARRANGEMENTS BY MARITAL STATUS
OF DISTRICT HEADS OF HOUSEHOLDS

	Patients		Non-Patients		Totals
	Single Head of Household Male Female	Marital Pair	Single Head of Household Male Female	Marital Pair	
Lives alone	5	4	2	2	26
Lives with own children	10	19	2	2	41
Extended family	3	2	1		6
Augmented family	2			1	3
Totals	5	19	23	14	76

which seem to fit within what Thomas might have described as a pre-existing situation. The second half of the chapter will deal with some of the variables that Thomas might have called an objective situation, the conditions of living to which The District residents have to adjust.

The Community as an Objective Situation

Housing

Twenty-four per cent of the community household heads were home owners. Almost half of the houses they owned were trailers; therefore they were not equity-accruing investments. However, they were an improvement over other available housing.

Arbitrarily the researcher ranked housing in five categories. See Table 13. This may suggest a wider range of choice than there really was.

The good housing would be classified as low-cost housing in most urban areas. Numerous repairs referred to items such as paint or screens. The major repairs involved housing that needed extensive work such as the addition of a flight of stairs to a porch, or complete interior renovation. The dilapidated houses were maintained only through the efforts of the residents who lived in them. The hazardous housing which sheltered 25 per cent of the people of The District was only slightly better than being outdoors. Its rustic charm was further enhanced by the "slivery" outhouse which often accompanied it.

Forty-one per cent of The District's houses had outdoor plumbing. Three households, one patient and two non-patient, lacked even outhouses. The two non-patients shared facilities with a neighbor while the one patient household used the fields. There may have been

TABLE 13
 PERCENTAGE OF DISTRICT HOUSEHOLDS BY
 VARIOUS LEVELS OF HOUSING QUALITY

	Good	Minor Repairs Needed	Major Repairs Needed	Dilapidated	Hazardous	Total
Patients	12	11	1	20	18	62
Non-patients	13	5	4	9	7	38
Total	25	16	5	29	25	100 (N = 76)

more households that lacked outhouses. Naiveté led the researcher to ask, "Do you have an indoor toilet or an outdoor one?" Much later it was discovered that one of the respondents who had answered "outdoor" meant the great out-of-doors. There was no way to return and, try, unobtrusively, to count outhouses to correct the error. The 55 per cent with indoor plumbing had septic tanks, since Meccaville does not yet have a sewage system.

Three houses had no electricity. The residents used kerosene lamps. Several houses had diminutive wood burning stoves for heat. Generally, they were so stubby that an unsteady toddler could scarcely escape burning himself. The roaring of the little stoves amidst all the old dried wood of the houses seemed to be a dangerous alternative to being cold since the side of the body away from the fire stayed cold anyway.

A few houses had yards with fences and flowers. Most houses, however, opened onto the streets which were hot and dusty or wet and muddy, depending upon the weather.

Before leaving the topic of housing, two comments by District residents about the quality of housing bear repeating. One comment by a frail elderly man who lived alone was made while he chatted with the researcher one brisk afternoon sitting on the edge of his sagging porch. The researcher asked him if it wasn't a little bit breezy in his house on cold days. He grinned, nodding his head, and replied, "When it's not rainin', I can lie in bed and see the stars through the cracks up over the fireplace." Another comment was made by a woman who lived in one of the hazardous homes. In answer to a question about her house, she said: "Oh that old raggedy thing. We keeps a cold the winter through."

Maternal Care

The condition of the housing conveyed still more impact when one began to count the number of babies who had been born in them. Midwives are coming back in style in modern medicine. They only recently went out of style in The District. Back when Meccaville had its own physician, some women went up to his office to have their babies and stayed overnight in his "back room." More, however, had them at home with the assistance of a doctor, a nurse, or a midwife. See Table 14.

Only one-sixth of the non-patients had hospitalized deliveries for their babies while almost one-third of the patients had hospitalized deliveries. A test of the significance of this difference yielded a z of 2.97 which is significant at the .01 level.

The difference between the two groups could reflect a difference in attitudes toward health care. It could also reflect a greater impact upon the patient group of the retirement of the local doctor and the two midwives who at various times serviced The District.

Health Care Choices

Choice of physician.--The clinic does not deliver babies, but the opening of the clinic helped to reduce the cost of medical care for many households. Formerly, those without a car had to pay someone to drive them to one of the cities where care was available. This added about \$5 to the overall medical expense. Even with the payment of a transportation fee, choice of physician was often dependent upon which direction the driver was headed.

Choice of being hospitalized.--It is likely that doctors in neighboring cities were aware that District residents had limited funds,

TABLE 14

AGE DISTRIBUTION OF PERCENTAGES OF MOTHERS BY
METHOD OF DELIVERY FOR PATIENTS AND
NON-PATIENTS OF THE DISTRICT

	Non-Patients			Patients		
	Hosp.	Dr.	Nurse Midwife	Hosp.	Dr.	Nurse Midwife
15-19						
20-24	1		1	3	1	.6
25-29			4	8	1	3.1
30-34	8	1	7	13		.6 8.1
35-39	4		9	3	.6	3 13.1
40-44			14	3		9
45-49				1	1	.6
50-54	2		23		.6	10.1
55-59						7
60 and over		1	24		.6	9
Totals	15	2	82	31	3.8	4.6 60.6 100 (N = 180)

and therefore were sparing in their recommendations for hospitalization. The researcher wondered one day if they were not a bit overzealous in this respect after a lady had told her about the day she had her stroke. After she had "passed out" her brother drove her the twenty-odd miles to the doctor. The doctor was alleged to have told her brother she had had "a light nervous stroke" and she would be all right in a few days. Her brother drove her home again. The researcher asked if she had stayed even overnight at a hospital. The question surprised her. She checked with her brother to confirm that hospitalization had not been mentioned. Some remaining facial, arm, and leg paralysis tends to substantiate that she did have "a stroke."

Choice of waiting rooms.--In talking with people about the medical care that had been available to them before the advent of the clinic, a certain fondness was noted for a Cuban physician who had an office in one of the two cities where care was located. Some gentle probing elicited an explanation that Dr. "X" seemed to have some sense of identification with the people of The District. Groping for a way to get her point across to the researcher, a very earnest lady explained, "He takes one from the white waiting room and then one from the colored waiting room. He don't make no difference."

Budget choice.--On the whole there were few complaints about the care that people had received in the past, although the best known story in the community concerns a lady who was turned away from one of the hospitals because she could not post security. She delivered her baby on the trip between hospitals. Some respondents preferred to go to the University's teaching hospital sixty-five miles away "even if it does

cost more because they let you budget for a longer time." One woman added a postscript "besides they know more."

Health Care Problems

Dental care.--The area in which the health of The District's residents suffered the most was in their dental care. It was also an area in which respondents seem to know little about the needs of other members of their families.

Thirteen of the patient respondents who had had extractions had only been to the dentist once and four of the non-patient respondents had been only once for extractions. An elderly woman who had had only one tooth "drawn" in her lifetime showed the researcher her other teeth. They were worn almost to the gum line. What was left of the teeth were shells with empty hollows in the centers.

Parasites.--Shortly after the data collection had been completed, the clinic took a specimen for parasites from everyone in The District. Approximately 90 per cent of the findings were positive.

Although the results were startling they did not carry nearly the impact that a matter-of-fact conversation with a District resident had carried. In discussing the impending visit of her little girl to the clinic, upon the request of the school clinic, she commented she was sure that her daughter had worms. She went on to explain: "Because at night she bees all up on her all fours. And she just grits her teethes. And she just jumps up like something scared her. And she be talking out in her sleep." The researcher asked her what made her think that was worms? Had she ever seen people with worms before? She answered:

I have . . . my sister . . . my baby sister. She have had them so bad they used to just crawl out of her back part and her nose when

TABLE 15
 PERCENTAGE OF DISTRICT RESPONDENTS AND THEIR CHILDREN
 BY THE STATUS OF THEIR DENTAL CARE

	Bridges or Dentures	Gold or Repairs	Children Had Seen School Dentist	Extraction Only	Never Been to a Dentist	Totals
Patients	9	17	16	46	12	100 (57)
Non-patients	7	7	13	47	26	100 (30)

she was small. Momma was scared we'd get them. And I was scared too. And she'd run around there and cry. We used to take a rag and pull them out of her. And at night she would crawl on her all fours and just grit her teethes. She had spells of them. Momma would take her clothes and throw them in the fire.

Besides throwing the clothes in the fire, her mother had made a candy from a weed found in the woods which she called Jerusalem. That, and garlic, were the cures for worms.

While plans were being made for a possible community-wide administration of medication for worms, the valid question was raised about the wisdom of administration of medication without removal of the cause. A parasitologist friend explained to the researcher that the damp soil facilitates the perpetuation of the worm cycle. Rains wash the eggs to places where children play in the mud. The children get the eggs in their mouths and the cycle continues. When it has been raining for several days, some parts of The District resemble a lake.

Mass-Conservative Migration

Seventy out of seventy-two residents had been born somewhere other than Meccaville. The specific names of only fifty-six birthplaces were available. These were used to make a comparison of the current size of cities and towns where District adults had been born with the current size of Meccaville. Thirty-eight of the birthplaces were larger than Meccaville.

Not only had District adults been born elsewhere. Some of their children had been born elsewhere indicating that at least part of the parental adult years had been spent in another location. A comparison of the size of the cities and towns where District children were born is presented in Table 16.

More than half of the households of The District had had babies

born to them in cities and towns larger than Meccaville excluding the cities where Meccavillians went for hospitalized deliveries. It was difficult to believe that District residents had departed to this extent from the trend toward migration in the direction of more urban areas. Scrutiny of the areas from which residents had migrated revealed that 50 per cent of the towns and cities had populations ranging from approximately 700 to 2,700. Another 36 per cent of the towns and cities ranged from 5,000 to 37,000. Thus 86 per cent of the residents had migrated from small southern towns no larger than 37,000 in population. Their migration can best be described as "mass-conservative" using Petersen's term; that is, residents migrated from areas similar to their present residence.

TABLE 16

CITIES OR TOWNS OF BIRTH OF DISTRICT
HOUSEHOLDS' CHILDREN

	Meccaville	Birth in Nearby Hospital Cities	Birth in One Other City	Births in More Than One Other City	Totals
Meccaville	24	6			30
Smaller than Meccaville			2		2
Larger than Meccaville			37	3	40
Totals	24	6	39	3	72

Why Meccaville?

Amidst a discussion of housing and health hazards, and the absence of diversified job opportunities, one is bound to wonder why the

migrant selected Meccaville, and once selected why he chose to remain.

This is a hazardous area of speculation about which Petersen comments:

The process of migratory selection . . . is obviously of great practical importance: to a large degree it defines the meaning of any movement for the two areas concerned. Unfortunately . . . it is a subject about which we know rather little. We have seen that migrants are in most respects not a random sample of the populations they leave and enter. In virtually all cases adolescents and young adults predominate. With respect to other characteristics--sex and occupation, possibly intelligence and mental health--selection usually seems to depend more on conditions at the destination than on those at the origin (1961:603).

The conditions at the destination, i.e., jobs that existed in Meccaville, brought many District residents to live there. These jobs existed twenty or thirty years ago when District residents who came to get them were young. Many of the jobs no longer exist. Many of The District residents are no longer young. For those who are still young, an additional factor not mentioned above complicates any decision they make to migrate, that is, the long history of racial barriers which mitigate efforts at economic improvement by reason of their being black.

CHAPTER V

THE STUDENT-PHYSICIAN COMMUNITY

Student-Physician Socialization

Since the research design did not allow for interaction between the researcher and the student-physician, an assumption of the homogeneity of the student-physician group was necessarily based on theory and research developed and presented in the literature by other social scientists.

In the preface to The Student-Physician, Merton, Reader, and Kendall point out that novices are presented the professional culture of medicine within the social environment known as the medical school. This setting acts as an agent between the previously trained capacities of the novice and the emergence of the professional self. Thus the student is not only given knowledge and skills, he is also presented with a new identity. The authors consider this process affected by the medical schools as socialization, a point that they make clear in Appendix A where they compare their meaning of the word socialization with other possible meanings. They comment:

In considering the "socialization of the medical student," then we consider the process by which neophytes come to acquire in patterned but selective fashion, the attitudes, and values, skills and knowledge, and ways of life established in the professional sub-culture (1957:288).

Renée Fox, describing the process by which students learn to live with uncertainty, connects this learning with: ". . . his

membership in the 'little society' of medical students, for a medical school class is a closely-knit, self-regulating community . . ."

(Merton, Reader, Kendall, 1957:220).

Becker, Reader, and Kendall describe medical school as being organized in an authoritarian pattern to an even greater extent than other schools. The greater the power exercised by the faculty the more students are forced to adopt faculty perspectives, and the less able they are, as a group, to develop their own student perspective. Students do manage, to varying extents, to develop their own perspectives comprised in part by medical ideals and values, and in part by situational demands with which they are forced to cope (1961:435-43).

The operation of the student perspective is highlighted in the chapter Becker, Reader, and Kendall call "Student Co-operation." The students are often assigned work for which they are, in a sense, collectively responsible. Although the faculty never formally specifies a credo of collective responsibility, the students believe an incomplete task will bring down the wrath of the faculty upon the group. Therefore they develop collective work norms to distribute the work load. Standards are kept reasonable by restraining individual members from setting a standard to which other group members would be invidiously compared. Students cooperate on assignments by quizzing each other, by sharing completed work, and by devising short cuts. As much as possible students shield each other from making bad impressions on faculty (1961:297-312).

Comments by Friedson suggest that the students' bifurcated perspective, proportioned between faculty and student views, continues to flourish beyond the confines of medical school. The dilemma is

different. The pressure to compromise is similar. Friedson

says:

There is some very persuasive evidence that "socialization" does not explain some important elements of performance half so well as does the organization of the immediate environment. . . . [D]ifferent specialists--for example, obstetricians as apposed to pathologists--are reputed to have different "personalities." . . . How can we explain such differences? . . . Certainly self-selection is one element to be taken into account. . . . But the personal and economic cost of . . . movement from one speciality to another is so great this kind of self-selection simply cannot be very common. . . . [A]nother kind of explanation lies in the press of the situation after he has landed in a position . . . on the consequences of being in a situation in which persistent and powerful demands cause the individual to behave in certain ways regardless of his personal qualities (1970:89, 106).

The behavior which Friedson observed among practicing physicians which he chose to explain as the "press of the situation" is reminiscent of Becker, Reader, and Kendall's student perspective. Both seem to carry within them W. T. Thomas' blend of the pre-existing situation, wrought by any and all of the stages of socialization, and the objective situation which consists of the pressures to behave brought by the setting, the people within the setting, and the point in time.

Professional Socialization

Socialization is not unique to medicine. It is an aspect of professions in general. Goode describes a profession as a "community within a community." He suggests that professions have eight general characteristics. These are:

- (1) members are bound by a sense of identity;
- (2) few leave a profession, therefore it is a terminal or continuing status;
- (3) values are shared by members;
- (4) role definitions by members and non-members agree;

- (5) within the areas of action, a common language is used which is only partially understood by outsiders;
- (6) the community has powers over its members;
- (7) the limits of the community are social ones;
- (8) though it does not biologically produce the next generation, it does control the adult socialization process which determines who will be its members (1957:194).

Socialization into the Use of Professional Language Norms

As Goode pointed out above, a common language only partially understood by outsiders is a characteristic of professions. It is an essentially unexamined characteristic. Discussion of the acquisition and use of this common language is sparse.

Some examples of the socialization into the use of professional language norms can be culled from literature devoted to other purposes. Becker, Reader, and Kendall provide an example. A lecturer had been particularly sarcastic to a student. The student in a comment about it afterward said, "He sure was malignant, wasn't he? He sounded like a grade five to me" (1961:291). The term malignant, a tumor classification, was used to describe the faculty member. He was still more specifically classified by grading him on a scale that spans the range from benign to malignant.

Another example of the learning by the students of a specialized language is also provided by Becker, Reader, and Kendall (1961:242-43). While a student was taking a history, a patient began to cough. The student stopped his history-taking and listened to the patient's chest with a stethoscope. He surmised the patient had gone into pulmonary edema, and the student acted accordingly. The researcher who noted the example parenthetically commented that he, the researcher, had found out

later that pulmonary edema is a condition where there is some kind of heart failure and blood plasma is taken into the lungs through the walls of the blood vessels. The patient chokes to death or dies of heart failure in fifteen or twenty minutes if appropriate treatment is not begun. The student when queried revealed that he had learned the details about pulmonary edema from a lecture only a few days prior to the incident.

The researcher, presumably with a high level of education, was unfamiliar with the medical term. The student had learned the term only a few days previously, as a part of his training. The possible conclusion that may be drawn from this incident is that technical terms such as this are not a part of everyday discourse, and must be learned as part of a professional socialization process.

Although the literature dealing with the acquisition of medical language norms is scanty, there is a slightly larger amount which deals with the use of medical language norms. A study was done by Romano in which fifty patients were asked sixty medical terms and abbreviations. These were all terms that were used frequently during bedside conferences. Most of the terms proved to be either unfamiliar or misunderstood (1941:664-67).

Redlich gave twenty-five neuropsychiatric patients sixty terms commonly used in the course of their treatment. Redlich commented about the outcomes of his research:

The different interpretations of medical terms by patients and laymen must be recognized. To physicians, medical terms are or ought to be "significata," the context of which has been determined by operational procedures. Laymen in most cases, as it has been demonstrated, are not aware of such denotations and their underlying principles; their responses are predominantly emotional (1945:427-53).

Ernstene, a physician, in an article he called "Explaining to the Patient," severely criticized the lack of coverage in standard medical texts and clinical training afforded to

. . . the need for explaining to the patient the nature of his problem, the mechanism and significance of his symptoms, and the course the illness may be expected to follow. . . . There are two principal reasons why an explanation . . . is indispensable. In the first place it is, in many illnesses, a therapeutic tool of basic importance. Secondly, it is one of the best available ways to show personal concern for the patient's welfare. . . . There are many diseases in which the difference between a satisfactory and a poor therapeutic result is determined by the care with which the patient carries out the recommended program of treatment . . . and whether or not a person cooperates to the extent required usually depends on whether or not he understands the need for the measures advised (1957:1110-13).

Ernstene includes a partial list of diseases in which he feels communication is critical. To name only a few of those mentioned, the author listed heart disease, diabetes, gout, emphysema, and pulmonary tuberculosis. Similar work done by Pratt, Seligmann, and Reader was mentioned earlier in Chapter 2 (1957:1277-83).

Apparently the role that communication plays in the socialization and later practice by the physician is accepted as so commonplace as to be unworthy of attention. The editors of The Student-Physician, while not addressing the specific problems of communication, do address themselves to the general problem of phenomena taken for granted. They comment:

The annals of science--physical, biological, and social--are crowded with instances of premature suspension of curiosity because a commonsense knowledge of gross phenomena had precluded interest in the mechanism through which the phenomena came to be (Merton, Reader, Kendall, 1957:288 fn.).

CHAPTER VI

FINDINGS FROM THE DOCTOR-PATIENT TRANSACTION COMPARISONS

A Compatible Hypothesis and Statistic

Summary of Assumptions

The assumptions presented in earlier chapters will be reviewed below, along with perspectives from the intervening theoretical chapters. The intent being to bring them to bear upon the hypothesis which will be stated and statistically tested in the latter part of this chapter. The assumptions are as follows:

1. The patient population uses a language that can best be described, using Bernstein's terms, as a restricted code (high structural prediction). The restricted code comes about as a result of sharing norms that are supported by kinship ties, by similar educational and occupational experiences, by racial and residential segregation, and by years spent living in the same community. The sharing of a body of common assumptions about behavior reduces a need for verbal differentiation.
2. The doctor population which produced the medical records used in this sample can be described as using a restricted code (lexicon prediction). This comes about as the result of rigorous training which in time produces a body of common assumptions. A measure of homogeneity probably is created

also by the highly selective screening process which permits only a few applicants to become participants in the training.

3. Each of the participants comes into the transaction with a body of assumptions acquired from the group significant to him, and with a coding style acceptable to his significant group. With his assumption and his coding style, he defines the situation of which he is a part. Beyond the pre-existing definition of the situation which each participant provides, there is also an objective situation which has some effect on modifying the definitions of the participants.
4. Where a situation is ambiguous or unstructured, an individual is forced to use his own internalized standards as an anchor. The more ambiguous the situation, the more stringent the individual becomes in his willingness to accept items that are new or contrary to his frame of reference. The patient is a participant in a situation which is vastly more ambiguous for him than it is for the doctor whose training has prepared him for it. Therefore, the patient will be less flexible in his acceptance of items that are new or contrary to his frame of reference.
5. Observers can make inferences about the intent of the behavior of others if they perceive the actors as being free to regulate their own behavior and aware of the consequences. Where knowledge of consequences and ability are evident, the observers may make inferences about the stable dispositions of the actors.

Framing an Hypothesis

The most difficult task in this piece of research has been the framing of an unambiguous hypothesis that would also be statistically testable. To demonstrate the conceptual pitfalls possible, one of the later unsuccessful attempts will be presented below. The hypothesis was:

If each of the participants comes into the doctor-patient transaction with a different definition of the situation and a different set of coding norms with which he structures the objective situation, the number of unmatched items will exceed the number of matched items. Lack of agreement will exceed agreement.

The conceptual flaw in this hypothesis is that it assumes an equality of discursive skills on the part of the participants. Picture, if you will, two three-year-olds who talk past one another, or two experienced politicians who do the same. These offer equality of discourse. The doctor-patient exchange involves a skilled professional trading information with a rank amateur. Or, to use the analogy of the children, it is like a ten-year-old trading with a three-year-old.

Hypothetical Outcomes

In an effort to avoid some of the semantic snares, the researcher tried to imagine some of the range of possible outcomes of the doctor-patient transaction. They follow.

1. If communication were perfect, the skill of the participants would not matter. There would only be matched items with no leftover unmatched items.

2. If there were no communication, there would only be unmatched items.
3. If there were partial communication and equal skill, the number of matched and unmatched items would be roughly equal.
4. If communication were partial and the participants' discursive skills were unequal, then the number of unmatched items would be greater for the more skillful. He would be able to recall his own contributions and more of the other participant's than the other participant would be able to recall of his.

The last imagined outcome led to the final version of the hypothesis:

Communication between doctors and patients can be expected to be less than perfect. A doctor can be expected to be more skillful in the use of language necessary to conduct a doctor-patient transaction. Therefore, he will remember more of his own contributions and the contributions of his coparticipant; hence he will accrue a larger number of unmatched items.

The null hypothesis is:

There will be no difference between the number of unmatched items accrued by doctors or patients.

The possibility that the patient may have forgotten what took place in the transaction deserves consideration, particularly since there was a variation in the length of elapsed time between the patient's interview with the student-physician and his interview with the researcher. This was a variable that could not be controlled, as was

explained earlier. However, this limitation may not be entirely a liability since it coincides with the medical practice presumptions that patients can remember over time, after having once been told or, in some instances, having never been told.

Search for a Statistic

A cursory examination of the distribution of matched and unmatched responses presented in Table 17 makes rejection of the null hypothesis seem reasonably inevitable.

TABLE 17
PERCENTAGE DISTRIBUTION OF MATCHED AND UNMATCHED
RESPONSES FOR DOCTORS AND PATIENTS

	Matched	Unmatched	Totals
Doctors	26	39	65 (N = 424)
Patients	26	9	35 (N = 225)
Totals	52 (N = 334)	48 (N = 315)	100 (N = 649)

However, if matches are separated into their individual responses, as they are in the totals given in Table 18, it becomes obvious that effort to find correlation or independence is confounded at the outset by the correlation of the two center columns and the independence of the two lateral columns. This correlation and independence are built into the totals by the definitions of matched and unmatched.

The statistic-related question amounted to clarifying which total could be compared with which other total without introducing bias through the imposed order of the coding rules. The conceptual problems of a testable hypothesis and an appropriate statistic had to be

TABLE 18
 PERCENTAGE DISTRIBUTION OF DOCTORS' AND PATIENTS'
 RESPONSE WITHIN TRANSACTION CATEGORIES

Transaction Category	Doctors' Unmatched	Doctors' Matched	Patients' Matched	Patients' Unmatched
History	10	5	5	12
Symptoms	62	42 ^a	42 ^a	60
Diagnosis	8	11 ^b	11 ^b	5
In-clinic Treatment	7	25 ^c	25 ^c	10
Home Care Treatment	7	6 ^d	6 ^d	10
Follow-up	6	11	11	3
Totals	100 (N = 257)	100 (N = 167)	100 (N = 167)	100 (N = 58)

^aIncludes 3 contradictions and 1 ambiguity.

^bIncludes 1 ambiguity.

^cIncludes 3 contradictions and 1 ambiguity.

^dIncludes 2 ambiguities.

simultaneously untangled. The match, by definition, involves a response by each of the two participants. The unmatched, by definition, involves a response by one of the two participants that does not have a corroborating response by the other participant.

Promising Statistical Methods

Card-matching model.--The title of an article by Gilbert, "The Matching Problem" (1956:253-66), suggested a possible workable method. Used mostly with early extrasensory perception experiments, the method involved the distribution of the probabilities of making correct guesses about hidden playing cards. Medical categories could have been substituted into the formula in place of suits of cards (spades, hearts, etc.), but card suits had a fixed number of thirteen which medical categories did not; therefore the method had to be discarded.

Clarification of agreement.--Another promising method was developed by W. S. Robinson (1957:17-25). Robinson's presentation helped to clarify some of the conceptual ramifications implicit in the notion of agreement, or matching, as the researcher had labeled it. Robinson contended that two methods for measuring agreement are predominantly used. The first common method involves finding the percentage of judgments that exactly agree, or finding the percentage of judgments within a range, that agree. The second common method involves using a Pearsonian correlation as a measurement between ratings. Both methods are used in ways that suggest that they mean "identical" or that they simply mean "similar." Robinson insists that a distinction needs to be made between agreement and correlation. To his way of thinking, agreement implies $X_1 = X_2$ which in turn means that X_1 and X_2 are perfectly

correlated. This is the point at which conception generally stops. However, it needs to be carried one step further in order to see the difficulty. If one attempts to reverse the statements by saying X_1 and X_2 are perfectly correlated, hence X_1 must be identical with X_2 , the difference between identical agreement and correlation becomes clearer. Correlation is not measured solely by the model $X_1 = X_2$ but by numerous functional relationships; among them the familiar rectilinear relationship $X_1 = a + bX_2$.

Robinson's method.--If two values are identical the sum of their disagreement, or the sum of their squares, is zero and agreement is perfect. If the difference between two values is large, the sum of their squares will be large.

In fact, the sum of squares for any pair of values is half the square of the difference between them. . . . For a single pair then $(X_1, - \bar{X})^2 + (X_2, - \bar{X})^2$, or the sum of squares measures the lack of agreement between the values X_1 and X_2 (1957:18-19).

The sum of N sums of squares, one for each pair of values, measures the total within pair lack of agreement of N pairs. This sum, D (for disagreement), is not useful by itself. It needs to be related to its range of possible variation. The least value D can have is zero when all pair members agree. The greatest possible value of D for a given sample of N pairs is called D_{\max} . Then D/D_{\max} is that fraction of possible disagreement that an observed D may take. The coefficient of agreement is thus defined as:

$$A = 1 - D/D_{\max}.$$

The maximum possible value of D for N pairs of observation is the sum of the squares of the deviations of each of the 2 N observations

from their common mean. The computation formula for agreement is, therefore:

$$A = 1 - \frac{(X_{1j} - \bar{X}_j)^2 + (X_{2j} - \bar{X}_j)^2}{(X_{1j} - \bar{X}_j)^2 + (X_{2j} - \bar{X}_j)^2}$$

Since the numerator and denominator appear to be the same, a brief reminder may be in order. The numerator refers to the within-pair difference and uses the mean for each pair. The denominator is concerned with the between-pair difference and the mean in use is the mean held in common by all of the units of both variables.

If agreement implies identity.--Before Robinson's method could be used, the dual hypothesis and statistic-related questions had to be answered, "Between what should there be agreement, and what would it mean?" If, as Robinson suggested, agreement implied identity, then the first of the four hypothetical possible outcomes outlined earlier in this chapter could be expected. Communication would be perfect and there would be no leftover unmatched items. This would mean that all of each participant's responses could be compared and would be matched. Therefore all of the responses for the doctor and all of the responses for the patient were used for all transactions rather than the separate matched and unmatched totals. The within-pair difference and the between-pair difference were found and inserted into Robinson's formula as follows:

$$A = 1 - \frac{651.2}{1253.0}$$

$$A = 1 - .51$$

$$A = .49$$

Robinson does not give confidence levels for the coefficient of agreement, but he does indicate that in the case of two variables the intraclass correlation is a simple linear function of the coefficient of agreement. The equation for this relationship is:

$$r_i = 2A - 1$$

$$r_i = 2(.49) - 1$$

$$r_i = - .02$$

Robinson directs the reader's attention to Fisher's test of significance Table V.B. which transforms r_i into z (1941:203).

$$r_i = - .02$$

$$z = .02$$

Significance through failure to reject.--Communication using Robinson's method, was not perfect. The use of this statistic for the purposes of this research would have amounted to using an alternative hypothesis which predicted lack of agreement and a null hypothesis which predicted agreement. Failure to find significant agreement would permit acceptance of predicted lack of agreement. This is not unheard of in the literature (see Morrison, 1969:132), but seemed an unsatisfactory way to solve a problem.

Mood has suggested that the use of statistical tools is like using the correct one of several wrenches, each of which appears to fit the bolt equally well but none of which fits exactly. (See Zelditch, 1959:v.)

A More Suitable Statistical "Fit"

Dissatisfied with the possibilities of more sophisticated techniques, the researcher finally resorted to a somewhat ingenuous

technique which seemed to offer more hope of clarifying the relationship the researcher had in mind. The technique chosen is one which Zelditch labels "The Difference Between Two Proportions When N Is Large: The Normal Approximation to Binomial Probabilities" (1959:276-79).

Similar code or similar level of skill.--The null hypothesis held that there would be no difference between the number of unmatched items accrued by either doctors or patients. This could be said in still another way by saying that the unmatched responses of the patients and the doctors were drawn from the same population of responses. The phrase "the same population of responses" could be construed to mean two things: (1) the same population of responses produced by a population using a similar code; or (2) the same population of responses produced by a population having a similar level of skill in code use. Conceptually these may amount to the same thing.

Bernstein has described the elaborated code user as one who has learned to expect to use his code to explore the unexpected. This implies versatility or level of skill. The use of a restricted code does not require versatility; it requires familiarity. Therefore, if the responses are not found to belong to the same population of code users it may be because they use different codes, as between two restricted code users, or because they have different levels of skill as between an elaborated code user and a restricted code user. Because the doctor fits both categories, the contribution of his two codes cannot be separated out.

Zelditch's method.--Assuming that the null hypothesis of no difference between the number of unmatched items accrued by either doctors

or patients is true, \hat{p}_1 , the sample estimate of the unmatched proportion of the doctors' responses, and \hat{p}_2 , the sample estimate of the unmatched proportion of the patients' responses can be pooled to make a common estimate of P and Q. This estimate can be used in turn to obtain the standard error of the difference, which in computation form is:

$$s_{\hat{p}_1 - \hat{p}_2} = \sqrt{\hat{p}_0 \hat{q}_0 (1/N_1 + 1/N_2)}$$

where $s_{\hat{p}_1 - \hat{p}_2}$ is the standard error of the difference between proportions

\hat{p}_0 is the pooled estimate of P given by

$$(N_{1p1} + N_{2p2}) / (N_1 + N_2) \text{ and } \hat{q}_0 \text{ is } 1 - \hat{p}_0.$$

In order to make the formula clearer, it will be demonstrated below, using the doctors' unmatched response total and the patients' unmatched response total. Additional results for the subcategories of the data will be presented in Table 19.

The tabulated data presented earlier in this chapter were introduced into the computing formula as follows:

$N_1 = 257$ unmatched responses of total of 424 doctor responses

$$\hat{p}_1 = .60$$

$N_2 = 58$ unmatched responses of total of 225 patient responses

$$\hat{p}_2 = .26$$

$$\hat{p}_0 = \frac{257 + 58}{424 + 225} = \frac{315}{649} = .48$$

$$s_{\hat{p}_1 - \hat{p}_2} = \sqrt{(.48)(.52) \left(\frac{1}{424} + \frac{1}{225} \right)}$$

$$= .0408$$

TABLE 19

FINDINGS FOR CODING CATEGORIES OF DOCTOR-PATIENT TRANSACTIONS USING
THE DIFFERENCE BETWEEN TWO PROPORTIONS WHEN N IS LARGE:
THE NORMAL APPROXIMATION TO BINOMIAL PROBABILITIES

Trans- action Category	Doctors'		Patients'		p2	sp1-p2	z	Level of Significance
	Unmatched/ Total	p1	Unmatched/ Total	p2				
History	25/34	.71	7/16	.45	.1094	-2.37	.05	
Symptoms	160/229	.70	34/103	.33	.0583	-6.51	.01	
Diagnosis	21/40	.52	3/22	.14	.1294	-2.16	.05	
In-clinic treatment	19/60	.32	6/47	.13	.095	4.72	.01	
Home Care treatment	19/29	.65	6/16	.37	.183	-1.53	Not significant	
Follow-up	13/32	.41	2/21	.10	.1608	-1.92	Not significant	
Totals	257/424	.60	58/225	.26	.0408	-8.3	.01	

Using the normal distribution, z can be computed by using:

$$z = \frac{\hat{p}_2 - \hat{p}_1}{s_{\hat{p}_1 - \hat{p}_2}}$$

$$z = \frac{.26 - .60}{.0408}$$

$$z = - 8.3$$

A z of -2.58 is significant at the .01 level of significance.

The z of -8.3 found above exceeds -2.58; therefore, a z of -8.3 would be expected to occur by chance less than once in a hundred times if p_1 and p_2 were drawn from the same population of responses. The null hypothesis can be rejected at the .01 level of significance.

The findings permit the researcher to say with some assurance that the population of doctors' unmatched responses significantly differs from the population of patients' unmatched responses and that the difference occurs in four out of six of the areas of discourse covered in the doctor-patient transaction, as well as in the overall totals.

Another Way of Looking at the Response Totals

The response totals presented in frequencies earlier in this chapter in Table 18 demonstrated an imbalance in the doctor-patient transaction by reason of a greater number of unmatched responses for the doctor. The imbalance is more obvious when the frequencies are transformed into percentages. See Table 20.

Despite efforts to weight the form in favor of patients' participation by excluding findings from physical examinations and including only "conversational" items, the doctors' overall participation amounts to 65 per cent of the transaction while the patients' overall participation amounts to only 35 per cent. Even in the areas

where the patient would be presumed to be best informed, his history and his symptoms, no apparent advantage is evidenced.

TABLE 20
PERCENTAGE DISTRIBUTION OF DOCTOR-PATIENT
COMPARISON BY RESPONSE CATEGORIES

Transaction Category	Doctors' Unmatched	Doctors' Matched	Patients' Matched	Patients' Unmatched	
History	50	18	18	14	100 (N = 50)
Symptoms	48	21	21	10	100 (N = 382)
Diagnosis	34	31	31	4	100 (N = 62)
In-clinic treatment	18	38	38	6	100 (N = 107)
Home care	42	22	22	14	100 (N = 45)
Follow-up	24	36	36	4	100 (N = 53)
Totals	39	26	26	9	100 (N = 649)

Optimal Patient Participation

The notion that symptoms were the patients' best-informed area was given some support by examining the totals in still another way. Table 21 lists each participant's activity levels in each of the transaction categories.

The distribution in Table 21 reflects the research design's emphasis on weighting symptoms. It also suggests that this was the area in which the patient brought most information and took away most information. The in-clinic treatment section appears also to have been a relatively well-informed area.

TABLE 21-

PERCENTAGE DISTRIBUTION OF EACH PARTICIPANT'S
MATCHED AND UNMATCHED RESPONSE ACTIVITY
BY TRANSACTION CATEGORIES

Transaction Category	Doctors' Unmatched	Doctors' Matched	Patients' Matched	Patients' Unmatched
History	10	5	5	12
Symptoms	62	41	41	60
Diagnosis	9	12	12	5
In-clinic treatment	7	24	24	10
Home care treatment	7	6	6	10
Follow-up	5	12	12	3
Totals	100 (257)	100 (167)	100 (167)	100 (58)

Comparison of Matched
and Unmatched Responses

A question may have been raised in some minds about why matched and unmatched responses were not compared statistically. Table 22 may help to answer the question.

Conceptually less than perfect communication is implied since matched responses exceed unmatched responses by only a small margin. Statistically the implications are not that clear. Matches represent doctors and patients equally weighted while unmatches represent a heavy weighting of doctors' responses. Further, since they are almost equal, most statistics would accept the null hypothesis that matches and unmatches came from the same population. The use of the unmatched responses seemed to permit a clearer picture of the imbalance favoring the doctors' participation in the transaction.

TABLE 22

COMPARISON OF UNMATCHED AND MATCHED RESPONSES TO
 DEMONSTRATE THEIR INHERENT DIFFERENCES
 BUT APPARENT SIMILARITY

Transaction Category	Unmatched			Matched Totals
	Doctors	Patients	Totals	
History	25	7	32	18
Symptoms	160	34	194	138
Diagnosis	21	3	24	38
In-clinic treatment	19	6	25	82
Home care treatment	19	6	25	20
Follow-up	13	2	15	38
Totals	357	58	315	334

CHAPTER VII

MEDICAL MELANGE

Defining and Coding

Preface

This chapter is directed toward those sociologists whose doubts are increased rather than lessened by statistical manipulations, and to those who need to see a closer correspondence between behavior and the inferences they are willing to make. The first half of the chapter will be anecdotal and will present an example of a "definition of a situation" and two samples of code usage. The second half of the chapter will mix some anecdotes with some statistics and present the results of the seventeen symptom-tabulations.

Definition of a Situation

The man who "defined a medical situation" had been coaxed against his wishes to go to the clinic. He felt one ought to go to a "real doctor." He went on to say: "Those people are just learnin' same as I got to learn. But they's just practisin'. I ain't got time for them to practise." In response to questions about what had taken place, he said that the student-physician had told him that he had pneumonia and had given him some medicine. He almost trembled with fury just to think about the incident. More questions elicited that he had left the clinic and driven twenty-five miles to go to a "real doctor." The "real

doctor" told him that he had pneumonia. With some trepidity, the researcher asked if that was not what the student-doctor had told him. He nodded and said: "Yes, but if he'd have thought that, he should have put me in the hospital like my own doctor did. I stayed there four days."

The student-doctor did not know that this patient's definition of pneumonia came replete with assumptions, one of which was that treatment called for hospitalization. Similarly, the patient did not know that the doctor belonged to a reference group whose definitions of illness change rapidly along a seriousness scale as methods of treatment change. The patient's previous encounters with pneumonia may have been several years prior to this episode, may have been more acute, or may have been treated by a physician who was losing the battle to keep up with change.

Physician Coding

The struggle to keep abreast of work and new knowledge probably creates a constant sense of pressure for many physicians. One of the apparent effects of this pressure is a penchant for abbreviations, many of which seem to be idiosyncratic or to belong to only a small band of disciples. Notes from a medical record were presented earlier in Chapter 1 to illustrate the coding form. Those notes had been translated into standard English. Below are presented the notes in their original form on the record:

Patient #4

6/27/69 7 mos. gestation, being followed by _____ OB Clinic presents today 2 hx of $\frac{1}{7}$ episode of vomiting & $\frac{1}{7}$ episode of diarrhea--no one else in fam or neighb similar

Imp. 1) Viral Gastritis

Disp. 1) NPO 12 hrs.-clear liq. 12 hrs. then nrml diet

2) Aspirin 6.5.mg. PO q 4 hr. prn discomfort or pain

3) RTC prn if NorV return.

There is little in the record above that requires medical training to read. One simply needs to be familiar with the code. The redundancy of the language usually permits guessing the nonstandard items.

Translation:

1. 7 mos. gestation Seven months pregnant
2. OB Clinic Obstetric clinic
3. Presents today A standard phrase intended to mean
"has come here today with the
following symptoms"
4. \bar{c} With
5. hx History
6. A method of specifying numbers, a
line below and a dot above for each
unit of one
7. Fam or neighb Not standard but the context indi-
cates it must mean family or
neighborhood
8. Imp Impression meaning tentative
diagnosis
9. Disp Disposition meaning treatment
10. NPO Nothing by mouth

11. Clear liq. 12 hr . . . Clear liquids for twelve hours then
then nrml diet . . . return to a normal diet
12. Aspirin 6.5 mg. . . . The aspirin strength the patient
was told to get
13. PO By mouth
14. q Every
15. 4 hr Four hours
16. prn As needed
17. RTC Return to clinic
18. NorV Nausea or vomiting

The records of this clinic are remarkably readable in contrast to clinic notes found in many general hospitals. The handwriting is legible and they contain more of the words that help to connect thought like "then" and "if."

Patient Coding

Now a sample of the patient's code will be presented. It does not need translation. One simply needs to become accustomed to the rhythm and to the unusual use of some ordinary words. Often the usage is apt and picturesque. The statements were made in response to the questions from Koos's seventeen symptom list. The questions are numbered according to their position on the list. Perforce, the presentation imposes an artificial order.

Question 1: Would you go to a doctor if you didn't feel like eating any more; if you lost your appetite?

Answer: "I had went to _____ City since I had a touch of the Hong Kong flu. It made me fall twelve pounds. I already was small. That's when I went to

taking (here the word was slurred but later in the interview it came out that she meant Geritol). You know those pills. That's what made me start feelin' real good. I sure don't have no appetite."

Question 2: Would you go to a doctor if you had a pain in your back every day for a long while?

Answer: "When I had this flu I coughed after I was getting rid of it but it don't bother me now."

Question: Do you have an indoor toilet or an outdoor toilet? (This was not in Koos's original list. It was added following questions 5 and 6, which ask about blood in stools or urine. For some outhouses, the respondent would not be able to determine the presence of blood unless he were equipped with a flashlight.)

Answer: "I go over there to their indoors because I ain't been too long moved here. I want to have some built on here before I--you know--but I got a indoors toilet in there but I don't let it work now because it is too close to the bed." (Respondent has a trailer. Her reference to "too close to the bed" applies to the indoor facility built into the trailer.)

Question 10: If your gums around your teeth (demonstration of a specific area) started to bleed a lot would you go to a doctor?

Answer: "Well I wouldn't know. Sometimes they get to

hurtin' you know--and when I know that--when I know it's kind of rotten, I say it just could be pyorrhea or something. I gets some soda and salt and rubs it and then it goes away."

Question 12: If you had trouble catching your breath (demonstration) would you go to a doctor for something like that?

Answer: "I had it about two years ago but you know--he--when I went to him he told me I had a touch of the--the pneumonia then and he doctored on me and I went backwards and forwards and I ain't been had it since." (Backwards and forwards refers to the round trip to _____ City.)

This patient evidently does not share the definition with the earlier patient mentioned who assumed that pneumonia required hospitalization.

Coding Criteria

Rather than comment on whether these anecdotal presentations are or are not samples of codes, the researcher will present some comments from some earlier work done by Bernstein (1964:252-63) based on his research with English working-class speakers. He set down the criteria for recognition of what he then called "public language" and now calls "restricted code." He said:

. . . this linguistic usage is a function of a sub-culture, not of individual psychology. The characteristics of a public language (the major speech form of the lower working class) are as follows:

1. Short, grammatically simple, often unfinished sentences with poor syntactical form.

2. Simple and repetitive use of conjunctions ("so," "then," "and," "because").
3. Little use of sub-ordinate clauses to break down the initial categories of the dominant subject.
4. Inability to hold a subject through a speech sequence, so that a dislocated informational content is facilitated.
5. Rigid and limited use of adjectives and adverbs.
6. Infrequent use of impersonal pronouns as subjects of conditional clauses or sentences.
7. Frequent use of statements where the reason and conclusion are confounded to produce a categoric statement.
8. A large number of statement/phrases which signal a requirement for the previous sequence to be reinforced: "Wouldn't it? You see? You know?" etc. This process is termed "sympathetic circularity."
9. Individual selection from a group of idiomatic phrases or sequences will frequently occur.
10. The individual qualification is implicit in the sentence organization: it is a language of implicit meaning (1964:253-54).

Although Bernstein is talking about working-class speech, the criteria he presents are not only applicable to the speech excerpt above but also describe, in part, the written speech of the medical record. Resting the case of the restricted code, the researcher will go on with the findings from the seventeen-symptom list.

Recognition of a Need for Medical Care

Recognition Related to Socioeconomic Level

Koos had found in Regionville that recognition of a need for medical care increased with rising socioeconomic level. The patient and non-patient groups from The District differed in their recognition of a need for medical care although there is no apparent difference in their socioeconomic level.

Koos presented a table of the symptoms with the percentages of affirmative responses by class (1954:32). The table is reproduced below, along with the percentages from The District's patient and non-patient groups. The symptoms have been numbered sequentially although Koos did not use a numbering system.

Koos emphasized the marked difference between Class I and Class III. More than 75 per cent of Class I respondents said that fifteen of the seventeen symptoms required medical attention. In contrast less than 25 per cent of Class III respondents so defined ten different symptoms.

The District patient group seemed to fall between Koos's Class I and Class II. They fell below 75 per cent recognition on seven symptoms. Regionville's Class II exceeded the patients' recognition failure by falling below 75 per cent recognition on twelve symptoms. The patient group fell below 50 per cent recognition on only one symptom while Class II fell below 50 per cent recognition on two symptoms.

The District's non-patient group seemed to fit between Regionville's Class II and Class III. The Class III respondents fell below 25 per cent recognition on ten symptoms while the non-patients did so on only one symptom. The Class II respondents fell below 50 per cent recognition on two symptoms while the non-patients did so on four symptoms.

Granted that it is hardly remarkable to find that patients define symptoms as more serious than non-patients define them. However Koos made distinctions between classes without implying that there were within-class distinctions. This research suggests that there are such distinctions.

TABLE 23

PERCENTAGE OF REGIONVILLE'S THREE CLASSES AND PATIENTS
AND NON-PATIENTS FROM THE DISTRICT WHO RECOGNIZE
SYMPTOMS AS REQUIRING MEDICAL ATTENTION

Symptoms	Regionville			The District	
	Class I	Class II	Class III	Patients	Non-Patients
1. Loss of appetite	57	50	20	64	52
2. Persistent backache	53	44	19	76	65
3. Continued coughing	77	78	23	82	60
4. Persistent joint and muscle pains	80	47	19	63	48
5. Blood in stool	98	89	60	87	73
6. Blood in urine	100	93	69	94	73
7. Excessive vaginal bleeding	92	83	54	75	66
8. Swelling of ankles	77	76	23	72	60
9. Loss of weight	80	51	21	59	44
10. Bleeding gums	79	51	20	45	30

TABLE 23--Continued

Symptoms	Regionville			The District	
	Class I	Class II	Class III	Patients	Non-Patients
11. Chronic fatigue	80	53	19	65	22
12. Shortness of breath	77	55	21	90	74
13. Persistent headaches	80	56	22	77	52
14. Fainting spells	80	51	33	88	70
15. Pain in chest	80	51	31	88	74
16. Lump in breast	94	71	44	92	88
17. Lump in abdomen	92	65	34	100	84
	(N = 51)	(N = 335)	(N = 128)	(N = 47)	(N = 23)

The findings included seventy of the seventy-two respondents. The only omissions were a ninety-nine year old community "court-jester," and one of two brothers who were jointly interviewed.

Purpose of Introducing the
Symptoms into the Interview

The District patient and non-patient group had been anticipated to closely approximate Koos's Class III respondents. The symptoms were expected to demonstrate that the patients were no different in their attitudes toward health care than the rest of the community. Obviously this expectation was not borne out.

Statistical Treatment

The difference between the two groups was treated statistically, using the same technique used earlier for doctor-patient comparisons. Respondents so frequently qualified their responses to the question, "Would you go to a doctor if . . . ?" with replies such as "If I couldn't upperhand it, I would," that the researcher felt constrained to tabulate "qualified yes's" and "qualified no's." "Don't know's" were also tabulated. See Appendix C for the complete tabulation.

Below are the computation for the difference between the two groups.

$N_1 = 578$ yes's and 43 qualified yes's

621 affirmative responses of a total of 789 patient
responses

$\hat{p}_1 = .719$

$N_2 = 229$ yes's and 9 qualified yes's

238 affirmative responses of a total of 385 non-patient
responses

$$\hat{p}_2 = .568$$

$$S_{\hat{p}_1} - \hat{p}_2 = .0269$$

$$z = -5.6 \text{ which is significant at the } .01 \text{ level.}$$

The implication is patients and non-patients do differ in their attitude toward health care.

Some Less Stringent Observations
Acquired with Koos's List

Less serious symptoms.--Several respondents commented in response to the question about bleeding gums that they had pyorrhea although only one in the community has been to a dentist and had this condition diagnosed. It seems that this is the common term used to label bleeding gums. It is not something anyone takes seriously. The common remedy is Listerine. One woman claimed good results from coal tar. An advocate of preventive care claimed reoccurrence was prevented by a treatment of kerosene held in one's mouth for a short period.

The question about blood in the stools was not viewed as seriously as it might have been otherwise because of the frequency of hemorrhoids which were often accompanied by bleeding. The question about persistent headaches seems to fall into two response categories. One group said, "I never have a headache," while the other said, "I keeps a headache." Presumably those who keep a headache would not go to a doctor for a persistent headache although they often verbalized recognition that perhaps they ought to go.

The loss of appetite question and the loss of weight questions seemed to many to be asking the same question a second time. They would respond with comments such as: "Like I said before, I always have a good appetite . . . ," "I've always been small like I am . . . ,"

"I could use some of that . . . ," "I got to lose a few pounds. . . ."

There were three other symptoms that respondents seemed to take less seriously than the rest. These were: persistent joint and muscle pain; swelling of the ankles; and chronic fatigue. These were most likely to be treated with rubbing alcohol or liniment. This would not be unexpected in a community where almost everyone works at hard labor. (See Appendix C for response distribution.)

Home Remedies and Folk Remedies

Rubbing alcohol and liniment seem to head the list of about four or five across-the-counter drugstore medications that residents take for almost anything. The others often mentioned included B. C. Headache Powder, Pepto-Bismol, Geritol, Black Draught Syrup, and castor oil. There was relatively little use of folk remedies. Residents remember their grandmothers or their mothers using folk remedies, but as a group they don't remember what they were or how to make them. Various individuals remember a few they had been given as children. (See Appendix D for the entire list.)

There were some exceptions. Most people knew how to make "Hogs Hoof Tea" which is made by drying the hoofs until they are black, scraping them, adding the scrapings to boiling water to make a tea, and then adding a lot of sugar because it tastes so bad. This, and tallow and camphor, are good for colds. Several people know a remedy that is good for "female problems." This is made from a leaf that looks like an "elephant leaf," which is boiled with camphor and turpentine in a container that is large enough to sit upon after it has been removed from the stove. This is also said to be a good cure for hemorrhoids.

A Symptom Diagnosed Is a Symptom
That Can Be Ignored

An accumulation of casual comments led the researcher to the discovery of an attitude that is suspected to be common even beyond the boundaries of this community. It seems that some individuals who had had an illness that had been diagnosed and treated, upon its reoccurrence, were less likely to return to the doctor on the grounds that they already knew what the illness was. A frequent response to the seventeen-symptom questions, "Would you go to a doctor if . . . ?" was "If I never had it before." This sounded reasonable until a respondent said it in connection with her "high blood." She had been given pills for it and finished them up two years previously.

The researcher became somewhat sensitized to comments about "high blood" and headaches during the data collection because of the deaths of two women in their early forties. Each died from a "stroke," leaving behind teenage children and a widowed husband. One of the two had had severe headaches for a week prior to her death, but had postponed seeing a doctor until the tobacco crop was in.

Koos's Symptoms as an
Interviewing Technique

The list of seventeen symptoms was useful in more ways than simply collecting yes's and no's. The questions are neutral enough, yet interesting enough, that they aid in keeping an interview moving. They nudge people's memories about their previous medical history.

CHAPTER VIII

CONCLUSIONS, IMPLICATIONS AND LIMITATIONS

Conclusions

Doctor-Patient Transactions

Only a very little actual misunderstanding was revealed by the findings of this study. There were only seven contradictory matches for a total of fourteen responses out of 634. Instead, a lack of consensus emerged. Almost half of the responses, 49 per cent, were unmatched or unacknowledged by the coparticipant.

It cannot be said with certainty that the coparticipant did not know the response that would have matched the unmatched response; it may be only that it was not sufficiently important to him to produce.

Eighty-two per cent of the total unmatched responses belonged to the doctor. These findings are not at odds with Ley and Spelman's findings (1967:60) in which only one quarter of a group of outpatients studied was able to recall everything they had been told by the doctor, and almost half of this total-recall group had been told only two things.

Unsatisfactory Communication

Ley and Spelman found that even when doctors had made an effort to see that their patients were informed, patients still remained dissatisfied with communication (1967:36). They suggest that the causes

for dissatisfaction are difficulties in understanding and remembering what was said. They offer some evidence to support their claim (1967:Chapters 5 and 6).

The patients in the researcher's sample were not dissatisfied with their communication. Yet 59 per cent of the items the doctor considered important enough to include in the medical record of the conversational transaction were unrecalled by the patient. What Ley and Spelman refer to as difficulties in understanding and remembering is, in this study, focused on as a difference in the language coding norms of the group significant to the coder.

The concept of coding was emphasized to underscore the normative language behaviors that permit lack of communication to go undetected because of unacknowledged assumptions that go into exchanges.

Black Community

The patients' community varied from expectations in several areas. Forty-nine per cent of the community's households are headed by marital pairs, 21 per cent of the household heads lived alone. Only 5 per cent of the household heads could be described as following the pattern of multiple short-term husbands with numerous children.

The migration pattern of the patient community reversed the expected pattern of rural to urban. Thirty-eight out of fifty-six respondents whose birthplace could be compared had been born in a community larger than Meccaville. Fifty-seven per cent of the births of District children had been in larger communities.

Although socioeconomically the community was comparable with Koos's Class III respondents in Regionville, in their attitudes toward health the patients and non-patients fell between Koos's classes. The

patient households of the community fell between Koos's Class I and Class II and the non-patient households fell between his Class II and Class III.

From the early fifties when Koos's data were gathered to the late sixties when this study's data were gathered, the impact of television is likely to have raised the level of health knowledge for all classes. Silberman, in support of his accusation that television has a quality of "mindlessness" contends that one could never have known until recently that there were social classes in United States if one had to depend upon television for information (1970:35). This classlessness that Silberman describes probably has had the effect of disseminating widely a single class, the middle class, "social construction of illness." Friedson, in a chapter he calls "The Lay Construction of Illness," comments:

No small part of the significance of social structure lies in its role in encouraging or discouraging the individual's movement toward medical consultation. This may be seen when we remember that the individual depends on others to grant him the privileges of illness he may seek: they may insist on legitimation of his condition by a physician. . . . [W]hen the individual feels discomfort and believes he may be ill, he is likely to seek the advice of those around him to determine whether or not he may be ill and what he should do about it. . . . Neither lower class patients nor their lay consultants are very familiar with the range of medical services available. . . . In contrast to the lower class, the middle class patient . . . needs less help from others. . . . [M]ore knowledgeable about illness itself, he is likely to feel more secure in his own diagnosis and his own assessment of the virtue of the care he receives (1970:289-91).

This is not to suggest that the lower-class patient in this study is not using lay consultants, rather it is to suggest that the lay consultants as well as the patient probably have a higher level of medical knowledge than did the lower-class patients studied by Koos.

Television has daily and weekly dramas such as "The Doctors,"

"General Hospital," "Medical Center," and "Marcus Welby, M.D." Regular viewers must inevitably redefine some of their notions about illness.

The prevalent health problems in the community were inadequate housing and "out-housing," parasites, and dental care needs. Prenatal care might also be considered a problem. Despite a state-wide maternal and infant care program, 69 per cent of the babies born to residents of The District were non-hospitalized deliveries.

Implications

Written Instructions

Ley and Spelman suggest that improvement in the following of doctors' instructions could be effected by having patients write instructions down providing them with a record they can subsequently follow (1967:90). This thought deserves further research with qualifications. The qualifications are:

- (1) the patient's hidden assumptions have to be ferreted out to be sure he understands the instructions;
- (2) a means of preventing the extension of the time the doctor spends with the patient would have to be found, otherwise doctors, who already feel burdened, would be unwilling to try the method.

A "Team" Member Responsible for Follow-up

It seems to this researcher that more effective than writing down instructions would be the inclusion of a member within the team whose responsibility was follow-up and translation from medical coding to patient coding.

Taping or video-taping of doctor-patient transactions and

follow-up interviews (see Grotjahn, 1970:52) could provide: (1) reinforcement for patients for whom the transaction tapes were played; (2) training material for medical personnel for whom either or both transaction and follow-up interviews would be informative; and (3) research data in communication transactions in general and doctor-patient transactions in particular.

Nonscientific Assumptions

After reading eight or nine hundred records some patterns of behavior emerged. As conscientious as they are, student-doctors do not always read the patient's previous record. Procedures get ordered more than once, or procedures ordered by a previous student-doctor are not carried out by the student-doctor who sees the patient on the subsequent visit.

Patients are often told that it is critical for them to return. When they do not, the record ends abruptly. Sometimes the student nurses contact the patients. In this respect, student medical practice deviates from general medical practice.

In general practice when a doctor has had his say and the patient leaves the scene, the transaction is ended. Yet this is contrary to scientific methods because it assumes outcomes before the evidence is in. It assumes the patient will follow advice, and it assumes that if he does not return he must have regained his health though it is also possible that he might have died or gone to another physician. The patient suffers from not having his assumptions followed up and examined, and his doctor unwittingly joins him by also not having his assumptions followed up and examined.

Assumption Monitoring

Medical transactions might benefit from monitoring on a regular basis by nonmedical people. In coding records the researcher found assumptions creeping into her own coding. For example a medical record said, "enema given," and the patient said, "They give me a treatment up there." The researcher coded a match and the other coder did not. The researcher knows that enemas can be given to outpatients. The other coder who had had little medical experience assumed the enema must have implied a home visit was made and that the treatment the patient was referring to was not matched in the record. There was nothing in the information that really gave a clue to the location of the treatment. It probably should have been coded an ambiguity but unconscious assumptions made both decisions.

Inroads into Local-Cosmopolitan Distinctions

Assumptions about the insularity of rural communities will need to be re-evaluated as the progress of television sets precedes the progress of plumbing. Television has informed viewers well about lumps in the breast being a sign of cancer, and the benefits of Geritol for tired people. Unfortunately it has not covered how to build a better outhouse.

Black families.--The stability of the families in The District and the lack of unequivocal matriarchal dominance is in agreement with comments made by the staff of Science News concerning studies done by Washington University sociologists in the black ghetto, Pruitt-Igoe, and the white ghetto, Soulard, both of which are in St. Louis. They
comment:

The Souldard study, completed in August (1968), . . . should help correct some of the misconceptions of the "culture of poverty" thesis. One form of that thesis, promulgated by white social scientists places the black family at the center of a cycle of pathology, and fails to see it as an adaptation to poverty conditions. But for the moment it also challenges black contentions that the matriarchy represents a new emergent family, stemming from a non-white culture (Guthrie, 1970:125-29).

Limitations

Need for Follow-up Can Only Be Inferred

A major source of dissatisfaction for the researcher is that the objective of demonstrating a need for follow-up still remains to be realized. The design focused attention on the encounter itself. The need for follow-up can only be inferred from the less than perfect consensus. There is some small satisfaction in demonstrating, even to a small extent, by means of the patients' unmatched responses, that doctors sometimes do not listen to patients. The conscientious student-doctor shares this flaw with his mentors.

The Lack of a Middle-Class Sample

A middle-class sample in addition to the lower-class sample would have helped to rule out the effects of elaborated code.

Recall and Forgetting

The time lag between the patient's interview with the doctor and his subsequent interview with the researcher may have given additional weight to the medical record's version of the transaction since presumably the student-doctor would have completed his records immediately.

The time lag is only one of several interrelated possible problems involved in the failure to recall or to record items. A possible set of categories for these might be as follows:

- (1) forgetting with comprehension, i.e.,
 - a. the patient or the doctor understood the meaning of the word(s) at the time of presentation but intervening material prevented recall at a later date. This is the equivalent of time lag;
 - b. the patient or the doctor understood the meaning of the words without being able to recall them because of their unfamiliarity;
- (2) recalled with comprehension, i.e., the patient or the doctor understood the meaning of the word(s) but considered them too unimportant to mention;
- (3) forgetting without comprehension, i.e., the patient or the doctor can repeat the word(s) at the time they are presented but can not recall them later when asked;
- (4) recalled without comprehension, i.e., the patient or the doctor can repeat the word(s) at the time of presentation, and can repeat them later when asked to recall them without knowing on either occasion the meaning.

One study done by Ley and Spelman controlled for category (1)a. above. Forty-seven patients were interviewed shortly after they had seen the doctor in outpatient clinic. The patients were found to have forgotten over a third of what they had been told (1967:Chapter 6).

In their work Ley and Spelman were able to cover some of the separate aspects of recall and forgetting by completing a series of studies using hospital and clinic patients (1967). This study could not undertake these multiple directions. However, this study does present in greater detail the criteria used in determining recall by presenting

the rules for coding. This study also considered the possibility that the physician's side of the transaction might contain misunderstandings and failures to recall.

A Parting Postscript

Three brief incidents are offered below as a final attempt to underscore the pervasiveness of unconscious assumptions that go into everyday medical transactions. The first two were related to this research. The last one was just happenstance.

One of the few dissatisfied patients that was discovered in the sample complained to the researcher that the drug prescribed for her had done no good. Curiosity prompted a check of her record, and a further check of a drug manual which described the drug prescribed. The manufacturer of the medication described it as a pain reliever with a gradual onset of relief.

The woman's impatience with the drug because she did not experience relief from her headache led her to purchase something else at the drugstore. The latter across-the-counter medication was probably credited with the relief which could very possibly have been brought about by the prescribed medication. There were probably sound reasons for giving her the type of medication prescribed, but the fact that she did not know what to expect led her to discredit the help she had received.

The woman complained of constant headaches. Her record described her as having hypertension. She does not connect her headaches and her hypertension. They may or may not be connected but they both could probably be treated with medication. Yet the chance is remote that she will return for further assistance from the clinic.

A young doctor was overheard saying to a mother, "If he spikes a temperature, bring him back." Asked later how one knew when a temperature was spiked, it took him some minutes to explain. The origin of the term is the recording on a temperature chart which makes an abrupt peak when there is a sudden change in temperature.

Standing in a supermarket checkout line an elderly black lady began a conversation. She told of her visit earlier that morning with the doctor at the Public Health Clinic. She said the doctor had told her to get a board for her bed. Nodding, the researcher said politely in return, "Oh, you must be having trouble with your back." She agreed. Cocking her head to one side, she said, "Does the board have to be a new one or can I get a second-hand one over to the lumber yard?" When it was explained to her that the quality the doctor had in mind was not newness but flatness so she would not sleep with her back crooked, she replied, "Oh, it doesn't go under the bed. It goes under the mattress."

APPENDICES

APPENDIX A
DIRECTIONS FOR CODERS

GENERAL DIRECTIONS FOR CODERS

1. Begin by reading the patient's side of the history, the right hand side in step 3 above.
2. For each separate symptom, make a check on the form in the patient's column.
3. Read the medical record side of the history. Look for a symptom(s) that corresponds with the one the patient mentioned. For each one found, enter a check in the same row with the patient's check, but in the doctor's column. Now enter an "M" in the "match" box in that same row midway between the patient's and the doctor's checks.
4. For every patient's check that remains unmatched, enter an X in the PUM column (patient's unmatched column) of the same row.
5. For every symptom that appears in the medical record history that is not reflected in the patient's history, enter it in an unopposed row of the doctor's column, and enter an X in DUM column.
6. If the same symptoms appear on both sides of the history, but they conflict in some respect, enter a "contradiction," that is, place the checks in the same row, as above, but enter an X in the matched column.
7. If the same symptoms appear on both sides of the history but something in their details makes it impossible to be sure they match, enter an "ambiguity," that is, place the checks in the same row but enter an A in the matched column.

8. Follow the above procedure for the subsequent sections of diagnosis, treatment, and follow-up.
9. Symptoms has two subsections, history and presenting symptoms. Treatment has two subsections, Medicine--In Clinic and Home Care; Diagnosis, and Follow-up each have one section.
10. Enter totals in the box at the bottom of the last page of the form.
11. There are several instances where the patient and/or the record span more than one visit. The patient generally seems to view the multiple visits as a single incident. (Chances are that an instrument or time were not available on the first visit to complete the transaction.) Treat these as one incident. Check one match in the follow-up, since obviously the patient was told to come back and did in fact come back. For further Return to Clinics at the termination of the multiple visit, treat it as an ordinary single visit, that is to say it is recorded or not recorded, and matched or unmatched.
12. Under Follow-up:
Check of progress may include:
 - (a) to have a bandage changed, sutures removed, etc.
 - (b) to have urine checked (diabetic progress)
 - (c) nurse to make home visits
 - (d) a specified date, in ten days, once a month, etc.Referral--lab tests--evaluation may include:
 - (a) culture taken
 - (b) sent VDRL to state lab
 - (c) sent to specialist, a hospital, to have an X-ray taken, etc.
13. Should there be insufficient blanks, make new rows in the category

spaces above and below. (If there are many checks keep track of them by labeling them with a brief label to the left of the doctor column or to the right of the patient column.)

14. The categories D10, F5, and H5 are not to be counted. They are simply for the purpose of keeping track of the information.
15. Do not be concerned if only a few boxes are checked, some interviews involve far less interaction than others.
16. Place the case number in the upper right hand corner of the first page of the form.
17. Below find some of the commonly used medical abbreviations found in medical records. Coders should add to the list as they find

new ones:

↓	diminished
↑	increased
+	one
++	two, etc.
hx	history
dx	diagnosis
rx	treatment, or prescription, or reaction
f/u	follow-up
w/u	work-up
stat	immediately, or now, or emergency
R.T.C.	return to clinic
R/O	rule out
PRN	as need be
S.O.B.	short of breath
L.L.Q.	lower left quadrant (of the abdomen)

R.U.Q.	upper right quadrant
L	left side
R	right side
U.R.I.	upper respiratory infection
U.T.I.	urinary tract infection
G.I.	gastrointestinal
I.V.P.	intravenous pyleogram (X-rays of kidneys)
A.S.A.	aspirin
_____ T.H.	_____ Teaching Hospital
P.O.	by mouth
\bar{c}	with
\bar{o}	without
♀	female
♂	male
q.d.	every day
q.i.d.	four times a day
q.l.	as much as desired
q.p.	at will
q.q.h.	every four hours
q.h.	every hour
q.s.	sufficient quantity
elixir	a syrupy liquid that makes medicine more palatable
tabs	tablets

18. If Rule out appears in a diagnosis section, do not include it as a diagnosis. Check the follow-up section to see if the patient has been told to return. If he has not been told to return, check H6 category. This is an internal inconsistency. Rule out is

generally used to convey the idea that this possibility still exists and that time or further examination will be needed before it can be definitely discarded. If so, then the doctor will need to see the patient again to rule out that possibility.

19. See specific coding directions for questions that arise about specific categories.

SPECIFIC INSTRUCTIONS FOR CODERS
Corresponding to the Order of the Coding Form

A. History

A1. Family history of this or relevant illness.

Illnesses or conditions of members of patient's family (either family of orientation or procreation) that may have some bearing on patient's present illness. For example:

1. Patient has a sick or retarded child.
2. Patient has a disabled spouse.
3. One or more of the patient's family have had a history of diabetes, hypertension, allergies, G.I. problems, etc.

A2. Factors in patient's own history relevant to his present illness, that is, is pregnant or diabetic, etc. Illnesses or conditions of the patient other than his present illness, either treated or untreated. For example:

1. Is an amputee
2. Is diabetic
3. Is pregnant

A3. Treatment by doctor(s) previously for the present illness or condition. Check this category only if the patient or doctor says that he was treated by a doctor or by Dr. X. Do not assume because the illness is chronic that it has been treated before. (It probably has, but it is not a piece of information unless it is offered.)

This refers to previous episodes of this illness. If he went to a doctor for this episode check under Coping Behavior.

A4. Previous occurrence(s) of this illness that were untreated,

that is, the patient says he did not go for treatment, or he does not specify whether or not he sought treatment.

If the patient says he had this ten years ago, check here. If he says he has had it on and off for ten years check under D3 and D4.

B. Coping Behavior Pertaining to Present Illness

B1. Remained at home and/or in bed; or reduced activity (self-explanatory).

B2. Went to a physician (other than the one he is dealing with in this record) (self-explanatory).

B3. Treated with drugstore or home remedy. Include self or home treatments such as:

1. Washed cut or wound
2. Bandaged (Ace, gauze, etc.)
3. Took a laxative, aspirin, hemorrhoid medication, etc.
4. Reduced hernia manually
5. Used an icebag, hot water bottle, heating pad, etc.

B4. Ignored (self-explanatory).

C. Contrary Behavior Pertaining to Illnesses or Conditions Diagnosed Prior to the Present Episode

C1. Didn't take medication previously prescribed for him. For example:

1. Patient knows that he is diabetic and does not take his medications regularly.
2. Patient has been diagnosed as hypertensive, but did not have his pills refilled.

C2. Did not return for treatment, X-rays, lab tests, or an appointment with the doctor (self-explanatory).

C3. Did not follow diet, that is, weight reduction, nutritional, diabetic, bland, etc. (self-explanatory).

D. Symptoms

Note: A reminder from the General Instructions.--Where there are multiple symptoms that are difficult to keep track of, make a brief note beside each check to facilitate rechecking. See examples below under D1 Presenting Symptoms and D3 System Elaboration.

D1. Presenting symptoms, that is, the patient's current complaint.

For example, a patient complains that he has shortness of breath, pain in his chest, and his ankles have been swelling.

	Dr.	DUM	Match	PUM	Pt.	
S.O.B.	<u>x</u>		<u>M</u>		<u>x</u>	short breath
pedal edema	<u>x</u>		<u>M</u>		<u>x</u>	ankles swell
pain	<u>x</u>		<u>M</u>		<u>x</u>	pain

If the patient uses several terms which the doctor groups under a more abstract term, check and match each term the patient uses. For example:

	Dr.	DUM	Match	PUM	Pt.	
malaise	<u>x</u>		<u>M</u>		<u>x</u>	no energy
malaise	<u>x</u>		<u>M</u>		<u>x</u>	ached all over

Note: If a patient mentions elsewhere in the interview that he and the doctor have shared information, return to the appropriate section and record. For example: "He gave me medicine for my eyes, but he didn't give me anything for my 'hi-blood.'" If the patient has not mentioned his "hi-blood" before, record it under symptoms.

Note: Where a patient runs together several visits, try to pick out a landmark such as "sent to a specialist," or "to the teaching hospital," and work from there.

D2. Absence of symptoms, that is, patient does not have chills or gastrointestinal upset, or patient says, "My nose isn't running like it usually is." Exception: If doctor says, ". . . the pain does not radiate," do not check here, check under D7 Type of Pain.

D3. Symptom elaboration: details regarding duration. For example:

	<u>Dr.</u>	<u>DJM</u>	<u>Match</u>	<u>PUM</u>	<u>Pt.</u>	
pain 6 days	x		M		x	
cough 2 mos	x		M		x	
N&V on-off 2 weeks	x		M		x	nausea & vomit on and off 2 weeks

D4. Progress of symptoms--this episode. For example, . . . gradual increase, . . . apparent disappearance and reoccurrence, . . . on and off, . . . etc.

If the patient has had on and off for years, check here.

If the patient had a previous similar episode years, or months, or weeks ago, check under A4.

Note: The last example in D3 included an item that had continued on and off for two weeks. The two weeks, the length of time, was significant for D3. The quality of "on and off-ness" is significant for this category. Also include here, ". . . feels better/worse today." If the symptoms agree but the sequence does not, check a contradiction.

D5. Symptom circumstances, that is, "appears when. . . ." For example:

". . . began with. . . ."

- " . . . never had before"
- " . . . seems worse when"
- " . . . appeared after"
- " . . . if I sit up/lay down, it"
- " . . . only happens when I"
- " . . . is relieved by"
- " . . . is unrelated to exertion."
- " . . . is unrelated to meal time."

- D6. Symptom location, that is, the patient makes an effort to pinpoint the pain. For example, pain over left eye, . . . laceration mid-thigh . . . hurts on the inside of my elbow.

This category is intended to reflect the patient's effort to be specific. For example:

If the patient says, "I had this pain in my stomach, right around my navel," he is trying to be specific.

If the doctor says, ". . . periumbilical pain . . . ," do not include it here, it simply reflects the precision of the language available to him. It belongs under Presenting Symptoms unless the doctor tacks on the additional ". . . around the navel . . ." (or something similar) which is redundant and is likely to be echoing the patient's phrasing.

- D7. Type of pain--radiating, dull, throbbing, sharp, etc. (self-explanatory).
- D8. Amount of exudate, excretion, or drainage, for example, ". . . must have bled a quart . . . ," ". . . had to change the bandage three times in a couple of hours," etc. For example:
". . . had diarrhea six or seven times."

". . . coughs up a lot of mucus every time."

". . . sweat so he kept soaking the bed."

wound, cut, abscess drained for _____.

D9. Conditions known to or apparent to the patient. For example, swelling, itching, rash, flushing, restlessness, hunger, etc. Include factors that the patient (or his spokesman) considers relevant to his condition, for example, susceptibility.

". . . his ears get infected easily."

". . . he gets a cold when he gets wet."

E. Diagnosis: General Instructions for Diagnosis Section only.

1. If the patient mentions one diagnosis and the record agrees, make a match at E1.
2. If the patient mentions more than one diagnosis, or mentions one diagnosis with qualifications or complications, and the record concurs, make a match under E2 instead of E1.
3. If the patient mentions one diagnosis and the record concurs but goes on to include a second diagnosis or complications/qualifications, make a match at E1 and a doctor's unmatched check at E2.
4. If the patient does not know the diagnosis, or does not remember, check the doctor's column and the DUM column in either E1 or E2, whichever is appropriate. Do not check both categories.
5. Follow the above procedure in the same manner for an "ambiguity" or a "contradiction."
6. If the diagnosis differs in severity, that is, the patient says "flu" and the record says "pneumonia," check a contradiction.

F. Treatment, Medicine and In-Clinic

F1. A shot; a bandage; stitches (sutures); an enema; wound cleaning; foreign body removal, etc.

If there is a notation I.M. after penicillin or one of the other "___cillins," it means that the medication was given in "shot" form (intramuscularly) and therefore the medication was given at the clinic.

If the notation says "tabs" then the penicillin was given in tablet form and was not given at the clinic. The only exception to this would be if the notation also said "now" or "stat" meaning that some of the tablets were to be taken immediately.

F2. A prescription or medication was given.

The doctor gave the patient a prescription to have filled or he gave him medication to take home with him.

F3. The patient can specify that the medicine was liquid, pills, ointment, etc.

If the patient can only specify that he was given a prescription or medicine, check under F2 with a match if the record agrees, go on and check F3 or F4 for the record if appropriate.

However, if the patient can specify at the level of F3 or F4, check only at the more specific level, that is, if the patient can specify that he was given a bottle of cough medicine, check F3 instead of F2 or

if he can specify that the liquid was taken four times a day, or that the dosage was on the bottle, check at the level of F4 (see next line).

F4. The patient can specify the specific dosage.

(Note: The above seems to violate the intention to refrain from expanding the medical record contribution. An attempt was made to establish instructions so that coders would only match the medical record at whatever level the patient was able to attain; however, the coders consistently continued to check the additional unmatched items for the medical record contribution. The researcher chose to risk the inflation of the medical record contribution for the sake of learning how specific the patient could be.)

Under F4 check only one doctor's unmatched even if the doctor has prescribed several medications; however, if the patient can recall more than one medication and its dosage match as many as he can recall.

G. Treatment, Home Care

G1. Bed rest; over-the-counter medicine such as aspirin, or liniment; plenty of fluids; stop solid foods; or stop baby's formula, etc.

Include doctor told patient to get a new girdle, truss, shoes, glasses, dentures, etc.

If doctor specifies ". . . take meds. regularly," check here. (The implication is the patient has a history of non-taking of medications.)

If doctor says ointment, or Vaseline, or baby powder check here but if he refers to them by a specific name such as "Sooth-all Ointment," check under F3.

H. Follow-up

- H1. Patient told to return PRN (as need be). Include such statements as ". . . if symptoms continue," or ". . . if symptoms get worse," ". . . if no improvement."
- H2. Patient told to return for: lab tests, further evaluation, referral in _____ days. If patient is referred, check here. (Patient does not need to return to the clinic (1) check here if he is referred on the first visit, (2) told to expect a nurse.)
- H3. Patient told to return: on a specific date for check of _____ progress in _____ days.

If the patient makes a comment such as "He checked me for cancer," and the doctor's notes say return for pelvic, this means he did the Pap Smear (cancer check) on the follow-up visit so check a match.

Note: For Follow-up Section also see General Directions #12.

APPENDIX B
CODING TOTALS

TABLE 24

CODING TOTALS BY CATEGORIES AND SUBCATEGORIES FOR MATCHED,
UNMATCHED, AMBIGUOUS AND CONTRADICTIONARY RESPONSES

Coding Form Section	Unmatched Doctors' Responses	Matches		Unmatched Patients' Responses	Totals
		Doctors' and Patients' Responses Agreed, Therefore Matches x 2 = Responses			
A1	0		0	0	0
2	5	5 x 2 = 10		2	17
3	9	2 x 2 = 4		2	15
4	<u>3</u>		<u>0</u>	<u>0</u>	<u>3</u>
	17		14	4	35
B1	0		0	0	0
2	0		0	0	0
3	6		0	1	7
4	<u>0</u>	1 x 2 = <u>2</u>		<u>2</u>	<u>4</u>
	6		2	3	11
C1	2		0	0	2
2	0		0	0	0
3	<u>0</u>	1 x 2 = <u>2</u>		<u>0</u>	<u>2</u>
	2		2	0	4
D1	84	55 x 2 = 110		28	222
		X x 2 = 2			2
		A x 2 = 2			2

TABLE 24--Continued

Coding Form Section	Unmatched Doctors' Responses	Matches		Unmatched Patients' Responses	Totals
		Doctors' Responses	and Patients' Agreed, Therefore Matches x 2 = Responses		
D2	9		0	0	9
3	33	4 x 2 =	8	1	42
		X x 2 =	2		2
4	9	1 x 2 =	2	2	13
5	12	2 x 2 =	4	2	18
6	6	2 x 2 =	4	1	11
7	5		0	0	5
		X x 2 =	2		2
8	<u>2</u>	1 x 2 =	<u>2</u>	<u>0</u>	<u>4</u>
	160		138	34	332
E1	8	16 x 2 =	32	3	43
		A x 2 =	2		2
2	<u>13</u>	2 x 2 =	<u>4</u>	<u>0</u>	<u>17</u>
	21		38	3	62
F1	2	8 x 2 =	16	1	19
		X x 2 =	2		2
2	1	8 x 2 =	16	1	18
3	2	13 x 2 =	26	1	29
4	14	7 x 2 =	14	3	31
		3X x 2 =	6		6
		1A x 2 =	<u>2</u>		<u>2</u>
	19		82	6	107

TABLE 24--Continued

Coding Form Section	Unmatched Doctors' Responses	Matches		Unmatched Patients' Responses	Totals
		Doctors' Responses	Agreed, Therefore Matches x 2 = Responses		
G1	19	8 x 2 =	16	6	41
		2A x 2 =	4		4
	<u>0</u>		<u>0</u>	<u>0</u>	<u>0</u>
	19		20	6	45
H1	5	2 x 2 =	4	1	10
2	2	12 x 2 =	24	1	27
3	6	5 x 2 =	10	0	16
4	0		0	0	0
5	<u>0</u>		<u>0</u>	<u>0</u>	<u>0</u>
	13		38	2	53
Totals	257	155 Matches	= 310 responses	58	649
		7 Contradictions	= 14 responses		
		5 Ambiguities	= 10 responses		

TABLE 25

PROPORTION OF DOCTORS' UNMATCHED, PATIENTS' UNMATCHED,
AND MATCHED RESPONSE TOTALS FALLING INTO EACH
CODING FORM SECTION

Coding Form Section	Doctors' Unmatched	Patients' Unmatched	Matched Response
History (A, B, C)	(25) .097	(7) .12	(18) .053
Symptoms (D)	(160) .62	(34) .596	(138) .413
Diagnosis (E)	(21) .0817	(3) .0517	(38) .1137
Treatment (F, G)	(38) .1478	(12) .2068	(102) .305
Follow-up (H)	(13) .05	(2) .0344	(38) .1137
Totals	(257) .99	(58) 1.00	(334) .99

TABLE 26

PROPORTION OF EACH CODING FORM SECTION TOTAL DISTRIBUTED
 INTO DOCTORS' UNMATCHED, PATIENTS' UNMATCHED, AND
 MATCHED RESPONSES

Coding Form Section	Doctors' Unmatched	Patients' Unmatched	Matched Responses	Totals
History (A, B, C)	(25) .50	(7) .14	(18) .36	(50) 1.00
Symptoms (D)	(160) .4819	(34) .1024	(138) .4156	(332) 1.00
Diagnosis (E)	(21) .3387	(3) .0483	(38) .6129	(62) 1.00
Treatment (F, G)	(38) .2467	(12) .0779	(104) .6753	(154) 1.00
Follow-up (H)	(13) .2452	(2) .0377	(38) .7169	(53) 1.00

TABLE 27

CODER AGREEMENT TOTALS FOR EACH PATIENT

Case No.	Number of Agreements	Maximum Number of Responses	Minimum Number of Responses
1	11	15	13
2	11	16	11
3	12	14	14
4	16	17	16
5	7	10	7
6	14	15	15
7	6	12	8
8	9	14	13
9	30	33	32
10	16	26	22
11	18	22	22
12	13	13	13
13	10	11	10
14	17	19	19
15	15	19	15
16	14	15	15
17	14	17	17
18	14	17	17
19	13	17	16
20	21	25	23
21	16	16	16
22	9	10	9

TABLE 27--Continued

Case No.	Number of Agreements	Maximum Number of Responses	Minimum Number of Responses
23	11	11	11
24	25	25	25
25	21	21	21
26	14	15	14
27	9	14	13
28	5	6	5
29	12	13	13
30	17	19	19
31	18	23	20
32	15	18	15
33	16	20	18
34	10	15	12
35	13	13	13
36	12	15	13
37	17	27	21
38	21	26	23
39	9	14	13
40	16	16	16
41	28	29	28
42	10	15	13
43	12	18	18
44	17	21	20
45	15	22	22
46-51 omitted from coding			

TABLE 28
CODER VARIANCE COMPUTED FOR EACH PATIENT

Case No.	Coder No. 1		Coder No. 2			
	d	d ²	d	d ²		
1	15	1.7	2.89	13	4	16
2	11	5.7	32.49	16	1	1
3	14	2.7	7.29	14	3	9
4	16	.7	.49	17	0	0
5	7	9.7	94.09	10	7	49
6	15	1.7	2.89	15	2	4
7	8	8.7	75.65	12	5	25
8	13	3.7	13.69	14	3	9
9	33	16.3	265.69	32	15	225
10	22	5.3	28.09	26	9	81
11	22	5.3	28.09	22	5	25
12	13	3.7	13.69	13	4	16
13	11	5.7	32.49	10	7	49
14	19	2.3	5.29	19	2	4
15	19	2.3	5.29	15	2	4
16	15	1.7	2.89	15	2	4
17	17	.3	.09	17	0	0
18	17	.3	.09	17	0	0
19	16	.7	.49	17	0	0
20	25	8.3	68.89	23	6	36
21	16	.7	.49	16	1	1
22	10	6.7	44.89	9	8	64
23	11	5.7	32.49	11	6	36

TABLE 28--Continued

Case No.	Coder No. 1		Coder No. 2			
	d	d ²	d	d ²		
24	25	8.3	68.89	25	8	64
25	21	4.3	18.49	21	4	16
26	15	1.7	2.89	14	3	9
27	14	2.7	7.29	13	4	16
28	6	10.7	114.49	5	12	144
29	13	3.7	13.69	13	4	16
30	19	2.3	5.29	19	2	4
31	20	3.3	10.89	23	6	36
32	18	1.3	1.69	15	2	4
33	18	1.3	1.69	20	3	9
34	12	4.7	22.09	15	2	4
35	13	3.7	13.69	13	4	16
36	13	3.7	13.69	15	2	4
37	27	10.3	106.09	21	4	16
38	23	6.3	39.69	26	9	81
39	13	3.7	13.69	14	3	9
40	16	.7	.49	16	1	1
41	28	11.3	127.69	29	12	144
42	13	3.7	13.69	15	2	4
43	18	1.3	1.69	18	1	1
44	21	4.3	18.49	20	3	9
45	22	5.3	28.09	22	5	25
	753			765		
	$\bar{X} = 16.7$	$d^2 = 1,402.85$	$\bar{X} = 17$	$d^2 = 1,290$		
		$1 = 5.58$		$2 = 5.32$		

Guetzkow's method involves arriving at obtained agreement, using the standard method of simple proportion. That is, the number of units for which there is agreement is divided by the total number of units coded. Then the obtained agreement can be inserted into Guetzkow's general expression for the range of theoretical agreement.

$$P = \frac{t^2 + 2nP'}{2(t^2 + n)} \pm \sqrt{\frac{(t^2 + 2nP')^2 - 4(t + n)n(P')^2}{2(t^2 + n)}}$$

t may be 2.58 or 1.96 depending upon the level of significance sought by the investigator.

Insertion of the data yielded the following:

$$P = \frac{(2.58)^2 + 2(789)(.81)}{2(6.65 + 789)} \pm \sqrt{\frac{6.65 + 2(789)(.81) + 4(6.65 + 789)(789)(.81)^2}{2(6.65 + 789)}}$$

$$P = .807 \pm .049$$

This means that obtained agreement of .81 is related to a theoretical range of agreement extending from .758 to .856.

Since the theoretical range of P is influenced by the number of categories up to five and by the skill of the coders, the lower limit of the range can be used to find the smallest value coder skill may take 99 times out of 100 by substituting into the formula:

$$P = \frac{k}{k-1} p^2 - \frac{2}{k-1} p + \frac{1}{k-1} \quad (k \text{ refers to categories, } p \text{ refers to coder skill)}$$

$$.758 = \frac{6}{6-1} p^2 - \frac{2}{6-1} p + \frac{1}{6-1}$$

$$.87 = p$$

Thus .87 is the smallest value coder's skill will take 99 times out of 100.

Another problem that is peculiar to the coding of qualitative material is treated by Guetzkow. That problem is the coding of the same material into different numbers of units. Below, compressing Guetzkow's coverage drastically, the researcher will insert her data.

$$U = \frac{O_1 - O_2}{O_1 + O_2} \quad (O_1 \text{ and } O_2 \text{ refer to the number of units coded by each coder respectively})$$

$$U = \frac{765 - 735}{765 + 735} = .02 \text{ unitizing error}$$

and the variance

$$\sigma_x^2 = \sigma_1^2 + \sigma_2^2 = \sigma_y^2$$

$$5.58 + 5.32 = 10.9 \text{ pooled variance}$$

and the constant h

$$E(O_1 + O_2) = 2h$$

$$765 + 735 = 1500$$

$$750 = h$$

and into a formula for t to obtain significance

$$t = \sqrt{2} \frac{h \sqrt{N}}{\sqrt{1 + U^2}} \frac{U}{\sqrt{1 + U^2}}$$

$$t = 1.4 \frac{750\sqrt{7}}{10.9} \frac{.02}{\sqrt{1 + .0004}}$$

N refers to number of units of a hundred coded

$t = 3.24$ which is significant at the .01 level with six degrees of freedom. This permits the researcher to say that a unitizing error as high as .02 with a coder accuracy of σ/h of .01 would occur only once for each hundred units coded.

APPENDIX C

KOOS'S SYMPTOM LIST--ORIGINAL AND REWORDED

KOOS'S LIST OF SEVENTEEN SYMPTOMS
NEEDING MEDICAL ATTENTION

Taken from The Health of Regionville by Earl Lomon Koos (1954:32).

1. Loss of appetite
2. Persistent backache
3. Continued coughing
4. Persistent joint and muscle pains
5. Blood in stool
6. Blood in urine
7. Excessive vaginal bleeding
8. Swelling of ankles
9. Loss of weight
10. Bleeding gums
11. Chronic fatigue
12. Shortness of breath
13. Persistent headaches
14. Fainting spells
15. Pain in chest
16. Lump in breast
17. Lump in abdomen

KOOS'S SYMPTOM LIST REWORDED

"I have a list of things here that people sometimes go to see the doctor about. I want to see if you think you would go."

Would you go to the doctor if you didn't feel like eating much any more . . . if you lost your appetite? Has that ever happened to you? How about now . . . do you have a good appetite?

Would you go to the doctor if you had a pain in your back every day for a long while? Has that ever happened to you? What did you do?

Would you go to the doctor if you coughed a lot . . . or if you coughed very often? Has that ever happened to you? How about now . . . ?

Would you go to a doctor if you had pain in your muscles (demonstrate arm and calf muscles) or in your joints (demonstrate the bending of the elbow and the knee)? Has that ever happened to you? How about now . . . ?

Would you go to the doctor if you saw blood in the toilet when you moved your bowels? (At this point the factor of an indoor or an outdoor toilet has to be clarified. Patients seem to agree that it wouldn't be possible to tell with an outdoor toilet.) Has that ever happened to you, etc.

Would you go to a doctor if you saw blood when you passed your water? Has that ever . . . ?

In the place where the baby comes out . . . the vagina . . . if you had a lot of bleeding there would you go to see a doctor? The answer to this may be, "Not if I'd just had a baby." To which the counter response is, "Supposing you hadn't just had a baby and it wasn't time for your period." Has that ever . . . ?

If your ankles ever swelled up, would you go to the doctor?

(Swelled and swollen are apparently not familiar words so the question requires a demonstration of the size of the ankles.) Has that ever . . . ?

If you lost weight, if you got skinnier, would you go to the doctor? Has that ever . . . ?

If your gums (demonstrate) . . . around your teeth . . . started bleeding a lot, would you go to the doctor? (This sometimes launches a discussion about whether or not they have been to a dentist.)

If you found that you were tired all the time (patients find this question puzzling, so it has to be qualified with "Even if you haven't been working or you have just gotten up"), would you go to a doctor? Has that ever . . . ?

If you had trouble catching your breath, would you go to the doctor? (Patients find this question puzzling no matter how it is worded, unless it is demonstrated.) Has that ever . . . ?

If you had a headache for a long time, would you go to see your doctor? Has that ever . . . ?

If you fainted . . . passed out . . . (demonstrate), would you go to the doctor? Has that ever . . . ?

If you had a pain in your chest, would you go to the doctor? Has that ever . . . ?

If you had a lump (a little hard place) in your breast, would you go to the doctor?

If you had a lump in your abdomen . . . your stomach . . . (demonstrate) would you go to see the doctor? Has that ever . . . ?

TABLE 29

SEVENTEEN SYMPTOMS TABULATIONS FOR DISTRICT PATIENTS

Patient Number	Symptom Number																	
	1	2	3	4	5	6	7*	8	9	10	11	12	13	14	15	16	17	Totals
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	5	2	2	1	2	2	1	5	1	4	2	2	5	1	5	1	1	1
3	5	5	2	1	1	1	1	3	5	5	5	5	1	1	1	1	1	1
4	5	1	1	2	1	1	1	2	3	5	5	1	1	1	1	1	1	1
5	5	1	1	5	1	1	1	5	5	5	5	1	1	5	1	1	1	1
6	5	1	1	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1
8	baby																	
9	1	1	1	1	1	1	1	1	1	5	1	1	1	5	1	1	1	1
10	1	1	5	1	1	1	M	1	3	1	5	1	1	1	1	1	1	1
11	1	1	1	1	1	1	M	1	1	1	1	1	1	1	1	1	1	1
12	5	1	1	2	1	1	4	3	1	4	5	5	3	1	1	3	1	1
13	baby																	
14	1	1	5	5	2	1	1	2	2	5	1	1	2	1	1	1	1	1
15	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1

TABLE 29---Continued

Patient Number	Symptom Number											Totals					
	1	2	3	4	5	6	7*	8	9	10	11	12	13	14	15	16	17
16	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1
17	5	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1
18	child																
19	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	2	1	1	1	4	1	M	1	1	4	5	1	1	1	1	1	1
21	5	1	1	5	1	1	1	1	5	5	2	1	1	1	1	1	1
22	5	1	5	5	5	5	M	1	1	5	5	1	5	1	1	1	1
23	1	1	1	5	5	1	1	5	1	5	5	1	1	1	1	1	1
24	1	1	1	4	1	1	M	1	1	5	2	1	5	5	5	1	1
25	1	1	5	5	1	1	1	1	1	1	1	2	5	5	2	1	1
26	5	1	1	1	1	1	M	1	1	1	1	1	1	1	1	1	1
27	5	1	1	5	1	1	1	1	4	5	5	1	1	1	1	1	1
28	1	5	1	1	5	5	1	1	5	1	1	1	1	1	4	1	1
29	child																
30	1	1	1	1	5	1	M	1	1	4	1	1	5	1	1	1	1

TABLE 29--Continued

Patient Number	Symptom Number																	Totals
	1	2	3	4	5	6	7*	8	9	10	11	12	13	14	15	16	17	
31	1	5	1	5	1	1	1	5	1	5	1	1	1	1	1	1	1	
32	1	1	1	1	1	1	M	5	5	5	3	1	5	4	5	5	1	
33	1	5	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
34	1	1	2	1	1	1	M	1	1	2	1	1	2	1	1	1	1	
35	1	5	5	5	1	1	1	5	5	5	1	1	1	1	1	1	1	
36	1	5	1	2	1	1	1	1	1	1	1	1	5	1	1	1	1	
37	1	4	1	1	1	1	M	1	5	1	1	1	1	1	1	1	1	
38	5	4	1	5	1	1	1	1	5	1	5	1	1	1	1	3	1	
39	1	1	1	1	1	1	1	5	1	5	1	1	5	1	1	1	1	
40	5	1	5	1	1	1	1	1	5	1	5	1	4	1	1	1	1	
41	5	1	1	1	1	1	1	5	5	5	1	1	1	2	1	1	1	
42	1	1	2	1	1	1	1	1	2	3	1	1	1	1	1	1	1	
43	5	1	1	5	1	1	1	5	5	5	5	1	1	1	1	1	1	
44	1	1	2	1	1	1	1	1	1	4	2	5	1	1	1	1	1	
45	2	1	5	2	1	1	1	1	5	5	1	5	5	1	5	1	1	

TABLE 29--Continued

Patient Number	Symptom Number																	Totals
	1	2	3	4	5	6	7*	8	9	10	11	12	13	14	15	16	17	
46	1	1	1	1	1	1	2	2	1	1	1	1	1	5	1	1	1	
47	3	1	1	5	1	1	1	1	3	5	1	1	1	1	1	3	1	
48	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	
49	5	5	1	1	1	1	3	1	5	5	5	1	1	1	1	1	1	
50	1	1	1	1	4	1	1	5	5	5	5	1	1	1	5	1	1	
51	5	5	5	5	1	1	1	5	2	1	5	3	2	2	2	1	1	
Yes	28	35	33	25	38	43	34	31	25	20	27	40	32	38	39	43	47	578
Qual Yes	2	1	6	5	3	1	1	3	3	1	4	2	4	3	2			43
Don't Kn	1							1	3	1	1	1	1		2			7
No	16	9	8	16	4	3	1	12	15	20	15	4	9	5	5	2		142
Qual No	2		1	2	2	1	1	1	1	5			1	1	1			19
M							9											9
Totals	47	47	47	47	47	47	46	47	47	47	47	47	47	47	47	47	47	798

Key: 1 = yes 2 = qualified yes 3 = don't know 4 = qualified no 5 = no M = male

*Vaginal question, excludes males.

TABLE 30
SEVENTEEN SYMPTOMS TABULATIONS FOR DISTRICT NON-PATIENTS

Non-Patient Number	Symptom Number																	Totals
	1	2	3	4	5	6	7*	8	9	10	11	12	13	14	15	16	17	
1	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5	5	
2	1	1	1	4	1	1	1	5	3	5	5	1	1	1	1	1	1	
3	5	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	5	5	5	3	1	3	M	1	5	5	5	5	5	1	5	2	2	
5	1	1	1	1	1	1	1	5	1	5	5	1	5	1	1	1	1	
6	5	5	5	5	1	1	M	5	5	5	5	1	1	1	5	1	1	
7	5	1	5	1	1	1	1	5	5	5	5	1	5	1	1	1	1	
8	Omission																	
9	5	1	1	1	1	1	1	1	1	1	5	5	1	5	5	1	1	
10	1	1	1	1	1	1	1	5	1	1	1	1	1	2	1	1	1	
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
12	1	1	1	5	1	1	M	1	5	5	5	1	1	1	1	1	1	

TABLE 30--Continued

Non-Patient Number	Symptom Number																	Totals
	1	2	3	4	5	6	7*	8	9	10	11	12	13	14	15	16	17	
13	5	5	1	5	1	1	1	5	5	5	5	1	5	1	1	1	1	
14	1	2	1	1	1	4	M	2	1	5	5	1	5	1	2	1	1	
15	1	5	5	5	5	1	1	5	5	5	1	1	5	5	1	1	1	
16	1	1	1	1	3	3	1	5	5	5	1	5	1	5	1	1	1	
17	5	5	1	5	1	1	1	5	5	5	5	1	1	5	1	1	1	
18	3	5	5	5	1	1	M	1	1	3	3	1	5	1	5	1	5	
19	5	2	5	5	3	5	5	5	5	1	4	5	5	3	3	5	3	
20	1	1	1	1	5	1	M	1	1	3	5	1	1	1	1	1	1	
21	1	1	1	1	5	1	1	1	1	3	5	5	1	5	1	1	1	
22	5	5	1	5	1	1	3	5	1	3	5	1	5	1	1	3	3	
23	1	1	1	5	1	5	1	1	1	1	5	1	5	1	2	1	1	

TABLE 30--Continued

Non-Patient Number	Symptom Number																	Totals
	1	2	3	4	5	6	7*	8	9	10	11	12	13	14	15	16	17	
24	1	2	1	5	1	1	1	1	5	1	5	1	1	1	1	1	1	
25.	Omission																	
Yes	11	13	14	11	17	17	15	13	10	7	5	17	12	15	15	19	18	229
Qual Yes	1	2					1						1	2	1	1	9	
Don't Know					2	1	1			3	1		1	1	1	2	13	
No	11	8	9	11	4	4	1	9	13	13	16	6	11	6	5	2	2	131
Qual No				1		1					1						3	
M							6											
Totals	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	391

Key: 1 = yes 2 = qualified yes 3 = don't know 4 = qualified no 5 = no M = male

*Vaginal question, excludes males.

TABLE 31
 SEVENTEEN SYMPTOMS COMPARISON OF PATIENTS AND
 NON-PATIENTS PERCENTAGE DISTRIBUTION
 AMONG RESPONSES

Symptom		Yes	Qualified		Don't Know	No	Qualified		Males
			Yes	No			No	Males	
1	Patients	60	4	2	34			100 (47)	
	Non-patients	48	4		48			100 (23)	
2	Patients	74	2		20	4		100 (47)	
	Non-patients	56	9		35			100 (23)	
3	Patients	70	12		18			100 (47)	
	Non-patients	60			40			100 (23)	
4	Patients	53	10		35	2		100 (47)	
	Non-patients	48			48	4		100 (23)	
5	Patients	82	6		8	4		100 (47)	
	Non-patients	74		8	18			100 (23)	
6	Patients	92	2		6			100 (47)	
	Non-patients	74		4	18	4		100 (23)	
7	Patients	73	2		4	2	19	100 (47)	
	Non-patients	66		4	4		26	100 (23)	
8	Patients	66	6	2	26			100 (47)	
	Non-patients	56	4		40			100 (23)	

TABLE 31--Continued

Symptom		Yes	Qualified		Don't Know	No	Qualified		Males
			Yes	No			No	Yes	
9	Patients	53	6		6	33	2	100 (47)	
	Non-patients	44				56		100 (23)	
10	Patients	43	2		2	43	10	100 (47)	
	Non-patients	30		14		56		100 (23)	
11	Patients	57	8		2	33		100 (47)	
	Non-patients	22		4		70	4	100 (23)	
12	Patients	86	4		2	8		100 (47)	
	Non-patients	74				26		100 (23)	
13	Patients	69	8		2	19	2	100 (47)	
	Non-patients	52				48		100 (23)	
14	Patients	82	6			10	2	100 (47)	
	Non-patients	66	4	4		26		100 (23)	
15	Patients	84	4		4	10	2	100 (47)	
	Non-patients	66	8			22		100 (23)	
16	Patients	92	4		4	4		100 (47)	
	Non-patients	84		4		8		100 (23)	
17	Patients	100	4		8			100 (47)	
	Non-patients	80				8		100 (23)	

APPENDIX D
FOLK REMEDIES

FOLK REMEDIES MENTIONED BY RESIDENTS OF THE DISTRICT

<u>Remedy</u>	<u>Purpose</u>	<u>Number of Times Mentioned</u>
Asphid	Worms	1
Blackberry root tea	Not stated	1
Blackberries, fresh with sugar	Stomach trouble	1
Black Draught Syrup	Constipation	2
Briarroot	Not stated	1
Camphor and Vicks spread on the chest	Colds	1
Camphor gum in a bag around the neck	Colds	1
Cod liver Oil	All purpose	1
Cane syrup	Not stated	1
Castor Oil	(1) Before and after childbirth	
	(2) All purpose	
	(3) Heated--cleans stuff from a cold	
	off the lungs	12
Coal oil mouth rinse	Pyorrhoea	1
Corn shucks	Not stated	1
Dow weeds	"Female trouble"	1

FOLK REMEDIES--Continued

<u>Remedy</u>	<u>Purpose</u>	<u>Number of Times Mentioned</u>
Epsom Salts	Not stated	2
Flour water	Dysentery	2
Garlic	Preventative for colds and pneumonia	1
Garlic and whiskey	Worms	1
Ginger root tea	Not stated	1
Hog's hoof tea	Colds	7
Hornet's nest and honey	Whooping cough	1
Husk tea	Not stated	1
Jerusalem candy	Worms	1
Life everlasting tea	Not stated	1
Mullet tea	Colds	1
Nutmeg around the neck	Colds	1
Olive oil	Not stated	1
Paregoric	Not stated	2
Pine tar tops	(1) Colds	
	(2) Foot	1

FOLK REMEDIES--Continued

<u>Remedy</u>	<u>Purpose</u>	<u>Number of Times Mentioned</u>
Root tea as a foot soak while wrapped warmly	"Female troubles"	1
Sardine grease	Mumps	1
Sassafras tea	"Feelin' bad"	1
Tallow, chewed	Teeth	1
Tallow, cooked	Colds	1
Tallow, rubbed on the chest	Colds	1
Tallow with turpentine	Colds	4
Tar spread on the chest	Colds	1
Teething powder and honey	Teething	1
Turpentine in a "night pot" to sit upon	"Body trouble" after delivery	1
Turpentine and wood live	Not stated	1
Vinegar and alcohol	"Bring the blood down"	1
Water from boiled rice	Babies' dysentery	1

APPENDIX E

INTRODUCTORY STATEMENT AND QUESTIONS ASKED
OF DISTRICT RESIDENTS

INTRODUCTORY STATEMENT

I teach at the university in Gainesville. One of the things I talk to students about is how people live out in the country. But, it seems to me, if you are going to talk about how people live, and what they think about, it's a good idea if you talk to them first. So--before the summer is over, I hope to talk to someone from just about every house here in The District.

Since you have a brand new clinic up the road, it seemed like a good idea to ask people some questions about their health.

The above was generally said outside the house while the interviewee was deciding whether or not he wanted to talk with the interviewer. More often than not, at least some part of the above was repeated after the interviewer was seated with the respondent before the actual questions were begun, and before the tape recorder was mentioned. The repetition was given because it was requested or because it was apparent that some confusion still prevailed.

A subjective opinion formed by the researcher after repeated introductions was that the respondent did not attend to the words the first time they were said. Instead he used the time to come to some conclusions about the interviewer. Upon repetition, he paid closer attention and occasionally asked questions, sometimes informational type questions and sometimes simply "chatty" conversational type questions.

QUESTIONS ASKED OF DISTRICT RESPONDENTS

- I. Seventeen symptoms (for everyone)
- II. Descriptive information (for everyone)
 - Where do you go for help when you get sick? If answer was clinic:
Where did you go before the clinic came?
 - If answer was a nearby city:
Where is _____ city?
 - Were you born in Meccaville?
 - Where were you born (if not born in Meccaville)?
 - How old are you?
 - Who lives here in this house with you?
 - How old are they (spouse, children, boarder, etc.)?
 - Were your children born in Meccaville?
 - Were your children born in a hospital?
 - How far did you go in school?
 - How far did your husband, children, etc. go in school?
 - When did you come to Meccaville (if born elsewhere)?
 - Why did you come to Meccaville?
 - Have you ever been in a hospital? If answer was yes:
Why? Where?
 - Have you ever had an operation? If answer was yes:
Why? Where?
 - Has anyone in your family ever been to a hospital or had an operation? If answer was yes:
Why? Where?
 - Have you ever been to a dentist? If answer was yes:
Why? Where?

Do you work every day? If answer was yes:

What do you do?

How do you get along when you are not working?

How big is your house? How many rooms are there?

Do you have electricity? A stove? Refrigerator?

III. Clinic Visit (only for respondents who had been to clinic)

What was wrong? What made you go to the doctor?

What did you tell him?

Did he seem to understand you?

Did you understand him?

What did he say? What was wrong?

What did he tell you to do?

Did he give you any medicine or did he tell you to get some at the drugstore?

Did you take the medicine? Did you take it all? (If answer had not already been given),

Did you like the doctor who treated you at the clinic?

What didn't you like about him?

If the clinic and where you used to go were the same distance, would you rather go to the doctor you used to have?

IV. More descriptive information and attitudes (for everyone)

Is there anyone who helps you when you are sick?

Is there anyone outside your family that helps you when you are sick?

Are there any kinds of home remedies that you take?

Are there any kind of remedies that your mother or your grandmother taught to you?

Tell me about the times that you have been sick that you did not like the kind of care that you got . . . from a doctor, or a clinic, or a hospital?

Do you know when the clinic is open?

Is there anything that makes it hard for you to use the clinic?

How do you think people feel about the clinic coming here?

Do you have any kind of sickness that I didn't ask you about?

Is there any question you thought that I was going to ask that I didn't ask?

(Note: The last two questions were not useful for gaining information but respondents were apparently pleased by some inferences they made from the questions. The only logical explanation that the researcher could make from the behavior was that the respondent was pleased at being asked to make an assessment of the thoroughness of the questioning. It ended the interviews on a pleasant note.)

APPENDIX F

SUMMARY OF STUDIES DEALING WITH
THE EFFECTIVENESS OF ADVICE
GIVEN TO PATIENTS

TABLE 32

THE EFFECTIVENESS OF ADVICE GIVEN TO PATIENTS*

Investigators	Patients	Medicine or Advice	Patients Failing to Co-operate
Simpson (1956)	Out-patients	PAS	24 per cent
Dixon <u>et al.</u> (1957)	Out-patients	PAS	Half
Wynn-Williams and Arris (1958)	Out-patients	PAS	49 per cent
Fox (1958)	Indian out-patients	PAS	14-20 per cent
Pitman <u>et al.</u> (1959)	Out-patients	PAS	48 per cent
Benstead and Theobald (1952)	Out-patients	Ferrous Sulphate	33-40 per cent
Mohler <u>et al.</u> (1955)	(a) young patients (b) adults	Oral Penicillin Oral Penicillin	32 per cent 50 per cent
Joyce (1962)	Out-patients	Placebo, Phenylbutazone or C20410 (Ciba)	48 per cent
Park and Lipman (1964)	Out-patients	Imipramine or placebo	On half of the occasions patients had failed to co-operate
Reynolds <u>et al.</u> (1965)	Out-patients	Placebo or barbiturate	Should have been taking 3 tablets a day--were only taking 2.6 on average

TABLE 32--Continued

Investigators	Patients	Medicine or Advice	Patients Failing to Co-operate
Wilcox et al. (1965)	Out-patients	Tranquillizers or anti-depressants	48 per cent
Neve (1958)	In-patients	Largactil	11 per cent
Roth and Berger (1960)	(a) In-patients	Antacids	Consumed less than half amount prescribed
	(b) In-patients	Antacids	Consumed just under two-thirds of amount prescribed
Tunbridge (1963)	Out-patients	Diet	Only 17 per cent keeping to diet satisfactorily. 36 per cent definite failures
Young (1957)	Out-patients	Diet	Only 32 per cent successful. 30 per cent definite failures
Brim (1954)	Mothers	Feeding regime for children	52 per cent do not even try to follow recommendations
Radke and Klisurich (1947)	Mothers	Giving orange juice and cod liver oil to babies	45 per cent did not even follow advice given

TABLE 32--Continued

Investigators	Patients	Medicine or Advice	Patients Failing to Co-operate
Newsom and Newsom (1963)	Mothers	Vitamin A, D and C supplements for babies	20 per cent did not give Vitamin C; 39-52 per cent did not give Vitamin A and D
Newsom and Newsom (1963)	Expectant Mothers	Relaxation Classes	50 per cent failed to attend

*Source: P. Ley and S. Spelman, Communicating with the Patient, pp. 41-43.

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BIOGRAPHICAL SKETCH

Margaret Brien DiCanio was born April 9, 1929 in Waltham, Massachusetts. In June, 1947, she graduated from Brighton High School. She served three years in the Women's Army Corps as an X-ray technician. She received a Bachelor of Arts degree, with a major in Sociology, from Northeastern University in June of 1957, and a Master of Arts degree, with a major in Psychology, from Boston University in June of 1958.

From 1958 until her entrance into graduate school, she worked at a variety of jobs including stints as; a psychologist at a state hospital, an instructor for an airline, a medical social worker, and a Head Start teacher.

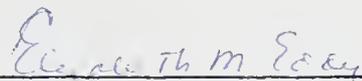
In September, 1967, she enrolled in the Graduate School of the University of Florida. There she has worked as a graduate assistant and as a teaching assistant while working toward the degree of Doctor of Philosophy. She is a member of Alpha Kappa Delta, The Southern Sociological Association, and The American Sociological Association.

I certify that I have read this study and that in my opinion it conforms to acceptable standard of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Gerald R. Leslie, Chairman
Professor of Sociology

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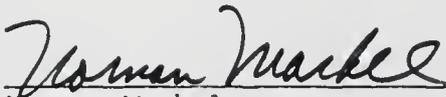
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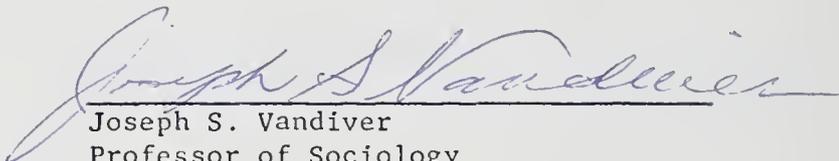
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Joseph S. Vandiver
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This dissertation was submitted to the Dean of the College of Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

June, 1971



Dean, College of Arts and Sciences

Dean, Graduate School

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