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MICROANALYSIS OF TREATMENT SITUATIONS

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PHYSICAL THERAPY AS COMMUNICATION: MICROANALYSIS OF TREATMENT SITUATIONS

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ABSTRACT

PHYSICAL THERAPY AS COMMUNICATION: MICROANALYSIS OF TREATMENT SITUATIONS

By

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A microethnographic case study was carried out to learn about how patients and physical therapists interact. A patient with a "frozen shoulder" was followed through treatments at an outpatient clinic. Data collection included participant observation, videorecordings of treatments, viewing sessions with participants, and interviews. Videorecorded material was analyzed to answer the questions "What do a patient and a therapist do and say during treatment? How do they talk with one another? What psychological and pedagogical aspects can be inferred from a content analysis of their talk and actions?"

Phases of "hands-on" and "hands-off" alternated as a "treatment dialogue" was interwoven with "conversations." "Treatment dialogue" consisted of the therapist's verbal and physical instructions and feedback and the patient's inaudible physical responses and vocal comments. "Conversations" were primarily initiated by the patient. With the two dialogues happening simultaneously, the use of different styles of talk, and of different interpretations of what was going on, accounts were given for why moments of confusion occurred in spite of the patient and therapist

being familiar with one another and the treatment routine.

Patient's talk about her dilemma, was interpreted by me to be important for recovery. Her talk turned the therapist into a listener, and therapy into the act of listening.

Aspects of teaching and learning were explored. Instances of non-learning illuminated the different perspectives the patient and therapist reasoned from.

This study questions the relationship between a patient and a therapist, what is therapeutic about treatments, and how knowledge is gained. It argues that treatment situations need to be conceptualized as jointly co-produced by the patient and therapist moment by moment in real time, and as occasions where knowledge is created.

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My mother, Marta Pettersson, has been significant to my work in her listening, in questioning, in never losing her dignity in spite of serious illness. My daughter, Gabriella, has been just as important. I thank her for reading parts of the manuscript and commenting upon it, for

telling me when it was time to finish, and for bearing with me.

Finally, I offer words of appreciation to the patient and the physical therapist of this study, who enabled me to learn about research, to discover essential features of therapeutic encounters, and to begin to understand the dynamics of face to face interaction.

All my knowledge of the world, even my scientific knowledge, is gained from my own particular point of view, or from some experience of the world without which the symbols would be meaningless. The whole universe of science is built upon the world as directly experienced, and if we want to subject science itself to a rigorous scrutiny and arrive at a precise assessment of its meaning and scope, we must begin by reawakening the basic experience of the world of which science is the second order expression. Science has not and will not have, by its nature, the same significance qua form of being as the world we perceive, for the simple reason that it is a rationale or explanation of that world. (Merleau-Ponty, 1962, p. viii)

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CHAPTER ONE

THEORETICAL FRAMEWORK

Qualitative research has its philosophical roots in phenomenology (Merriam, 1988). This micro-ethnographic case study of physical therapy sessions is guided by existential phenomenology, which serves both as a theoretical foundation and as a mode of inquiry. It takes the living world of the patient and the physical therapist, as it is expressed in treatment situations, as a point of departure.

The philosophical concepts of "being-in-the-world," of "experience," and of "reflection" are thought about as being firmly rooted in any situation and as phenomena that can be studied. In other words, the emphasis upon physical, bodily matters in treatment situations lends itself to examination of what bodily experiences there are; how they are expressed; and how a treatment situation turns into a different experience for the patient and for the therapist.

Physical therapy treatment is not something that is part of the everyday life of people. It occurs mostly when an injury or a disease has done some damage to one's body and a "restoration" is required. For a physical therapist, treatment situations constitute her working day. There is

ground to assume that treatment situations are approached differently by the patient and by the therapist.

The reason for the patient's and the therapist's being together, the physical trauma the patient suffers from and the treatment modality the therapist offers, are central for understanding what is talked about, perceived, and acted upon during the session.

Assumptions about Physical Therapy

The following assumptions are held regarding physical therapy. The therapy involves longterm and repeated contact between a therapist and a patient; in the course of treatment physical contact is often needed with the therapist's "laying on of hands" being very much part of her work; the living body and movements are in focus when delivering physical therapy. During treatment the patient and the therapist are present to each other moment by moment and they take account of each other's actions. Both of them are acting and reflecting human beings. Both of them have intentions and knowledge, although of different kinds. Both of them teach and learn.

This study approaches teaching and learning from a social constructivist's perspective and assumes that knowledge can be inferred in the doings and the talk of the patient and the therapist. The assumptions also encompass

the idea that the patient's knowledge and the therapist's knowledge are of little value when isolated from each other, but when they intermingle during the course of treatment they are of the utmost importance in leading to the creation of new knowledge.

Views of Physical Therapy

In a traditional view of physical therapy, the therapist is considered the teacher and the patient the learner. The therapist is educated to "help restore motion homeostasis" (Hislop, 1975). The patient is the person whose mobility has been impaired. This implies an asymmetrical relation, if we look at the distribution of specialized knowledge. It is the therapist who determines what treatment should be carried out, what movement a patient should practice, when to introduce, for instance, strengthening exercises. All that is required of the patient is to do as instructed, to comply.

Such a description can easily be translated into a context or a relationship of already set rules. If a treatment situation were perceived by both participants in this way and accepted as such, there would be no need for negotiations to occur, for discussions to arise, for difficulties to appear and be resolved. But a therapy situation may be viewed in other ways by the participants.

For example, it can be viewed as a service-like encounter where the therapist is expected to serve the patient's needs. Alternately, it may be viewed as a teaching/learning encounter where both the patient and the therapist have something to learn and something to teach. What will be taught and learned will also change over time. It may also be viewed as an encounter in which bodily knowledge, reformulated and expressed in words, both by the patient and the therapist, alters or enriches one's understanding of a particular physical condition.

This study refutes the notion of a "causal relationship" or causal linkage between a health professional and a patient or between therapeutic interventions and patient outcomes (Jensen, Shepard, & Hack, 1990) which is implicit in many specialized/ professional service organizations. But this does not mean we lack ideas about how the encounter is or could be construed. Being a naturalistic study it assumes that "All entities are in a state of mutual simultaneous shaping, so that it is impossible to distinguish causes from effects" (Lincoln & Guba, 1985, p. 38).

One means of thinking about physical therapy sessions is to adopt a social constructivist's perspective. This influences one's view of treatment situations and encourages application of the concept of communication to their study. Philosophers and social scientists holding a

social constructivist view stress how human beings are actively creating their own worlds, their own realities. They stress the continous effort we engage in to make sense of what is happening around us, of our attempts to understand.

One research tradition that builds upon these philosophical assumptions is ethnography and particularly constitutive ethnography. The premise of constitutive ethnography is that "social structures are interactional accomplishments which are mutually constructed by the participants in them" (McCollum, 1989, p. 136). Within this framework, treatment situations are seen as being socially organized by the patient and the therapist.

Definition of Experience and Reflection

One of the intentions of this study is to illuminate a patient's and a therapist's concrete experience of treatment situations as being potentially physico-therapeutic, psychotherapeutic, and pedagogical teaching and learning encounters, and that this is expressed by the participants during the session itself. To begin that task, it is useful to define "experience" in a way that guides the study's questions and methods as well as its theorizing.

Schutz' definition of experience is explained by Wagner (1970) in the following way:

> The basic starting point of all phenomenological considerations is the essential actual, or immediately vivid, experience, that is, the subjective, spontaneously flowing stream of experience in which the individual lives and which, as a stream of consciousness, carries with it spontaneous linkages, memory traces, etc., of other, prior, experiences. Experience becomes subjectively meaningful experience only by an act of reflection in which an essentially actual experience, in retrospect, is consciously apprehended and cognitively constituted. In the course of his life, a person compiles a stock of experience, which enables him to define the situations in which he finds himself and to guide his conduct in them. (p. 318; emphasis in original)

Langer (1989) interprets existential philosophy in the following way:

> ... for an understanding of our being-in-the-world, existentialist philosophy seeks to awaken us to an awareness of our fundamental involvement in a natural-cultural-historical milieu. It stresses that we are not neutral observers but rather, situated participants in an ongoing, open-ended, socio-historical drama. It claims that truth comes into being in our concrete co-existence with others and cannot be severed from language and history. The existentialists declare that a non-situated human being is inconceivable. (p. iv)

Merleau-Ponty (1962), influenced by Husserl, stresses that it is through perception we are able to experience the world. He argues that the perceiver is not a pure thinker,

but a body-subject and that "intentionality of consciousness is first and foremost a bodily intentionality" (Langer, 1989, p. xiv). The subject, to Merleau-Ponty, is the living body, and consciousness is defined as an "active meaning-giving operation" (Merleau-Ponty, 1961, p. xi). He says "Because we are in the world, we are condemned to meaning, and we cannot do or say anything without its acquiring a name in history" (1961, p. xiv).

In physical therapy, the focus is upon the body and its movements. By adding the word "living," so we get the "living body," we can remind ourselves, again, that the people we see, the patients, are not only bodies composed of parts. By thinking of them as being just as involved in the ongoing situation, the ongoing treatment, as we ourselves are, we can begin to appreciate how both of us shape the situation at hand. By reflecting consciously upon what happens in treatment situations, we can begin to understand who the patient and the therapist become during that particular encounter.

The application of certain concepts from the field of communication to treatment situations is one way of illuminating how the participants themselves define and shape each session. However a treatment turns out, it is accomplished in interaction. In communicative terms there is no longer a difference between the patient and the

therapist, since both possess interactional competence. This is based on communicative knowledge that is "institutionalized" as well as "emergent," to use Erickson's terms (1986a).

Concepts of Communication

When thinking about a patient and a therapist as interacting successfully in face to face situations, one fundamental issue to stress is the communicative competence they share.

Shared Communicative Competence

Institutionalized knowledge is the ability to use linguistically proper ways of speaking, such as correct syntax and lexicon. Also taken for granted are "culturally learned patterns for the use of speech" (Erickson, 1986a, p. 295). These are, among other things, to know how to speak appropriately in different situations; what patterns of sequencing to expect in ordinary activities; to know and be able to apply principles that organize discourse, for example, an answer follows a question. Institutionalized communicative knowledge represents "general systems of rules or operating principles for the conduct of talk" (Erickson, 1986a, p. 296). Emergent communicative knowledge is another dimension:

> It is the domain of praxis in reasoning, the capacity to create sense in addition to following rules, to go beyond what is culturally learned and, in the midst of the fortuitous contingency of the moment, to play interaction by ear. (p. 296)

Communication in a general sense can be defined in a variety of ways and it can be studied from different perspectives. Some consider all behavior to be communicative in nature (Ruesch & Bateson, 1951), others that behavior is only considered "communicative" if the person providing it intends to convey some message, regardless of whether anyone else receives the message (Ekman & Friesen, 1981). This last proposition is challenged by Kendon (1981) who argues "The question of intentionality is irrelevant because ... to witness a behavioral event is to receive information" (p. 9).

When looking at how those different conceptions of communication relate to the basic components of communication--the sender, the message, and the receiver--one finds that they are based on different assumptions regarding responsibility for whether something has been communicated or not. For example, Ruesch and Bateson, and Kendon, assume that the "burden" of communication lies on the receiver, while Ekman and Friesen place it upon the sender. Depending on what researchers tend to focus upon, be it the relationship between the sender and the message

or the receiver and the message, different properties of communication come to be accentuated.

Central to constitutive ethnography is the study of speech. Forms of speech and prosody, and their relevance for participants, all merit attention. It is equally important to incorporate how speakers and listeners gesture, alter their facial expressions, and orient themselves toward each other in face to face encounters in order better to understand how interaction is accomplished. About the significance of interpretation of speech, prosody, and gesture in conversation, Paget (1983) has written:

> Talk, when it is serious rather than casual, is as much as is anything at all a labor of understanding, of listening and interpreting, of clarifying and acknowledging what has been said, and responding. It is an interactionally constituted activity sustained by conversationalists. (p. 72)

The multimodal nature of communication assists, through its redundancy across verbal and non-verbal channels, the interpretive work of participants.

Context Analysis

One group of researchers claim that one cannot separate the three entities--the sender, the message, and the receiver--from each other if one is to learn about the

collaborative work participants employ. They study the relationship between all three using audio-visual records (Erickson & Shultz, 1982; Florio, 1978; Kendon, 1981; McDermott, 1976; Shultz, Florio, & Erickson, 1982). While the speaker is saying something, the listener (receiver) reacts to what is being said, affecting both the speaker and the message. This dialectical way of thinking about communication is radically different from focusing upon either the sending end or the receiving end of the continuum, because it places the "burden" of communication as much on the receiver as it does on the sender and the message itself. McDermott (1976) is particularly concerned with "how people establish environments for each other and for themselves, and how these environments constrain their next activities" (p. 28).

This group of researchers follows an approach called context analysis (or "microethnography" or "constitutive ethnography"), which originated in the work of Ruesch and Bateson (1951), Birdwhistell (1952), and Scheflen (1973). They worked with films and were therefore able to look at the "simultaneous cooccurrence of what all interactional partners were doing together in constructing a communicative ecosystem in real time" (Erickson, 1986a, p. 297).

With the development of kinesics, the study of communication came to include gestures, posture, and facial

expressions, among others. This group of researchers treat communication as problematic. In other words they assume that intentionality is not a simple concept, that it takes work to understand what people say and mean, that it takes effort to interpret the meaning of a message both for analysts and for participants. A message does not carry one particular meaning but several, and it serves multiple functions. The sender and the receiver collaborate in giving cues for how a message is to be interpreted. The approach to communication taken by these researchers is to assume that inherent in every message there are two kinds of meanings. There is the literal, referential meaning and there is the social meaning. The latter means that while two people talk about something, they also address or talk about the relation between themselves. Bateson (1972) says,

> As mammals, we are familiar with, though largely unconscious of, the habit of communication about our relationships. Like other terrestrial mammals, we do most of our communicating on this subject by means of kinesic and paralinguistic signal, such as bodily movements, involuntary tensions of voluntary muscles, changes of facial expression, hesitations, shifts in tempo of speech or movement, overtones of the voice and irregularities of respiration. (p. 371)

At the same time as something is being talked about and implicit references made about the relationship between those engaged in talking, the participants tell each other what is going on. This might seem a strange proposition to

make. It might seem as if we do not know what we are doing. If one is having breakfast, one is having breakfast. If one is taking a course, one is taking a course. The issue is not about the official label of an event, but rather the different sequences or chunks of which each event is built. What is called "worktime" in a classroom is sequences or segments of "getting ready; focused worktime activity; wind up; clean up" (Florio, 1978, p. 69). Each sequence is seen in the behavioral displays of the participants, that is, in their postures, their gaze, their words. These behaviors serve reflexively to create and to cue the definition of situation and hence the rights and duties of participation (as well as the range of improvisatory options) at any point in time.

Within each sequence the participants occupy certain communicative roles. According to Erickson and Shultz (1982):

> In communicative terms, a role is the set of rights and obligations regarding ways of acting and ways of being acted toward which is possessed by an individual occupying a particular social identity. As performed social identity can change from moment to moment during face-to-face interaction, so can communicative rights and obligations of the individual change from one moment to the next. Participation structure can be thought of as the complete set of communicative rights and obligations in the roles of all those engaged in interaction at any moment. (pp. 17-18)

The transition from one sequence to another is not explicitly stated, "Now we have finished the 'getting ready' phase and we are focusing on the worktime activity." Rather this is said implictly by various linguistic, kinesic and prosodic cues whose meanings are negotiated verbally and non-verbally by the participants.

The purpose of talking about an event as consisting of various sequences is to illustrate the term context. It is important to stress that context is not meant here to be what surrounds actions or events, but rather the actions themselves, the actions taken by the participants at a particular place, during a particular time, which constitute the event. The word context is derived from the Latin verb contextere which means "to weave together separate strands" (Erickson, 1986c, p. 19). In other words, each event is socially organized by the participants in that they continuously take account of each others' actions.

This is not to be confused with the traditional understanding of the concept of equality. It rather means that all involved contribute equally to the event at hand, but do so in different ways. For instance, when one person has selected to speak, and the other stops what she is doing and shows that she is paying attention to what she hears and sees, she "enables" the speaker to have the

floor. The shift from one context to another is also jointly accomplished.

Contextualization Cues

Gumperz'(1977) notion of contextualization cues is important to understand how meaning is negotiated in a situation. It points to the interpretive work of both speakers and listeners. Erickson and Shultz (1982) state that we continuously tell each other what is going on, what context is in play for the moment:

> People of varying ages and cultural backgrounds all seem to be actively engaged while they interact, in telling one another what is happening as it is happening. This can be called the telling of the context by means of 'contextualization cues'... what signals are used and how the signals are employed and interpreted by the interactional partners ... may vary ... But some ways of telling the context seem to be present in all instances of face-to-face interaction among humans. People seem to use these ways to keep one another on the track, to maintain in the conduct of interaction, what musicians call 'ensemble' in the play of music. (p. 71)

By asking the practical and methodological question "When is a context?" Erickson and Shultz (1981, 1982) describe how people in face to face situations create and move in and out of different contexts through changes in postures, tone of voice and gaze. The cues that Erickson and Shultz refer to consist of changes in the rhythmic

organization of speech and body motion (Erickson & Shultz, 1982), speech prosody (Gumperz, 1977), postural positioning (Scheflen, 1973), and proxemics or interpersonal distance (Hall, 1966).

Conversation Analysis

Another school of microanalysis of interaction has contributed different but complementary insights into the collaborative work by participants in face to face encounters. Sociologists developed a method called "conversation analysis" (Sachs, Schegloff, & Jefferson, 1974) to understand how and why conversations are or become organized the way they do. They worked with audiotapes and focused their attention on the vocal reactions of listeners to speakers and vice versa.

Among their contributions are the formulation of principles governing who gets to talk, that is, principles of turntaking, and the notion of adjacency pairs as an organizational device used in conversation (Sacks, Schegloff, & Jefferson, 1974). Certain types of utterances have been found to occur in ordered pairs: a question leads to an answer, a greeting to a greeting. These findings arose largely from work with audiotapes, not videotapes. This might have led, in Erickson's (1986a) view,

> to their theoretical emphasis on adjacency relationships of cooccurrence across real time -

> on pairings of antecedent and consequent utterances by interlocutors who exchange turns at speaking. (p. 298)

Conversation analysts stress vocal communication. But Goffman (1981) points out that "there are lots of circumstances in which someone giving verbal orders or suggestions expects something nonlinguistic as a response" (p. 40), and calls physical doings "nonlinguistic deeds" (p. 37). This is a notion important in the study of physical therapy as the purpose there is to instruct, make, or help a patient do some physical movement.

Communication as an Overriding Principle in the Study of Physical Therapy Practice

By stressing the similarities between the patient and the therapist in communicative terms, one is likely to find a shift from context to context. One is likely to find that at one moment the therapist leads, at another the patient. The treatment situation might therefore be depicted in a different way. We will then expect to see actors actively engaged in each session, actors whose speech is meaningful and situated, that is, spatially and temporally located. This "meaningfulness" as a feature of interaction is something that is "actively and continually negotiated, not merely the programmed communication of already established meanings" (Giddens, 1986, p. 105).

By locating the treatment situation in its proper space and time we will see how

> the anticipations of the responses of others mediate the activity of each actor at any one moment in time, and what has gone before is subject to revision in the light of subsequent experience. (Giddens, 1986, p.105)

We also see that a lot of what is happening is interpreted and defined quite differently. We see that the actors judge the ongoing treatment differently. What the therapist considers a good trial, is not good enough for the patient. Moments of disagreement, moments of confusion and the untangling of them are therefore to be expected.

The title "Physical Therapy as Communication" indicates a particular way of thinking about physical therapy and communication. Communication is here conceptualized as carrying multiple meanings, expressed both explicitly and implicitly, vocally and non-vocally. Considering communication as concrete allows for its accessibility to examination. In fact, because of its physical nature, kinesics may be even more important in a physical therapy session than they might be in some other sorts of face to face interaction, as carriers of both social and referential meaning. Consequently, any observable action by a patient or a therapist merits investigation. Talk is one form of communication, but the

use of hands as part of the treatment is also part of the communication. Gaze, postural configurations, movements, gestures, and facial expressions are all part of communication in the therapeutic session. In other words, the use of a particular treatment technique represents one form of discourse. The "ordinary" conversation the patient and the therapist engage in represents another.

Finally, and most importantly, according to Bateson's (1972) view of understanding behavior or actions, it is necessary to assume that participants communicate something. This implies a focus on relationships and not on isolated factors. In other words, when looking at treatment situations what the therapist says cannot be isolated from what the patient does or says and vice versa.

The Purpose of the Study

The purposes of this study are to uncover what goes on in treatment situations, to examine how the patient and the therapist jointly construct sessions, and to discover how the two experience and interpret what is going on within the sessions. Little is known about what constitutes a treatment session, about what happens between a patient and a therapist, and some researchers tend to refer to the physical therapy session or the therapeutic intervention as a "black box" (Jensen, Shepard, & Hack, 1990, p. 315). The

same is true for doctor-patient encounters. When talking about future research in doctor-patient relations Korsch (1989) states that,

> Clearly the ultimate goal will be to arrive at a body of knowledge that deals with the essential features of what goes on between physicians and patients, and that applies to clinical practice. (p. 251)

This explorative study aims to arrive at some features that are essential to the field of physical therapy. It therefore considers the patient's diagnosis as equally important as the therapist's treatment technique; the patient's perceptions of what is going on as equally important as the therapist's; what the patient says as equally important as what the therapist says. By staying close to the ordinary doings in clinics and by using a language which is familiar to practitioners, the hope is to provide a new description of physical therapy practice that is still recognizable in terms of current research and practice. For instance, the calling of the therapist by her first name but the patient by her last, as is done at the research site, is also done in this thesis. The word "patient" for the woman who is seen in physical therapy is not something she calls herself. However, it is customary at this particular clinic and therefore adopted here.

The Organization of the Thesis

The thesis is organized into three sections. The first two sections contain three chapters each. Here, the content of each section and its chapters is briefly summarized.

The first section describes the intellectual roots of the study. Chapter one outlines the theoretical framework for the study, and chapter two reviews two fields of literature. One pertains to the physical therapy profession, the other the medical diagnosis of frozen shoulder. Chapter three restates the purposes of the study and reports its questions, original as well as emergent, and its methods.

The second section describes and analyzes the findings of the study. Chapter four reports on how a session comes to be organized around a specific diagnosis and a specific treatment technique. Chapter five gives a detailed account and an analysis of six brief episodes during which the patient and the therapist suddenly seemed quite confused about how to proceed. This chapter ends with identifying some of the rules that organize the treatment and that the patient and the therapist adhere to most of the time. Chapter six approaches the same talk that had been analyzed previously, but looks upon it from other perspectives. By assuming that physical therapy sessions serve multiple functions and can be beneficial from a psychological as

well as a pedagogical point of view, evidence of both were found and are discussed.

Section III, which contains only chapter seven, summarizes the findings, draws conclusions from them, and outlines recommendations for how practicing physical therapists and researchers alike might, in their work, use elements from both the research methods that have been used in this study and the findings themselves. The benefit of adopting a social constructivist's view in their work is argued.

CHAPTER TWO

REVIEW OF THE LITERATURE

This literature review is divided into three major parts, each with a separate focus. The reason for this is that physical therapy is strongly influenced by the two disciplines, medicine and psychology. Scientific findings from one usually exclude findings from the other. In other words, when referring to the field of physical therapy, the patient's medical diagnosis is often given a subordinate role in the more psychologically oriented literature. The clinical research concerning the diagnosis itself gives, on the other hand, little attention to the person who is the "carrier" of the condition and her/his relationship with the therapist. As the purposes with the research differs, this separation is a natural consequence.

In order to give due credit to the knowledge available concerning psychological issues as well as medical matters, the first part provides a background of the physical therapy profession and discusses present concerns such as models of practice, psychosocial aspects of practice, and the role of communication. The second part is a description of the shoulder joint, and the third part has as its focus

medical findings regarding the diagnosis of frozen shoulder.

Part I

Overview of the Physical Therapy Profession

In order to contextualize the present study of everyday practice of physical therapy in the United States, this part is introduced by a brief description of the profession, its background, development, and goals. As the profession is in the midst of changes, three major trends that have been distinguished are discussed. Briefly, these trends concern striving toward full professional status, striving toward establishing physical therapy as a clinical science, and striving to improve patient care by arguing for the incorporation of communication skills courses into the curriculum. In addition to these trends, this review has been guided by two meta-questions: How is the social "reality" of physical therapy practice conceptualized and described? How are the patient and the therapist portrayed in medical and psychological literature?

Background of the Physical Therapy Profession

Physical therapy received its professional status in the United States in the beginning of the 20th century. Advances in bacteriology, immunology, and surgery led to

the need for more medical personnel. Particularly, the physical therapy profession was founded to "provide restorative services to persons who suffer physically handicapping conditions" (Hislop, 1975, p. 1075). The first physical therapists assisted orthopedic surgeons. Many were also engaged in treating patients with poliomyelitis.

During and after World War I traning programs were developed both at Harvard University and at military hospitals. The first formal curriculum in physical therapy, a four month long program, was offered in 1918 (Yarbrough, 1986). By the early 1920s the American Physical Therapy Association (APTA) was founded (May, Bing, Ballard, Luckhardt, & Barney, 1982).

The same association stated in 1979 the competence to be expected by a physical therapist in a **Model Definition of Physical Therapy for State Practice Acts:**

> Physical therapy means the examination, treatment, and instruction of human beings to detect, assess, prevent, correct, alleviate, and limit physical disability, bodily malfunction, and pain from injury, disease, and any other bodily and mental condition, and includes the administration, interpretation, and evaluation of tests and measurements of bodily functions and structures; the planning, administration, evaluation and modification of treatment and instruction, including the use of physical measures, activities, and devices, for preventative and therapeutic purposes; and the provision of consultative, educational, and other advisory services for the purpose of reducing the incidence and severity of physical disability, bodily malfunction, and pain. (Yarbrough, 1986, pp. 142-143)

The emphasis upon restoring somebody else's physical function is also to be found in the writings by May et al. (1982). They state that physical therapy is concerned with

> the prevention or management of human dysfunctions or abnormalities arising primarily from deficits in motor, sensory, and physiologically support systems. Practice is directed toward preventing disability, relieving pain, developing, improving, or restoring function. (p. 222)

In addition to providing appropriate service to patients, claims are raised that research needs to be carried out to prove the benefits of physical therapy. Another reason for the call for extensive research activities is to establish physical therapy as a clinical science (Currier, 1984; Dean, 1985; Peat, 1981). During the last 20 years, there has been increased emphasis upon defining the unique body of knowledge that physical therapy as a whole encompasses (Dean, 1985).

In 1977, APTA received status as an independent accrediting agency for physcial therapy programs from the United States Office of Education and the Council on Post-Secondary Accreditation. The collaboration with the American Medical Association from 1956 regarding accreditation was over. This is considered an important step away from the domination the medical profession

traditionally has held over physical therapy practice (Yarbrough, 1986).

The number of physical therapists has grown rapidly. In the United States there were 1,160 physical therapists registered in 1940; 6,242 in 1960; 10,919 in 1970; and 25,000 in 1980 (Peat, 1981, p. 171). In 1984 the number had increased to 40,200, with the educational program averaging four and a half years. By 1990, all programs will be converted to graduate programs (Yarbrough, 1986).

Traditionally, a referral must be obtaind from a physician before a physical therapist may legally treat a patient. The therapist is also required to report back to the physician the results of the treatment. In spite of the fact that physical therapists today belong to a group of health professionals who maintain relatively complete control over their own pace of work and selection of treatments, they remain "subordinate" to or limited by the medical profession (Miles-Tapping, 1985).

However, Miles-Tapping (1985) does not consider physical therapists to be representative of so-called "paramedical" workers or "paraprofessional" occupations that lack autonomy; she claims that the work physical therapists do supports this since

> Most physiotherapists think their jobs are moderately autonomous. They accept referrals from physicians, but perform their own assessment of the patient's problems, plan and execute their

> treatments, and evaluate the outcomes themselves. (p. 290)

The actual practice of physical therapy has been dominated by the medical profession in that physicians have always viewed physical therapy as an adjunct to medicine, much like nursing (Yarbrough, 1986; Thornquist, 1988). Increased autonomy, that is, increased degrees of independence or discretion, is an important goal to obtain for physical therapists working in the modern health care system (Yarbrough, 1986), in order to utilize the growth of knowledge and of treatment techniques specific to the professional domain. This striving toward full professionalism in the United States led to a proposal that physical therapists should be allowed to treat patients without the mandatory physician referral. This proposal was passed by the House of Delegates of the APTA in June 1979. Still, most patients seen by therapists are referred by physicians.

Another measure of professional autonomy is, however, the extent to which physical therapists are directly and personally responsible to their patients (Yarbrough, 1986). Sim (1985) states that in the working situation it is natural that the therapist is the judge of the needs of the patient. This is a delicate issue that has not received much attention in the literature.

Medicine continues to exert influence upon the profession, in that the "medical model" still dominates the physical therapist's view of what counts as disease and as knowledge (Miles-Tapping, 1985). The medical model, according to her,

> describes a way of looking at the world and at illness that identifies deviance as a disease and as potentially treatable or curable by drugs, surgery, or other forms of individually applied medically sanctioned therapy. (p. 291)

Medical science influences also physical therapy education since it is centered around physical, physiological, and biomechanic aspects of human health and illness (Lewis & Schaefer, 1986). Physical therapists thus have good knowledge of basic sciences and treatment techniques (Yarbrough, 1986), but are less versed in the behavioral sciences.

To summarize, medicine has influenced the profession in several ways. It has affected the curriculum, where the basic sciences dominate. It has led to therapists' acceptance of the biomedical way of viewing disorders and diseases. Within practice, therapists have adopted the procedures physicians use when seeing patients. These procedures include taking a case history, doing examinations, treating and evaluating patients. In research, as in medicine, only quantitative methods are

considered scientific. Administratively, patients are still referred to the therapist by a physician.

Models of Physical Therapy Practice

Being a profession that lies between "the caring model of nursing and the curative role of medicine" (Sim, 1985, p. 21), several authorities in the field are concerned with identifying what physical therapy "is;" what the essence or general character of the profession is; how to best describe its uniqueness. Attempts to define the physical therapy profession vary from providing models (Dean, 1985; Hislop, 1975; Tyni-Lenné, 1983), to emphasizing certain issues in the field (Davis, 1986; Payton, 1986; Ramsden, 1986; Shepard, 1986), to giving fictive examples of practice along with theoretical considerations (Purtilo, 1978).

The Hislop Model of Pathokinesiology

Hislop (1975), one of the first to articulate the need for a common conceptualization of the profession, states:

> Physical therapy is knowledge. Physical therapy is clinical science. Physical therapy is reasoned application of science to warm and needing human beings. Or it is nothing. The precise role of science in physical therapy is not often understood and no coherent philosophical overview exists to guide the growth of the profession. (p. 1071)

Hislop bases her model of physical therapy primarily on pathokinesiology or "faulty" movements as the distinguishing clinical science of the profession and secondarily on the skill of therapists to place exercise on its proper scientific foundation.

Motion is thus considered an important concept. By looking at man as a natural system, where motion occurs and can be disrupted, the following hierarchical levels or subsystems are identified as related to physical therapy. There are the levels of cells, tissues, organs, systems (as the nervous system), persons, and families. Motion can be disrupted on any level. Physical therapists can influence the upper and the lower levels, but possess tools for intervention only at the middle levels, according to Hislop. By some form of controlled exercise or stimulus to induce movements, physical therapists aim to restore motion homeostasis or to "enhance the adaptive capacities of the organism to permanent impairment of loss" (p. 1073). Hislop defines physical therapy as

> a health profession that emphasizes the sciences of pathokinesiology and the application of therapeutic exercise for the prevention, evaluation, and treatment of disorders of human motion. (p. 1076)

Along with the intervention tools a therapist uses in treatment situations, Hislop adds humanism as an intrinsic

attribute of therapy. Building upon Hislop's notion of treatment as being the essence of physical therapy, Dean (1985) adds another factor, optimal treatment outcome, when presenting a psychobiological adaptation model for physical therapy practice.

The Psychobiological Adaptation Model

Treatment outcome is supposed to reflect "the interaction of factors relating to the patient and the therapist" (Dean, 1985, p. 1061). Psychobiological factors are defined as primary factors and psychosocial factors as secondary ones with respect to the patient profile. Primary and secondary factors relating to the therapist are clinical factors and educational and professional factors. Of the primary psychobiological factors, three are related to the patient's condition and include the anatomy, the physiology, and the pathology of the condition. The fourth one, psychology, refers to the patient's psychological traits. For each of these, there is a matching therapeutic intervention such as physical modalities, patient education, therapeutic techniques, and prevention strategies. This "fit" is essential for arriving at an optimal treatment outcome.

One of Dean's goals is to include a biopsychosocial perspective of the patient with the clinical one and this is covered in the model. However, the therapist is only

portrayed as a professional being, armed with treatment strategies. The therapist has all the knowledge, the patient none.

The Physiotherapy Model

Tyni-Lenné's model (1983) also takes Hislop's original writings about physical therapy from 1975 as a starting point when describing a physiotherapy model. Physical therapy is here seen as a process, with the interaction between the patient and the therapist as the central theme. The process involves several choices. Problems continually have to be resolved. The actions that are carried out by the therapist during the physiotherapy process are all purposeful or intentional.

Using a systems theory approach, the process is described with principles from problem solving and decision making theories. The patient and the therapist are primarily portrayed as two subsystems that influence each other. All kinds of behavior are displayed in this process, including cognitive, affective, and psychomotor, with psychomotor behavior being considered particularly complicated.

Similarities and Differences between the Psychobiological Adaptation Model and the Physiotherapy Model

There are several similarities in Dean's and Tyni-Lenné's models. Logic, rationality, and intentionality are

seen as fundamental to physical therapy practice. Nothing is left to chance. Both stress treatment outcome as being of central importance. Dean proposes that for each problem or element a patient brings, there is a corresponding therapeutic intervention available. Tyni-Lenné "guarantees" proper outcome through adherence to a step by step sequence of decision makings. Implicitly, there is an assumption that every patient will perceive the therapist's actions as meaningful.

Although both try to describe the patient and the therapist as "people," Dean talks about them as factors, Tyni-Lenné as subsystems. Both portray the patient as bringing only problems, the therapist as providing all the solutions. Thus, we see that intentionality and knowledge belong to the therapist, but not to the patient.

While Dean and Tyni-Lenné talk about treatment as being constituted by two people, the interaction as such is only given minor attention. Their models are based strictly on theoretical studies. No empirical findings support them. The models by Tyni-Lenné (1983) and Dean (1985) point to physical therapy as intentional actions, assuming that they are perceived as such by each patient. Built into each model is the implicit promise that if the appropriate steps are taken, positive outcome is guaranteed.

This way of looking at physical therapy is yet another attempt to arrange all the different factors that can

influence the outcome of a treatment into one single conceptual model.

Both state that their intentions with the proposed models are to improve the profession, both theoretically and practically. For this to be accomplished, therapists are recommended to start thinking and acting in terms of their proposed models. However, questions must be raised as to whether these idealized models of physical therapy are useful in actual practice.

The Need for Empirical Studies

Recent work by Jensen et al. (1990) stresses the necessity for observing treatment sessions in order to understand the practice of physical therapy. They report on an observational study, the purpose of which was to "develop a conceptual framework and a data collection tool to begin a systematic analysis of the work of the physical therapist" (p. 314). They present a conceptual framework that is divided into three levels. Level I consists of the physical therapist's professional characteristics, the patient's characteristics, and organizational factors such as type of setting, payment system, geographic location, other personnel, and time constraints. On Level II there are the tools the therapist has available. These are communications techniques, manual techniques, and modalities. At the third level is

> the dynamic intervention, or 'black box' or filter, that all of the identified Level I and Level II factors are filtered through. At the end of this filtration process is the patient outcome. (p. 315)

This framework suggests that the therapist, the patient, the setting itself, and the circumstances during which treatment occur are all factors that affect the final patient outcome, but this is dismissed in the discussion. What is focused upon is rather the more or less effective ways of working with patients that the therapists they studied displayed.

Eight physical therapists with varying degrees of experience, working at four different adult outpatient orthopedic settings, were observed by two researchers. Written fieldnotes and transcribed audiotapes of treatment sessions were the data from which coding categories of the patients' and the therapists' verbal communication were developed. Five themes emerged that the researchers found to be present in all sessions and within which they could see a differenc between the novice and the experienced therapist in the study. The themes concerned how treatment time was allocated; the type of information gathered from the patient and the therapist's use of it; the impact of the therapeutic environment upon the therapist's work, such as handling interruptions and tasks outside of direct treatment; the degree of responsive therapeutic

interaction, that is, to what extent therapists integrated "verbal encouragements and tactile cues" (p. 321); and the therapist's integration of nontherapeutic interaction with therapeutic interaction. Social interaction is considered nontherapeutic.

This study of naturally occurring treatment sessions refrains from attributing patient outcome to the treatment technique being used and seeks to uncover the complex interactions that constitute treatment sessions.

Psychosocial Aspects of Physical Therapy Practice

In developing an integrated model that provides a place for the role of therapist-patient interaction, one volume of the research series, Clinics in Physical Therapy, devoted to psychosocial aspects of clinical practice (Payton, 1986), is worthy of special review. It pays particular attention to the concepts of purposefulness or intentionality, the portrayal of the patient and the therapist, and, to some extent, the distribution of knowledge.

Payton (1986), when writing about the acquisition of communication skills, states from the outset that intentionality is the key concept for turning ordinary communication skills into professional communication skills. Communication skills, he argues, ought to be part of the therapist's overall technical competence. The

therapist should be able to choose deliberately choose when to use certain kinds of listening skills and when to use influencing skills. These skills, along with the category "focus," refer to the Ivey Taxonomy of Communication Skills. A microskill model has also been developed, tested, and found useful in the fields of counseling, nursing, and business management (Payton, 1986). Payton's chapter is based upon this model and its relation to and usefulness in physical therapy practice.

Payton argues that,

> Just as each element in a treatment program is evaluated for its effectiveness so each statement or question in a communication is evaluated for its effectiveness in achieving the purpose for which it was chosen. (p. 2)

Payton goes on to stress the conscious intentions of the therapist's sayings and doings. For instance, the therapist's non-verbal behaviors are important in encouraging the patient to "speak openly and freely and to stay on relevant topic" (p. 5). And reflective skills are used to assist the patient to "see his own thoughts, feelings, or meanings more clearly" and through this patients might be able to "clarify and refine their own thinking, feeling, and valuing" (p. 7).

Throughout Payton's chapter, we see the therapist as actively being able to utilize a variety of skills in order

that the patient might understand himself more clearly. The therapist is also portrayed as shifting between the roles of a physical therapist and a modified version of a psychotherapist. For example, Payton asserts that "Instruction is at the heart of much physical therapy. From his professional knowledge base, the therapist tells the patient and his family what to do and how to do it" (p. 19). Confrontation skills can be used to help the patient "to clarify his own thoughts, feelings, and meanings so that his behavior is consistent" (p. 15).

We see a therapist who knows exactly what a patient should do and how to do just that. The therapist also knows how to help the patient clarify his feelings and meanings. From this we can infer that the patient has no knowledge of what "to do" before seeing a therapist; the patient's behavior is many times inconsistent. Granted that Payton does not explicitly state the fictive patient's condition, nor claim that all patients' behavior is "inconsistent," nonetheless we see the therapist as knowledgeable and the patient as "having problems."

Ramsden (1986) portrays the therapist in a similar way:

> It is standard behavior for health professionals treating patients to observe patient behavior, make judgments about that behavior, decide on a course of action, then note the results and evaluate them. (pp. 58-59)

Ramsden also mentions another dimension of physical therapy. "Often in treatment what we are doing or what we are saying may cause the patient discomfort" (p. 69). She reports on a discussion with a group of therapists, which revealed their serious concern about the legitimacy of their own particular way of interacting with patients.

By using case studies to illustrate how therapists can draw on various theories, such as Erik Erickson's Psychosocial Theory of Development and Maslow's Needs Hierarchy, Ramsden suggests how a patient's motivation pattern and his or her level of psychosocial development can be judged. It is clear who is in charge. The therapist is "the expert and in control of the environment" (p. 38). A slightly troublesome treatment situation involving a young man and a young female therapist is commented upon in the following way. "Ms. Morgan (the therapist) seems to be defensive, protecting her turf and her control--for what? It is her turf and she is in control" (p. 58), while the patient is

> assertive in a subculture that expects passivity. He wants control where others want him to be passive. He appears to have a strong need for achievement and quick results when the situation calls for careful pacing and slow progress in step with healing. (p. 58)

This sequence informs us that the therapist should control the situation; the patient, who seems strongly motivated, should be passive.

Shepard (1986) alludes to the same concept. She talks about the therapist as being in an optimal position to "offset deleterious effects" of the hospital environment because, among other things, "Conversations can be turned away from specific bodily concerns as the therapist encourages the patient to talk about functioning in home and work environment" (p. 78). Earlier Shepard states that the focus of most physical therapy treatments is on increased independent functioning and mobility, and that to achieve this therapists work with patients' bodies. However, there is a possibility that such use of conscious strategies to make the patient not talk about the body while actually using it in concrete treatment situations might be counterproductive to achieving these goals, an issue raised by this dissertation in chapter seven.

Davis (1986) states the following when talking about health care delivery:

> Health care professionals often discover what is wrong with a patient after careful and cooperative examination. Clinicians can explain causes of symptoms, referred pain, trigger points, arthritis, spasticity, reflex bound behavior, etc. They understand, to a great extent, what causes many symptoms and know various ways to treat problems. Most of the therapists' efforts are rewarded with predictable outcomes, such as relief of pain, correction of

> posture, or gain in endurance, strength, or agility.
>
> This is reassuring to our patients who do not understand what is happening to them. Their symptoms are, to a great extent, beyond their knowing or control. In sum, health care workers provide patients with the reassurance that what is happening to them is not part of the unknown, nor beyond control or influence, but part of the rational world. Their explanations connect the unknown and seemingly uncontrolled phenomena a patient feels with the remainder of the patient's experience. (p. 124)

Although Davis' main focus is on how values influence the care of patients, in the above section she describes patients as understanding and knowing little about their own bodies.

In summary, the book is intended to shed light upon issues that are, by their very nature, difficult to grasp. Although the writers alternate between giving concrete advice about how to behave in a "humanistic way" (Davis) and talking about the patient and the therapist in general terms, there are no contradictory statements about the therapist's good intentions, purposeful actions, and professional knowledge. The patient is pictured as bringing problems, both physical and psychological, to the scene. The authors claim the patient lacks knowledge, but this can also be interpreted to mean that the patient lacks the <u>therapist's knowledge</u>. The patient is often "not motivated" (Ramsden), or "has a strong need for achievement when the situation calls for careful pacing" (Ramsden, 1986, p.58),

or can be helped in clarifying his feelings and thoughts (Payton, 1986).

Another book in the same field, Health Professional Patient Interaction, by Purtilo (1978), is directed to health professionals with the purpose of describing premises and methods for achieving effective interaction with patients. Facts from studies in biomedicine and the behavioral sciences are illustrated with examples of different situations, where staff interact with patients. Instances of both good and problematic encounters are provided, adopting both the patient's and the therapist's perspectives. Explanations for their behavior are given, and, when needed, suggestions for appropriate behavior and effective communication. By referring to the patient and the therapist not only as roles, but, equally frequently, as human beings, the examples sound true to life. However, as stated in the preface of the book, all the examples are fictive. Not one of them is based on any empirical study. And by providing recommendations for appropriate behavior an illusion is conveyed, namely that treatment situations should be and can be free from conflicts. It all depends on how the therapist handles the situation.

Other researchers address issues similar to those brought up in the above reviewed books. This body of literature can be divided into three groups. One discusses concepts considered pertinent to physical therapy, such as

psychotherapy (Stewart, 1977), psychological theory (Davis & Kenyon, 1981; Goldin, Leventhal, & Luzzi, 1974), and basic relationship skills (Hamilton-Duckett & Kidd, 1985). Another group describes the content of training programs in social skills (Dickson & Maxwell, 1985) and in microcounseling (Saunders & Maxwell, 1988). A third group reports successful outcomes of courses aimed at improving counseling and therapeutic skills mainly among physical therapy students (Levin & Riley, 1984; Payton, 1983; Schultz, Wellard, & Swerissen, 1988).

Communication as a Treatment Technique

Common to those who argue for improvement of communication as a whole, as well as improvement of counseling skills is that the talk they are concerned with does not include the instructions that accompany any treatment. These are to be found in textbooks regarding specific treatment techniques, for example, the book written by Knott and Voss (1968). Instead they discuss the talk that "surrounds" the physical treatment itself. They define talk either as interviewing skills, communication skills, social skills, interpersonal helping skills, or counseling skills. Talk is thus considered a tool to receive appropriate information from the patient and a technique to help the patient on a psychological level. There are few, if any, conflicting opinions of what needs

to be improved by physical therapists, such as interviewing skills, or how those skills should be taught.

Characteristically, talk is placed in the domain of psychology. In doing so and, at the same time, eliminating the "instructional talk," the authors indirectly state the following. First, physical therapists are in a position such that while helping patients recover from physical traumas, they can also help the patients accept and deal with the associated psychological traumas. Second, the talk that is part of the instrumental or technical aspects of the profession (that is, the talk that is closely but implicitly connected with the patient's medical diagnosis) is separate from other forms of talk. Third, the impact of this "instructional talk" upon the patient is discounted or reduced.

This body of literature thus extends physical therapy situations to being therapeutic in more than one sense. But the portrayals of the patient and the therapist remain unchanged. The therapist, in learning communication skills, is even more in control of what goes on. The patient, who remains a problem, is still depicted as having little to contribute to the treatment itself and the recovery process.

An Existentialist View of Physical Therapy

A contrast to this dominant way of looking at physical therapy situations is present in the work by Engelsrud (1985, 1990). First, she claims the essence of physical therapy to be the living body and its movement. Second, it is through them the therapist gains access to the patient's world. Third, in looking at physical therapy from a philosophical perspective, the assumptions or definitions of human beings are that they are living, acting, and experiencing subjects. As a consequence, they cannot be directed, manipulated, or predicted. If human beings are looked upon as objects, they are already defined, unchangeable, and mechanic.

This existential perspective points also to people's ability to reflect upon their experience. We are not passive recipients, nor in the hands of external demands and conditions. We are able to reflect upon the experience of our bodies. In a dualistic perspective, the body, a non-living object, is separate from our experience of it. Engelsrud cautions us:

> To learn about the 'dead body,' and to accept research findings based on studies of the same 'dead body,' without making references to the body as it is lived and active, might bring about an objectification of physical therapy. Through this both the therapist and the patient are presumably turned into objects, which can be standardized. (p. 51, my translation)

Engelsrud refers to the work of Merleau-Ponty and Sartre. According to Merleau-Ponty (1962), the condition for a human being to be in the world as a subject is that the body must "be lived" and acknowledged frankly and immediately. Sartre's concept of the body as "being-for-itself" implies that human existence is a condition, characterized as being and experiencing each moment. These notions are important to consider since the participants in a physical therapy relationship interact through the body and the movements (Engelsrud, 1990).

In a previous study, Engelsrud (1985) examined the assumptions therapists hold regarding one particular aspect of therapy, namely, what working with a living body means. By closely analyzing three books in the field of physical therapy, she found that physical therapists clearly prefer seeing the body as separate from the mind. Thus a perception of body and mind as separate entities prevails in the field of physical therapy, in spite of the fact that psychology is the discipline, apart from medicine, that has always exerted a strong influence upon the profession (Engelsrud, 1985).

Summary

Those researchers who explicitly address psychosocial aspects of the profession indirectly claim that they want to move away from identifying the therapist with her

treatment technique and the patient with her diagnosis. They want to talk about the two as human beings. They proceed in the following way. After first establishing the humanity of the patient and the therapist, in other words bringing up their silimarities, they move on to make distinctions between them. Clearly, but indirectly, they define the different roles of the two. This is found in the case studies they provide, selected to exemplify something else. They portray the therapist as having expert knowledge, as having the right to tell a patient what to do, as being the one who is in control of the treatment situation. Thus, the therapist has intentions. She acts rationally.

This emphasis upon the therapist's purposeful activities and control is not to be confused with professional responsibility. But the ways the terms "purpose", "intention," and "control" are used here imply more than what therapy alone demands. The patient is portrayed as a carrier of problems. The patient is assumed to understand little of what has happened to her/him or what is happening. The patient is depicted as either a passive recipient of treatment, that is, not motivated, or someone who wants to do too much. The patient has, in a sense, nothing to offer to the recovery process except information about the problems.

The patient's body and mind are talked about as separate entities. The patient brings first of all bodily problems to the therapist for rehabilitation. Eventual negative psychological consequences, brought on by the injury itself, should also be treated. Accordingly, therapists are recommended to learn various psychological models to help in evaluating the patient's dilemma. Along with this, counseling skills are deemed necessary. Various forms of communications skills, referred to as "technical competence" should also be mastered. The kind of communication that is discussed and recommended is mostly vocal in nature. It is considered something deliberate. It is dominantly and implicitly referred to as going from the therapist to the patient, the message never being ambiguous, the patient accepting whatever the therapist says.

What is stressed most of all, with respect to the patient and the therapist, is the <u>difference</u> between them. Even if this is what caused the two to meet in the first place, the similarities between them have received minimal attention. That the patient also is someone who has intentions, knowledge, and competence, albeit of different kind from the therapist, is not mentioned. Also left out is the fact that the patient does possess something important, namely bodily knowledge of her condition.

By talking about the therapist's knowledge and control and the patient's problems means focusing upon the static roles of the two. By using fictive examples of treatment situations the patient and the therapist are portrayed as stereotypes. In this lies a danger. When statements about what goes on in treatment situations are not grounded upon empirical studies, and assumptions are made about what might go on, it becomes too easy to prescribe how a therapist should act toward a patient. It becomes too easy to say what is right and wrong in treatment situations, and to discount the patient's participation in the recovery process. Now, the goal behind these recommendations is to provide best possible care. However, such descriptions of idealized situations are quite removed from the "lived world," although they prevail in the literature. What takes place in treatment situations is not solely the result of conscious deliberation. Spontaneous and immediate reactions also play a part. Therefore questions of validity need to be raised.

When turning to authentic situations, one must ask whether patients present themselves as problems to be solved. One must ask whether the knowledge and competence of the patient is attended to or not. One must ask about the patient's contribution to the treatment and the recovery process.

The kind of research that is presently carried out tells us about the assumptions regarding physical therapy. It is a clinical profession based on the natural sciences. It is a profession that involves working with people and where psychology is put to use. It is a profession that defines communication as technology. The treatment situations are depicted as highly rational with the therapist assuming lots of responsibility. The purpose of many studies is prescriptive, in the sense that they aim at describing how to facilitate carrying out the work of the therapist, that is, to make the patient do things while at the same time paying due respect to the patient. This is not to say that what is recommended is wrong. But the discrepancy between the writings about treatment situations as being well organized and controlled by the therapist and the way treatment situations look when observed is striking. There is a need to study physical therapy practice closely to capture or stress other features that will influence the profession eventually.

As mentioned in the introduction to this chapter, there is a tendency to underestimate or to discuss in general terms how the physical injury or condition itself influences the patient, the therapist, and the process of treatment in the psychologically oriented literature. After describing the shoulder joint (part II), a review of the literature concerning the diagnosis of frozen shoulder, a

problem from which the patient in this study suffers, is therefore reported in part III. This review includes mainly studies that aim to identify the cause of the condition, its symptoms, the structures that are affected, and treatments to be offered. The latter include treatments that can be provided by physicians and by physical therapists.

Part II

The Shoulder Joint

As an introduction, a general description of how a joint is build is given. The structures surrounding the shoulder and the movements they allow the arm to do are prerequisites to understanding the symtoms caused by a frozen shoulder.

The Architecture of a Joint

The junction of two bones is called an articulation or a joint. Each joint is a functional unit formed by a number of different tissues such as bones, a capsule, a joint cavity with synovial fluid, ligaments, muscles, tendons and bursae.

The articulate surfaces of the bones are covered with cartilage, which ensures a better fit between the bones, protects them, and absorbs shocks. Cartilage lacks its own

nerve and blood supply. It receives nourishment from the synovial fluid, which is produced from a thin layer or membrane of the capsule. The outer membrane of the capsule is in some areas reinforced by thickenings, very much similar to ligaments.

In addition, separate ligaments help hold the bones together. The capsule encloses the joint completely. It is rich in sensory nerve endings, reacting to tension and pressure (Petrén, 1960, p. 176). The capsule and the ligaments prevent dislocations of the bones and limit possible ranges of motion. Other stabilizing forces are muscles as they contract and tendons that cross most joints. Other structures of a joint are tendon sheaths and bursae. Their function is to minimize friction between tendons or muscles and bones. In the case of a frozen shoulder, all of the tissues that are mentioned, except the bony structures, can be affected.

The Scapulohumeral Joint

The joint commonly considered the shoulder joint refers to the joint between the shoulderblade (scapula) and the upper arm (humerus). The medical term for this joint is the scapulohumeral or the glenohumeral joint. But the shoulder is not a single joint. It is only one of the seven joints that form the shoulder girdle or the shoulder complex (Cailliet, 1981). Any smooth movement of the arm

requires well synchronized actions of all seven joints and their muscles. Dysfunction of any of these joints can inhibit arm movement.

The purpose of all shoulder movements is to increase the area through which the hand can move. Therefore the scapulohumeral joint, which from now on will be referred to as the shoulder joint, has a wide and lax capsule with few ligaments. The stabilizing function of the capsule is diminished. This in turn is compensated for by muscles that surround the capsule almost entirely. Only the lower or inferior part of the capsule lacks this protection. Here an axillary fold or recess is formed due to the looseness of the capsule. With the arm by the side, the upper part of the capsule is taut and the inferior part is slack. When the arm is lifted our to the side the recess is taut and the upper part of the capsule slack (Cailliet, 1981, p.8).

The Movements of the Arm

Many daily activities, such as taking dishes from a cupboard, tying an apron behind the back, combing the hair, putting on a coat, or reaching into a hip pocket for a wallet, require, apart from lifting the arm, the ability to rotate it. Being a ball and socket joint, although incongruent, the shoulder joint allows the arm to move in all directions. Starting from the anatomical position where the arm is resting at the side of the body, palm turned

forward, the arm can be elevated forward, backward and sideward. It can be rotated inward and outward. In medical terminology forward elevation is called flexion, the return movement extension. Backward elevation is called hyperextension. Sideways elevation is called abduction and the return movement is called adduction. Rotation inward is called internal rotation, outward is called external rotation. By bringing the arm out to the side up to shoulder level, and there rotating the arm externally and continuing to lift the arm, one can reach the same extreme terminal position as when doing a full forward flexion.

With the arm at shoulder height (flexed to 90 degrees) it can be brought horizontally in front of the body (horizontal adduction) and away from the body (horizontal abduction). The arm can be elevated in the diagonal planes between flexion and abduction on the one hand, and extension and abduction of the other hand. For those movements there is no standard terminology.

Not considered a pure movement but a combination of movements in the shoulder joint is the circumduction. If one puts one's fingertips on the same side's shoulder and draws a circle in the air with the elbow, a circumduction is performed.

Classification of Movements

In physical therapy, movements are classified as active or passive (Cailliet, 1981). Active movements are carried out by the patient herself, while passive movements are those where the therapist moves, for instance, a patient's arm, which has to be relaxed. In addition, the therapist can assist the patient in carrying out an active movement, which is called an active assistive movement. When the therapist applies resistance to a movement, it is called an active resistive movement. When the patient and the therapist work to achieve an elongation of the muscular and capsular fibers, all these movements are used in different parts of the stretching process.

The Muscles

Five of the nine muscles related to the shoulder joint are considered prime movers (Cailliet, 1981). Four of these five muscles are known as the musculotendinous cuff muscles, m. teres minor, infraspinatus, supraspinatus, and subscapularis. They act as rotators. They all originate from the shoulderblade and insert upon the upper arm. The fifth muscle is m. deltoideus, which belongs to the utmost layer of muscles and is seen in the rounded shape of the upper arm. Its insertion is located on the outer upper third part of the humerus. This is one of the areas or spots that patients with frozen shoulder find extremely

painful. The pain is not caused by any inflammatory reaction of the deltoid tendon, but is "referred" from the shoulder joint. This was perplexing to the patient in this study who said,

> Intellectually I understand referred pain, but I don't understand it in my heart. Why it hurts down here (touches her right upper arm), when it actually is up here (puts hand over shoulderjoint). (Video I, 1/18/84)

The logic in locating pain to its proper origin is thus gone, and it seems incomprehensible to the patient. Apart from having pain, flexion, abduction, and external rotation are the movements which are particularly difficult to perform when the shoulder is "frozen."

Function of Muscles

A muscle can do two things: develop tension within itself (contract) or relax (Rasch & Burke, 1971). Movements will be performed smoothly and automatically, if nothing prevents muscles from either contracting or relaxing. Muscles that work actively to perform a movement are called prime movers or agonists (Rasch & Burke, 1971). An example is the biceps muscle that, when activated, bends at the elbow. Muscles that work the opposite direction are called antagonists, in this example the muscles that extend the elbow. If they are activated they can prevent the flexion

from occurring. In order to carry out a full flexion at the elbow, the antagonists need to be relaxed and not shortened.

Throughout this study the patient's forward flexion remains incomplete. One reason for this, apart from the effect of a contracted capsule, can be a shortening of the muscles that bring about the extension. What is desired then is a treatment where the extensors will be elongated and will stop preventing full forward flexion from occurring. The purpose of this technique, which is called stretching, is thus to work with the muscles that are shortened, not the muscles that perform the movement that is restricted.

Part III

The Diagnosis of Frozen Shoulder

As the shoulder joint permits excessive mobility but not enough stability, it provides a basis for pain, degeneration and dysfunction (Cailliet, 1981). One of the most common conditions that middle-aged people seek help for in general practice is, accordingly, a painful and stiff shoulder (Neviaser, 1980). The particular condition, frozen shoulder, was first described in 1872 by the French surgeon Duplay, who labeled it "periartherite scapulo-humerale" (Bruckner & Nye, 1981). Several other terms have

been used since then, such as frozen shoulder, adhesive capsulitis, periarthritis, pericapsulitis, obliterative bursitis, and "stiff shoulder" (Cailliet, 1981). This variety of diagnoses suggests a lack of consensus regarding the etiology of the condition.

In his classical book about the shoulder (published in 1934), Codman writes about the frozen shoulder as a class of cases he finds "difficult to define, difficult to treat and difficult to explain from the point of view of pathology" (Weiser, 1977, p.408).

Many of the published reports, if not all of them, confirm Codman's impressions. The frozen shoulder remains a rheumatologic enigma (Bulgen, Binder, Hazleman, Dutton, & Roberts, 1984). In spite of this several studies have been undertaken to understand the etiology of the condition; to more accurately arrive at an appropriate diagnosis; to be able to provide optimal treatment; and to learn about the prognosis of the condition.

Frozen shoulder is a frustrating condition, both for the patient and the physician, writes Neviaser (1981). The condition takes an extremely long time from which to recover. Symptoms may last for up to three or four years, claim some researchers. Others say that it can leave up to 70% of patients with slight but permanent restriction of motion.

Symptoms of the Idiopathic Frozen Shoulder

The frozen shoulder syndrom, defined by Reeves (1975, p.193), is "an idiopathic condition of the shoulder, characterized by spontaneous onset of pain in the shoulder with restriction of movement in every direction. Pain is often severe and, characteristically, disturbs sleep."

The long term study of the natural history of frozen shoulder (Reeves, 1975) is important here because patients were followed up for 5-10 years or until their greatest recovery. Patients were only given analgesics to relieve pain and were recommended to rest the arm in a sling. No physical therapy was given during the recovery period, apart from instructions to exercise to regain external rotation and abduction. Reeves found the condition to follow three consecutive stages, one of pain, one of stiffness, and one of recovery. The painful period lasted for 10-36 weeks; the period of stiffness, that is, the time when no improvement took place, lasted for 4-12 months. After this, spontaneous recovery of movement followed. The recovery period took 5-26 months.

The total duration of the symptom was an average of 30.1 months. The longer the stiffness stage, the longer it took to recover. The total time from onset to greatest recovery was between one and four years.

Reeves reports that 40% of the patients recovered completely, 54% were left with clinical limitations of

movement, and the remaining 6% suffered from functional limitations that interfered either with their hobbies or work. Reeves defines clinical limitation as a loss of movement compared to the unaffected side. This limitation does not inhibit the patients' normal functional activities, including work and hobbies. Binder, Bulgen, Hazleman, and Roberts (1984a) also found, at a review 40-48 months after onset, clinical restrictions without functional impairments.

Pain occurs with no prior trauma. It can involve the whole shoulder and is many times referred to the insertion of the deltoid muscle on the upper arm. During night, pain wakes patients up when rolling over on the affected shoulder. The movements which are especially painful are abduction and external rotation. The only way to relieve pain is not to move the arm. This leads to less mobility and increased stiffness. Thus a vicious circle is created (Roy & Oldham, 1976).

What Causes a Shoulder to Lose its Mobility?

There is general agreement among researchers that most cases of frozen shoulder are idiopathic, that is, of unknown origin. But frozen shoulder can be caused by trauma; it can be associated with diseases such as diabetes; it can occur after myocardial infarction (Rizk &

Pinals, 1984) and in connection with neurosurgery (Bruckner & Nye, 1981).

Early studies by Simmonds (1949) and Neviaser (1945), reviewed by Bulgen, Hazleman, Ward, and McCallum (1978), suggested frozen shoulder to be precipitated by degeneration of the supraspinatus tendon and to be associated with chronic inflammation of the shoulder capsule and of the subacromial bursa.

Neviaser found at autopsy and at surgery the capsule to be "avascular, tense and markedly adherent to the head of the humerus," and that there were adhesions between the two synovial surfaces of the axillary recess, which limited abduction. He drew the conclusion that the thickened capsule was a result of a chronic inflammation (Neviaser, 1980).

Later arthroscopic studies (Ha'eri & Maitland, 1981) found the joint capsule to be contracted in 60% of the patients they studied, but no adhesions. They concluded that causes for frozen shoulder are to be found in structures outside of the capsule, such as adhesions of the subscapularis bursa.

The vulnerability of the supraspinatus tendon has been explained because of its passively supporting the humerus in a person standing or sitting and actively participating in abduction of the arm and in external rotation (Cailliet, 1981). Microvascular studies also show a constant relative

avascular area close to the insertion of this tendon (Bulgen et al., 1978). This last finding prompted researchers to investigate whether frozen shoulder was a localized autoimmune reaction to the damaged supraspinatus tendon. This is also what Bulgen et al. (1978) found, but it has later been disconfirmed by Rizk and Pinals (1984).

There are conflicting opinions as well regarding what methods to use to confirm the diagnosis. Rizk, Christopher, Pinals, Higgins, and Frix (1983) and Neviaser (1980), among others, claim arthrography to be the only reliable method, while Binder, Bulgen, Hazleman, Tudor, and Wraight (1984b) do not consider it to be of any prognostic or therapeutic importance.

Bruckner and Nye (1981) report results from other studies. No degenerations of the bony structures were to be seen in X-rays of the shoulder joint, while X-rays of the neck showed an increased incidence of disc degeneration C 5-6 and C 6-7, that is, the discs between the fifth and the sixth and between the sixth and seventh cervical vertabrae.

Personality Studies

When no conclusive results are to be found regarding physiological causes of certain conditions, some researchers turn to personality studies. The assumption is that the cause can be found in a patient's personality. An early study by Coventry (1953) continues to be cited by

many. Coventry describes a "periarthritic personality" as somebody who is displaying deep-seated anxiety and apathy (Cailliet, 1981). But, according to Caillet, low pain threshold and disuse of the affected arm have to be combined with such a personality for a frozen shoulder to develop.

Fleming, Dodman, Beer, and Crown (1976) investigated the personality profiles of 56 patients by means of a self-administered assessment of psychoneurosis, the Middlesex Hospital Questionnaire. The total score measures general neuroticism, of which there are six sub-categories: free-floating anxiety, obsessionality, depression, phobic anxiety, somatic anxiety, and hysterical traits. They found only that women showed significantly increased somatic anxiety in comparison to a control group. Somatic anxiety is defined as "a measure of the increased tendency of patients to focus anxiety symptoms to bodily structures and functions" (Fleming et al., 1976, p. 456). Based upon this finding, the authors claim it to be an important factor to consider both with respect to etiology and treatment. They do mention, however, that Codman (1934) argued that the personality changes seen in patients with frozen shoulder were the result of pain rather than the cause of the condition.

Bruckner and Nye (1981) wanted to evaluate risk factors among neurosurgical patients, who are predisposed

to develop frozen shoulder. Among other tests they included the Middlesex Hospital Questionnaire with an assessment of the patient's pain threshold. They found no correlation between the development of the condition and low tolerance for pain. They also found the sub-category depression to correlate significantly with a frozen shoulder condition, thus contradicting the Fleming study. The authors caution that pain itself could have led to the condition.

What Is the Most Effective Treatment?

There have been numerous attempts to compare different treatments, but there is no general agreement as to the most effective one (Thomas, Williams, & Smith, 1980). The treatments that have been evaluated include the use of local or oral steroids, manipulation under anaesthesia, ultrasonic therapy, various forms of physical therapy, and radiotherapy, to mention only a few (Bulgen et al., 1984; Hazleman, 1972; Thomas et al., 1980). But Hazleman (1972) seriously questions whether any therapy alters the natural history of the condition at all.

Many researchers report favorable results from manipulation under anaesthesia (Haines & Hargadon, 1982; Helbig, Wagner, & Dohler, 1983; Thomas et al. 1980; Weiser, 1977). However, it is difficult to draw conclusions from these studies since none of them use the same diagnostic criteria. For instance, when some studies include patients

who have suffered from shoulder pain for only one month (Bulgen et al., 1984), one must question whether such cases are "true" frozen shoulders.

Binder et al. (1984a) state that the prognosis for recovery and effectiveness of therapy remains uncertain. They assume that the conflicting results that are reported are signs of discrepancies regarding selection of patients, criteria for diagnosis, and criteria used for recovery. With respect to degree of recovery, findings vary from prolonged disability, to restriction of range of motion but with little functional impairment, to complete recovery in patients with "untreated" frozen shoulder followed up for two years, to favorable outcomes of those treated (Bulgen et al., 1984).

Conflicting results are also reported regarding the effect of physical therapy treatments.

What Is the Effect of Physical Therapy Treatment?

A comparable trial of ice and ultrasonic therapy demonstrated no significient advantage of one treatment over the other, as both treatment groups improved in terms of arm movement and pain relief (Hamer & Kirk, 1976). The long term prospective study carried out by Binder et al. (1984a) found that mobilization physical therapy was associated with a less satisfactory outcome compared to

either group receiving local injections, ice, or no treatment.

Lee, Lee, Haq, Longton, and Wright (1974) compared the effect of three different treatments with a control group who received only analgesics. All treatments consisted of exercises combined with heat, or with hydrocortisone to the joint, or with hydrocortison to the bicipital tendon. Those who received analgesics regained least mobility. Among the other groups there was no difference.

In a study by Bulgen et al. (1984), all patients were taught pendicular exercises and then divided into four treatment groups. One group was given intraarticular steroids, another mobilizations (developed by Maitland), and a third group ice followed by proprioceptive neuromuscular facilitation (PNF). The fourth group received nothing. The treatment lasted for six weeks.

The group that received steroid injections suffered less from pain and regained mobility faster than the others during the first three weeks, but at a follow up six months after the treatment there was no difference with respect to mobility between the four groups. The conclusion is that "there appears to be little place for physiotherapy alone, and, if used, it should not be continued for more than four weeks" (Bulgen et al., 1984, p. 360).

Hazleman (1972) assessed the response to treatment in a retrospective study of 130 patients. The treatments given

were either steroid injections, physical therapy, or manipulation under anaesthesia. All patients were also instructed to perform exercises. No treatment was superior in reducing total duration of the condition. Physical therapy was found to exacerbate pain in 28% of the patients.

One study by Rizk et al. (1983) makes a comparison between different physical therapy treatments only. The result is that prolonged pulley traction accompanied by transcutaneous nerve stimulation gave better results compared to a combination of heating modalities, therapeutic exercises, and gentle rhythmic stabilization manipulation. Mobility was increased in both groups but range of motion was regained more rapidly in the group that got pulley traction. The method of treatment with pulley traction is based on the premise that connective tissue shows plastic elongation when subjected to mild tension (Rizk et al., 1983).

To conclude, frozen shoulder is a condition which in most cases has a spontaneous onset. Pain in the shoulder region leads to disturbed sleep at night, ordinary movements with the arm become painful, and the shoulder becomes stiff. Improvement occurs spontaneously, but the symptoms can last for up to four years, many times with permanent, albeit slight, limitation of the shoulder mobility.

In addition, there are conflicting theories as to the cause of the condition. Histological studies, immunological examinations, arthroscopy, and arthrography show different structures to be affected. Regarding therapy, some researchers argue strongly for manipulation under anaesthesia, while others are more cautious. Physical therapy has proven to aggravate pain in some studies. There is not even one name for the condition but several - stiff and painful shoulder, frozen shoulder, periarthritis, capsulitis, adhesive capsulitis. The only consensus that has been reached is that there is a chronic inflammation of the joint capsule.

Summary

The upshot of this review concerning a frozen shoulder has been to demonstrate how problematic the condition "idiopatic frozen shoulder" is. It is problematic for physicians as they have no optimal treatment to offer. They cannot point to any particular reason for the development of the condition. They cannot guarantee the outcome of any treatment or that recovery will be complete. However, they can say with confidence that, given time, functional mobility will be restored. They can provide medication to suppress the pain and the inflammatory reaction of the joint capsule. Finally, they can refer the patient to a physical therapist for help in reducing the pain and

regaining mobility eventually faster than if the shoulder had gone untreated.

Although no studies document how many patients are being treated by physicians and by physical therapists, there is cause to assume that most patients are seen in physical therapy. The reason is that physical therapists have a variety of physical modalities and therapeutic techniques to offer, not as a cure but as support during recovery and an eventual hastening of it.

Frozen shoulder is problematic for the therapist. Prescriptions never say anything about hurting a patient, but rather to reduce the patient's pain. However,

> In the non-acute condition there are also occasions when it may be necessary to hurt our patients. Examples are many and include stretching out of shoulder capsules and the application of transverse frictions. (Paris, 1985, p. 165)

Frozen shoulder is also problematic for the patient. Apart from the pain and the inability to use the arm in a natural way, it is stressful not to know what caused the condition, not to know if full mobility of the arm will be restored or not. Even if it is comforting for health professionals to inform patients that the condition is reversible, it is of little comfort to the patients to hear that this will happen within approximately 30 months (Reeves, 1975). Besides, any treatment that aims at

restoring mobility is, in this case, painful. It is also unclear to whom or to what progress, or lack of it, should be attributed once treatment is initiated. Is it the therapist's way of delivering treatment, the treatment technique itself, or the patient's doings and her ability to endure pain that causes improvement or not? Or is the combination of all these factor most important? What is the role of the talk that the patient and the therapist engage in?

The literature stresses the psychological value and impact of the therapist's communication but excludes the talk that accompanies any particular treatment. It also pays minor consideration to the impact of the treatment technique upon the patient, and the patient's experiences of the condition. Those studies that have focused upon the condition and its clinical treatments eliminate, on the other hand, the patient's contribution to the result.

This study focuses upon the everyday practice of physical therapy. The treatment technique that is being used, the therapist's instructions in connection with the treatment, and what is said about the condition both by the patient and the therapist have been documented and analyzed. The following chapter will describe in detail how this study was carried out.

CHAPTER THREE

THE STUDY: ITS QUESTIONS AND METHODS

Questions of the Study

A micro-ethnographic case study was carried out to learn more about how physical therapists and patients approach the problem of frozen shoulder. The patient, who suffered from frozen shoulder, was followed through her treatments at an outpatient clinic. The following questions guided the study: "What constitutes the treatment situation? What do the patient and the therapist say and do when working together? What are the social, educational and interpersonal problems for the therapist and patient to work out in the therapy sessions? In particular, what makes a treatment session turn out the way it does? Who do the patient and the therapist become when working with each other?"

Treatment situations were documented through participant observations in fieldnotes, on audiotapes, and on videotapes. Besides transcribed interviews, documents such as referrals, the therapist's evaluations and progress notes were collected. Considering the importance of the

patient's and the therapist's accounts of what was going on, the three videotapes were the subject of viewing sessions and were also analyzed in detail by the researcher. One of them, a videotape made three weeks before the series of treatments was over (Video X), was selected to be reported. Details of its selection are presented as part of the data analysis.

Justification for the Study

The first part of the literature review revealed that few of the models of physical therapy practice that were given were founded on empirical studies. Rather, various theories and assumptions about practice were applied to treatment situations, to highlight certain aspects of treatment. This approach, in combination with the authors' experiences as physical therapists, teachers, and researchers, then led to recommendations for how patient care should be improved. In spite of the authors' good intentions, one can doubt the applicability of the recommendations since they were based on a particularly narrow or idealized view of the relationship between the therapist and the patient which was never questioned.

The tendency to move quickly from certain assumptions of practice to idealized versions of it should be avoided. Otherwise one could claim that everything has already been said about the profession and that all practitioners need

to do is to follow the recommendations. But the idealized versions can easily become norms and if therapists try to live up to them, they manifest the particular relationship that presupposed them. The norms might also serve as criteria against which both patients and therapists can be judged.

It is therefore important to stay close to naturally occurring treatment situations and to study them in detail, to focus upon the therapist's doings in relation to the patient's, to see and to accept that difficult and confusing episodes arise even in routine sessions, and thus refrain from categorizing professional practice as either good or bad. "Back to the things themselves," says Edmund Husserl, "the primary 'inventor' of phenomenology" (Ihde, 1979, p. 15). It is an imperative that must be taken seriously when the ultimate goal of a study is to gain insight into what constitutes therapeutic encounters.

Restatement of Purpose

This study is an attempt to describe, in detail, how physical therapy sessions, organized around the diagnosis of frozen shoulder, are carried out. By attending to the treatment procedure per se, the instructions accompanying it, the talk between the patient and the therapist, and the "sounds" of the therapist's hands and the patient's arm, the study shows how different forms of discourse evolve. By

analyzing the forms of talk the patient and the therapist use most frequently, a particular therapeutic relationship is uncovered.

By paying attention to everyday clinical practice, the hope is to give a nuanced picture of the patient and the therapist as they create and sustain a working relationship that proves to last for a long period of time; to show how the two make sense of what is happening moment by moment; and to describe how misunderstandings of each other lead to episodes of confusion.

The purpose is also to take seriously the patient's active participation, both verbal and physical, in the treatment sessions, particularly since it "looks" as if the patient's shoulder simply is manipulated by the therapist. Thus it will be possible to avoid reducing the patient to someone who is solely at a disadvantage; to someone who does not know what goes on in her body; to someone who has nothing to contribute to the treatment but information about her medical problem.

Original Research Questions

This study is guided by an interest in treatment situations and a curiosity about what makes sessions turn out the way they do. Recognizing the role of kinesics and the centrality of movement in physical therapy encounters, both talk and movement are focal and are analyzed in detail

for information about contextualization cueing and negotiation of social roles. Three basic questions were formulated prior to data collection. The first one concerned the doings of the patient and the therapist. What do they physically do during treatment? Or more specifically, how do the patient and her physical injury and the therapist and the application of a specific treatment technique affect one another and come to organize a session in a particular way?

Assuming that any treatment is mediated in part through talk, the second basic question focused specifically on the talk between the patient and the therapist. What language is used in a therapeutic setting? How is this language used? How do the patient and the therapist talk with one another? What do they talk about?

By looking at the treatment session as a whole and acknowledging that it is primarily oriented towards a patient's physical problem, but assuming that this does not rule out or exclude the simultaneity of other aspects of healing, the third question saw the treatment session as an opportunity for the participants to ventilate concerns about the medical condition and to learn more about it. It approached the talk between the patient and the therapist from a psychological perspective, then from a pedagogical perspective.

Research Questions That Emerged During the Study and During Analysis

Apart from these original, basic questions, additional and more specific questions emerged during the study. The viewing sessions proved to be highly important in this respect, but so did the videotapes themselves. The richness of information each videotaped event contained compelled or challenged the analyst to apply a variety of questions to the material itself. After the initial analytic viewings of the tapes described later on in this chapter were finished, certain general phenomena became salient. These were first formulated as strong, simplified assertions, such as, "The therapist does most of the talking," or "The patient only moves her arm as long as the therapist has her eyes on her." The assertions were then rephrased as questions and thus asked of the material. Regarding the doings or movements of the patient and the therapist, the following questions were asked:

What treatment technique is being used?

Exactly how is the treatment (the stretching) carried out?

When is the stretching most effective or when does the "critical moment" occur?

What is characteristic for the phase when stretching occurs and for the subsequent phase of recovery?

What should be achieved during treatment and what is achieved?

How does the session come to be organized around the specific diagnosis and the specific treatment?

With respect to the second basic question, the talk between the patient and the therapist is considered important to study in detail, since inferences can be made and evidence found for what the patient and the therapist pay attention to, how they interpret what goes on, and who they become when working together. The following assumptions were therefore formulated and tested: The one who has the floor or takes a turn at talk exerts a certain amount of control and requires being listened to. The therapist, who is responsible for carrying out the treatment, talks most of the time during the phase of stretching. The patient talks most of the time during the phase of recovery. Three questions were asked, using some notions from conversation analysis:

> How much time is spent talking and how much time is spent in silence?
>
> Who has the floor most of the time?
>
> How many turns are uttered by the patient and by the therapist?

Looking then at the form and function of the patient's and the therapist's speech, and finding that the patient and the therapist did talk in different ways at certain times, the following questions emerged:

> What are the patient's and the therapist's primary modes of speaking?

What is characteristic for the patient's and the therapist's talk?

Regarding the content of the talk:

What topics are brought up?

When do different topics come up?

Who brings up which topic?

What does the patient tell about her shoulder?

What theme does the patient keep bringing up and how does the therapist respond?

How do they talk about what happens during today's treatment?

Learning that the therapist was bothered by the patient "wanting to run the show," completely new questions arose:

What grounds can the therapist have for perceiving the patient in this way?

Does the patient do or say anything in particular that makes the therapist feel this way?

Being also struck by seeing moments in the videotapes where the patient and the therapist, late in the series of treatments, seemed uncertain about how to proceed, those episodes were analyzed in detail. It proved, for instance,

that when the patient was ready to work, the therapist kept on talking and vice versa.

How do such misinterpretations come about?

What causes the confusion?

Why, all of a sudden, do the two misinterpret one another?

What larger issues do these brief confusing moments point to?

The last basic question, regarding other aspects of healing, was approached in the following way:

What evidence is there of psychological benefits for the patient in seeing a physical therapist?

What of the therapist's doings might be signs of psychological thinking?

Considering the session as an educational event, what forms of teaching and learning can be found at the beginning of the series of treatments and towards the end?

What instances of "non-learning" can be inferred from the data and what does this tell about the patient's and the therapist's assumptions regarding what is important in physical therapy?

Methods of the Study

Ethnographic theories of culture and communication offer one useful way to proceed to study treatment

situations. Erickson, Florio, and Buschman (1980) claim that fieldwork methods of ethnographic research are appropriate when one wants to find out what is happening in social action in a particular place, what these actions mean to the people engaged in them, and how the actors are serving as environments for each other.

Asking what is happening in a specific place is important for three reasons (Erickson & Wilson, 1982):

> First, everyday life (because of its familiarity and because of its contradictions) is largely invisible to us--we do not realize the patterns in it. Second, everyday life is organized in slightly differing ways from one setting to the next. Often these objectively small differences of pattern and meaning can make a big difference in the subjective reality and qualitative character of social relations in the setting ... Third, because many of the pattern are outside of conscious awareness for the actors in the setting and because many of the patterns are constructed around distinctions of meaning attached to slight differences in amount (such as the measurable difference between 'not too loud' and 'too loud'), description and analysis of specific local details is necessary. (p. 40)

In this study, participant observations along with fieldnotes, formal and informal interviews, and collection of documents, that is, traditional methods in the social sciences (Schatzman & Strauss, 1973), were used to get as complete a picture as possible of physical therapy sessions. Several sessions were videotaped or audiotaped. In addition, three of the vidotapes were looked at with the patient and the therapist, on separate occasions and not

simultaneously, to elicit additional information. These viewing sessions are discussed under "Viewing Sessions with the Participants" in this chapter. Besides, less formal ways of learning about the two participants occurred during casual conversations before and after the treatments, over a cup of coffee or when having lunch together.

Choice of Physical Therapist

A decision was made early to do an in-depth study of one patient and one therapist and to follow the two throughout a course of treatment. This decision was formulated after having completed a pilot study of physical therapist-patient interaction at a physical therapy department located in a hospital (Ek, 1983). That department served both inpatients and outpatients, and there was a rapid turnover of patients. Several of the eleven therapists who worked there worked part-time. Depending on the time of the day, the same patient might therefore be treated by one therapist in the morning and another in the afternoon. The study came to focus more upon different styles some of the therapists used when working with patients, irrespective of whether it was the first, the third, or the last session in a series of treatments that was observed, rather than providing detailed accounts of a complete treatment.

I chose to study a single therapist experienced in her field. Assuming that years of professional practice makes a therapist feel confident about her work, it was hoped that this would make her less affected by the recording equipment and my presence, enabling me, in turn, to capture what I aimed for, namely ordinary or routine treatment sessions.

Choice of Setting

Anticipating that my own previous experience of working at Swedish outpatient clinics would facilitate my understanding of how an American outpatient clinic is organized, I made an appointment with Kathy Davis,[1] a physical therapist at such a clinic, in the summer of 1983. The purpose was to find out whether Kathy was the experienced therapist I was looking for and if she would be interested in allowing me to observe her work with patients. Kathy had actually worked many years as a physical therapist, she was the only therapist who worked at this clinic, and she was willing to be a participant in the study. The clinic itself was small enough so that others, like the assistant and the patients, would not be bothered by my presence. At the time of this inquiry, no patient was selected.

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[1]All names of people, places, and institutions are pseudonyms.

Choice of Patient

The only criteria for a prospective patient were that she or he should not suffer from a chronic condition or disability, that the diagnosis should be common in an outpatient clinic, and that amounts of treatments were limited. The diagnosis itself was of minor importance at this point. No search for a patient had yet taken place when, in the middle of January 1984, one of the professors teaching a class I attended mentioned that she had just started going to the Medical Center for physical therapy for her sore shoulder.

Realizing that a prospective patient had presented herself, I seized the opportunity and asked if I could make observations and videorecord the remaining treatment sessions. Dr. Strauss and Kathy Davis agreed, and the data collection process started.

Data Collection Procedures

The process of collecting data about the participants parallels, in this study, that of the patient going to physical therapy. This means that as a patient one does not know how many treatments will be needed before recovery is complete, even if the prescription is restricted to a certain number of weeks. The patient starts out with an initial referral that, apart from the diagnosis, prescribes a treatment and sets a time limit. In this case, the

diagnosis is a right frozen shoulder, the physical therapy services requested are "Hot packs, ROM (range of motion), massage, ultrasound," the number of treatments to be carried out are "3 x wk x 4 wks" (Referral, 1/6/84).

If the patient had gotten well in due time, the treatments would have been terminated after four weeks. But neither the patient, the therapist, nor the referring physician was pleased with the result. Progress did occur, but slowly. A second referral was issued. It stated "Continue P.T. for 1 month as written. Then call for further orders" (Referral, 2/10/84). It proved difficult to predict when the patient would be completely rehabilitated. The treatments continued without further written referrals through agreements over the phone. It took almost five months before the patient had regained close to full mobility of her shoulder.

The patient made 42 visits to the physical therapy clinic from January 9 until May 31, 1984 (see Table 3.1). The first treatment was given by Kathy Davis, the following three by a male therapist as Kathy had one week's vacation. On January 18, 1984 Kathy was back again. The treatments were given three times per week during January, February, and March, and twice a week during April. In the first week of May an attempt was made to give treatment daily for a full week, but only three of these were carried out. During the last four weeks of May, the patient was seen only once

a week. The recording of the treatments began on January 18, 1984, the patient's fifth visit. Out of the remaining 38 visits, 28 were observed. Ten of these treatments were videotaped, ten were audiotaped and eight were documented in fieldnotes (see Table 3.1).

Data collection was adapted to what actually happened. Six sessions were videotaped and two were audiotaped during the first month of treatments. I had assumed, like the patient, that the stipulated time on the first referral was an indication of when rehabilitation was to be completed. Later on two sessions were videotaped in March, one in April, and one in May. After the patient had terminated her treatments, participant observations were continued throughout the year of 1984.

My status as a student as well as a licensed physical therapist made possible particular opportunities to study both the patient and the therapist outside the treatment sessions. As a student I was able to observe the patient while attending some of her courses at the university. As a physical therapist I worked as a substitute during five weeks in 1984. This occurred after the patient on whom this study is focused had terminated her treatments.

Table 3.1 Appointment Times and Mode of Recording

Appointments		Mode of recording
Date	Time	
1/09/84	?	None
1/11/84	?	None
1/13/84	?	None
1/16/84	?	None
1/18/84	11:30 AM	Videorecording I Study begins
1/20/84	10:00 AM	Videorecording II
1/23/84	01:45 PM	Audiorecording
1/25/84	11:00 AM	Videorecording III
1/27/84	11:00 AM	Videorecording IV
1/30/84	01:00 PM	No observations allowed
2/01/84	11:00 AM	Videorecording V
2/03/84	11:00 AM	Videorecording VI
2/06/84	02:00 PM	Audiorecording
2/08/84	02:00 PM	--
2/10/84	08:45 AM	--
2/13/84	01:00 PM	Fieldnotes
2/15/84	09:00 PM	Fieldnotes
2/17/84	Cancelled by P	--
2/20/84	Cancelled by P	--
2/27/84	01:00 PM	Audiorecording
2/29/84	01:00 PM	Audiorecording
3/02/84	09:00 AM	Videorecording VII
3/05/84	01:00 PM	Audiorecording
3/07/84	01:00 PM	--
3/09/84	01:00 PM	Videorecording VIII
3/12/84	09:00 AM	Audiorecording
3/14/84	09:00 AM	--
3/16/84	10:00 AM	--
3/19/84	09:00 AM	--
3/26/84	?	--
3/29/84	08:15 AM	Audiorecording
4/03/84	08:15 AM	Audiorecording
4/05/84	08:15 AM	Fieldnotes
4/10/84	08:15 AM	Audiorecording
4/12/84	08:15 AM	Fieldnotes
4/17/84	08:15 AM	Videorecording IX
4/19/84	08:15 AM	--
4/30/84	Cancelled by T	--
5/01/84	08:00 AM	Fieldnotes
5/02/84	08:00 AM	Audiorecording
5/03/84	08:00 AM	Videorecording X
5/08/84	08:00 AM	--
5/14/84	08:00 AM	Fieldnotes
5/22/84	08:00 AM	Fieldnotes
5/31/84	08:00 AM	Fieldnotes

One viewing session and two brief interviews were also held with the patient in 1985, and three viewing sessions with the therapist (see Table 3.2).

Table 3.2 Date for Viewing Sessions, Videotape Being Analyzed, and Participant

Date	Videotape	Participant
03/08/84	V	The physical therapist
10/25/84	I	The physical therapist
11/01/84	I	The physical therapist
11/08/84	X	The physical therapist
08/01/85	I	The patient

The opportunity to serve as a therapist provided certain insights about how the therapist in the study looked upon her patients and their predicaments. For instance, in addition to receiving information about the patients' diagnosis I also was informed about "what kind of people" they were.

Categories of Patients

When Kathy talked about the patients she categorized them using three different criteria. One was a rough diagnosis, another was their different scheduling preferences, a third was whether patients were demanding or not. When the therapist talked about the patients' diagnoses, they were either labelled "chronic pain patients," "rehab patients," or "sports medicine patients."

When she talked about what time of the day the patients were scheduled, there were "professors from campus" who came early in the morning, at lunch, or late in the afternoon. Between 10 and 12 noon and 1 and 2 PM "those on welfare" came. "College kids" showed up between 3 and 4 PM (Viewing session, 11/1/84). An average of 13 patients per day were seen at the physical therapy department. The third way the therapist talked about the patients was either as "easy" or "hard." For example, during one viewing session, the therapist explained that,

> The easy patients are the patients that are very self-motivated. They have a goal in mind already and all I do is give them the tools to achieve that goal. Then there are the hard patients, that don't have a goal in mind. They suffer. They don't see the end yet and they don't see how to reach it. And I have to find out, to communicate well enough with them so I can point those things out to them.... Those are my hard patients. Well, there is a major difference. Just look at the department, sports medicine versus rehab medicine. Sports medicine is a simple injury. They can relate to the injury that happened. They are aware of it. There are no other conflicting things interfering with the problem they are having. They know they want to get better and they know what to do to get better. And here I am, helping them get better. But with the rehab patients, other things are involved. (Viewing session, 11/1/84)

In the therapist's description of the "easy" patients, there is no doubt about what was the cause of the injury, no doubt about the effectiveness of the treatment, no other problems that interfere with the rehabilitation, and the

patients want to get well. They do not question the treatment the therapist provides. Being athletes, they are used to being told what to do. This might facilitate following the therapist's instructions. However, "easy" patients can turn into "hard" patients. In the therapist's view,

> Sometimes they are looking for drugs or they are addicted or what not to running for example. Then they turn into hard patients and you have to do more. You have to teach them about preventive medicine and it is a little harder for them to accept. (Viewing session, 11/1/84)

Patients can also be "hard" because it is unclear what their problem really is:

> I have to find out what is bothering them, so I know what I am treating. Whether I am just treating the back, a plain injury, or whether there are other things that at least I need to be aware of. (Viewing session, 11/1/84)

Another group of "hard" patients are those that have other opinions of what should be done. Of these the therapist says,

> I want him to do one thing that I know will help him, which he refuses. He wants to do something that is not getting him any better.... My challenge would be to get him to go for what is best for him. But if he doesn't want to do that, there is nothing I can do. (Viewing session, 11/1/84)

The way the therapist categorizes her patients corresponds to the amount and kind of work required of her to treat them. Consideration has to be taken of the injury the patient suffers from (simple or complex); the cause of the injury (known or unknown); eventual other problems that interfere with the rehabilitation; the patients' attitudes to or understanding of the treatment; and their willingness to get well. The therapist summarized the discussion in the following way: "Betty (the assistant) and I like a couple of sports medicine patients in between our hard patients, because they are easy and they are very positive" (Viewing session, 11/1/84).

The Patient in the Study

Dr. Strauss, the woman who in this study is being treated for a painful shoulder, belongs to the category "hard" patients (Viewing session, 3/8/84). This is discussed in detail in the section "Viewing Sessions with the Participants" in this chapter. Dr. Strauss reports her symptoms as follows in an early interview:

> Actually almost a year ago (January) I began to have pain in my right shoulder when I carried my briefcase.... It must have been around May, there was sort of a cold wet spell, I noticed when I woke up in the morning my right arm would hurt. But I couldn't figure out why, I hadn't done anything to injure it. And I thought it would get better by itself, but by, I would say June, I could no longer lift my arm up like when you rest it on a car window. I couldn't lift it like that.

> Or I couldn't lean on it on a table having lunch.
> ...
>
> By that time, I was less and less able to lift my arm or use it at all and it was very stiff. There seemed to be no cause whatsoever for my shoulder to hurt and not get better....
>
> I am also left handed so I don't use my right arm very much and it just seemed like it got that way all by itself.... There was certainly no reason to wake up in the morning and find my arm hurting.
>
> For a while it was hurting all the time so that my whole right side, upper right quadrant was painful and ached. My whole shoulder ached, muscles, this muscle bundle here between my shoulder and my neck was painful....
>
> I probably did it to myself by not moving it. But the more it hurt, the more I didn't use it and the more I didn't use it, the worse it got and so on. Now I am all frozen up and I must have done it to myself.... Well, I'm not responsible for initiating it, but maybe for the frozen part of it, from just not using it. (Interview with the patient, 1/20/84)

This description is reiterated in a viewing session a year after the treatment was finished, when the patient said the following:

> All I knew was that it <u>hurt</u> and I couldn't <u>do</u> anything. And I couldn't <u>sleep</u> at night. Then you wake up and you're <u>tired</u> and then you still have to kind of plod on with your day.... I couldn't lift it, I couldn't turn it, I couldn't pull it over this way (across the chest). (Viewing session, 8/1/85)

Dr. Strauss' description of how the problem started, how "unbelievable" it was to get severe pain without a

known cause of it, how restricted the use of her arm was, is typical for an idiopathic frozen shoulder. What also puzzles her is whether she herself might have caused "the frozen part" of it, something never intended.

Dr. Strauss is a 50-year-old woman. She was born in Kansas, but has lived the last 13 years in Lindesberg. She is a social scientist and holds a position as a full professor at the university. Before going into academics, Dr. Strauss worked as a lab technician.

Dr. Strauss had been referred to the Medical Center by her primary care physician, Dr. Brown. Originally the diagnosis was tendinitis of m. supraspinatus, for which shots were given. The pain ceased only temporarily. Physical therapy treatment at a local hospital in November 1983 helped initially, but after one session pain increased tremendously and Dr. Strauss never went back to that clinic (Video I, 1/18/84). Troubled by the gradual worsening of her shoulder pain, Dr. Strauss had gone through several clinical examinations in order to find out why the problem occurred. A car accident in 1979 could potentially have done some damage to her neck. Insurance covered all the expenses for medical matters eventually related to the accident. X-rays were taken of her neck, an EMG was carried out, and an appointment with a neurosurgeon was made to discuss the findings. Dr. Strauss reported these findings

to the therapist during an early therapy session as follows:

> There are posterior and anterior osteophytes on the fifth and sixth cervical vertabrae, a central osteophyte in the fifth vertabrae and a defect in the area of the fifth vertabrae. That's from the myelogram. So she (Dr. Brown) said then that it was one of those things pushing on the spinal cord. Must be the central one. I don't know. She (Dr. Brown) said it (the EMG) was abnormal but not specifically abnormal. Anyway I didn't have all the symptoms that she would expect, if the nerve was entrapped.
>
> What she (another physician) said in the hospital was that there was a large spur pushing on the spinal cord and that she thought it ought to come off. That's why they sent me to the neurosurgeon and then he said he didn't think, that he thought that might or might not bring relief. So he and Dr. Hall and Dr. Brown decided to be conservative. (Video I, 1/18/84)

The conservative treatment was to try physical therapy again and in January 1984 Dr. Strauss started seeing Kathy Davis, registered physical therapist, at the Medical Center.

The Physical Therapist in the Study

Kathy Davis is 40 years old. She was born in Europe, where she also received a bachelor of science degree in physical therapy. However, she never practiced her profession while in Europe. She moved to the United States 20 years ago and she has worked as a physical therapist for the last 12 years. Before accepting her present position at

the Medical Center, she worked for six years at a pain clinic in a hospital in Hallsberg. Since the opening of the physical therapy unit at the Medical Center in 1983, Kathy Davis has been the only physical therapist working there. To help her she has an assistant.

Dr. Strauss and Kathy Davis live very close to each other north of the university campus, but had never met until the treatments started.

The Medical Center

A market study of the Medical Center (Health Systems, 1984) reports the following. The Medical Center opened in 1976. It is located in Lindesberg between major freeways, but on a low traffic road. It was designed for two purposes. One, to provide complete outpatient health care services the general public, the university faculty, and the staff. Two, to serve as a clinical setting for the medical programs at the university. The Medical Center offers eleven different major programs and is staffed by both allopathic and osteopathic physicians.

The Health Institute (HI) is one of the programs. It, in turn, consists of two separate clinical entities. One specializes in sports injuries, the other in medical rehabilitation. The physical therapy unit is part of the rehabilitation program.

Written referrals are the rule. Patients are referred not only by physicians working within the Health Institute but also by others. Most of the patients who visited the Medical Center in the fiscal year of 1983 were employed by the university in Lindesberg; the state government, located in the capital Hallsberg; and the car plant also located in Hallsberg (source: Medical Center Administration, Dec. 1983).

The Physical Therapy Setting

The physical therapy localities consist of one large treatment area, a storage room, a room with a whirlpool, and an office. At the center of the treatment area there is a large table with a mat on it (see Figure 3.1). Next to it there are weights, dumbbells, wristbells, and anklebells stored on a small table. Some of the weights are to be used on the N-K table, which is placed against a wall. This is used for strengthening of the major leg muscles. Along one wall there are parallel bars, a three way mirror, and a set of wall pulleys. On another there is a graded staircase and next to it a stationary bike.

Curtains separate three cubicles from the rest of the large treatment area. In two of the cubicles there are, in each, an adjustable treatment table, a cabinet, a sink, an ultrasound machine, a chair for the patient, and hangers for clothes. In the third cubicle there are traction

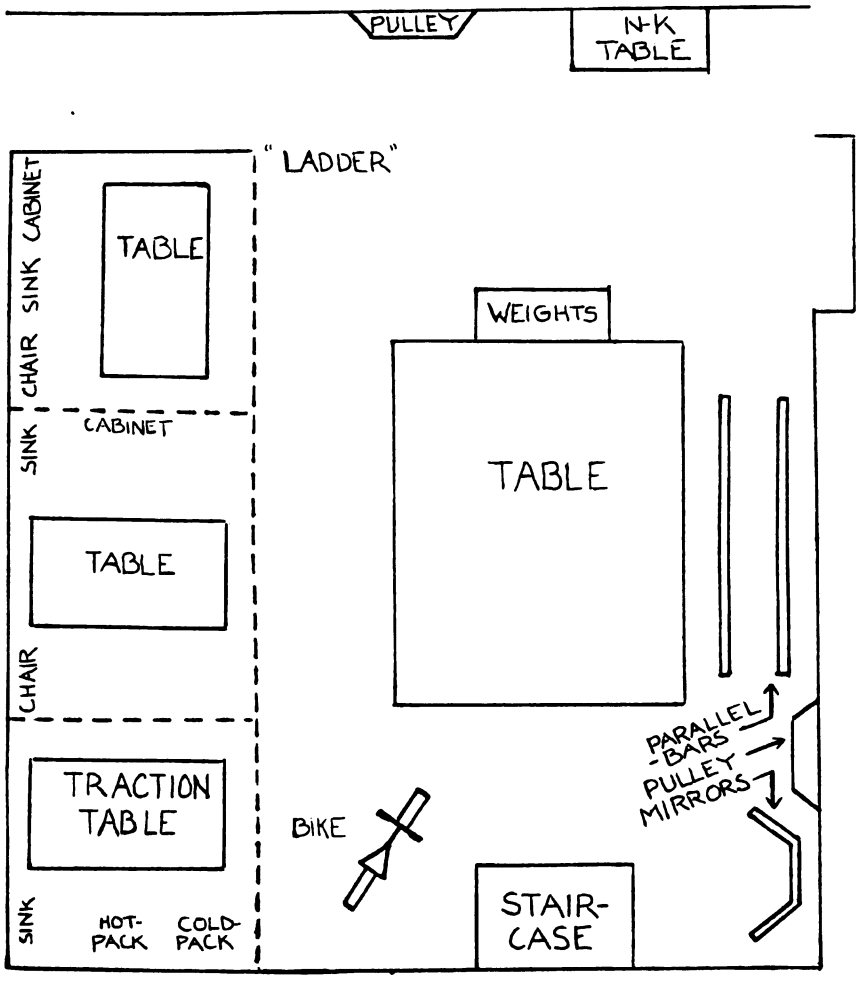

Figure 3.1 Treatment Area, Physical Therapy Unit

equipment, a traction table, a muscle stimulator, a cabinet, a chair, and containers for hot packs and cold packs.

Dr. Strauss is always treated in one of the cubicles. Before Kathy goes to the waiting room to get her patient, she covers the treatment table with a white sheet and adjusts the pillow. She places a white gown on the table for the patient to change into.

When the treatment is over, Dr. Strauss frequently stops outside of the treatment cubicles where a smaller piece of equipment is hanging on the edge of a wall. It is made of wood, has the shape of a ladder, and is approximately 25 inches long and two inches wide. Each "step" is numbered. Facing the ladder, she climbs the ladder with her fingers until she reaches as far up as possible. This provides an easy way for the patient to do her own evaluation, to get a sense of her progress. The results were never written in the therapist's progress notes, but are frequently referred to in my fieldnotes (see Appendix A).

The Purpose of Videorecording Treatment Sessions

Treatment situations are very complex. Roughly, one can say that they involve two people, a diagnosis, a treatment technique, and a location. The complexity lies in coordinating the actions that are hidden in the words

"treat" and "being treated." As those words are associated with the roles of a therapist and a patient, the division of labor is already allocated. Granted, the therapist "delivers" treatment and the patient "receives" it. But that does not mean that the therapist is the active one and the patient the passive. Both are active, but in different ways.

Goffman defines (1959) face to face interaction as "the reciprocal influence of individuals upon one another's actions when in one another's immediate physical presence" (p. 26). He stresses that the two are interdependent. What one says or does cannot be understood separately from what the other says or does. Neither can the location in which the encounter takes place be excluded. Both participants make sense of each other's actions and define the situation accordingly. Merleau-Ponty (1962, p. XVIII) says "... there is not a human word, not a gesture, even one which is the outcome of habit or absent-mindedness, which has not some meaning."

The influence of phenomenology on sociology and anthropology is subsequently to be seen in studies that are concerned with "constituted human meanings" (Ihde, 1979, p. 143). Interpretive research, as one form of educational research, emphasizes the necessity of studying how people make sense in order to understand why people act as they do. The object of interpretative reserach is action, not

behavior. Action is defined as "the physical behavior plus the meaning interpretations held by the actor and those with whom the actor is engaged in interaction" (Erickson, 1986b, p. 35). Besides,

> Humans, the interpretive perspective asserts, create meaningful interpretations of the physical and behavioral objects that surround them in the environment. We take action toward the objects that surround us in the light of our interpretations of meaningfulness. Those interpretations, once made, we take as real - actual qualities of the objects we perceive. (Erickson, 1986b, p. 34)

Erickson talks about the world as a world of communication. Contrasted to the Newtonian world where physical objects have form, mass, energy and velocity, in the world of communication there are no such substances. Instead there are messages and information, with information residing inside each event, each object. This "propositional or informational aspect of the events and objects in the natural world" is the theme in cybernetics (Olgaard, 1983, p. 27).

Bateson (1972) has elaborated extensively upon this in his work. Notably in his theory of communication he claims that all behavior is communicative. Verbal communication cannot be considered more important than non-verbal communication, for instance.

To find out how and in which ways a therapist and a patient communicate with each other, to find out how they cooperate in creating any treatment, accurate records of treatment situations must be obtained. Videorecordings are to be preferred (Erickson, 1982; Kendon, 1979). Thereupon, analysis and interpretation of what is captured on the videotapes must take place.

Through videorecordings one is able to capture details of events as they occur naturally at a particular time, in a particular setting. The data are highly sensitive and stored permanently. As Duncan (1982) says,

> The speed and multiplicity of actions occurring in interaction require that some sort of permanent record--film or videotape--be used for research. Such a record permits fine-grained, accurate observations of any set of observable actions (taking up one type of action at a time), while preserving in the transcription the sequence in which the actions occur. Using film or videotape one can review the interaction as many times as required--and in slow motion, if desired--to verify and correct one's observations, and to add new observations, if desired. It is obvious that any sort of real-time observing process cannot begin to provide comparable scope and accuracy. (p. 177)

Erickson and Wilson (1982) state that documentation in the form of videotapes is especially appropriate to the study of "the conduct and organization of face to face interaction" (p. 40). They go on to say that,

> Audiovisual documentation and analysis is also useful in discovering new insights about the organization of everyday life in educational settings--new perspectives on phenomena that may have been overlooked because of their subtlety and their familiarity to those closest to them. (1982, p.41)

Although Erickson and Wilson refer to the study of classroom interaction, what they argue for can be generalized to other settings.

How the Videotapes Were Made

Initial contact had been made with the patient and the therapist prior to making the first videotape. Both of them were carefully informed about the purpose of the study, how the sessions were to be recorded, and how the videotapes were to be used. They were reminded of their right to refrain from participating in the study at any time and/or to have certain episodes erased from the videotape, if they so wished. The director of the rehabilitation program had approved the study. Consent forms were signed by those involved (see Appendices B, C and D).

Following the recommendations by Erickson and Wilson (1982) about the most unselective visual recording, the camera was set up on a tripod in the booth where the treatment took place. A wide angle lens was used. The microphone was placed next to or on the treatment table. No special lighting was used. The camera ran continuously and

the angle was adjusted only to make sure the participants remained within the visual frame.

The decisions regarding what to tape, where to place the camera, when to start and when to stop taping, were all made by the researcher. The goal was to get as much as possible from the participants within the frame--to start the taping before any of them had entered and not to stop until they had left. By this means the researcher refrained from being the one who determined "this is the moment when the treatment starts and now it stops." From the participants' point of view the treatment could have started earlier or later. The participants' perceived beginnings and endings are indications of their interpretation of what is going on, of what context is now, and these are crucial data or information in this kind of research.

In some videorecordings, where the whole session included the application of hot packs (20 min.), the ultrasound treatment (10 min.), and the manual treatment (20-25 min.), the camera was turned off when it became obvious that the therapist was going to stay out of the booth for a longer period of time. This would occur after the hot packs had been applied and no other treatment was to be given at the same time. After setting up the equipment, I remained in the booth to take fieldnotes. I would leave the booth temporarily.

During the last two videorecordings I set up the equipment, left the booth, and returned temporarily to check the camera angle. In the meantime I helped the assistant with various tasks.

This brings up the issue of how my presence and the presence of the camera affected the behavior of the patient and the therapist. This problem can probably never be resolved. Since various ways of documenting the treatment sessions were used (see Table 3.1), I can say that those that were videotaped do not differ from those observed at other times.

Some evidence that the participants acted as they usually did became apparent during the second week of the study. After having completed the fourth videotape (1/27/84), I asked Kathy if the taping bothered her. "It wasn't such a problem," she responded, except that she wanted to be alone with the patient the next session, to see if she would be more relaxed. "She is so tense." She [the therapist] didn't know if it depended on me being around or if it was the pain (Fieldnotes, 1/27/84). I called Kathy (1/31/84) to see what had happened. Kathy answered "It was the same. Unchanged. So you can come next time if you want to. She behaved in the same way. She cried a little bit. But she is getting better, slowly" (Fieldnotes, 1/31/84). Thus observations were resumed.

During the following videorecording (2/1/84), Dr. Strauss and Kathy discussed my presence. Dr. Strauss said it doesn't bother her "when she sits here" and Kathy said "I get so tangled up in your shoulder here" (Videotape V, 2/1/84).

Other evidence comes from discussion with the participants. Both claimed they felt slightly ill at ease at the beginning of each recording, then more or less forgot about the camera.

Erickson and Shultz (1982) state that,

> While immersed in doing, one does not regard one's actions from the point of view of a detached observer.... In lived time, the compelling power of everyday life is that people become absorbed in it and take its 'reality' for granted. (p.56)

The prescribed treatment has to be carried out in actual therapy sessions. The therapist has to give the ultrasound, apply the hot packs properly, and instruct the patient to perform certain movements. The patient in turn has to make the treatment possible, by doing what is asked of her. Besides, both of them are occupied with talking and listening. All this demands their attention. For the researcher this is an opportunity to describe and analyze actual treatment situations, rather than role-plays, for the purpose of theorizing about practice.

Viewing Sessions with the Participants

When doing ethnographic research the goal is not only to describe the ongoing activities as accurately as possible but to capture how the participants themselves look upon the same activities. Through this dual approach one arrives at both the outsider's and the insider's perspective. In order to elicit the participants' perception of or opinion about some aspect of the treatment, they were invited, separately, to viewing sessions (see Table 3.2).

The use of videotaped material as a means of elicitation is described by Florio (1978) and Erickson and Shultz (1982). A viewing session, conducted as described below, provides an opportunity for and encourages the informant to bring up issues that are of significance to her. On purpose, the researcher refrains initially from asking questions to avoid influencing or directing the informant. Each informant, in this study, was simply asked to turn off the tape when something interesting or unusual happened. Or, if the informant just felt like making some comments about something on the tape, it was turned off. The comments the informant made, and the discussion that it led to, usually led to a more fine-grained inquiry about what made the informant stop the tape. It could also result in an analysis of a particular situation in the tape. These viewing sessions were audiotaped and later transcribed.

Through the viewing sessions the informant helps the researcher to pay attention to particular episodes. For example, on March 8, 1984 the therapist and I looked at the fifth videotape, recorded on February 1. At one point the therapist turned off the tape and commented on the patient's attempt to be in or take control. The patient had asked the therapist to wait a few seconds before she would bring the arm up further. The therapist said,

> But the way she did it to me. Like she wanted to control the whole treatment program. And I want the control back, ya. If it is what is going to happen next time, I don't know what I am going to do. But somehow or another she cannot run the show. (Viewing session, 3/8/84)

In this way the therapist guided the session to looking at moments where there was some kind of dissonance or disagreement, between the patient and the therapist.

By paying close attention to moments of conflict, the rules that otherwise guide the interaction and that now have been violated, can be made visible. This is one way of learning about what organizes smooth interaction.

The first viewing session is of importance in the study because of what was brought up. The intensity with which the therapist talked about the patient was striking. Besides, I had considered Dr. Strauss an ideal patient. She attended almost every scheduled session (see Table 3.1). She endured the pain during the treatment. She did the

recommended exercises. Being used to a regular exercise program since her car accident, Dr. Strauss just added the exercises for her shoulder. In class she placed her arm on the back of a chair to stretch it passively. She struggled with using her right arm as much as possible when taking her coat on and off. But the therapist was referring to something else. More attention was therefore given to how the patient and the therapist worked together to accomplish the treatment and to the fact that this was difficult. It proved that the therapist could not simply carry out what "the doctor ordered," but needed the cooperation of the patient at every step of the treatment.

Phenomenological Approach to Data Analysis

As stated in chapter one, this study is based on phenomenological thinking. It has had implications for the methods that have been used, the way transcriptions have been carried out, and the analysis of the data. Apart from following the pragmatic advice by Erickson and Shultz (1981), as described below, an attempt was also made to stay close to the steps outlined by Ihde (1979) regarding inquiry in a phenomenological tradition.

These rules state, first, that phenomena are to be attended to as they appear. Second, they shall be described, not explained. Third, all phenomena shall initially be equalized, that is, no assumption is to be

made about any hierarchy among them. This so called epoché "requires that looking precede judgment and that judgment of what is 'real' or 'most real' be suspended until all evidence (or at least sufficient evidence) is in" (Ihde, 1979, p. 36).

The fourth rule, which represents another level of the investigation, urges one to look not at the particularities of phenomena, but at the essences of them or their essential features. Any pattern that is repeated is considered significant and must be actively examined.

As mentioned at the beginning of this chapter, material was collected through different approaches, including participant observations, interviews, audiorecordings, videorecordings, and viewing sessions. The material or the raw data appear either immediately in written form, like the fieldnotes, or in the form of sound recordings or videorecordings. These recordings had to be transcribed before they could be analyzed as texts too. Since the emphasis in this study is upon the videotapes, details of how the work proceeded to transform pictures into words will be described. It is important to mention beforehand, that every transition from picture to text, from spoken language to written words, inevitably includes both a reduction of the raw material and a reconstruction of it. In addition, the amount of detail of behavior that

each taped event contains requires repeated viewings before any form of transcription is even attempted.

Analytic Viewings of the Tapes

The viewings of the tapes can be performed differently. A complete tape can be viewed several times, or in small segments. The sound can be turned on or off. One can listen to the sound and then look at what has happened or reverse the order.

Empirical studies, reviewed by Erickson and Shultz (1981), have demonstrated that people in face to face situations organize their behavior into segments or "chunks," called principal parts or contexts. The junctures between these are constituted by postural reorientations by the participants. The new postural configurations or positions are then sustained during the following segment. Assuming these shifts to be of importance in the study of interaction, Erickson and Shultz (1981) developed a six-stage model for how to view videotapes analytically. The model is also an example of how to reduce the amount of data. It was used in the study as follows.

First the tapes were indexed according to the major occasions they contained, Stage 1. Four to five different segments were identified. Ultrasound was given; hot packs were applied; a manual treatment was administered; the patient was instructed to move her arms while using a wand;

and/or the patient was asked to do some strengthening exercises with a barbell.

At Stage 2, a decision had to be made regarding which of these segments to focus upon. So, the same tapes were viewed again, searching for one segment or event that was similar in the tapes. Out of the four to five segments, only the ultrasound treatment and the manual treatment were given from the first until the last session. Of these two, the manual treatment itself demonstrated most clearly what is characteristic for physical therapy practice and was thus selected for further analysis.

When this decision was made, and anticipating many hours of viewing, copies were made to avoid working from the originals. At the same time a time-generator was used, so that digital clock numbers were printed on the screen. The viewing was now restricted to the segment containing the manual treatment but extended to what happened right before and after it. The indexing procedure was repeated, now facilitated by using the time on the screen. At each viewing, notes were taken of what was happening. Then this information was condensed onto a chart along a horizontal time line. It proved that two phases alternated continuously, a hands-on and a hands-off phase, to be described in Chapter 4.

At this point, Erickson and Shultz suggest informants be invited for viewing sessions. Here the study departs

from the model. The intense data collection process did not allow time for the kind of preliminary analysis called for by the model. The patient and the therapist were both working full time, and could not set aside time for viewing sessions. However, one viewing session was held while the study was being carried out. On March 8, 1984, the whole of videotape V (2/1/84) was viewed with the therapist. The impact of this single viewing session on the formulation of the research questions and analysis of the data is discussed in this chapter under the headings "Viewing Sessions with the Participants" and "Analysis of Transcriptions." The other four viewing sessions were carried out after the treatments were over (see Table 3.2) when it was feasible for the patient and for the therapist.

Returning to Stage 3 of the analytic viewings of the tapes, the viewing now focused on behavioral details during both the two phases and the transitions between them.

At Stage 4 this whole segment, that is, the manual treatment with all its hands-on and hands-off phases, was built into a preliminary model of the structure of the treatment session. This particular procedure is called a "type-case analysis" by Gumperz (Erickson & Shultz, 1981, p.156).

In Stage 5 this "type-case" was tested for its validity by looking for four types of evidence, including the following (Erickson & Shultz, 1981, pp.156-157):

> During those moments the model designates as moments of transition there are descriptively specifiable shifts in interactional performance occurring.
>
> After a moment of transition, specific forms and functions of communication behavior--ways of listening, ways of speaking, kinds of topics, speech acts, postural positions, etc.--are differently distributed in contrast to their frequency of presence or absence and their sequential position of occurrence during the time prior to the moment designated by the model as a moment of transition.
>
> After the moment of transition, kinds of interactional behavior which before the juncture were sanctioned if present (or absent) are no longer sanctioned by participants if these behaviors are present (or absent), and kinds of behavior previously not sanctioned are now sanctioned; i.e. participants behave as if rules of appropriateness differ from before the juncture to after it....
>
> If in a viewing session the participants themselves or other informants are shown the juncture and its immediate surround, their accounts of what is socially appropriate before and after the juncture will agree with analytically descriptive evidence of types 2 and 3 above.

The last stage involves a test of this model for its generalizability. The selected tapes are looked through again, to see if the model or "type-case" is representative or not. If so, the generalizability is confirmed, at least within the data available. The manual treatment that is analyzed and reported in this thesis is considered typical for a type-case analysis (see Appendix E).

Transcriptions

As a result of the analytic viewings described above, the synoptic chart and the details of the type-case model serve as rough descriptions of what has taken place. The next step is to transcribe carefully what the participants say and do.

Although the researcher's goal is to make verbatim transcriptions, to be as clear as possible when describing what the participants do and how they move, each "transcription is a selective process reflecting theoretical goals and definitions" (Ochs, 1979, p.44). In this study, for analytical purposes, two parallel transcriptions have been made. One is the transcription of what is uttered, be it words or sounds (see Appendix F). The other builds upon the first one and adds the non-verbal or non-vocal communication that takes place (Appendix G). Time has been noted on both of these transcriptions, but is only shown here in Appendix G. Stubbs (1983) stresses that,

> much of the complexity of spoken conversation is evident only in close written transcriptions... such as false starts, hesitations, self-corrections, ungrammatical and unfinished sentences, overlapping utterances. (p. 228)

He adds, "Conversation looks odd, incoherent and broken when seen in the written medium - but it does not sound odd to those taking part in it" (p. 228).

In the first transcription special attention has been paid to changes in prosody, on the assumption that some of the meaning of an utterance is to be found in the way it is said. The transcription of the speech is primarily based upon a copy of the sound from the videorecording. After having spent several hours listening, going back to the videotape and listening to the sound there, speech and other paralinguistic phenomena and sounds have been written down.

The symbols that are used are modifications after Bennett (1982). What is inaudible is marked with a line. Words that are emphasized are underlined; elongation of vowels are represented by colons; overlapping speech is placed within brackets. Intonation is marked above the word with a falling or rising arch, as in the following example, where the therapist says: "Let me get it out to the side Is that painful At that place You do better at this one" (Video X, 5/3/84).

As natural speech seldom benefits from being analyzed as sequences of sentences, Goffman uses the term "utterance" (1981, p.22) to refer to the spoken word. This way of thinking about an utterance as a turn or a turn at talk has been adopted in this study but also extended to include whatever sound is heard by the researcher. Every word, deep exhalation, and sigh has been classified as a turn. Trager (1964) labels the noises that do not have the

structure of language for vocalizations. The combination of these vocalizations and the "voice qualities" of pitch, rhythm, and tempo are called "paralanguage" (Trager, 1964, p. 275). An audible exhalation by a patient in a treatment situation many times is a profound statement. It needs to be taken into account when the talk between a patient and a therapist is focused upon. So "P exhales (6 s)" is one turn, as well as "T: Kee::p going Kee::p reaching." Focusing the listening on the prosody of the uttered words and sounds led to the realization that each party uttered several short phrases, more or less complete sentences, or many imperatives within the same turn at talk. The content of these sub-units could be different as well as similar. Or the topic could be changed within one turn.

Each sub-unit represents a tone-group or breath-group. Most of the time these breath-groups coincide with the specific function of the utterance itself, such as "Move it back That's good." Other times they don't, as in "Good and relax." The sub-units are therefore called functional units. Another term might be "move" (Coulthard, 1977). The identification of the first word of each functional unit (marked with a capital letter, except "I") has been arrived at through intensive listening and a search for distinctions between pronounciation of words. The example "T: I won't push any more Try to relax Your ribcage Your other shoulder" contains four units, each of

them with different content but similar prosody. This classification has then served as the basis for tallying the number of functional units.

Silence has been marked with one period per second up to five seconds. More than five seconds have been marked within parenthesis, such as (6 s). To uncover how people speak and to refrain, initially, from one's own inclination to fill out incomplete sentences, instead of "accepting" them as they are, conventional symbols such as period, comma etc. have been excluded.

To visualize the continuity of the conversations and to avoid giving the impression that each turn that starts on the left margin is an introduction to a new conversation or another topic (Ochs, 1979), each turn has graphically been placed in connection to the preceding one, but on the line below, as in the following excerpt:

T: Yeah That really looks better than, when we
P: Yeah
started out Let me get it out to the side Is
that painful At that place You do better at
this one
P: Yeah ((exhales))
T: Okay
P: It hurts right in
here
T: Okay Okay Go push (6 s) Give it a real hard
push ... ____ .. Good and relax. (Hands-on VI,
Forward flexion, Video X, 5/3/84).

In the latter transcription several additional features have been noted. They include facial expressions;

direction of gaze, sometimes inferred by head position; gestures that accompany speech; movements with, for instance, an arm or the whole body; small changes in posture, like slumping or stretching a back, or gross changes like leaning forward or backward, that is, all that affects the distance between the participants.

A transcription system as described above is of advantage to the analyst who has listened to the speech repeatedly, who has an audible memory of the voices that appear on the tape, and who actually hears them when reading the transcribed versions. The same transcription can, however, mislead or cause misunderstanding for the novice reader of it.

Knowing also that any presentation of transcriptions can have an alienating effect upon the reader (Stubbs, 1983), minor modifications have been made whenever phrases are cited in the body of text from the transcribed videorecorded sessions. The original transcription system remains unchanged in Appendices F, G and H.

While still maintaining the demarcation of breath-groups (or functional units) and assuming the verbatim phrases are to be read like a script, a question mark (?) will be added to symbolize rising intonation and a period (.) to symbolize falling intonation. Both of them thus indicate the end of a breath-group. To separate the period that will now be used to mark the end of a breathgroup from

the periods that were used to mark each second of silence, seconds of silence will now be placed within brackets, as in [...] and [10 s]. As a rising intonation at the end of an utterance can be interpreted as a request for information or confirmation ("Wanna have it back?"), but also can occur in a happy exclamation ("Good stretch hm?"), this is addressed throughout the text.

The excerpt on page 117 will have the following appearance after it has been adapted to be read like a script:

T: Yeah. That really looks better than when we
P: Yeah.
started out. Let me get it out to the side. Is that painful? At that place? You do better at this one?
P: Yeah. ((exhales))
T: Okay.
P: It hurts right in here.
T: Okay. Okay. Go push. [6 s] Give it a real hard push. [...] ____ [..] Good and relax.
(Hands-on VI, Forward flexion, Video X, 5/3/84)

The value of working from double transcriptions, where one contains only words, sounds, and time when nothing is said, and the other includes kinesic behavior and descriptions of the movements that occur during the time of silence, is, among other things, that it makes the analyst aware of different forms of interaction. It also allows for thorough exploration of the material. This is exemplified in the next section.

Analysis of the Transcriptions

As this is an explorative study, the transcriptions and the original videorecordings have been analyzed in several ways. The first transcription has been used primarily in determining the time allotted to the different phases; the time allotted to talk and silence; the number of turns and functional units; the categorization of the patient's and the therapist's talk (form as well as function); the topics that are brought up. The second transcription, which in no way has replaced the videorecordings, has been used in the analysis of the phases of stretching and the phases of recovery. The second transcription has also been used when determining who initiates versus terminates each phase of stretching and when locating and describing the episodes of confusion.

Thus, certain notions from conversation analysis (Sacks, Schegloff, & Jefferson, 1974) such as turns, functional units or moves, coherence in conversations, and adjacency pairs have been applied in the analysis. The content of the talk has been analyzed from several perspectives, and a context analysis has also been carried out.

For instance, when attending to coherence in the conversations between the patient and the therapist, notes were taken of those instances where it was lacking. For example, a question by the therapist, "Is it tender

there?", seemed to have no connection with what had been talked about previously or what followed it. By turning to the videotape the phrase was found to be an "answer" or a confirmation of what the therapist had perceived the patient to have said non-verbally. The patient had placed her left hand over her right shoulder, while at the same time wrinkling her eyebrows, indicating discomfort.

Then, looking at the tape as a whole, it proved that this phrase by the therapist, which she did not immediately follow up on, had consequences. It led to several interactional difficulties later on in the treatment. This will be discussed in chapter five.

As described previously, the therapist in the first viewing session chose to talk about an instance where she perceived the patient to be wanting to "run the show." In another viewing session (11/8/84) she pointed out that the patient was not ready to start a new attempt of stretching at the same time as she was. Both instances are examples of moments where the two of them had been unable to reach consensus. They "missed" each other, as they defined the ongoing situation differently. On one level they displayed differences in opinions, on another they did not coordinate their movements well.

In the last viewing session the therapist also discovered, to her own surprise, that she could "do nothing" if the patient was not ready (Viewing session,

11/8/84). She thus indicated difficulties with transitions from one phase to another. Those moments where the therapist placed her hands upon the patient's arm and when she removed them had been considered from the beginning to be significant moments in the treatment. I had assumed that these instances would give valuable insight into how the patient and the therapist coordinated their talk and behavior. However, now it proved that not only were these transitions indeed troublesome, but that it was of little value to isolate them from the rest of the treatment. The significance of them was lost once the context in which they occurred was removed. Instead, all of what happened during the manual treatment on three different occasions has been analyzed, more or less in detail.

Videotapes Selected for Detailed Analysis

The videotapes used in this study are numbered I, V, and X. They were selected primarily because they had been used in viewing sessions (see Table 3.2). Also, they represent different points in time in the series of treatments. Although of good quality, small portions of the talk of the videorecorded sessions have not been possible to transcribe either because the participants spoke in low voices or the sound from a patient using the stationary

bike or another patient talking to the assistant was being recorded instead.

The last videorecorded treatment (Video X, 5/3/84), which was followed by another four sessions before the patient stopped going to therapy, was chosen to represent a type-case of the manual treatment and appears therefore in chapters four, five, and six. The reason behind this decision is that one assumes that interactional difficulties might occur in the beginning of a series of treatments when the participants do not know each other; the treatment is new to the patient; the therapist is uncertain of the patient's response or reaction to the treatment and she does not know how much pain or discomfort the patient can tolerate. Also, it is unclear at which stage of the frozen shoulder a patient is, as discussed in chapter two. Is is the stage where pain or stiffness dominates, or has the recovery period started? By now, after four months of treatment, the patient and the therapist know each other. They have established a routine that is familiar to both of them. The treatment or rather the stretching is the same. The patient is now in the "recovery phase" (Reeves, 1975). Compared to when treatments started in January, all that varies is the daily condition of the shoulder. Thus there is little reason to believe that the treatment should not run smoothly. In addition, the actual, physical outcome of treatments is

always of interest to professionals in the field, and in this session the therapist and the patient find that they have "actually hit home," that is, the patient has gained full forward flexion (Video X, 5/3/84). This is, however, not mentioned in the therapist's progress notes, which state "5/3/84 Same as above (ultrasound and stretching). Pain today. Signature."

With data from various sources such as observations, interviews, machine recorded events, and viewing sessions, triangulation is possible. Gorden writes (1980),

> One strong recommendation made more and more often in studies of comparative method is that we cease quibbling over which method is best, use methods to fit the purposes of the study, and use multiple methods whenever possible. This use of multiple methods, each to cross-check or supplement the others, is often referred to as triangulation. (pp. 11-12)

By comparing information from various sources, some phenomena that are brought up in the interviews also appear in the fieldnotes. They are again visible in the videotapes and commented upon in the viewing session. These phenomena all circle around the purpose of the therapy, namely, to achieve increased range of motion. The success of "loosening up the shoulder" depends on the condition of the shoulder at the beginning of each session; the pain or discomfort the patient is able to endure in the course of

the treatment; and the intricate working together to achieve a result.

Issues of Trustworthiness

In addition to using triangulation to show that different data do describe the same event in different ways, as just reported, it has also been used as a technique to increase the probability that credible findings would be produced (Lincoln & Guba, 1985). Other measurements taken were prolonged engagement at the setting and persistent observations of treatment situations.

Apart from observing and recording treatment sessions of one patient and one therapist for four and a half months (see Table 3.1), another seven and a half months were devoted to participant observations at the same setting. During this time, one videotape was taken of the therapist working with another patient, a man with the same diagnosis, and observational notes were written of her working with three other women, each of them suffering from a severely sore shoulder. One of them had an idiopathic frozen shoulder, the other two had injuries that resulted in frozen shoulders. Many other sessions were observed and documented in fieldnotes of the therapist working with patients who suffered from tetraplegia, paraplegia, hemiplegia, low back pain, neck and shoulder pain, and

arthritis. Some injuries were due to accidents, while others were incurred while participating in sports. One physiatrist, a woman, was videotaped when giving manipulation treatment to three patients with back problems, and later interviewed.

Although the preliminary analysis of these data are not reported here, they have served as a backdrop against which the primary data have been contrasted and cross-checked. It was found, for example, that the physical therapist applied the same treatment technique to patients with frozen shoulders, but they were adapted to a level that was tolerable for each patient, and her instructions varied according to which phase each patient was in. The patients themselves showed discomfort in various ways; some would talk about it at great length, while others would, more or less, grind their teeth. They also indicated when pain had subsided in different ways. The man with a frozen shoulder would slap his unafflicted arm on the treatment table, as if to say, "I've had enough rest," while one of the women would say, "Now I am ready to start again."

Equally important as using a variety of data have been the presentations of the videotapes of Dr. Strauss and Kathy Davis to different audiences. Paralleling the analysis of the videorecorded treatment sessions, various segments of the videotapes that had been analyzed in detail were shown to different audiences. Practicing physical

therapists, physical therapy students, teachers of physical therapy, and other health professionals and researchers have seen various portions of the videotapes.

During these presentations, the audience was first given background information about who the patient and the therapist were, their reason for being together, where and when the treatments took place, and which part of the tape was about to be shown. A brief segment of two to three minutes was played a couple of times, then the audience was encouraged to tell one another or the whole group their impression of what they had seen, what they had noticed, what they had heard. This always led to the revelation that most of them had heard and seen different things. Many would be upset with what they saw; they would question the treatment that was given; they wanted to know more about the history of the patient's shoulder; they would find the conversation between the therapist and the patient odd. Such questions are to be expected when only a segment of an ongoing interaction is shown. The participants expressed the same bewilderment one experiences when one turns on the TV without first checking what is being broadcast and is "thrown" into an ongoing program. It takes a while to figure out what is going on. After these initial reactions were expressed, the participants started arguing their case or arguing over their interpretations. This, in turn, led to more viewings, more listening. The same segment was

shown several times, and the participants were here encouraged to have the tape stopped at whatever place they wanted. Instead of questioning or criticizing what they saw and heard, the participants were guided to look at how, for instance, the patient moved her arm, how the therapist used her hands, how the two sequentially coordinated their movements and their talk, and how the patient showed that something was hurting.

The participants were thus indirectly asked to adopt an analytic stance toward the face to face interaction they were observing. They would therefore leave with an impression which many times was quite different from their original one. They would leave with new insights about something that had been salient to them. They would leave still wondering why the patient behaved as she did, and why the therapist acted as she did.

These presentations served multiple functions. They became introductions to how one can study naturally occurring treatment situations. They became introductions to the field of communication and microanalysis. They were particularly useful to me, in that the "findings" reported by the participants served as a validity test for my ongoing analysis. This also forced me to continually scrutinize and refine my transcriptions.

An unintended, but highly valuable, consequence of some of these presentations was that some teachers of

physical therapy encouraged their students to be more focused in their observations of patient/therapist encounters during their clinical practice. One teacher told how surprised she was when her students reported that they only saw therapists treat patients, they did not see any examinations or evaluations.

Other informal reports came from practicing physical therapists, who had started to become more aware of their own actions. Many said that they had never thought of, or did not know, what they actually were saying to their patients. Others would say, "I do exactly like the therapist in your study. When the patient is grimacing with pain, I tell her how well she is doing." For a discussion of what scene in the vidotape these therapists were referring to, and its eventual therapeutic value, see page 145.

Summary

This chapter has reported on a study of one patient and one therapist whose contacts were originally assumed to last for one month but ended up lasting four-and-a-half months. The data collection process took altogether one and a half years. The chapter tells of how participants were chosen, and how original research questions were expanded as viewing sessions with the participants were carried out.

The documentation of treatment situations on videotapes allowed each scene to be revisited many times and that, by itself, generated new questions. These were tested systematically and some of the findings were confirmed using what Lincoln and Guba (1985) refer to as peer debriefings.

The therapist's opinion of this patient being a "hard" patient, as expressed in the viewing sessions, has been used as one point of departure. Tying the therapist's utterances to the particular behavior that was displayed on the tape led to looking for instances of similar behavior. I discovered that part of the therapist's perception of this patient wanting to be "in charge" could be due to a series of misreadings of contextualization cues. This will be discussed in chapter five. The difficulties or episodes of confusion to be discussed refer to lack of interactional synchrony, with the diagnosis, the unstable condition, the physical therapy treatment playing a minor role but always being present.

SECTION II

DESCRIPTION AND ANALYSIS OF THE FINDINGS

CHAPTER FOUR

DOINGS AND TALK DURING MANUAL TREATMENT

Chapter four is divided into two parts. The first one is centered around the physical actions the patient and the therapist perform, the second one around the talk that the two engage in during treatment. Part I first gives an overview of the manual treatment on May 3, 1984, then shows how it is organized into different phases. Part II follows with a description and analysis of the treatment technique itself, and the identification of the critical moment for improvement during the stretch. A characterization is then given of the two different phases. The implicit goal of the treatment is stated along with arguments that this, to a large degree, determines how the session turns out.

Part I

The Doings of the Patient and the Therapist

The treatment session on May 3, 1984 is the major data source on which the analysis reported here rests. Throughout the session the patient lies on a treatment table and the therapist sits on a low chair with wheels.

The session starts with the therapist giving ultrasound over the patient's right shoulder joint and shoulder muscles. It is followed by the manual treatment which lasts for approximately 20 minutes. The treatment ends with the patient sitting up on the table and the therapist standing. Both are pleased with the result achieved today. They joke and laugh. Before the patient leaves, agreements are made about the following session.

Before giving details about today's session, an important difference between the patient and the therapist regarding the condition itself needs to be stated. The initial knowledge a therapist has about a patient is through the prescription, which states, in a sense, that this person suffers from something, or "has" something. The patient's condition is now a "fact" for the therapist. The patient in this study has had the problem for almost a year, so it has been a "fact" for her much longer. She knows a lot about her sore shoulder. This does not mean, however, that she understands why she got a frozen shoulder in the first place, or that she has "accepted" it, or that she has accepted that an ordinary movement with her arm can cause such pain.

The therapist, on the other hand, has no difficulties in accepting the patient's condition. Her first evaluation confirms the diagnosis and lists "Presence of pain, decreased ROM, and decreased strength" as problems. The

goals to be obtained are "Relief of pain, increased ROM and strength" (Patient evaluation form, 1/9/84). In the prescription the therapist received, there is no indication of how range of motion is to be increased. That is left for her to decide. The therapeutic technique she uses is called stretching.

Returning to the session on May 3, 1984, late in the series of treatments, the patient is here close to achieving full range of forward flexion, that is, she is almost able to bring her arm all the way over her head. She has greater problems in rotating her arm outward, a motion necessary, for instance, in combing one's hair. These two directions, forward flexion and external rotation, are being worked on in this session. Not only do they alternate, they are also separated by minutes of rest.

Phases of Stretching ("Hands-On") and Phases of Recovery ("Hands-Off")

During the manual treatment two phases were found to alternate continously. One consisted of the specific treatment, the stretching, where the therapist kept one or both hands on the patient's arm. This phase is called "hands-on." The moment the therapist has placed one hand on the patient's arm is considered the beginning of a hands-on phase. It continues until the therapist has removed her hand from the patient's arm. In the other phase, the therapist does not touch the patient and that phase has,

accordingly, been called "hands-off." There are few exceptions to this rule, but the purposes of touch during phases of "hands-off" were not intended for stretching.

When looking at what the patient's arm "does" during the treatment, during the "hands-on" phases the arm is held still in almost the same position. In contrast, during the "hands-off" phases the patient moves her arm in all directions. If the patient's arm had been used as a criterion for labelling the different phases, instead of the therapist's hands, the phase would have been labeled with something like "Stationary position of the patient's arm" versus "Free movements of the patient's arm."

An overview of the phases during the manual treatment is provided in Figure 4.1. The horizontal line is the time line. It shows the length of the treatment and of each phase.

The manual treatment lasts for 19 min. 25 sec. and consists of 15 phases. There are 8 hands-off phases and 7 hands on-phases. The last hands-off phase is over when the patient sits up on the treatment table. Later on in the text the phases are referred to as hands-off I-VIII and hands-on I-VII. The patient and the therapist work in forward flexion in hands-on I, II, VI, and VII, and in external rotation in hands-on III, IV, and V.

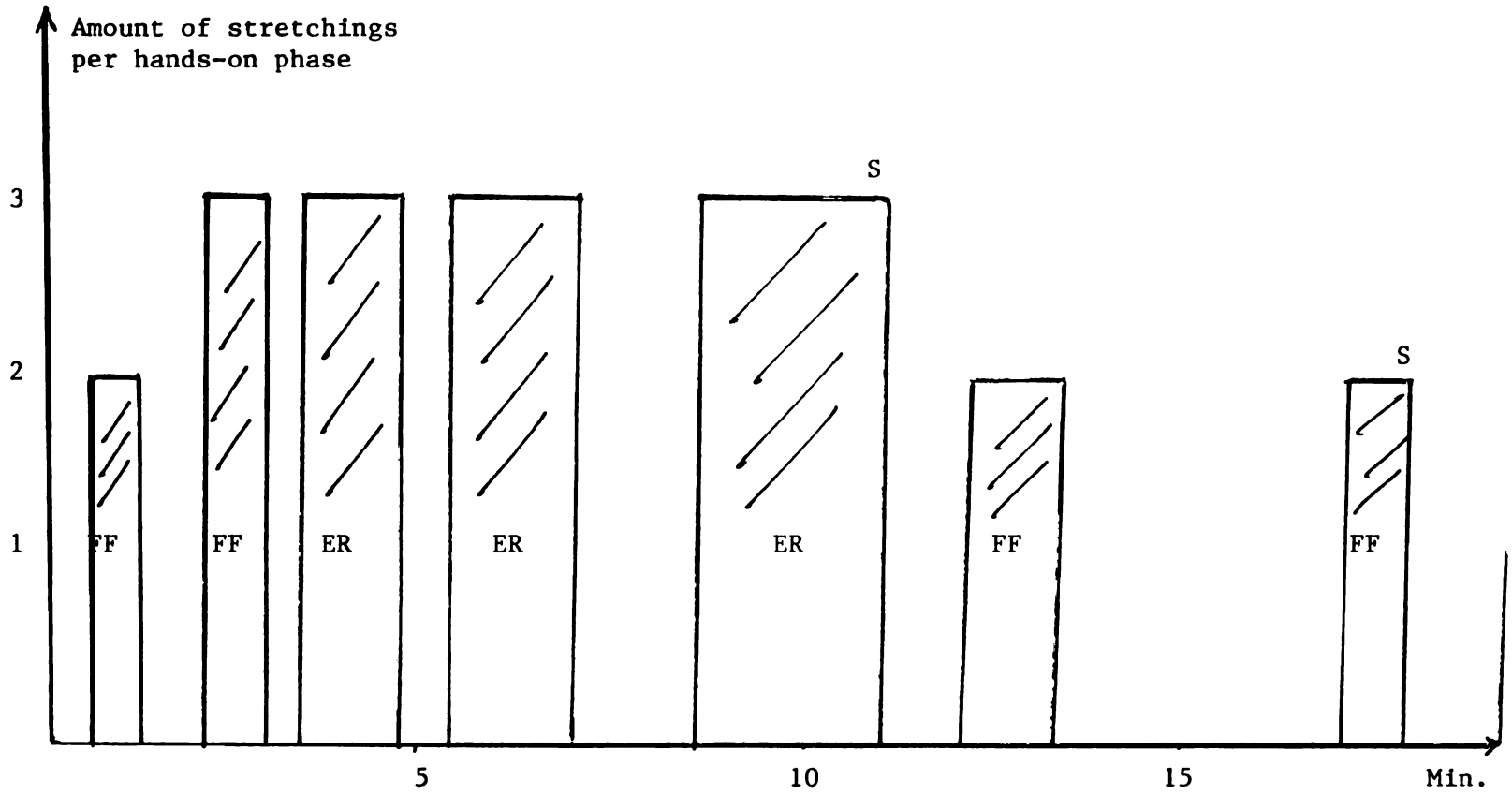

Figure 4.1 Distribution and duration of all phases during manual treatment (Video X, 5/3/84). Filled bars=Hands-on phases I-VII; Space in between filled bars=Hands-off phases I-VIII; FF=Forward Flexion; ER=External Rotation; S=Successful outcome.

Along the vertical line, the number of stretchings carried out per hands-on phase is noted. Two stretchings per hands-on phase are carried out in hands-on I, VI, and VII, and three in the remaining hands-on phases. All together 18 stretchings are performed during the seven hands-on phases. Only two of them are judged successful and acknowledged as such by both the patient and the therapist. This happens at the end of hands-on V (external rotation) and hands-on VII (forward flexion), and is indicated in the figure with an S. Direction is changed twice, after hands-on II and hands-on V.

To distinguish the hands-on phases from the hands-off phases, the former are represented as filled bars. The direction that has been worked on is indicated in abbreviated forms within each filled bar. FF is forward flexion and ER is external rotation.

Thus one can see that the session starts and ends with two phases of forward flexion, surrounding three phases of external rotation. All of the phases vary in time. The first 7 or 8 minutes of the treatment are quite different from the last 11 to 12 minutes. There are more hands-on phases, short periods of recovery, and the impression is that intense work is going on here. In the latter part of the treatment there are only three hands-on phases, with one quite long period of recovery, but it is here that the treatment is successful.

Why the session came to turn out this way is discussed through the rest of the thesis.

Stretching as a Therapeutic Technique

The manual treatment used here is a form of stretching. The primary reason for limited mobility is the contracted capsule that surrounds the shoulder joint. Secondarily, a shortening of muscles has occurred. By stretching the muscles, indirectly an elongation of the capsular fibers will be accomplished.

In order to carry out the stretching, the therapist must place one or both of her hands upon the patient's arm. The patient lies on her back on a treatment table and the therapist sits on a chair next to the patient's right side. There are wheels on the chair, so the therapist can easily move along the treatment table.

Based on the analysis of video X (5/3/84), the technique to increase forward flexion is as follows. The patient herself brings her right arm to a starting position, which means as far up as possible to a position where it does not hurt to hold the arm. The therapist then places one hand on the patient's upper arm, whereupon the patient is asked to contract certain groups of muscles, working against the pressure of the therapist's hand. No movement should take place in the joint, that is, an isometric contraction is required. When the contraction has

been held for a certain amount of time, a matter of seconds, the patient is asked to relax the same muscles, and keep them relaxed as the therapist brings the arm further up. It is important that the patient not resist the therapist's moving of her arm. Sometimes the patient is asked to actively move her arm at the same time as the therapist. Even so, it is always the therapist who brings the arm as far up as possible. Passive range of motion always exceeds active range of motion.

The therapist keeps the arm in this extreme position for some time. The patient is unable to reach this position by herself. If possible, this position becomes the new point of departure, the starting position for another stretch. If it is too painful, the therapist lowers the arm slightly. This four-step procedure is repeated two to three times before the therapist brings the arm down and the patient is given time to rest and recover. The moment the arm is lowered, the pain starts to subside.

In analyzing the stretching from the outside it looks as if all that is required of the patient is to bring her arm to a starting position, contract certain muscles, and a few minutes later relax them and keep them relaxed. When the therapist brings the arm further up, the patient is supposed to let this happen passively, to "do nothing," or, if so instructed, to move the arm at the same time as the therapist. It also looks as if the therapist only tells the

patient to first contract some muscles, then relax them. A few seconds later she moves the arm a little bit.

This seemingly simple technique demands a high degree of concentration and sensitivity on the part of the therapist, both with respect to the verbal commands she selects and to the use of her hands. The verbal commands the therapist uses are mostly "Push" or "Keep pushing" and "Relax" or "Let go." "Push" and "Keep pushing" refer both to the gradual build up of muscular tension and to the stationary phase of the contraction. "Relax" refers to the gradual release of tension and also to the state of relaxation. Many times an "Okay" replaces any of these commands. How that is to be interpreted depends on when it is uttered and what the therapist instructs with her hands. The therapist has to steer the patient's physical work by means of her hands through gradually increasing resistance; encouraging isometric contraction without breaking or defeating it; and lightening the pressure and waiting for the relaxation to occur while supporting the arm. When she has felt the patient "let go," she moves the arm to the point where limitation is again felt to occur.

The therapist thus holds her hands in the same place through the whole sequence. The difference lies in the amount and kind of pressure she uses. When the patient contracts her muscles, the therapist exerts so much pressure (resistance) that the patient cannot perform any

motion in the shoulder joint. During the relaxation the pressure is reduced, and during the stretching itself pressure is increased. The therapist moves the arm in the opposite direction from the direction the patient has been working in.

In spite of having done the same stretch in seven sessions, the patient is still confused about what constitutes one complete stretch. In one session (Video V, 2/1/84) the therapist says, after the patient has brought her arm to maximal forward flexion, "We're gonna do oh do our usual routine." She continues, "Move back. Three times. Now the three times mean you. You pushing. You relaxing. And me pushing." The patient says she understands but adds " .. my end of the third is your? What I thought was the end of the third is the beginning of the fourth." Now, "the end of the third" is the moment the therapist is keeping the patient's arm at the newly achieved maximal position. This is exactly where the next sequence starts, that is, where the patient is supposed to contract her muscles again.

A few seconds later, as they go on working, the patient asks "Is that one whole one or is it one and a half?" The therapist replies "Well this is the start of the second one. Whenever you push you're starting another one."

From this it can be inferred that the patient has difficulties in discriminating between the pressure the

therapist applies when she moves the patient's arm and the pressure the therapist uses when providing resistance.

What do the patient's comments stand for? Do they mean that the patient incorrectly perceives the therapist's pressure, when keeping the arm at the new position, as an indication to start contracting her muscles? Or is it that the patient has difficulties "knowing" whether she has contracted her muscles voluntarily or involuntarily so as to "safeguard" them? Muscle spasm is known to serve as a protective phenomenon to prevent movement that is painful (Cailliet, 1981).

The therapist's comment, "Whenever you push you're starting another one," gives, in a sense, the responsibility for initiating each new sequence to the patient, while the patient seems to be considering the commands from the therapist's hands to be the "starter."

The therapist's explanations are another way of saying to the patient:

> You do not have to think here. All you need to do is to follow my instructions. That means just contract your muscles to push against my hand, then stop doing that and let the muscles relax. Then I will do the rest.

But the patient says:

> I am following closely what you are doing. I keep track of what is happening by counting the number

> of stretches we do or you make me do. I am thinking at the same time as I respond to your instructions.

This example has been selected to demonstrate three features. First, the physical closeness and the attention that is required by the therapist and the patient to carry out the stretching. Second, the patient's eagerness to do what is asked of her correctly. Most of the direct questions the patient asks the therapist, across sessions, concern just that. Third, it shows that the patient pays close attention to what is going on, but that she experiences the stretching in a way that is different from what the therapist intends. What the therapist considers one complete stretch is counted as two by the patient.

We now turn to the moment in the treatment that is critical for improvement.

The Critical Moment During the Stretch

The time when the therapist holds the patient's arm at the maximal position is the time and the situation where improvement can occur. It is the time when the capsular as well as the muscular fibres are elongated. This extreme position of the arm can be very painful because of the activation of nerve endings, sensitive to tension, in the capsule. What Cailliet (1981, p. 85) calls stretch pain occurs when forceful movement is attempted.

The success of this critical moment depends on how much discomfort the patient can endure and how sensitive the therapist is in judging the patient's level of tolerance. If the therapist holds the patient's arm for too long in the extreme position, it will take longer for the pain to subside and treatment time will be reduced.

In viewing sessions, the therapist and the patient separately comment upon the same moments in the treatment, indicating that there are certain instances they are keenly aware of. One of these is the time when the patient is supposed to be relaxed and let the therapist move her arm as far up as possible.

The therapist says the following:

> It is my arm when we stretch it and then she can have it back to relax. And she knows that. But basically, she is fearful of the pain and I don't know whether she trusts me enough or not, but it is the fear of the pain that she would like to keep the arm to herself and not let anybody mess with it. That really causes a problem in her own recovery, because when that fear is there and the tension, then the muscles are not as relaxed and you don't give as much for the stretching purpose and in general, get better slower. (Viewing session, video V, 3/8/84)

The patient talks about the same phenomenon in this way:

> Well the thing is, because you <u>know</u>, that as soon as you let go that she is gonna pull it up and it's gonna get to a certain point and it's gonna

> hurt.... And it's hard to relax when you know if you relax, that's a signal for them to hurt you worse ((laughs))..... As long as I pushed I was safe. As long as you push against her arm you're safe. And you know the minute you let go, then she is going to hurt you some more.... And to know that, doing what you're told to do, is then going to bring on something horrible. Which is moving it further. (Viewing session, video I, 8/1/85)

In the therapist's description, the two phases are separated according to who has the right to do what with the patient's arm. As a therapist, she claims ownership over the patient's arm as long as she has her hands on it. But she cannot carry out the treatment properly unless the patient relaxes her muscles. In a sense the patient is attributed the power to prevent progress by not relaxing.

The patient, on the other hand, is well aware of her reluctance to and difficulty in letting her muscles go. She knows that when this happens, she no longer has control over her arm--the therapist does. Besides, there is no way the patient can hide her reactions from the therapist. This is clear in another session. When the patient performs internal rotation, assisted by the therapist, the therapist says with rising intonation "Can you just relax?" The patient exhales and says "I always think I am relaxed. [..] Just because I'm two inches off the table that makes you think I am not relaxed? Hm?" (Video I, 1/18/84). Both laugh. Thus the therapist sees what happens; she hears the patient exhale, and her hands know what is happening with

the patient's arm. The patient's doings during both the hands-on and hands-off phases are closely monitored by the therapist. But during the hands-on phases, the patient is literally in the hands of the therapist.

Characteristics of a Hands-On Phase

Characteristic for a hands-on phase is that this is where real work takes place. This is where the patient's arm is kept in the same position most of the time. This is where the stretching is carried out. It does not mean, however, that work starts and stops with the therapist's placement and removal of her hands, because the therapist can put both her hands on the patient's arm and keep talking about some TV program. She can also, after a stretch, start to bring the patient's arm down, stop halfway, and rub the patient's shoulder before she lets go of the arm. The patient can decide when to place her arm in the proper starting position, but she cannot decide when to bring the arm down. That is up to the therapist. The moment the therapist has removed her hands, the scene changes. A hands-off phase has started.

Characteristics of a Hands-Off Phase

At the beginning of each hands-off phase the patient moves her arm slowly. It is a way to get rid of the stiffness the stretching itself inadvertently led to.

Rarely is she instructed to do this. The patient moves her arm in all directions, bends and stretches the elbow, reaches toward the ceiling. She stays away from getting close to the position the arm was held in during the preceding hands-on phase. Temporarily she brings the arm down on the table to rest. During the hands-off phase there is recuperation, rest, assessment of what has happened during the previous phase, and preparation for the next one. This preparation can be described as follows: The patient has "warmed up" by moving her arm around before placing it in the starting position; her arm is held still in that position; the therapist sits close to the patient and has stretched or is stretching her back; eye contact has been established and disengaged; the patient now faces the ceiling; a conversation is finished or is about to be finished. The next hands-on phase is about to begin.

How a Session Comes to Be Organized Around a Specific Treatment

The session thus becomes organized into phases of hands-on and hands-off. The ultimate goal of the treatment itself is to accomplish a physical change in the patient. It is clear that "something is going to happen" in the session. The whole treatment is geared toward "loosening" up the patient's shoulder. Both the therapist and the patient concentrate on this. The therapist continuously, and in various ways, encourages the patient to endure the

discomfort of the treatment and the patient says, "If it hurts it must be good for me" (Video V, 2/1/84).

The treatment as a whole can be described as a series of attempts to "loosen up" the shoulder, attempts that can be successful or not. There is a gradual buildup to achieve a positive result in that at least two stretchings are carried out within each hands-on phase. The outcome of each single stretching in a sense drives the treatment forward. Based on the patient's reactions and on what has happened in the shoulder, it can have loosened up a little or it can have remained stuck, the therapist decides what to do next. She can either do another stretch, or she can bring the arm down, let the patient rest and then make another attempt. A third alternative is to work in another direction after a few minutes of rest.

The outcome of each complete hands-on phase can also be characterized as a success or a failure depending on what has actually happened in the shoulder. Both the patient and the therapist acknowledge verbally that the shoulder indeed has "loosened up" on two occasions (Video X, 5/3/84). Characteristic for most sessions is that there are many attempts, but few of them are successful.

Looking again at Figure 4.1, one sees that the working direction has been changed twice in the same session. The analysis of when changes have taken place and when working directions have been maintained shows that the therapist

has followed these principles. A change in working direction can take place either because there have been too many failures or because a positive result has been obtained. The decision to continue working in the same direction is based on the same premises. Either there has been a series of failures, and the therapist does not want to stop before something is achieved, or something has been achieved, but there is still a chance that more can be gained.

The patient never explicitly suggests either a change or a maintenance of working direction. But her contribution to continuing working in the same direction should not be underestimated, as she many times places her arm in a starting position without being instructed.

The therapist's seemingly arbitrary changes were not explicitly expressed as a problem by the patient, but in a viewing session she reports,

> I don't recall.... that I had the feeling.... that there was a pattern that 'Now we've gotten two of 'em out of the way, there's only one to go.' I don't recall that I had the feeling of seeing this pattern, that first we do this, then we do this, then we're gonna do that and then it's over.
> There was one I disliked a lot. I think it's the over-the-head thing that I hated the worst. And then sometimes, after it had gotten kind of loosened up, she would say she wants me to do more of 'em. And I would feel that I had already done them and shouldn't have to do 'em again. But she would say 'But we've got it so nice and loosened up' and I'd usually go ahead and do more. (Viewing session, 8/1/85)

In this excerpt we see that the patient perceives the therapist to solely decide how many stretchings to carry out. There is no way she can keep track of what is going to happen. But, again, she is ready to do what is asked of her.

To summarize, the therapist's hands are used as instruments in the treatment. Along with commands and encouragements the patient's arm is brought to a position she could not have accomplished herself. Since this position is uncomfortable, the arm cannot be held there for too long. The moment the arm is brought down, pain starts to subside. Thus a pattern is established where phases of stretching alternate with phases of rest. All phases vary in time.

A rough analysis of "who is in charge" during the alternating phases can be summarized in the following way. It looks to the researcher as if the therapist has the power to solely decide when to bring the arm down and, consequently, the number of stretchings in each phase. It is true that it is not the patient herself who lowers her arm, but her influence upon the therapist's decision should not be underestimated. The patient's reactions and responses to the treatment are fully displayed during the session, in words, sounds, and facial expressions. This in turn leads to verbal negotiations preceding each lowering

of the arm, particularly during the last four hands-on phases.

When looking at Figure 4.1 one can, for instance, assume that hands-on V, which consists of no more stretchings than in the other phases, occupies so much time because the therapist prolongs the critical moments. And the extremly long hands-off phase VII might be due to the patient needing an extra long time to recover from the previous hands-on phase. However, it is not solely the length of the specific treatment and the time for recovery that is displayed in the figure. Rather, talk can cause phases to be extended.

Part II

Talk During Manual Treatment

The analysis of what is said and talked about during the manual treatment on May 3, 1984 starts with reporting how much time is occupied by talk and by silence, and how much the therapist versus the patient talks. This estimation is arrived at by tallying first each turn of talk, then each sub-unit or functional unit of each turn, as described in chapter three. The assumption that the therapist has the floor during the hands-on phases is discussed. Then the form and the function of the patient's

and the therapist's speech are analyzed and characteristics of their speech provided.

The content of the talk has been studied and is reported in three sections. The first one relates to what the patient reports about her shoulder, the second the theme the patient brings up most frequently and how the therapist responds to this, and the last one concerns how the two comment upon what is happening during the ongoing treatment. Part II concludes with the assertion that the therapist considers that they are doing very well, while the patient is not pleased at all. Strikingly different interpretations are thus revealed.

Time of Talk and Silence

All the hands-off phases last together 10 min. 16 sec. Out of this 8 min. 3 sec. is spent talking and 2 min. 13 sec. is spent in silence. Silence means here absence of sounds, not absence of movements. Appendix G gives an example of what happens during 10 sec. silence in hands-off VI. The mean for a hands-off phase is 1 min. 17 sec., the median 1 min. 4 sec. The hands-off phases range from 3 min. 44 sec. to 29 sec. The hands-on phases last together 9 min. 9 sec. with talk taking place during 4 min. 54 sec. The remaining 4 min. 15 sec. is spent in silence. The mean for a hands-on phase is 1 min. 18 sec., the median 1 min.

16 sec. The hands-on phases range from 2 min. 36 sec. to 38 sec.

Talk takes place throughout the phases, while physical contact is restricted mostly to the hands-on phases. The talk is first categorized and tallied as turns (see Table 4.1), then as functional units (see Table 4.2).

Table 4.1 Distribution of the Number of Turns Occurring in all Hands-Off and Hands On-Phases

	Hands-Off	Hands-On	Total
Therapist	64	61	125
Patient	68	55	123

This table shows that there is virtually no difference between the number of turns uttered by the patient and by the therapist when they are added up. The patient has a few more turns in the hands-off phases, the therapist a few more in the hands-on phases. When looking at the length of each turn or how much is uttered within each turn, there is however a difference (see Table 4.2).

Table 4.2 Distribution of the Number of Functional Units Occurring in all Hands-Off and Hands-On Phases

	Hands-Off	Hands-On	Total
Therapist	108	144	252
Patient	101	69	170

The only quantitative difference between the patient's and the therapist's talk is to be found in the amount of functional units during the hands-on phases. The qualitative analysis of the utterances shows that the functional units can consist of complete sentences; incomplete sentences; single words; sighs ("Ah"); backchanneling signals such as "Uhum," "Hm" and audible exhalations. The therapist expresses more than twice as many functional units as the patient, all done through words and backchanneling signals. Even during the hands-off phases this is how the therapist speaks. The patient, on the other hand, uses expressions such as "Ah," "Oh" and audible exhalations in 25 cases of 69 (36%) during the hands-on phases, but during the hands off-phases this happens only 6 times out of 101. Thus there is a difference in the way the therapist and the patient speak during hands-on phases. The patient not only speaks less, that is, uses fewer functional units, she also uses a different language, such as vocalizations.

These differences in talk during hands-on phases support the assumption about the therapist's dominance during the hands-on phases, when judged from the transcription of the vocal communication. It certainly looks as if the therapist is in charge. When extending the analysis to include the non-vocal behavior, we find that there is a regular giving and taking of turns here as well.

The difference in the number of functional units is due to the fact that the therapist's audible instructions are tallied, while the patient's silent, physical responses are not. Thus there is a dialogue between the patient and the therapist even during the hands-on phases. In fact, a particular treatment dialogue begins to emerge from this analysis. It can be described as the therapist instructing the patient, verbally and physically, to do something. The patient responds immediately with her muscles, but also with comments about how she feels. This happens particularly when the therapist moves the patient's arm. One third of these "comments" are vocalizations (Trager, 1964) indicating that the patient is in pain.

Temporarily setting aside the importance of including non-vocal behavior and paralanguage when analyzing talk, the study now turns to categorizing solely the vocal communication. First, a description of how the talk has been categorized according to style is presented, then the main features of the therapist's and the patient's talk.

Categorization of Styles of Talk

The stretching is central to the session. The session itself can be described, in a reduced form, as "the therapist tells the patient what to do; the patient does as instructed; the therapist evaluates the patient's performance." It is important to note that the patient is

not required to respond in words to the therapist's instructions, except during the physical examinations the therapist performs. Still, the patient does talk. What is it, then, that she has to say? What is characteristic of her talk and of the therapist's talk? What is the function of their talk? It is important to take a close look at the talk itself, since it informs us about the relationship between the patient and the therapist.

When looking first at the way the two talk, both use a style defined here as "making conversation." This term "making conversation" has been selected as representative of the most ordinary way people talk. One feature of ordinary talk is its spontaneity; another can be the framing used, for instance, when retelling an event or relating a narrative; a third the lack of imperatives. Implicit in the use of this term is, however, its association with the fact that any utterance can be the beginning of a conversation. An ordinary statement can become a short exchange of a couple of phrases, or it can turn into a lengthy discussion. Whatever the outcome, it depends upon the "uptake" of the interactional party.

Another implicit feature of the term "making conversation" is that conversation is a noun that stands for an activity, an activity consisting of people talking about something. Thus a topic is always involved. Any sentence contains or has a topic. Every conversation has

one or more topics, but this is always worked out in the process of talking. In line with this, instead of saying, "The therapist or the patient starts to talk about _____," the term "takes initiative to conversation" has been used, even if it turns out that the conversation itself is very brief.

The patient's style of talk is represented only in one category, "making conversation," while the therapist's style of talk appears in three. This discrepancy is largely due to the therapist's occupational role, and the categorizations of the styles of her talk are based, partially, on the concrete tasks she performs (see Table 4.3). In other words, the function of her talk is connected to the particular activities that take place.

Table 4.3 Categories of Styles of Therapist Talk and Patient Talk

Therapist Talk	Patient Talk
A. Giving instructions and feedback related to the treatment	A. Making conversation
B. Asking questions and giving feedback while doing examinations	
C. Making conversation	

Tables 4.3 and 4.2 both show differences in the patient's and the therapist's talk, with the therapist having longer turns or more functional units than the patient and

shifting styles of talk. Figure 4.2 indicates that the therapist's styles of talking vary according to the activity at hand, but that the patient's style remains the same across activities. As Figure 4.2 includes the category "taking initiative to conversation," the patient's role becomes more salient. Omitted in the figure are, however, the responses by the patient and by the therapist to each other's utterances, but they are discussed in the text. Since references will be made to Figure 4.2 throughout the remainder of the thesis, additional remarks are in order.

Each phase in Figure 4.2 is marked exactly as in Figure 4.1 with respect to length of time. In each hands-on phase, where the stretching occurs, there are instructions and feedback. In addition, they appear in four hands-off phases. Three examinations are carried out during this session, one of them at the very end. The therapist takes initiative to conversation only in three phases, all of them during the second half of the treatment. Note that her initiatives co-occur with the episodes of confusion. This will be discussed in detail in chapter five but also in the following section.

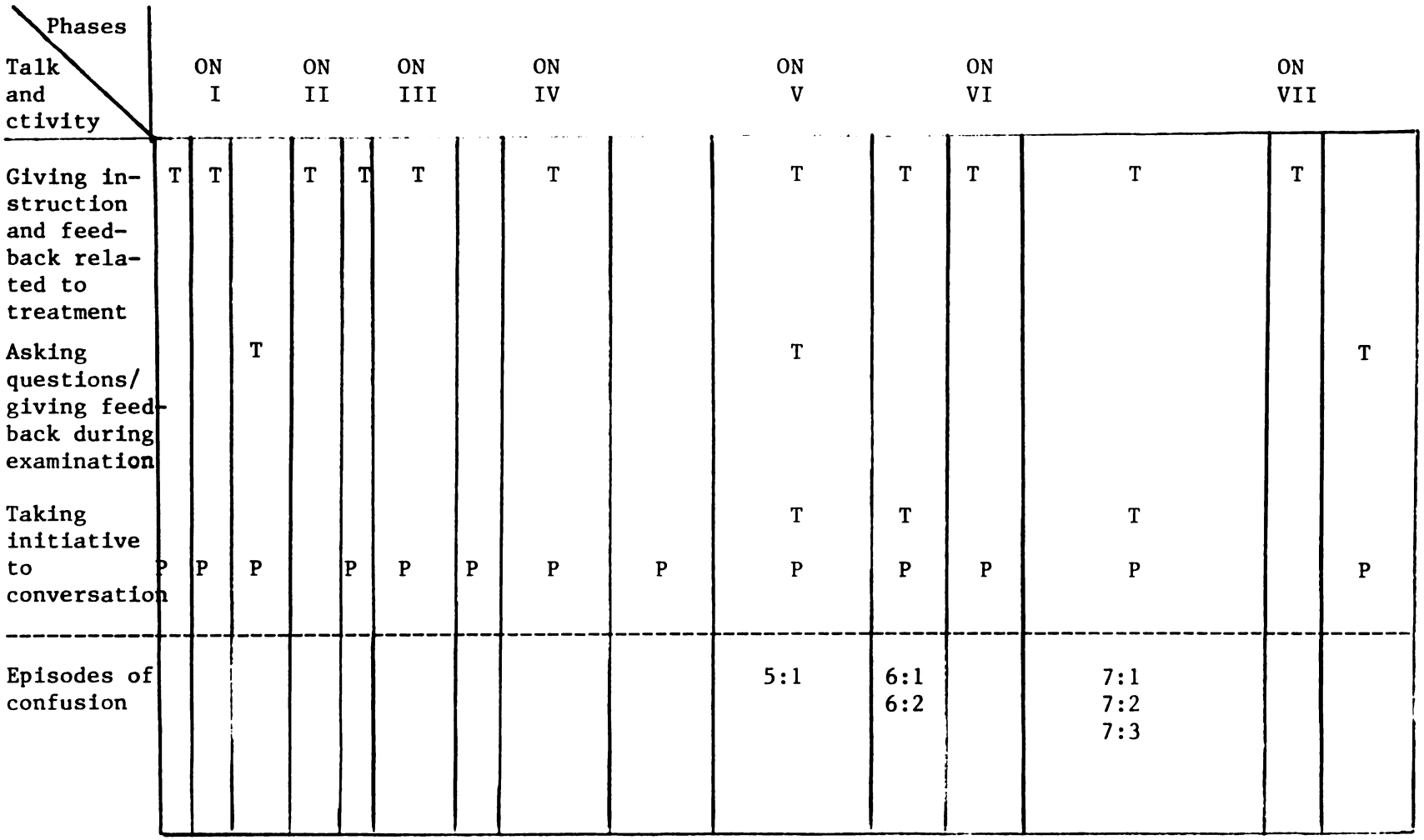

Figure 4.2 Styles of talk and type of activity and their occurrencies. Locations of Episodes of confusion according to phase. T=Therapist; P=Patient; ON I-VII= Hands-on phases I-VII; Space in between hands-on phases=Hands-off phases I-VIII

Therapist Talk: Its Styles and Functions

The styles of the therapist's talk are labeled as giving instructions and feedback; asking questions and giving feedback while doing examinations; and making conversation.

The function of the talk that is related to the treatment, that is, the category "giving instructions and feedback," can be divided into three subcategories.

1. Commands in preparation for the stretch with the specific purpose of finding a "painfree starting position"

2. Commands related directly to the stretch and addressed to the patient's shoulder, like "Push" and "Relax"

3. Evaluative comments on the patient's performance

All three are illustrated in the following example, "Yeah. That's good. It really looks better than when we started out. Let me get it out to the side. Is that painful? At that place? You do better at this one? [....] Okay. Go push" (Video X, 5/3/84). The evaluative comments are: "That's good. It really looks better than when we started out." The commands to prepare for the stretch are: "Let me get it out to the side. Is that painful? At that place? You do better at this one?" The commands related to the stretch itself are: "Okay. Go push."

The category "giving instructions and feedback" occupies almost 2/3 (62%) of the therapist's functional units during all phases. Most of them are commands and evaluative comments regarding the stretching itself. They are to be found in every hands-on phase. Instructions also are given in four of the eight hands-off phases (see Figure 4.2). Three are preparations for the following hands-on phase. The first one (hands-off I) indicates the transition from the ultrasound treatment to the stretching. The second one (hands-off III) and the third one (hands-off VI) are related to changes in working direction. In hands-off VII the instructions are of a different kind. One is an instruction to the patient to rest; two are related to finding a painfree starting position.

The commands and the evaluative comments that are expressed in the hands-on phases are coordinated with the messages the therapist gives with her hands. Her reliance upon the hands is to be inferred from the utterances "It's good. [...] Okay. Let's start there. [.....] Okay and relax. And roll back" (Video X, 5/3/84). Instructions could also have been coded as "responses" to something the patient does. One can say that the therapist does talk back to the patient's physical actions, as in "Roll back. Let it go. Reaching back. Let it go. It's still going. You're doing real well." The phrases "Reaching back" and "Let it go" are instructions as well as responses to the patient's

muscular contractions and relaxations. The phrase "It's still going" is uttered immediately after the patient has turned her head and looked at her arm. When the patient a second later grimaces with pain the therapist says "You're doing real well."

This last phrase by the therapist is worth a special commentary. It is uttered, with emphasis and in an appreciative tone of voice, exactly at the same time as the patient looks as if she is experiencing the worst kind of pain. She has her eyes closed, her whole face wrinkled. The patient is not doing well at all. She is in pain. The contrast between what the therapist says and how the patient feels is striking. One interpretation is that the therapist is not empathetic with how the patient feels; she ignores it. Another is that she is trying to encourage the patient to endure the pain a little bit longer, because she feels something is happening with the patient's shoulder. A third is that she in fact is instructing the patient to "hang in there" but using positive words.

As each utterance can have multiple/simultaneous functions, it is difficult to distinguish whether an utterance is only an instruction or only a feedback or only a comment upon how things are going. The category is therefore composed of both instructions and feedback. The expression "It's good" can be a positive feedback, but it can also be an instruction to stop. It is worth noticing,

however, that some, as in the previous example, can be distinguished as "praise." Some are uttered directly after a stretch is completed, but most of them are uttered at the end of a stretching sequence, when the patient reveals her discomfort. The function of these can be to ask/instruct the patient to endure the pain a little bit longer. Talking takes time and a strategy the therapist might use is to merely utter a phrase to prolong the critical moment.

The commands regarding the starting position occur three times and occupy only eight functional units. However, they are included for three reasons. Their functions are ambiguous. They are expressed at the end of the session. It is something the patient should know and does know about after four months of treatment. The first one is expressed in hands-on VI, the two others in hands-off VII (see Figure 4.2). Besides, they are all involved in the "episodes of confusion" to be discussed in detail in chapter five.

Characteristic of the second category, asking questions and giving feedback while doing examinations, is that the therapist asks her questions at the same time as she examines a particular area of the patient's shoulder with her hands. The purpose of the therapist's talk and doings here is to find out something about the patient's shoulder. This is different from the talk that is related to the stretching, which is to make the patient do

something. For example, the expression "Not hurting that bad Yeah Not hurting that bad right there," indicates that the therapist wants, and gets, some information from the patient. She gets this both through asking and through touching. She gets the answer she seeks quite fast. Imbedded in the way the therapist phrases her questions and in her fast feedback is that the therapist is almost sure that "It is not hurting that bad right there," that the pain in that particular area is not a serious problem for the patient, or that the therapist needs to do something about it.

It is as if the therapist, at the same time as she elicits information from the patient, has a conversation with the situation itself and says, "I'm just checking. I want to confirm that my perception of your status is correct."

Three brief examinations are carried out, two during hands-off phases and one at the end of a hands-on phase (see Figure 4.2). The first one concerns a sound that is heard from the shoulder joint as the patient moves her arm (hands-off II); the second one pain in the back of the patient's shoulder (hands-on V); the third one a comparison of mobility in forward flexion between the patient's arms (hands-off VIII). Although brief, these examinations serve other important functions. This will be discussed in chapter five.

The third category, making conversation, refers to another style of the therapist's talk. The topic of the talk here is not directly related to the stretching itself or to the examinations, but includes bringing up issues outside of the ongoing treatment as well as talking about future plans. Part of this category is also the way the therapist talks as she is being drawn into conversations by the patient. Of importance are the three occasions when the therapist initiates conversations, as they deviate from her most ordinary way of talking. The first topic, in hands-on V, concerns a TV program: "Well the tune that goes through my head is 'This is it.' You know that half an hour program." The second one, in hands-off VI, is a change in the present treatment plan: "You do good with rest in between." The third one, in hands-off VII, is a suggestion to stop the ongoing treatment at a certain point in time: "It doesn't matter to me whether we do it another time or not." The responses to what the patient says, which also are part of the style of making conversation, occur every time the patient brings something up. That happens in all but two of the fifteen phases. How the therapist responds to some of the patient's comments is discussed under the heading "The Theme Brought Up Most Frequently by the Patient" and is reported in Table 4.4.

The Form of the Therapist's Talk

The function of the largest part of the therapist's talk has proved to be giving instructions and feedback. That happens in eleven out of the fifteen phases. The commands related to the stretchings are, with only a few exceptions, brief imperatives. The examples are many, e.g.,

Go push. Give it a real hard push.

Rela::x. Reach.

Keep breathing.

The commands related to finding a painfree starting position are mostly interrogatives, such as "Which spot do you want?", with a rising intonation at the end of each functional unit, "Is that painful? At that place? You do better at this one?". One command is formulated very indirectly, like "Sometimes it's finding the right spot." Another is an imperative, "You pick out the spot that you think is gonna do best." The feedbacks and the evaluative comments are statements or declaratives.

As reported earlier, many of the "questions" the therapist asks are just another way of giving instructions. However, a summary of the therapist's talk that has the form of a question will be given. Questions dominate during the examinations.

Is it my hand or your shoulder? (hands-off II)

Not hurting that bad? (hands-on V)

How far does that one go? (hands-off VIII)

Questions are also used before the stretching starts (hands-on VI and hands-off VII), that is, in the search for a "painfree position," and towards the end of the hands-on phases when the patient displays some discomfort, for example, "Wanna have it back?" (hands-on I).

Two other questions which fall outside of these instances are significant. Both are uttered by the therapist immediately after the patient has made a slight grimace of pain which is not related to any critical moment of a stretching. It happens long after a hands-on phase is over. The first one, "Is it tender there?", is uttered at the beginning of hands-on IV as the patient is touching the upper part of her right shoulder and at the same time is making a painful grimace. The therapist has placed her right hand on the patient's arm but the stretching has not yet started. The patient answers with a slight nod. Later on in the treatment both return to this question.

The second one, "You want me to push in that direction?", is uttered when the patient, during hands-off VII, moves her arm horizontally, while showing some discomfort. The patient shakes her head and says "I do that with my weight."

With these examples it is useful to point out some important aspects of the therapist's questions. First, her questions are brief, simple, and direct. They require only a simple answer. All but two of the questions the therapist asks throughout the session are to be answered with a "yes" or a "no." This feature is characteristic of all the questions the therapist asks. Second, the questions seem to be uttered incidentally, revealing most of all that the therapist has "heard" that the patient has communicated something strictly behaviorally. Or the questions can be interpreted as if the therapist is merely asking the patient for confirmation that she has perceived properly what the patient already has said--without a word. This is also typical for the questions the therapist asks during the stretching itself. In other words, there are few "true" questions. There is little information the therapist does not already have access to.

While her questions may not seek new information from the patient, they are signs of the therapist's attention to the patient's discomfort even when it is not caused by any stretching. The rule is that pain during the stretching itself is natural or to be expected. If the patient hurts on other occasions, it must be probed into. Third, even if the patient is required to respond with a simple yes or no, she goes on to provide more information or she qualifies her answers. All the questions the therapist asks, apart

from those that are part of the stretching itself, are taken seriously by the patient. She interprets them as true questions, that is, she assumes that the therapist wants certain information from her, and tries to answer them as correctly as possible, even if time is not allotted at the moment the question is asked. This is characteristic for this patient's way of attending to questions throughout the sessions.

Typically, the form of the therapist's talk during a hands-on phase shifts from, for example, telling the patient what to do, to giving positive feedbacks, to asking the patient to endure the critical moment a little longer (see Appendices F and G). Besides, the therapist is interrupted by the patient's comments and has to respond to them. When looking at the session as a whole there is a difference between the first and the last hands-on phase. During the first three hands-on phases the therapist responds fast to the patient's expression of discomfort and brings the arm down, without discussion. During the following hands-on phases, she tries to extend the critical moment in that she gives lots of praise, which is uttered exactly when the patient grimaces with pain and can't speak normally but has to whisper. She also asks the patient, directly or indirectly, to go on. For example, "We can stop and then we can go a little further. You wanna do that?", and "Can you do one more time?". What is noteworthy is the

shift in the therapist's talk from telling the patient what to do, to asking her to go on, to giving praise. As the therapist ceases to use imperatives, it looks as if she is ready to discuss with the patient or negotiate whether to continue or not. The style of the therapist's talk has shifted from giving instructions and feedback to having features of the style of making conversation, but it is questionable whether the underlying urge--to continue until the shoulder has loosened up--has been altered or not.

A conclusion about the therapist's talk is that it is to a large degree instructional. The use of imperatives, and the fact that more than twice as many functional units are uttered by the therapist, strengthens the impression of the therapist being in charge during the hands-on phases. In contrast to the therapist's "instructional" talk stands the patient's "conversational" talk to which we now turn.

Patient Talk: Its Style and Form

It needs to be stressed, again, that the patient is seldom requested by the therapist to respond in words. Rather, her responses are to be non-linguistic. Apart from complying with the instructions she is given, the patient also talks.

The style of the patient's talk has been categorized as, solely, to be making conversation (see Table 4.3). The form of her talk is mostly statements or declaratives. The

comments she offers occur throughout all phases, except in hands-on II and hands-on VI (see Figure 4.2). The patient brings up one issue after another, and all but one circle around the same theme--the shoulder. In addition, the patient responds to what the therapist says in every phase. It is important to examine the content of the patient's talk--how she talks about her shoulder, what she has to say about her condition--for several reasons. First of all, she talks a lot about her shoulder, but does so in brief sequences. Second, the therapist has not asked for this information, so what the patient brings up can be thought of as voluntary information. Third, it reveals something about how the patient experiences her condition, and about her knowledge. The therapist's replies might function as encouragement for the patient to go on talking or the reverse.

The function, intended and/or unintended, of the patient's talk is discussed throughout the remainder of this chapter and in chapter six.

What Does the Patient Say About Her Shoulder?

When looking at what the patient has to say about her shoulder, the impression is that she presents various dimensions of her experience of a frozen shoulder. Her comments can be grouped around the following concerns:

The present condition of the shoulder, including when it hurts, where it hurts, and what kind of pain there is.

Plausible explanations/reasons for today's condition.

The results of the ongoing treatment.

The effect upon her of receiving physical therapy.

The exercises done at home.

To be more specific, the patient states how the shoulder feels, "It's kind of sore." or "It's just not springy." She gives examples of when it hurts: "It was tacky when I tried to open the door this morning." and "Yeah it was real sore in class when I was lecturing. I had I kept I had to keep rubbing my shoulder." She describes where the pain is located and what it is similar to: "Ah. It's right in here. Well that's better. I can feel it crunching there and I can feel it move. Some stuff down underneath it's kind of rubbing together." She provides plausible explanations in voicing her concern over today's soreness: "Maybe the difference is that it is just hard for me to tolerate two days (of treatment) in a row." She comments upon the result of the ongoing treatment: "Good stretch hm?" and "It got better." She tells what it is like to receive treatment: "Uh. It's tiresome." She makes comparisons between the last two days regarding the use of a pulley at home: "Cause yesterday when I woke up. It was just straight up. I could pull that thing down without even

having to reach. And this morning I didn't stretch to _____. Ah." She tells when and why she uses a weight at home: "I do that with my weight. To stretch it over because I feel it pull. If I can feel it pull it must be tight. So I just practice. I do that when I watch TV." She refers to a joke between the two about "a new word," which turns into a lengthy discussion: "Yeah. Think of something new." Some of these themes keep coming back.

Even if the therapist has not asked for any of this information, each statement by the patient can be looked upon as a reply to something the therapist <u>might</u> have asked. Those "questions" could be formulated in the following way:

How does the arm feel?

What do you think of the progress?

How do you interpret the lack of success?

How do you like to come here?

Why do you think the arm is the way it is today?

Do you think it is you or the treatment that is the cause of poor progress?

How do you think coming here affects you?

What is the difference between yesterday and today?

What else do you do, apart from coming to therapy, to maintain/increase the mobility of your shoulder?

The patient's comments can also be interpreted as providing information to the therapist; as signs of disappointment with the stiffness of the shoulder; as attempts to understand what has gone wrong this time; as indirect appeals for the therapist's opinions; as a critique in disguise of the treatment itself or this week's daily treatments. Also, to tell about how the shoulder has reacted or "behaved" in between treatments is a way to fill a gap in the therapist's knowledge. By eliminating this lack of knowledge, both will know the same thing about the shoulder and, in a sense, be more equal. Many of the comments can also be forms of apology or excuses for the poor results of the stretchings. As reported earlier, only two of the eighteen stretchings are considered successful by both the patient and the therapist. In other words, the patient seems to take responsibility for the unsuccessful trials.

Other alternative interpretations of what the patient says, and the consequences the answers have, will be discussed later on in this chapter.

Conclusions about Therapist Talk and Patient Talk

In concluding this section about therapist talk and patient talk, it seems that "giving instructions and feedback" represents the therapist's dominant or primary mode of speaking, while "making conversations" is

characteristic for the patient. Common to both of them is the style "making conversation." But the therapist has in her repertoire additional styles that can be called registers. That is, part of her talk is strongly associated with her occupational role, with her "doing physical therapy."

Regarding the form of the patient's and the therapist's verbal exchanges, assertions about the state of affairs dominate, rather than questions or interrogatives.

Their secondary, or not so obvious modes of speaking, are to be found in their replies to each other. That is, the patient responds physically and immediately to the therapist's direct instructions and the therapist acknowledges, in various ways and at different points in time, every statement made by the patient.

This pattern does not, however, exclude topic initiation by the therapist, as seen in Figure 4.2, or non-verbal instructions by the patient. The term "instructions" here refers to all the times the patient brings her arm to a starting position without being told. By doing this, the patient indicates that she is ready to start another stretch and this makes the therapist resume her work. The position of the patient's arm can thus serve as a proposition. Four of the seven hands-on phases are initiated in this way by the patient. Also, the episodes of confusion (in hands-on V, hands-off VI, and hands-off VII)

to be discussed later on involve several "false starts" and deviances from the established communicative pattern.

The fact that the patient has a lot to say is not to be interpreted as if she does not want to work or do as instructed. It is rather the opposite. She both talks and works. On some occasions her talk does create delays, but so does the therapist's. "Conversation" or talk, not work itself or the need for prolonged recuperation time, causes two phases (hands-on V and hands-off VII) to be longer than all the others (see Figure 4.1).

Confirmation of the analysis of the style of the patient's talk and one of the functions of her talk--to make conversation--is given in the viewing session with the patient (Viewing session, 8/1/85). Due to various circumstances this viewing could not be arranged until more than a year had passed after the termination of the treatments. The tape that was viewed was the first videorecording (1/18/84). In some instances the patient took a very active role in analyzing what was going on. Three particular sets of comments are of interest: the patient's way of talking; how this is indicative of the situation; and what she is trying to understand in the midst of treatment.

The relationship between what the patient says and what is actually happening is commented upon in the following way:

> It seems very clear that I'm trying to keep up what I see as polite social interaction. All the way through all the tapes. I mean she may be killing me but I'm trying to make conversation .... Uh she may be killing me but, uh, if uh, you know, it's just unspeakable, and then I say 'Well gee, I should be able to do better than that or whatever'.... I think I really do, sort of have the sense that I'm trying to--it's sort of like this 'This really isn't, this is really just ordinary interaction, it (the shoulder) isn't, uh all that sore you know, we're going to have the usual, uh, amenities' and so on. (Viewing session, 8/1/85)

Thus the patient does notice that she talks a great deal and attributes that to attempts to define the situation as a place to talk as well as to receive treatment. By talking she "maintains" her posture and refuses to let the treatment make her lose control. The phrase "I'm trying to make conversation" is worth a special commentary. The patient herself does not describe her brief comments or statements as "only comments." She spontaneously identifies them with attempts to make conversation, thus referring to the function of her talk. Although I have used the same expression in describing a style of talk, and indirectly hinted at its function, they together comprise, in the patient's own words, the activity of talking.

The expression "I'm trying to keep up what I see as polite social interaction," is also evidence of her assumptions about her right to talk.

Returning to the session on May 3, 1984 we will see what the patient is concerned about this time.

The Theme Brought up Most Frequently by the Patient

Analysis of the content of the patient's talk reveals that the same issue was brought up several times. It is of particular interest then to analyze how the therapist responds to this and to think about what makes the patient state the same thing over and over again. The theme the patient brings up most frequently concerns today's soreness of the shoulder and the cause of it. In order to understand what the patient and the therapist make references to, a brief summary will be given of what took place before this videorecorded treatment on May 3, 1984.

The patient had been seen in physical therapy for four months, twice a week in April. On April 17, 1984 there are discussions about taking a break.

> They talk about doing nothing for one week. Then the patient is to come every day for one whole week for ultrasound and a stretch. 'It might save time and pain.' (Fieldnotes, 4/17/84)

This trial treatment was to start on April 30, but was cancelled due to the therapist's temporary illness. May 1 is the first day after the break. The session starts with the ultrasound treatment, and the patient tells of the work

she has done in her garden during her week off. She has planted a dwarf cherry tree, dug 15 holes, taken care of rose bushes and gotten lots of cuts. When the stretching is about to start and the patient brings her arm to full forward flexion, the therapist exclaims happily, "You didn't lose anything.... There are only two inches left" (before the arm touches the table) (Fieldnotes, 5/1/84). There are good results during this session and at the end of the third hands-on phase, working in forward flexion, the therapist says "Only one inch from the table" (Fieldnotes, 5/1/84). In the progress notes the therapist had written "US (ultrasound), stretching" (Progress notes, 5/1/84).

It is clear that the absence of treatment did not cause the patient any decrease of mobility. Both this session and the following one (5/2/84) are successful. The patient is pleased.

> When the tape recorder is turned off Dr. Strauss showed me how she could move her right arm over her head and clasp her hands behind her neck. Very good. (Fieldnotes, 5/2/84)

The progress notes written after the treatment state "Same as above" (Progress notes, 5/2/84). However, something has caused the shoulder to get "stuck" again and this is what comes up during the following treatment on May

3. There is also a change in the progress notes which say "Same as above. Pain today" (Progress notes, 5/3/84).

To return to the theme brought up most frequently by the patient on May 3, ultrasound has been given and gel has been wiped off. With her usual "Oka::y" the therapist indicates that the patient should bring her arm to full forward flexion. The patient pretends to be scared or reluctant to start the stretching in that she says "Oh. O::hhhh" in a shivering voice. The therapist laughs. Right here the patient begins to say that her shoulder is "kind of sore" and a few seconds later that "It was tacky when I tried to open the door this morning." Some minutes later, after the second hands-on phase the therapist agrees with the patient's evaluation. "Stuck. Toda::y. [...] On strike. Ya." she says while smiling (Video X, 5/3/84).

This fact does not seem to be anything unusual or worrisome for the therapist, since she early on concludes "It gets that way." And over the months mobility has shifted from being increased, to remaining stable, to being decreased (see Appendices A and I). The patient is however bothered since she voices her concerns about the present condition sixteen times. The patient brings this up during phases of both hands-on and hands-off (see Table 4.4). The therapist's replies reported are those which are uttered immediately after each comment by the patient. The omittance of a period or a questionmark at the end of some

of the patient's utterances indicates that she is interrupted.

The patient starts voicing her concern in the first phase and does not stop until the last hands-on phase is about to begin. Is this because she talks about her worries

Table 4.4 Locations of the Utterances by the Patient Regarding the Present Condition of her Shoulder and the Therapist's Responses

Phase	Patient's Comment	Therapist's Reply
Hands-off I	It is kind of sore	Well it was tender last time.
Hands-on I	Well it was	It gets that way.
	It was tacky when I	Yeah.
	It is just not springy.	Uhum.
Hands-off II	It does not go. [...]	--
Hands-on II	--	
Hands-off III	It wouldn't _____.	--
	Two days and it doesn't work. Ah.	Let's do the rotation and we'll go back to that one.
Hands-on III	Not sensible _____.	Inaudible response
Hands-off IV	--	
Hands-on IV	--	
Hands-off V	Uh. It's tiresome. You're probably tired of it	

Table 4.4 (cont'd.).

	too. [.....]	I think we've done real well.
	It shouldn't take that long	Interruption by the receptionist
Hands-on V	--	
Hands-off VI	Two days and maybe it was just. I really really stretched it yesterday.	Yeah.
Hands-on VI	Maybe the difference is that it is just hard for me to tolerate two days in a row.	Uhum.
	Yeah it was real sore in class when I was lecturing. I had I kept I had to keep rubbing my shoulder.	Hm.
Hands-off VII	Yeah I think I dread coming on over and then it's harder	Uhum. Harder to let go so I can stretch.
	In fact I did some taking up of _____ and I kind of jerked it a little.	The two days we did. Yesterday and the day before it just would get real nice.
	Cause yesterday morning when I woke up. It was just straight up. I could pull that thing without even having to reach ___.	

Table 4.4 (cont'd.).

		And this morning I didn't stretch to _____. Ah [...]	It doesn't matter to me whether we do it another time or not.
Hands-on	VII	--	
Hands-off	VIII	--	

at inappropriate moments, or does it have something to do with the therapist's responses?

How does the therapist respond, in fact? Her responses vary from confirming that she has been listening, either by saying "Uhum" or "Yeah;" to answering with a full sentence; to giving a slightly longer reply. Other reactions are to examine the shoulder (hands-off II), to instruct the patient to start working in another direction (hands-off III), or to place her hands on the patient's arm (hands-off VI/on VI). Besides, two of the therapist's three initiatives to conversation (Figure 4.2), that is, the suggestions to cease the daily treatments (hands-off VI) and to stop the present treatment at a certain point (hands-off VII), can also be interpreted as delayed responses to the patient's worries.

One must remember that while responding to the patient the therapist at the same time carries out her professional manual work. She gives instructions; she pays attention to

the physical responses she receives; she is aware of the patient's attempts to endure the pain; she gives feedback and provides evaluative comments; she decides whether to stop or to go on. To ignore what the patient brings up would not be considered polite. The major question to be asked about this constellation of the patient frequently bringing up the same theme and the therapist giving different replies is: Why do the therapist's replies vary? Assuming first of all that the therapist's responses depend on whether the patient brings up issues like this during a hands-on phase or hands-off phase, and that it is difficult, if not impossible, for the therapist to give a longer response while in the middle of a hands-on phase, one finds that this in fact is the case. Brief answers occur only in hands-on phases. They are slightly longer in the hands-off phases.

One particular response from the therapist deserves attention. The phrase "It gets that way" is important for three reasons. First, it is stated early in the treatment. Second, it is expressed in an affirmative way. Third, it reveals that the therapist talks about the condition <u>in general</u>, that is, in her experience of patients with the same diagnosis, for the condition to vary is a common feature.

Looking at the therapist's replies in chronologic order, it seems that at first the therapist does not find

today's soreness remarkable. From her point of view, the shoulder was already tender the day before. It is just part of the syndrome. In hands-off III she responds by changing working direction. Then she emphasizes what has been good in the treatment. After saying that the patient's shoulder "is real functional" (hands-off VI), the therapist finally suggests that they should stop the ongoing treatment (hands-off VII). The patient rejects this idea, but does cease presenting her concerns. Thus the therapist attempts first to reduce the seriousness of the pain the patient is experiencing, then to stress the positive results they have achieved.

Another plausible explanation for the therapist's various replies is that the information the patient gives is not needed by the therapist. It will not affect the treatment technique. In seeking explanations, as the patient does, she requires the two to consider the "past," when the ongoing treatment is geared toward the future, toward recovery.

It is clear, however, that the therapist's refusal to engage in this topic has not made the patient stop bringing it up. It rather seems as if the patient continuously is trying to <u>convince</u> the therapist about how disturbed she is by the soreness, how bothered she is by not understanding if she herself has caused it or not, how bothered she is in not knowing whether daily treatments are too much for her

specifically or for anybody else. On another level, these statements by the patient can well be apologies for today's difficulties in achieving a good result.

The example in Table 4.4 of how one theme is approached by the patient and the therapist will now be used to illuminate other characteristics of the communication between the two.

What the therapist says immediately after the patient's statement is always coded as a reply, although one could question this where a pause lasts three to five seconds before the therapist answers. However, it can be argued that what the therapist says represents a form of reply which covers or responds to more than what is "required" by the preceding statement. In hands-off V, when the patient says "Uh. It's tiresome. It must be tiresome for you too." There is silence for five seconds and then the therapist says "I think we've done real well." By responding in this way the therapist gives her opinion of the state of affairs. She also avoids saying that "Things are not going so well today." Due to the therapist's manner of responding to larger issues, contradictory definitions of the situation are revealed. The therapist talks about the overall result and is pleased, while the patient is focusing upon the present situation and is disappointed.

The therapist's line of reasoning is on the positive side, emphasizing progress, recapitulating why things have

gone well the two previous days. At the end of the session she compares both of the patient's arms and finds that "You are missing a little bit less than an inch. So then yesterday we actually hit home" (Video X, 5/3/84). She thus "proves" that she has been right all along. The patient takes a more negative approach throughout the treatment, but is at the same time eager to achieve something during today's session.

Different Interpretations of What is Going on

The "local topic," or one theme both participants have in common, is namely what is happening during this particular treatment. When it comes to evaluating the condition of the shoulder, the patient connects today's status with the two previous days. The therapist, on the other hand, extends her evaluation to include past outcomes. The patient refers in her talk indirectly, but continuously, to the lack of progress in today's treatment, while this is almost completely absent in the therapist's talk.

When looking in detail at how the two verbalize their perceptions and opinions of what happens during this ongoing treatment, the differences are obvious. Four times the therapist asserts or states that the shoulder is not "quite well" today. On three occasions she agrees with what the patient has claimed all along, namely that the shoulder

today is stiff and sore. In hands-on II/off III the therapist says, "Stuck. Toda::y." and "On strike. Ya." Before removing her hands in hands-on VI she says, "Real tender. You have. Yeah it's hard then. To let go. To let me stretch." And in hands-off VIII, after the patient has said "It got better," the therapist agrees but adds a qualification "Yeah. But it is tender." All three of these evaluations are uttered long after the patient has talked about the condition of her shoulder. The fourth occasion occurs during the first examination, where both agree upon a sound from the shoulder; they say "Snap" at the same time. These evaluations by the therapist, expressed as declaratives, function as "official" acceptances that the shoulder is not quite well today.

Another form of agreement between the two is related to the discomfort that is part of the critical moment. As soon as the therapist has started to bring the patient's arm down, she many times rubs the patient's upper arm or the back of her shoulder. Without words she says, "I know that it hurts."

Leaving the more "negative" evaluations of the shoulder and looking at how they talk about the positive results, namely that the shoulder does loosen up, it proves that they agree upon this <u>at the same time as it occurs</u>. Previously it was argued that one of the "rules" of treatment situations can be phrased as "Something is going

to happen." To achieve a loosening of the shoulder is the sign of improvement. It also confirms that the treatment technique is reliable. How do the patient and the therapist mark these important instances?

The therapist says, after hands-on V, "That one loosened up quite good. [...] Not too bad." and the patient says happily, "Good stretch hm?". After the last hands-on phase the patient is the first to say "It got better" and the therapist agrees. In a pleased voice the patient repeats her evaluation and this time the therapist says "Yeah. But it's tender." One interpretation is that by wording her evaluations on both of these occasions in the way just cited, the therapist reduces the importance of the successful outcomes.

In the last examination of the shoulder, when the therapist compares how far the patient can bring both arms in forward flexion, she finds that there is no longer a difference between left and right arm. She states "Yesterday we actually hit home." Both are happy about this and emphasize that "That is <u>good</u>."

These instances, where the patient and the therapist express similar opinions about the condition of the shoulder--be it negative or positive--represent instances where consensus has been reached between this patient and this therapist, even though to a large extent their opinions differ.

When looking at how the patient and the therapist talk about the ongoing treatment, the impression is that things are not going well when judged from the patient's point of view. The therapist's statements are, in contrast, dominantly positive (see Table 4.5).

Table 4.5 Estimated Amounts of Comments by the Patient and the Therapist that are of Positive or Negative Character

	Positive Comments	Negative Comments
Therapist	25	5
Patient	4	26

When listening to the therapist, everything seems to be going just fine. Whatever the patient does is good. Every trial is good, whether something has been achieved or not. No less than twenty-five statements by the therapist have a positive content. For example, the therapist says,

> Good one.
>
> That was good.
>
> You're doing real well.
>
> You're reaching so good.
>
> The two days we did. Yesterday and the day before it would just get real nice. (P: Aha.) It softened. (P: Aha.) You relaxed well enough that we _____.

Some of these are expressed in hands-on phases, others in hands-off phases.

Many of these evaluations, as previously argued, function as encouragements to the patient to endure the pain during the critical moments. Nevertheless, this does not exclude their positive quality.

In contrast to the therapist's appreciative comments stand the patient's largely negative ones (see Table 4.5). Many of these have already been reported in Table 4.4. Additional examples are:

It feels weak.

That's enough.

Oh my hand.

No wonder it's getting purple. I know that's pain.

It hurts right in here.

But it was even sore last night.

It doesn't feel like it's just relaxing. It just feels <u>tight</u>.

Summary

This section, about how the patient and the therapist approach two interdependent themes, "the soreness of the shoulder and its cause" and "the results of the ongoing treatment," can be summarized in the following way. It

appears as if both address the same themes but do so out of different perspectives.

The major differences in their comments are to be found in the way they talk about the present condition of the shoulder and how they comment upon the ongoing treatment. The therapist refers to the condition in general, while the patient stresses her particular experience. The therapist ignores the poor results, does not doubt that progress will continue, and points to the overall good outcomes. Implicitly the therapist states "It does not matter that the shoulder is sore today. In the long run it will be fine." The patient is quite disturbed and frustrated by the poor results, and does not ignore them. Many of her comments upon the ongoing treatment can also be seen as explanations for its lack of success.

It becomes clear that the patient and the therapist have different criteria for what is "good." The therapist is positive, and gives a lot of praise. When success is reached, she does not mark it clearly. She rather uses understatements. As every trial is considered "good," then success can be no better. There seems to be no difference between a trial without a positive result and a trial with one. The patient, on the other hand, constantly reminds the therapist that in spite of all the stretchings, little is achieved. When the shoulder finally is loosening up, it is the patient herself who stresses these instances.

These different appraisals of what is going on indicate that the patient and the therapist do talk out of different perspectives. They have different criteria for how to evaluate the results. What is important for the therapist differs from what the patient stresses. It is part of the therapist's professional role to evaluate each patient's performance. In contrast, the patient is not expected to evaluate her own performance but persists in doing so. Due to their competing definitions of what is good and what is not in this session, there are indications of the therapist reducing the seriousness and the value of the patient's experience. In doing so, it looks as if the therapist implicitly considers the patient's perception or experience to be incorrect. That neither the patient nor the therapist "hears" what the other is saying has been demonstrated. What matters to the therapist does not seem to matter to the patient. What matters to the patient does not seem to matter to the therapist. This does not change. Both persist in their attitudes. It is never clarified that they are reasoning from different perspectives.

The following chapter will look at situations where their different interpretations of what is going on make them struggle to reach consensus for what to do next.

CHAPTER FIVE

EPISODES OF CONFUSION

This chapter is introduced with a discussion of how participants arrive at endings and beginnings of hands-on phases. It shows that three of the hands-on phases are initiated by the therapist, verbally, and the remaining four by the patient, physically. The beginnings of the last three hands-on phases are problematic compared to the first four. It is during the second half of the session that six episodes of confusion occur. Although all are very brief in time, they are considered significant for how the patient and the therapist in this study struggle to reach consensus. The episodes are therefore described, analyzed, and interpreted in depth. The chapter concludes with stating the unwritten rules governing the session.

How Participants Arrive at Endings and Beginnings of Hands-On Phases

So far this discussion has focused on how each stretching or attempt to loosen up the shoulder has been attended to by the patient and the therapist. The expression "the critical moment" was introduced at the

beginning of chapter four to identify the point in time and the position of the arm where the treatment is most effective. It is also the most painful moment for the patient. Both the patient and the therapist are aware of this. The balance between how much pain the patient can tolerate, and the desirability of a good result, is delicate. The verbal negotiation that the two engage in toward the end of each stretching is a sign of the importance of the moment. The critical moment can be said to represent a "locked position." The therapist cannot force the patient to endure too much pain, but she can ask her in words to continue, and she can, physically, secure this through the use of her hands. The patient can likewise ask the therapist to stop by showing her discomfort, and can reinforce this by saying "That's enough." But she cannot physically move her arm away from the therapist's hands.

The right time to cease each hands-on phase is thus more or less openly discussed. But it is always the patient who first shows the pain, then the negotiation starts. Sometimes the therapist decides without consulting with the patient, as in this example from fieldnotes:

> Kathy ends the treatment with saying 'That's plenty.' Dr. Strauss reacted with joy. 'What has happened? It is the first time she wanted to quit first'....
> When I put my things together in Kathy's office, I mentioned how pleased Dr. Strauss was. How

> surprised she was that Kathy had been the first to quit today. Kathy responded, 'Oh, it was nothing. I who would like to go on for hours, to get a result.' (Fieldnotes, 4/12/84)

Even if this example illustrates the termination of a whole session and not a hands-on phase, the comments by the patient and the therapist are significant. They reveal that the therapist cannot work as much as she wants to; she must attend to the patient's reactions. They reveal that the patient knows that she always "wants to quit first." The patient's tolerance of pain determines how much the therapist can work.

The terminations of the hands-on phases are filled with negotiating back and forth, but the mere notion of verbal negotiations indicates that both the patient and the therapist have access to what is going on. They can discuss it. Even if they do not know whether they will go on or stop, those instances are not "episodes of confusion." In contrast, it is the beginnings of the hands-on phases that prove to be problematic.

A comparison between the transcription and the videorecording shows that the initiative to start a hands-on phase can be expressed verbally or in the form of a motion. The initiative is taken three times by the therapist. In hands-off I, she says "Show me your right arm." In hands-off II, she says "Let's do the rotation and we'll go back to that one." And in hands-off VI, she says

"Yeap. That way. Over the head." In the other four cases it is the patient who positions her right arm in maximal external rotation or lifts it as high up as possible (see Table 5.1).

Table 5.1 Distribution of who Takes the Initiative to Start a Hands-On Phase and the Type of Initiative

	Type of Initiative	
Hands-On Phase	Verbal	Physical
I	Therapist	
II		Patient
III	Therapist	
IV		Patient
V		Patient
VI	Therapist	
VII		Patient

There is no discussion about the "right time" to start. The therapist does not ask if the patient has recuperated well enough from the previous phase to start another one. The patient does not say that she is ready. Both rely on each other's behavioral cues. How they arrive at the beginnings of the last three hands-on phases will now be discussed in detail.

How Episodes Have Been Selected

The episodes of confusion that occur all involve the beginning of a stretch. They occur in the second half of the treatment. There is an escalation of them: one episode in hands-on V (but before the stretching has started), two in hands-off VI, and three in hands-off VII.

The instances categorized or labelled as episodes of confusion are built upon the therapist's comments around the theme of patients who wanted to be "in charge." They were "hard" patients. This was expressed first in the viewing session (3/8/84). Other comments regarding the same theme were brought up in the viewing session of videotape X (11/8/84). One hands-off phase turned out to be different from the others. The receptionist came over to ask about some patient appointments. The therapist turned away from the patient and moved her chair closer to the receptionist. The patient, who no longer was observed by the therapist, put both arms down on her stomach. When the receptionist left, the therapist turned towards the patient again and rolled her chair closer. When the therapist had returned to her treatment position, that is, close to the patient's arm, the patient started to "warm up." She lifted, bent and stretched her right arm up before she placed it in position for external rotation. When the therapist saw this on the video, she exclaimed "She isn't even ready when I am"

(Viewing session, 11/8/84). The therapist obviously thought that the patient's timing should have been better. The patient should have warmed up before the therapist was back in her treatment position. The therapist should not have to wait.

Later on in the same viewing session the therapist discovered that the "patient is in control," that she herself could "do nothing" if the patient was not ready: "Nothing can be done till the patient decides" (Fieldnotes, 11/8/84). In other words, the patient's arm must be in the proper position for the therapist to carry out her work. The therapist saw how her work was held up by the patient and was quite astonished by this: "I who think I should have more control" (Fieldnotes, 11/8/84). In a sense the therapist realized that she alone does not control what happens, that if work is to be carried out, both of them have to be in agreement on what to do, when to start, when to stop. What the therapist did not see, however, was that the patient's readiness to work was ignored by herself on other occasions as she kept on talking.

With the therapist's comments as a starting point, six instances that reveal some confusion have been localized (see Table 5.2).

Criteria for Inclusion

All episodes are instances of "disagreements" regarding whether to work or not; what direction to work in; which position of the arm to start from; or when to start working (see Table 5.2).

Table 5.2 Overview of Episodes of Confusion. Identification of who Displays Readiness to Work and the Issues of Disagreement that Contribute to the Confusion

Episode	Display of Readiness to Work	Issue of Disagreement
E 5:1	Patient	When to start
E 6:1	Therapist and patient	Which direction to work in
E 6:2	Patient	When to start
E 7:1	Patient	Whether to continue or not
E 7:2	Patient	When to start
E 7:3	Therapist	From which position to start

Three of the six instances are directly related to when to start; another two are indirectly related. Originally these instances were perceived by me as moments of highly unsynchronized behavior. When the patient was ready to work, the therapist kept on talking. When the

therapist was ready to start, the patient was busy telling and showing where the sore spot was. Since the patient and the therapist never talk about when to start, problems are likely to occur here. They do not talk about it when things have gone wrong, either. However, their mutual awareness of something gone awry is seen in their laughs, gestures, repair work or face-saving activities. This concerns particularly the episodes 6:1 and 7:1. In other instances only one of them might be aware that something has gone wrong.

In this analysis I take the position of an outsider, identifying, observing, and describing instances of sometimes very subtle communicative misunderstandings. As the literature in the field of physical therapy is mostly concerned with the intentional speech of the therapist and of the patient, it is of value to shed light on other elements that play a part in each physical therapy session.

One finds here the sophistication of multilayered communication; an indirectness in speech which works well under certain circumstances but goes wrong in others; and an established pattern of communication that, when disrupted, can cause problems. The episodes are described in detail below.

Description and Analysis of the Episodes

Episode 5:1

The therapist talks about a TV program and does not notice that the patient is ready to start working (Hands-on V).

At the beginning of hands-off V, Rhonda, the receptionist, enters the treatment booth and talks to the therapist about some appointments. As they talk, the patient keeps her arms still. When the conversation is over the therapist turns towards the patient and rolls her chair closer. The patient starts to warm up before she places her arm in full external rotation as follows. The patient has brought her arm out to the side, level with the shoulder. There is 90 degrees flexion in the elbow, so the direction of the lower arm and the hand is toward the ceiling. By moving the lower arm toward the wall behind her head, the patient increases the external rotation in the shoulder joint. During the stretching, the therapist always has her right hand on the patient's upper arm and gives resistance with her left hand against the patient's lower arm.

Returning to the episode itself, the therapist now puts her right hand on the patient's upper arm and stretches her back. As she starts saying, "Well," she slumps. The moment after the therapist has relaxed her back, the patient rolls back on her left side slightly. The

therapist continues her sentence and says, with laughter in her voice, "The tune that goes through my head is 'This is It'" (she sings the tune). She continues, "You know that half an hour program," and the patient asks, "'This is It'?". They continue talking and the patient seems to associate the title of the TV program with the goal they are working toward, namely, full external rotation, in that she says, with laughter in her voice, "This is it. Crunch." while slapping her left arm into full external rotation. While the therapist laughs and continues to talk, the patient brings her left arm down on the table and brings her right arm into maximal external rotation. This is the first time of the three times she indicates that she is ready to work (see Time Schedule below). On one of these occasions, the therapist is looking away so she cannot see what the patient does. Finally the patient says "I'm gonna hang on there" and grabs hold of the table with her left hand. The therapist encourages her "Yeah. Go on." and the patient brings her arm into full external rotation. Ten seconds later the therapist puts her left hand on the patient's lower arm to give resistance. Almost a whole minute passes before the work starts. The time schedule looks as follows.

At 29:54 Rhonda thanks the therapist and leaves.

At 29:55 P starts to warm up in that she bends and stretches her right arm toward the ceiling, then abducts it (during silence).

At 29:59 P's arm is in position.

At 30:01 T puts her right hand on the lower part of P's upper arm.

At 30:03 T starts talking "Well the tune that goes through my head."

At 30:15 P brings her unafflicted arm into full external rotation, as a joke, then she brings her right arm more into external rotation.

At 30:18 P brings arm more into external rotation, the therapist looks away.

At 30:26 P moves lower R arm horizontally.

At 30:34 P brings her arm into external rotation again.

At 30:39 P says "I'm gonna hang on there."

At 30:42 T says "Yeah. Go on."

At 30:52 T says "O::kay" and puts her left hand on P's arm for resistance.

Analysis of E 5:1

This is one of the instances the therapist pointed to during a review session. She reacted to the fact that the patient was not ready. Her comment shows a slight annoyance with the fact that the patient was not about to start working at the same time as the therapist. The episode identified is, however, the minute during which the therapist herself does not notice that the patient is ready

to start the stretching, and that her trials to get the therapist's attention about this are unsuccessful.

Why does this happen at all? No major delays had occurred prior to Rhonda's entrance on the scene. Is Rhonda's presence creating a severe interruption in the work the patient and the therapist are engaged in? Does she break the communicative pattern the therapist and the patient have established? The therapist does talk in a different way with Rhonda, with whom she has another relation, than with the patient. It is the only time during this session that the therapist brings up a topic that is, not related to the shoulder. It is also one of the three instances which have been categorized as therapist-initiated conversation (see Figure 4.2).

One plausible explanation for this confusing moment is that when the therapist talks about something, she does not observe what the patient is doing. Her attention is no longer focused on the patient's arm. Also, the therapist's deviation from giving instructions, and turning to making conversations or story telling, breaks the rhythm the patient and the therapist have been used to in their special way of communicating. This makes it harder for them to resume their work. It is assumed here that only the patient is aware of the dilemma described.

Episode 6:1

The patient brings her arm in the wrong direction

(Hands-off VI).

The therapist nods and says "Yeap. That way. Over the head." When saying "Over the head" she points toward the wall behind the patient's head three times. The patient puts her arm in position for external rotation, but the therapist immediately says "No." The patient quickly rolls back on the left side of her back, which has been slightly off the table, and puts both hands on her stomach. At this moment the therapist demonstrates forward flexion, that is, the direction she wants the patient to work in, by lifting her own right arm in front of her, and reaches the maximal position. But the patient does not see this as she has turned her face away from the therapist and has closed her eyes. The therapist slaps her right hand on the table, the patient says "Blah" and sighs. The patient adjusts her head on the pillow, moves it closer to the therapist, then she slaps both arms on the table and sighs again.

In order to clarify this misunderstanding it is necessary to look closely at what happened prior to this moment (see Appendices G and H), but also to see the connection with something else that took place early in the session. During the last part of hands-on V (external rotation) the patient rejects the therapist's proposition about going on with another stretch. She whispers "I think

I just wanna stop." The therapist accepts this in saying "Okay. I'll hold it right there." But before she brings the arm down, she gives it an extra push. The patient grimaces with pain. The therapist says, "That was good" and starts immediately to rub the patient's upper arm with her left hand. She then gradually moves her chair closer to the patient's head and turns the comforting strokes into an examination of the back of the patient's shoulder. To her question in the utterance "Not hurting that bad? Yeah. Not hurting that bad right there." the patient responds, now in a normal tone of voice and not until the therapist has completed her utterance, "No it's not in the back. It hurts more up here." while touching her upper arm. The therapist then says "That one loosened up quite good. [...] Not too bad." before removing her hand from the patient's back. The patient exhales and says happily, "Good stretch hm?", which the therapist confirms, saying "Uhum. Tough one." During the following ten seconds of silence the therapist scratches her wrist and the patient moves her right arm before the therapist says "Yeap. That way. Over the head." The patient makes no complete stretch but brings her right arm toward the ceiling, bends the elbow, stretches toward the ceiling keeping the arm straight, and then moves it very slightly towards the wall behind her. She sighs, puts down the upper arm on the table (90 degrees at elbow), and sighs again. She slaps her elbow on the table once more and

the therapist smiles. The patient sighs and turns her face toward the therapist. There is one second's pause, then the therapist nods and says "Yeap. That way. Over the head."

Analysis E 6:1

This episode is an example of a misunderstanding regarding which direction to work in. Both the patient and the therapist have seen that a mistake has taken place and seem slightly embarrassed. The patient says "Blah" and sighs deeply. The therapist is doing some repair work in that she initiates a new topic for conversation. She starts talking about taking another break in the series of treatments.

Why did this confusing moment happen? The therapist attends first to the pain that the stretching caused the patient, in that she strokes her arm. Then she goes on to an examination and with her question brings the patient's attention away from the shoulder joint. She also selects or returns to a topic that was brought up six minutes earlier. All the therapist does can be interpreted as distracting the patient, so that the pain will be forgotten. It also gives the patient a chance to recover from the discomfort. Relief can be signalled through the return to a normal tone of voice. In this instance, the patient is able to talk normally quite soon, indicating that the therapist did not

misjudge the length of the critical moment the patient could endure.

Not until the brief examination is over does the therapist judge the outcome of the previous hands-on phase. She omits mentioning anything about the consequence of this successful outcome. She does not say explicitly, "Since we finally accomplished something in external rotation, we can leave that and go back to forward flexion," even if this is likely to have been her reasoning. Also, through the examination two features are obscured. First, that a goal with the treatment has been obtained, namely something has happened with the shoulder. Second, by slowly moving the chair she is sitting on, the therapist can better examine the back of the patient's shoulder, but she also positions herself for working in forward flexion. This postural message is obviously not perceived by the patient (see Figures 5.1 and 5.2).

The therapist's word "Yeap" can be interpreted in two ways. It can mean "Yes let's start again," but it can also be an answer to the patient's moving of her arm in the direction of forward flexion a few seconds earlier. In other words, the therapist might have assumed that the patient knew that forward flexion was now to be returned to.

The topic the therapist brought up, "where it hurts" or "the sore spot," is appropriate in the sense that it

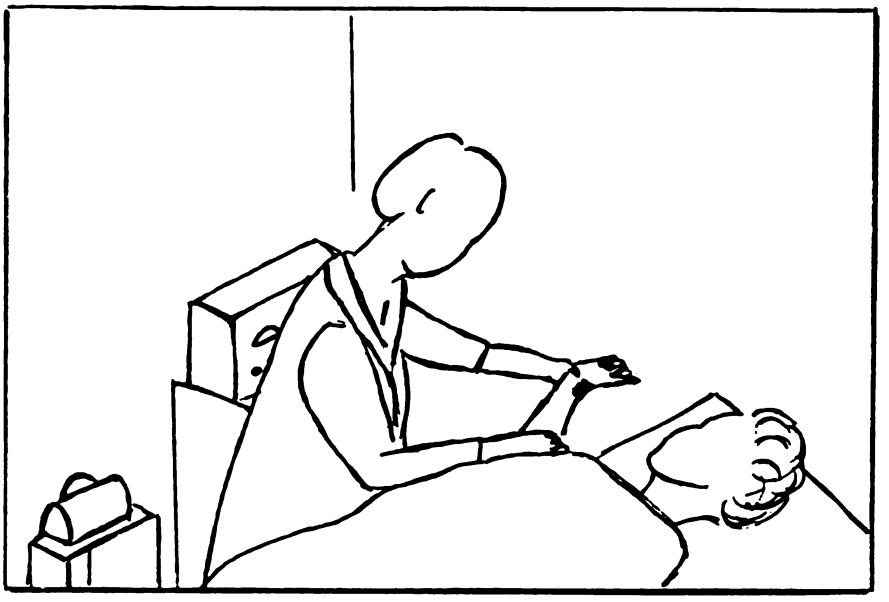

Figure 5.1 Working Position, External Rotation
(Video X, Hands-on III, 5/3/84)

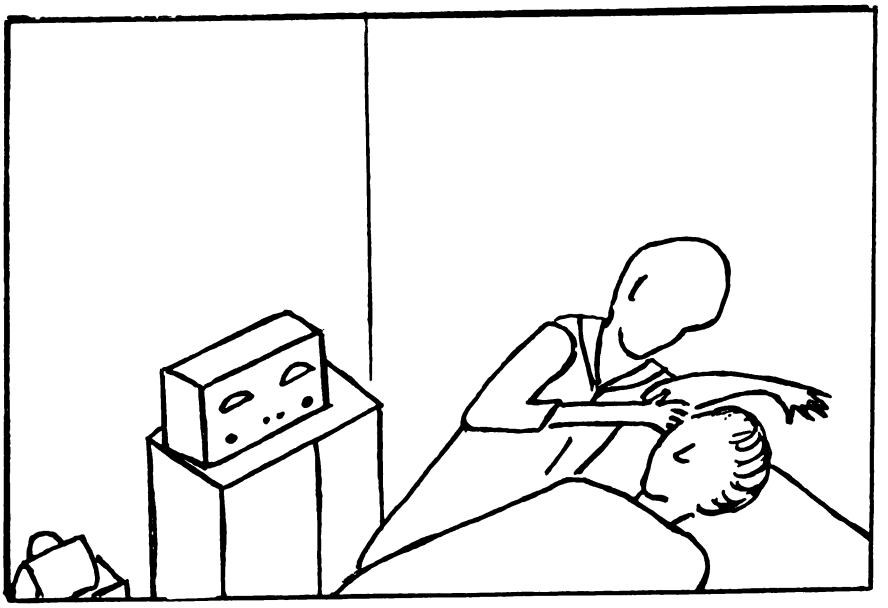

Figure 5.2 Working Position, Forward Flexion
(Video X, Hands-on I, 5/3/84)

connects to something briefly talked about six minutes earlier. That time, as this time, it is not clarified exactly where the pain is located. The incompleteness of this topic has consequences later on as it is involved in additional episodes of confusion.

The misunderstanding that has taken place here is not being talked about. It certainly looks as if it is the patient who has done something "wrong," but it could be interpretated rather that both had different opinions or assumptions about the consequences of the successful stretching in external rotation. The patient, who had initiated both hands-on IV and V (see Table 5.1) and had not been questioned about them, does not realize that the success of increased mobility at this time means that for the therapist there is no purpose or need to continue working in that direction.

The following episode consists of several misunderstandings or misreadings. It is directly related to the previous one, and builds upon the notion that the patient and the therapist are aware of the mistake that took place. Instead of talking about it, the therapist brings up another topic, namely to eventually change the series of treatments. The conversation that takes place between the two will be quoted.

Episode 6:2

The therapist goes on talking about next week, while the patient holds her arm in position for forward flexion for 18 seconds (Hands-off VI).

The patient has slapped both arms on the table and sighed, when the therapist says:

T: You do good with rest in between. I was thinking that maybe we should do. (T hits three times on the table with the side of her right hand) I don't wanna you to stop you.
P: Yeah. No I know.
T: What you can do. You can look at your shoulder and see it's real functional. It's okay. You can use it the way it is. We can
P: Yeah.
build up the strength _____. But I still think that we. You do good with rest in between. And if you
P: Yeah.
check in once a week and if each time it's going further then we can see. That doesn't. But your
P: Yeah. P: _____
shoulder is functional. It'll be okay to get around for you know for.
P: Yeah. Two days and maybe it was just. I really really stretched it yesterday.
T: Yeah. That's good. It really looks better than when we started
P: Yeah.
out. Let me get it out to the side. Is that painful? At that place? You do better at this one?
P: Yeah.

The second time the therapist says "You do good with rest in between" she leans forward and puts her right hand on the table. As she goes on to say "And if you check in once a week etc.," the patient brings her arm to full forward flexion. This happens at 33:27. The therapist continues to talk. The patient keeps her arm in the same

position and it is not until 33:45, that is, 18 seconds later, that the therapist puts her right hand on the patient's arm to give resistance. The therapist's placement of her hand occurs in the middle of the sentence "Yeah. That's good. It really looks better [hand on] than when we started out." The topic is now changed to an evaluation of the patient's mobility. The patient does not respond to the therapist's indirect suggestion of when and how many times to meet next week. She concludes the therapist's talk by saying "Yeah. Two days and maybe it was just. I really really stretched it yesterday."

Analysis E 6:2

The first misunderstanding is that the patient reads the therapist's leaning towards her and her putting of her right hand on the treatment table as an indication to start working. So, the patient brings her arm to full forward flexion. The second problem is that the therapist does not stop talking (does not see that the patient is ready). The third difficulty is that the therapist does not receive an answer from the patient.

This long monologue by the therapist has previously been categorized as an "initiative to conversation" (see Figure 4.2). It has also been considered as a delayed response to the patient's comments about her sore shoulder. An alternative interpretation is that the therapist is

getting ready for, or is foreshadowing, the close of this session by giving a summary. It is unclear whether the therapist is asking the patient something or just giving her own opinions. For whatever reason, the patient does not give an answer.

Again, as in episode 5:1, the therapist does not or cannot pay attention to what the patient is doing when she herself is talking about something and is not giving instructions.

In looking at the content of what the therapist says, one finds that it starts with an evaluation of the patient's reaction to rest and to treatment. It contains justifications for the suggestion of taking another break: "I don't wanna you to stop." Twice the therapist says that "You do good with rest in between." Five times she states that the patient's shoulder is functional:

> What you can do. You can look at your shoulder and see it's real functional.
>
> It's okay.
>
> You can use it the way it is.
>
> But your shoulder is functional.
>
> It'll be okay to get around you know for.

There is also an indirect suggestion from the therapist that they should meet once a week "And if you check in once

a week and if each time it's going further then we can see."

The patient agrees with the therapist's statements about the condition of the shoulder but she does not respond to the suggestion of changes. As reported earlier, the previous week's break had not caused any problems.

It is clear that the therapist has been attentive to the patient's comments throughout the session about today's soreness and its cause. Her sincere answer might be this indirect one. The monologue can thus be interpreted as an answer and a suggestion at the same time. The indirectness of the speech adds to the confusion.

It is important to emphasize that the patient treats the therapist's comments just like the therapist has handled hers. That is, there is confirmation about having heard something but rarely is a direct answer provided. The treatment itself, with its particular vocabulary, can be thought of as competing with ordinary conversational patterns.

The last three episodes all occur during hands-off VII and are interrelated incidents. The first one has to do with the patient, who after having rested is again ready to work, but is instructed to rest a little longer. In the second one the therapist indirectly instructs the patient to place her arm in a painfree position, but the patient keeps looking for a position where pain is present. Here

the therapist is ready to start working, but the patient is occupied with talking about and looking for the sore spot. In the third episode the therapist misreads a gesture by the patient. A particular position of the patient's arm is perceived by the therapist as an invitation to start working. The therapist is just about to put her hands on the patient's arm, when the arm is brought to the proper starting position, that is, full forward flexion, by the patient.

Episode 7:1

The therapist indirectly suggests the treatment to cease at this point. The patient rejects it and brings her arm up. The therapist first positions herself for a hands-on phase, then says "Take another minute to rest" (Hands-off VII).

The therapist leans her head, looks at the patient and says "It doesn't matter to me whether we do it another time or not. Because I think we might not get all that. Thinking to relax _____. If not we'll just schedule another time." "Oh you mean right now or tomorrow?" the patient asks. When the patient has said "right now" the therapist inserts "Yeah." To the patient's "or tomorrow" the therapist responds "Yeah forget tomorrow." The patient answers immediately "Okay. Well. Let's try it one more time." During this statement there is eye contact and

nodding. Then the therapist says " _____. Today? Okay. Take another minute to rest." The patient goes "Ah."

The therapist utters the word "Today" with a rising intonation as if she is truly surprised; she then says "Okay" with a falling intonation and moves closer, her back already straight. Right here the patient brings up her right arm to forward flexion. The therapist puts her left hand on the table, then slumps and says "Take another minute to rest." The patient says "Ah" with a grimace of pain and brings her arm quickly down. The therapist laughs and the patient says, "It's right in here where it is [...]" while touching the upper part of her right arm.

What preceded this episode? The result of hands-on VI (forward flexion) is not considered a success like hands-on V. Here, in Episode 7:1, the therapist admits that the shoulder is "real tender" and indirectly attributes lack of success to that. The therapist says, "Real tender. You have. Yeah it's hard then. To let go. To let me stretch." The patient agrees with "Aha" twice. Before the therapist has removed her left hand from the patient's arm, the patient says "Yeah it was sore in class when I was lecturing. I had I kept I had to keep rubbing my shoulder." Then the patient states that she dreads coming over. The therapist ascertains how the two previous treatments had gone: "It just would get real nice. (P: Aha.) It softened. (P: Aha.) You relaxed well enough that we _____ [....]".

The patient agrees with the therapist's first two statements but disagrees with her indirect way of keeping the patient as a person responsible for being able to relax or not, in saying "It doesn't feel like it's just relaxing. It just feels "tight." The patient talks about the difference in the shoulder she had experienced in using the pulley yesterday morning and today, and sighs deeply.

Right here the therapist proposes very indirectly that they should stop: "It doesn't matter to me whether we do it another time or not". This, in turn, is quickly rejected by the patient.

Analysis E 7:1

Why does the therapist instruct the patient to rest? Judging from the intonation, the therapist seems unprepared for the patient's willingness to "try it one more time." She might have assumed that the patient now was satisfied with today's treatment. Or she might want to terminate the session herself. The way the therapist formulates her proposition is indirect and ambiguous when put in relation to the patient's questions. This proposition is similar to the summary in E 6:2. Episode 7:1, too, can be a delayed response to the patient's reasoning around the cause of today's soreness, as the therapist with "Forget tomorrow" shows that she has already decided that there will be no treatment the following day. From the patient's rejection

of the therapist's suggestion, one can conclude that even if the patient had complained repeatedly about the stiffness and demonstrated that each stretching had been painful, those messages were not to be interpreted as a signal to the therapist to stop or make the ongoing treatment short. Also, forward flexion has not been extended today. This was the third attempt and the patient might not be pleased with success only in external rotation. The therapist seems to have forgotten that no progress was made in forward flexion. Here it is the patient who is pushing for something to happen.

As in E 6:1 both the patient and the therapist are aware that another mistake has taken place. Both seem to be embarrassed. The therapist laughs and the patient quickly returns to an old topic, "the sore spot." The patient had been ready to work, but was instructed to rest. She had been resting for 1 minute 13 seconds. Now it takes another 2 minutes 33 seconds before the therapist puts her hands on the patient's arm and they start working. This hands-off phase thus becomes the longest and lasts for 3 minutes 46 seconds. Other factors that play a part are that the two have a long conversation about a new word and that there is confusion about <u>when</u> to start the next stretching.

Episode 7:2

The therapist indirectly instructs the patient to place her arm in a painfree starting position (forward flexion), but the patient makes half a circle with her arm and looks for the sore spot (Hands-off VII).

After having joked about how to make the shoulder muscles relax, the topic is concluded with the patient's statement "It reminds me too much of lightning." The patient brings her arm to forward flexion. She lifts her head slightly off the pillow, blinks, makes a grimace of pain. She puts her head down, moves the arm to further forward flexion, says "Ah" and makes another grimace of pain. The therapist, while showing forward flexion herself, now says, "Sometimes it's finding the right spot we can go back and." The therapist demonstrates the movement in the following way. She lifts her right arm in front of her, stops at shoulder level, and bends her elbow. Then she brings the elbow backwards so the arm is now abducted, and from that position she lowers her arm. She moves closer toward the patient and stretches up. Instead of finding a painfree position of the arm in forward flexion, the patient abducts her arm and, while making half a circle, brings it slowly down to her side. She is thus imitating the therapist's movement. While doing this the patient says, in one breath-group, "Yeah this is what I when I pull

it rea::lly." The therapist fills in "Feel it." The patient agrees.

As the patient starts making the half circle the therapist has to make room for the arm. She thus curves her back and rolls slightly away from the table. The patient now says, while looking directly at the therapist, "Ah. It's right in here" and touches the upper part of her right arm.

Analysis E 7:2

The therapist indirectly instructs the patient to get ready to work now. Her phrase "Sometimes it's finding the right spot," uttered when the patient already has placed her arm in forward flexion but at the same time is revealing some discomfort, can be interpreted as a reminder for the patient to find a starting position that is not painful. This is the ground from which all stretchings start and the patient knows that. Either she does not hear what the therapist says, or she has simply not concluded the topic "the sore spot." "The right spot" for the therapist means, on this occasion, a painfree position, but "the right spot" for the patient is the place in her upper arm where it hurts.

The topic "the sore spot" is introduced early in the treatment. The patient is the first to bring this up. It

happens in hands-on IV before the stretching has started. Without saying a word she touches the upper part of her right shoulder and makes a grimace of discomfort. In asking "Is it tender there?" the therapist makes this an "official" topic . As reported earlier, the therapist comes back to this during hands-on V, when she does the brief examination of the back of the patient's shoulder, saying "Not hurting that bad?". This was part of E 6:2. Immediately after E 7:1 the patient brings this up again, saying "It's right in there where it is." But not until now (hands-off VII) can she say or inform the therapist exactly where it hurts and at which position of the arm the pain is reproduced.

From this one can conclude that it is important for the patient to tell the therapist exactly where it hurts. It is also a topic both can safely return to.

It is worth noting that the therapist, in this instance as in many others, demonstrates in which direction they are going to work. This is not new information for the patient. The therapist's demonstrations are a silent way of urging the patient to get ready. The therapist never says "Please, hurry up" or "Get ready." She cannot exert any control over the patient's arm during phases of hands-off. The therapist's demonstration of forward flexion this time deviates from her usual manner. Most of the time she simply lifts the arm in front of her as high up as she can and

then brings it quickly down the same way. Here she goes only halfway, and even lowers the arm in an unusual way. The patient's imitation of the half circle can be interpreted as a sign of her attention to what the therapist did. She might have read this deviation as an implicit instruction.

Finally, the fact that the patient does not place her arm in forward flexion could also be an indication that she is not quite ready to start yet or does not know when they will start. Three times she was ready to work before but was "corrected" (E 6:1; E 6:2; and E 7:2). So it might be difficult to know how to properly interpret the therapist's words and gestures.

Episode 7:3

The therapist cannot get hold of the patient's arm (Hands-off VII).

The patient continues talking about the sore spot "Ah. It's right in here. Well that's better. I can feel it crunching there and I can feel it move." She shows it with both hands in the air. Here the patient makes some kind of joke with her arms. With her right arm close to the table, flexed more than 90 degrees at the elbow, the patient flaps her right hand at the wrist while at the same time slapping her left hand on the table. She turns her head towards the therapist, miming a "hopeless" look on her face. The

therapist smiles. The patient turns her head and again faces the ceiling. The therapist moves closer, ready to put her hands on the patient's arm. The patient, who does not see this, goes on lifting her arm to full forward flexion, so the therapist misses the arm. She then says, "Which spot do you want? You pick out the spot you think is gonna do best." Not until now does the stretching begin.

Analysis E 7:3

Why does the therapist miss the arm? Why does she interpret the patient's gesture as an invitation to start the stretching? Several of the criteria for starting a phase of stretching are fulfilled.

The arm is still.
Eye contact has been established and disengaged.
The previous conversation is finished.
The patient knows what direction to work in.

But the arm is not in full forward flexion. Is the therapist so eager to start working that she has forgotten that during this treatment the patient always brings her arm to full forward flexion herself? It was only during the first weeks of treatment that the therapist assisted the patient in lifting the arm. Also, the therapist could be eager to start working as this hands-off phase has been

prolonged by conversations and uncertainties about when to start.

During this phase the therapist has indirectly asked the patient to get ready to work several times. This is the third attempt. Not until the therapist assertively utters the phrase "Which spot do you want You pick out the spot you think is gonna do best" can they start working.

Summary

The episodes are all related to the beginnings of the last three hands-on phases. They involve several false starts, with the actual beginnings becoming therefore postponed. In hands-off VI there are two attempts (E 6:1 and E 6:2) and in hands-off VII there are three (E 7:1, E 7:2, and E 7:3) before the patient and the therapist arrive at a proper beginning.

It is important to note that the patient, in four of the six episodes, is the first one to display her readiness to work (see Table 5.2). When the work is delayed, it is easy to assume that the patient has done something wrong. But on two of these occasions (E 5:1 and E 7:1), work was about to begin but the therapist changed her mind. The other two (E 6:2 and E 7:2) can be labelled misunderstandings, that is, reading instructions into gestures that were merely accompanying the therapist's

talk. In E 6:2 the patient believes the therapist's leaning forward and bringing her arm toward the table to be an indication that work is now to begin. In E 7:2 she interprets the therapist's motion with her own arm as an instruction to do the same.

Of the remaining episodes (E 6:1 and E 7:3) one might claim that the patient does not read the therapist's postural shift as an instruction when she should have done so (E 6:1). And in E 7:3 the therapist confuses a gesture by the patient with a signal to start a hands-on phase. Obviously, in all the episodes, except E 7:1, there are faulty interpretations of movements or positions.

In addition to analyzing this "physical discourse," it is helpful to look at the impact of the verbal communication, as an eventual source of or contribution to the troublesome moments. When looking at Figure 4.2 one finds that those phases where the episodes of confusion take place (hands-on V, hands-off VI, and hands-off VII) differ significantly from the other phases. The only time an examination is carried out during a hands-on phase is in hands-on V. And, as reported before, with examination goes a particular set of questions. Instructions, which are part of each hands-on phase, are given in hands-off VI and hands-off VII. This happens in only two other hands-off phases. But the outstanding feature is that the only times the therapist herself takes an initiative to conversation

occur in the phases of troublesome beginnings. The therapist's pattern of giving instructions and participating in the conversations the patient initiates is thus broken.

This change is first triggered by the receptionist who enters to get some information (hands-off V). After Rhonda has thanked the therapist and left, the therapist does not give any verbal instructions before she introduces the topic "a TV program." Therefore, it can be claimed that an ordinary break such as another staff member asking for some information can have serious consequences. One interpretation is that Rhonda's entrance makes the therapist leave her therapeutic role and display the administrative side of her profession. In starting to talk about a TV program, the therapist abandons her professional role completely. The patient's phrase "I'm gonna hang in there" is what turns her back into a therapist.

The second time the therapist's instructional talk is temporarily abandoned is in hands-off VI. Here the fact that the patient and the therapist had misunderstood each other (E 6:1) came as a surprise to both of them. The patient shows her annoyance or irritation by saying "Blah." The therapist immediately starts to talk about something else as if a mistake never had taken place. This talk leads indirectly to E 6:2.

In hands-off VII, finally, the therapist invites conversation several times. The first one is quickly interrupted by the patient when she asks for clarification. That results in E 7:1. Then another dilemma arises. For quite some time the two had talked about other ways of making muscles relax. As that topic is finished, the patient brings her arm to full forward flexion. The therapist's phrase "Sometimes it's finding the right spot we can go back and," which leads to E 7:2, can be a sign of the difficulty in turning from conversation to giving instructions on the part of the therapist, and to stop making conversation and start performing on the part of the patient. The patient continues to speak as if they still were in the middle of a conversation.

The last incident, E 7:3, is the instance when the therapist now is eager to start working and mistakes the patient's display of a limp right arm for an invitation to start a hands-on phase. This error forces the therapist to return to her direct way of giving instructions in saying with an assertive tone of voice, "Which spot do you want? <u>You</u> pick out the spot you think is gonna do best." Hands-on VII can finally start.

To conclude, what can be learned from the description and analysis of these six incidents? First, that the talk that goes on outside of the physical treatment itself is important to consider. Second, that the transitions of the

therapist's different ways of speaking can be problematic. Third, the topics that run through the treatment are being illuminated. Fourth, some of the unwritten rules that the patient and the therapist adhere to are revealed. More precisely, the analysis of the episodes provides explanations for how two phases (hands-on V and hands-off VII) come to occupy so much time. Conversation is a legitimate cause for taking up time, and not solely the treatment and its consequences. The complications that are caused by the therapist's alternating ways of speaking (E 5:1; E 6:2; E 7:1; and E 7:2) are also illuminated, and the two topics that run through the whole session and are attended to by both the patient and the therapist are brought out. These are "Comments upon the treatment outcomes" and "The sore spot." Analysis also shows that, primarily, the patient talks about "The cause of today's condition" and that this topic, too, runs through the complete session. The last major topic, "Planning for the future," is solely brought up by the therapist and is done so toward the end of the session.

The episodes show how participants indirectly speak about the unwritten rules that they follow, rules which can be formulated in the following way.

> The therapist can shift between giving explicit and implicit instructions regarding when to start a hands-on phase.

> The patient should be ready to work at the same time as the therapist. She should not waste the therapist's time. She should prepare herself for the next stretch if the therapist is occupied by something else, like talking to another staff member.
>
> The patient should pay attention to the therapist's postural shifts.
>
> The therapist is to select the appropriate time for the termination of the session. In other words, the therapist is to lead and the patient is to follow.

The analysis shows that one or more of these rules have been violated in six instances.

In the following chapter, the study leaves the physico-therapeutic aspects of the session and looks at the encounter as an educational event.

CHAPTER SIX

PHYSICAL THERAPY SESSIONS AS EDUCATIONAL EVENTS

The chapter discusses first the difficulties and the pain a patient faces when afflicted by a sore shoulder and how the condition itself demands of her to change and to accept this change. It also considers the physical therapy session as an opportunity for this acceptance to take place, but this in turn alters the role of the therapist. The therapist herself is assumed to act in a way that she thinks is therapeutic. The chapter then looks at aspects of teaching and learning in treatment sessions and ends with describing two fundamentally important instances of "non-learning."

Physical therapy sessions are educational as well as therapeutic events. As a therapeutic event the focus is primarily upon physical improvement. In addition, elements of psychological support are inherently part of any treatment. When considering a session educational, it is not enough to assume that only the therapist has special knowledge and is thus entitled to teach.

Until now this dissertation has analyzed the treatment situation as a traditional physico-therapeutic event and

has primarily paid attention to its concrete or highly visible activities. It should be emphasized that the session analyzed here is one of the last in a series of treatments that last four and a half months. The results reported of this session have been built around the following features:

> How a session comes to be organized around a specific diagnosis and a specific treatment.
>
> The dialogue of which the treatment consists.
>
> The talk that is part of, but still separate from, the treatment dialogue.
>
> Certain incidents, identified as episodes of confusion, which illuminate some of the implicit rules the patient and the therapist adhere to at other moments of the session.

The dissertation now looks at the session with the purpose of first identifying some actions by the patient that might be psychologically beneficial for her. It will identify actions by the therapist that might be indicative of her providing psychological support or demonstrating a broadened therapeutic attitude. The analysis starts with the patient.

Psychological Aspects of Physical Therapy Sessions

What does this physical restoration of function require of the patient? First, she must be able to tolerate the shift between being able to use her arm in a natural way and being forced to guard it to prevent pain. She tells of how she learned this the hard way:

> One thing I did find out, it didn't have to take two or three times to do it, was that if I jerked it, or moved it very suddenly, I would get a spasm of pain that was so bad that. (Viewing session, 8/1/85)

Thus it did not take long to learn how not to use the arm. Sudden movements were to be avoided. The consequence is a complete alteration from automatic movements to a conscious and cautious use of the arm. Second, she must be able to endure being a patient. The patient refers to being exposed or vulnerable in the treatment situation only very indirectly. This was expressed when she asked the researcher to restrict the showing of tapes. She did not want everybody to "see when you were so disarmed, when you were absolutely powerless" (Viewing session, 8/1/85). Third, she must be able to tolerate progress one day and no progress another day (see Appendices A and I) as well as the lack of control.

> The thing is it (the pain) starts to take over your life. That, that's all you can think about. Or that, you can't, the teeniest little thing you do, reminds you of it, so it's a bigger and bigger and bigger chunk. (Viewing session, 8/1/85)

In spite of faithfully attending each appointment (see Table 3.1), doing the prescribed exercises, and buying the recommended equipment, a pulley, progress is slow and therefore bound to be a frustrating experience. The treatment situation itself provides an opportunity to give that frustration a voice. The fact that the patient has a lot to say has already been demonstrated in chapter four. A question never answered is why this is the case. For instance, the patient's comments or initiatives to conversation that are uttered immediately after a stretch can be triggered by the discomfort of the treatment. Out of relief, the patient says something. Regardless of the content, any expression can be a way to release tension. Regarding the utterances that are not directly connected to the stretch, there might be other explanations. For example, by merely talking about a dilemma, room is given for its gradual acceptance.

As seen in chapter four about the content of the patient's talk, what stands out is its repetitiveness. The patient talks over and over again about the same phenomena. This in itself might be a way of diminishing the weight of the problem. Trying to describe exactly how the shoulder

feels, to properly locate the sore spot, and to reason around causes of stiffness, are perhaps means of rendering meaning to the physical experience itself.

Another dimension of the patient's talk could be a way to counterbalance being the one who is constantly instructed to do something. The patient does not surrender passively to the role of being a patient, but makes sure her voice is heard. Through her initiatives to conversation the patient temporarily replaces the asymmetrical relationship with a symmetrical one.

In turning to the talk and actions by the therapist, the analysis reveals that she, too, attempts to establish a more equal relationship. This is apparent in two recurring situations. One is related to her questioning the patient whether she wants to extend a phase of stretching or not. Another one is the fact that the therapist seldom pushes or urges the patient to get ready for a hands-on phase but leaves that to the patient.

As the therapist carries out her physically therapeutic work, her actions are simultaneously psychotherapeutic. By being physically close, she is available as a listener. The position itself lays the ground for psychotherapeutic work. Simple as well as sophisticated therapy can indirectly be accomplished. Some features of the therapist's talk that can be thought of as beneficial for the patient are the emphasis upon positive

outcomes, the avoidance of marking poor achievements, and the implicit orientation toward the future. Also, by talking the therapist can help the patient relax. The therapist stated this in the following way: "I can tell whether she relaxes or not. If I distract her, she relaxes, whereas if she talks about her problems, she tenses up" (Viewing session, 10/25/84). This comment was not about Dr. Strauss, but another patient suffering from the same condition and receiving the same treatment.

Her statement reveals the problem that can arise when the treatment dialogue comes in conflict with other conversation. This line of reasoning could also explain other difficulties plausibly. For instance, what is helpful for the patient could be problematic for the therapist. The patient might benefit psychologically from talking over and over again about her problem but in doing so she also could, inadvertantly, become physically tense and thus hinder the treatment. So the therapist tries to make her change the subject. As has been demonstrated, the patient in this study does continue to talk about her condition. Now, to hear the same story, albeit with slight changes, time after time, poses particular demands on the therapist. First, it stands in contrast to her being the "active" one, the one who leads, the one who instructs. Second, the patient talks about something that has already happened. She talks about the past. And physical therapy treatments

are strongly future oriented. Third, to dwell on one's problems can be perceived as wanting to maintain them. This, too, contrasts to the purpose of the treatment which is to eliminate or alleviate the physical dysfunction. Fourth, to bring out the negative aspects of a particular condition is also opposite to the therapist's emphasis upon positive results.

But even if there are potential conflicts because of different orientations, that does not imply that the patient does not benefit from the discussions. Neither does it mean that the therapist is solely responsible for the therapeutic effects. By talking, the patient herself turns the situation into something more than an opportunity for function to be restored. Whether this is consciously intended or not cannot be concluded from the available data. However, the notion that each session invites a variety of experiences does persist. The following section is therefore devoted to looking at treatment situations as instances of teaching and learning.

Aspects of Teaching and Learning in the Physical Therapy Session

Signs of teaching and learning in the therapy session differ along many dimensions. They depend upon the condition itself; whether one analyzes the first treatment sessions or the last ones; and the definitions one chooses

to use. Starting out with how the patient and the therapist explicitly address these issues, the following questions will be asked. What kinds of knowledge do the therapist and the patient bring to the situation? What do they need to learn from each other? What do they want to teach one another?

In the literature reviewed in chapter two the therapist's professional knowledge was stressed, along with that of her entitlement to teach. The patient is assumed to be the learner. That the relationship also can be the reverse, namely that the patient has particular knowledge and something to teach the therapist, is not often mentioned. What different kinds of knowledge do the therapist and the patient possess? The therapist's knowledge is gained through formal studies but is also arrived at through performing in the profession itself. In other words, seeing and following many patients with the same diagnosis provides a deepened knowledge of frozen shoulder. What the patient knows is founded primarily on her own experience of the condition. As such it is a direct bodily experience. The description of a bus-ride will serve as an example.

> I remember once I tried to, I was on the bus. And you have these things where you would push to and I was sitting in a seat where I had to reach behind me, just a little bit, to push on it. And there was, I never knew when it was gonna be, go so far. But if you went just one little bit past,

> then you would get one of these incredible pain spasms that were just disabling. And I had, I didn't have very many of them but I learned real well that I wasn't gonna, I wasn't gonna move it. (Viewing session, 8/1/85)

Apart from becoming aware of movements that one otherwise never thinks of, this patient learned <u>not</u> to use her arm. Being an academician, she also read some papers which addressed the etiology of the condition.

When looking at attitudes toward teaching and learning, both the therapist and the patient stress these. However, what is to be taught and learned differ for the patient and the therapist. In viewing sessions the therapist states clearly both what she wants to teach and what she needs to learn. The patient expresses that she wants to learn and why this is the case.

> And I like to know how things work. I like to know what makes things happen. I like to know the names of things. I would ask her (the therapist) what muscle or bone or whatever because I like If I feel if I know what things are called I have more control over them.... When I say control I mean, that I think I'm a very, that I would like to be able to manipulate what is going to happen. And my feeling is that the more I know about everything the more facts I have, the more able I am to make decisions that are going to help me, make things turn out the way I want them to be. (Viewing session, 8/1/85)

The patient does stress a strong desire to learn. Knowing, to her, is one way to control what happens. In the

same session the patient stops the tape right after she has said to the therapist "That's the trouble. It (the shoulder) starts to loosen up and I think I can do more than I really can do." Her comments are:

> I'm always sorting through all the possibilities .... If if there is something I don't know the answer to I say 'Well gee maybe it's this.' Or I think 'Well but it could also be that.' 'Well on the other hand it might be this.' Or whatever, but I do that about everything. When I don't really know what the answer is I--try to, kind of, filter through and--and figure out what the best--most efficient explanation is. (Viewing session, 8/1/85)

In this excerpt the patient brings up several issues. She asserts that the way she acts during the sessions is characteristic for her. In other words, she approaches treatment situations as she does other situations. Part of her behavior is wondering what is happening. She takes the responsibility to provide many of the explanations or answers herself. Implicitly, the patient states that she does not really seek answers from the therapist but that she "thinks out loud" during the sessions.

According to the therapist, one of the cornerstones in physical therapy is the education of the patient: "The treatment is only temporary and the teaching is going to be lasting" (Viewing session, 3/8/84).

What the Therapist Needs to Learn and Wants to Teach

The study now compares the beginning of the series of treatments with the end. The study will look at some issues of teaching and learning occurring during the first month of treatments and report them in a summarized fashion. First there will be a discussion about what the therapist needs to learn from the patient and what she wants to teach, then an analysis of what the patient wants to know and what she in turn tries to teach. After this, the study returns to the session on May 3, 1984 to see how teaching and learning are expressed on that occasion. Finally there will be a report of two instances of "non learning."

At a viewing session (11/1/84) the therapist reported that she wanted to know whether a patient thinks physical therapy is going to help or not:

> So that I don't try to treat a shoulder when the patient in the back of the head thinks 'Well I got a spur and it has to come out. My arm is not going to get better until it comes out';

what patients "do" about their problem and she would ask:

> Are you coping right now?
> Are you doing something?
> Are you taking pills?
> Are you getting angry at it?
> Are you doing exercises?

and she wanted to know how the pain "reacts" outside of the treatment situation: "I want to know all about them, about the pain, how it reacts when they are not here."

The therapist wanted to teach the routine itself which includes ways to relax:

> One of my goals is always for them to feel comfortable with me and with my techniques. And that is why I describe the techniques.... That is why I go real easy in the beginning so they learn And they relax more and it is more fluent.... I want them to be able not to hold back and think they have to be quiet and keep it inside I wanted her (Dr. Strauss) to let it out, because it hurt, so that she can relax. Because if she keeps it inside and thinks she has to show good cooperation, if she tries to do all those things she will tense up. (Viewing session, 11/1/84)

She also wanted to teach the function of the shoulder joint and what hinders motion: "I want to tell how normal motion is, how their motion is, different ways of getting normal motion"; and what exercises to do at home and why they should be done "My work is to have them realize that they have to work with their shoulder to get it better."

What the Patient Wants to Learn and Tries to Teach

What does the patient want to learn and what does she try to teach? Her questions focus upon two things, namely how to prevent the condition from getting worse when away from the treatment situation, and how to find explanations

for what is happening in her shoulder when in the treatment situation. She asks specifically the following questions:

> I guess my concern would be. If there really is something that is pushing on the spinal column the spinal cord. To make sure I don't inadvertently do something that will do more damage. [...] Could you do an exercise and make it worse? (Video I, 1/18/84)

And: "I'm still sleeping with my teddybear pillow under my arm. Is it better to? [..] In other words if I can sleep with it (the arm) down without the pillow would that be better?" (Video V, 2/1/84). During the viewing session of video I, the patient stops the tape after she says, during a hands-on phase, "You can tell though. (T: Keep pushing.) That when you do that. Then I can move it a little bit more every time." The patient's comments are:

> I'm explaining. Doing the same thing I always do I think I've I've noticed something new, as my repertoire of knowledge. So I can say 'Aha now I can see, that when you do that, then I can move it a little bit more each time.' Because it helps explain to me why we're doing what we're doing. (Viewing session, 8/1/85)

And later, on the same occasion she says, "A very powerful theme for me is I want to know why things happen. And why things are the way they are." Again the patient says that she learns by seeking explanations. Also, she has

a strong conviction that there are explanations for everything.

As mentioned before, the patient does not state in viewing sessions that she has something to teach the therapist. However, she tells/teaches the therapist how she signals pain: "I was brought up frontier style. You don't scream unless you're dying. Actually it is better if you don't scream then. Oh my." (Video I, 1/18/84). She commented upon this herself in a viewing session,

> When I say 'Oh my' that was the worst that I'm gonna allow myself to say. That was just exactly like the screaming and yelling. Uh for me that is a very very strong statement. But I mean who would know that I mean, when you say 'Oh my' What I'm saying is 'Oh my that was just unspeakable It was intolerable.' (Viewing session, 8/1/85)

She also tells the therapist that she knows exactly how much she can take: like "I really do know how mu::ch. That maybe one little more. That's how much is gonna be enough." (Video V, 2/1/84). And finally, in every session the patient tells about how her frozen shoulder affects her life.

Turning to the session that has been the focus of analysis, recall that it occurs late in their relationship. At this point in time there is not much left to teach the patient. She has already learned how a frozen shoulder changes the physiological and biomechanical conditions of

the joint. She knows the treatment routine. The traditional educational tasks, namely instructions regarding how to properly use the arm, what exercises to perform at home, and how to find positions where the arm can rest, were all given during the first month of treatment. All the therapist continues to teach are explanations for lack of mobility: "It's that big muscle." It is questionable whether her stress on the positive achievements should be called teaching or not. One interpretation is that the therapist, on a metacommunicative level, does recommend the patient to "adopt my perspective. If you do you will fare much better. Accept that you have done well, instead of clinging to the present temporarily poor results. See the process at large, not day by day, not moment by moment." Thus the therapist's emphasis on positive outcomes is an attempt to alter the patient's attitudes.

There is also reason to assume that the therapist now knows the patient and her shoulder well enough, since she asks few specific questions. In spite of this, is the patient still trying to teach the therapist something? The patient continues to report in great detail what living with a frozen shoulder means. And, looking at what the therapist said was important for her to know when seeing a new patient (see pp. 240-241), this is exactly what Dr. Strauss keeps saying (see pp. 171-172).

Signs of learning on part of the therapist are to be found in the number of stretchings per hands-on phase she instructs/asks the patient to do. She knows quite well now how much the patient can tolerate. This knowledge is inferred from paying attention to changes in the patient's tone of voice. Even if the patient hardly can speak at the end of some hands-on phases, it does not take long for her to return to a normal tone of voice, after the therapist has lowered the arm.

The therapist also learns, at different points in time, throughout the session, the present state of the patient's shoulder. Noticably, she does so quite some time after the patient has told that the shoulder is sore, is stiff today. This was discussed in detail on p. 168.

It is easy to outline evidence for what the patient has learned, or rather, evidence of her knowledge. One, she does her <u>own evaluations</u>. She continues to make comparisons with her unafflicted arm during the session and she reports changes in her right arm from one day to another. Two, she reveals her <u>attentiveness to her shoulder</u> and how this leads her to "provide treatment" herself. Evidence of this is found in her rejection of the therapist's suggestion to do a stretch in the horizontal plane. The patient says "I do that with my weight. To stretch it over because I feel it pull. If I feel it pull it must be tight. So I just practice. I do that when I watch TV." Three, the patient

demonstrates knowledge of how mobile her shoulder is, where the pain is located, and she claims that poor achievement is not due to her being unable to relax, but is caused by tightness in particular muscles. In a sense, the patient in this session reasons like a physical therapist herself. She knows when to take action, how to find painful versus painfree positions, how to judge the outcome by making comparisons with her unafflicted arm.

Summary of Teaching and Learning Aspects of the Physical Therapy Session

This summarized version of issues of teaching and learning has shown that what is important to learn and to teach for the therapist varies over time. What remains unchanged to learn, in each session, is the status of the patient's shoulder. What remains unchanged to instruct is the stretching itself, but it is rather to be considered a repetition of a pattern than something that has to be taught anew. What also remains unchanged are the biomechanical explanations for restricted mobility. Maybe one can say that toward the end of a series of treatments the therapist's official teaching role has given way to a more supportive or psychotherapeutic role. The therapist once said, when talking about teaching and learning, "Some people, you know, need a lot of empathy and some people are looking for information" (Viewing session, 3/8/84).

The fact that the therapist does learn each session about the state of the patient's shoulder and that she has learned how much the patient can tolerate of the treatment are so played down or so intertwined with the treatment dialogue that they are hard to detect.

For the patient some aspects of teaching and learning are to be found both at the beginning and toward the end of the series of treatments. Regarding learning, it seems that the patient takes every opportunity to come to grips with or to understand why her shoulder reacts the way it does. Every stretch is perceived as something to learn from. And through this the patient also teaches or "informs" the therapist about the status of her shoulder. This happens just as much during the first videorecorded treatment as during the last one.

Instances of Non-Learning

Two examples illustrate where learning can be said not to have taken place. The first one concerns expressions of pain during treatment and the second one the patient's perception of what is most important to do for her shoulder. Briefly, the therapist does not want the patient to "grin and bear" the pain that the stretching inevitably causes, but to express it, both in "yelling" and in words. The therapist formulated this in the following way: "She

doesn't state 'I can't take it any more.' She makes noises that are not really words to let me know that it hurts" (Viewing session, 1/11/84). The patient, on the other hand, states that not a word will come over her lips, no matter how uncomfortable the stretch is.

> In the hospital (after the car accident 1979) they did some really awful things but I never once said 'Ouch.' And kind of, you know, sort of proud of that ... I can take pride in the fact that they didn't make me yell. (Viewing session, 8/1/85)

These divergent attitudes, where the therapist wants the patient to "let her emotions out" and the patient herself wants to "keep them in," are expressed during several sessions by both of them, but always implicitly. In viewing sessions, as seen above, both commented explicitly on this phenomenon. The therapist's argument for asking the patient to express freely the discomfort she feels could, as mentioned before, be a technique to make the muscles relax, but it could also be a wish for a more precise verbal communication of the experience of the pain. The therapist really asks for two things. On the one hand she asks the patient to show what she feels, that is, to let go of the control, but on the other hand she asks her to stay in control by using words to express her pain. If something hurts too much, one cannot talk. If something hurts, but one can still talk, that is a sign that the pain is less

severe. If a patient uses words to communicate discomfort, then a therapist can use words to distract her. Whatever happens in treatment situations can be attributed to the treatment being too harsh or the patient being too vulnerable. To provide an optimal amount of treatment is a challenge in physical therapy.

Evidence of the patient's reason for non-compliance or non-learning is that she wants to be stoic and asks the therapist to respect this: "I was brought up to be very stoic and not to cry" (Viewing session, 8/1/85). By referring to her upbringing the patient states two things. One, she has learned <u>not</u> to show her emotions. Two, whatever difficulties she will encounter, she is not ready to change that behavior. The patient also asks the therapist to pay close attention to her non-verbal communication.

This discussion of the display of pain in treatment situations is central to physical therapy. The therapist offers the patient a place or a situation where it is acceptable to express strong emotions. This will, of course, have no effect upon the patient if she does not identify the physical therapy setting as the therapist does.

The second example has to do with the relation between treatment provided at the outpatient clinic and the home activities. It is related to the patient's knowledge or

awareness of what would help her the most. This is something which I asked the patient about during a viewing session (8/1/85). The response was that she did not know. When questioned a bit further whether recovery had something to do with her keeping up her exercises, or using a wand or the pulley, she said,

> Well I think whatever the things I was supposed to do at home were very clearly part of it. That if I didn't do them I wasn't going to make any progress. And that it would take longer and Lord knows no one would want to extend it. (Viewing session, 8/1/85)

Thus merely to use the arm as much as possible (like working in the garden) and do as instructed was good enough.

From the therapist's point of view, one particular exercise, the use of the pulley, is the most important. In a viewing session (3/8/84) the therapist discussed the patient's frustration and her own concern over the slow progress. She wondered, "Am I ever going to get her to reach the full range of motion" (Viewing session, 3/8/84). The only alternative treatment would have been manipulation under anaesthesia. But considering this only a hypothetical solution, the therapist said with conviction, "If I would be Dr. Strauss I'd be making sure I would have time to make my own exercises more often." I said that Dr. Strauss was quite worried. She had told me "I can get it (the arm) up

here, but the last part I can't get by myself." "The pulley," the therapist said. She continued,

> She doesn't like it though. It hurts. That's the one she avoids. That is the one she didn't put up for two weeks. When I told her about it, she couldn't find a place to walk it over and this and that. (Viewing session, 3/8/84)

The therapist states that the patient does not want to use the pulley, even though she knows how important it is. "I have talked to her about it again" (Viewing session, 3/8/84).

When going through the fieldnotes regarding comments upon the pulley the following four instances were found.

1. The patient "had had no time for making arrangements for a string so she could lift up her right arm with the help of her left. She was going to use a hook, used for a flower." (Fieldnotes, 2/1/84)

2. The patient reported "that she had now ordered a pulley and that she has finally been able to start pushing herself beyond where she actively can't go further." (Fieldnotes, 3/12/84)

3. "The pulley has arrived. The patient complained, 'They are very slow.' In the meantime the patient had used to place her fingers on top of a door to stretch out." (Fieldnotes, 4/3/84)

4. The patient states "Nauseating" when asked what it was like to use the pulley. "But I do it." (Fieldnotes, 4/10/84)

What is important to observe here is that it has taken two months of treatment before the patient can start pushing herself. What the therapist perceives as resistance or non-compliance could simply be signs of the patient's physical and psychological difficulties.

Why is the use of the pulley such an important issue for the therapist? And why does this go unnoticed by the patient? One interpretation is that the therapist actually asks the patient to carry out "hands-on phases" at home. She asks her to keep the arm still at full forward flexion. Her reasoning is likely to be like this: "To be truly effective, repeat as precisely as possible the treatment I usually give you." The patient, on the other hand, makes no distinction between the home activities. The therapist's message has had no impact on her. Referring to what the patient tells about her doings when at home, like gardening, she indirectly says that moving her arm, that is, imitating the "hands-off phases," is what she should do and does when on her own. One must also remember that the patient had learned not to use her arm beyond a certain point. Simply to be able to use the arm as much as possible could be more important to the patient than the therapist is aware of.

Questioning the Goals of Physical Therapy

The two examples discussed above point to some general issues or questions about goals of physical therapy. Is it the goal of physical therapy that the patient should only learn what the therapist considers to be most important? If this does not take place, is the patient then non-compliant? If a therapist indirectly says "This physical therapy department is a special place. Feel free to 'act out.' But, please, don't lose control totally," should a patient accept that? If a therapist assumes that her own doings, that is, what happens during the hands-on phases, are what get results, should a patient imitate those outside of the treatment situation? If these prejudices are representative of how teaching and learning are perceived and acted upon in a therapist's everyday practice, then they need to be reconsidered. It is important to see the distinction between what the therapist intends to teach, which she has control over, and what the patient learns, which is beyond the therapist's control. Another step to take is to start looking for how and when patients tell what they have learned and how they make use of this outside the treatment situation.

This section has considered two alternative perspectives from which treatment situations can be analyzed. The conclusion is that every session in itself is

an opportunity for the patient to restore function, to heal, and to learn. While it is not possible to distinguish from this study what benefits the patient most, it is possible to identify occasions on which the patient and the therapist reach consensus or fail to understand one another's goals, concerns, or definitions of the situation at hand.

The following chapter summarizes the findings of the study, draws conclusions from them, and outlines future implications for practice, research and education.

SECTION III

CONCLUSIONS

CHAPTER SEVEN

CONCLUSIONS AND IMPLICATIONS FOR THERAPY, RESEARCH AND EDUCATION

The title of this dissertation suggests that physical therapy can metaphorically be conceptualized as a form of communication. As such it requires two parties to send, receive, and interpret messages through a variety of channels. Concretely, physical therapy sessions are face to face encounters that take place in particular settings, under particular circumstances, with particular purposes. The main goal, to restore function, structures the interaction between the patient and the therapist. How this is done has been the focus of this study.

In the attempt to describe some instances of the practice of physical therapy as adequately as possible, this study has paid attention both to the concrete treatment technique, used when treating a frozen shoulder, and to the talk that evolves between the patient and the therapist. Details of actions, both vocal and non-vocal, were analyzed in videorecorded sessions, as well as fieldnotes, interviews, and documentary records.

This chapter first gives a summary of the findings from the study, then discusses the conclusions drawn and outlines implications for research and therapy.

Summary of Findings

First, a note on the outcome of the total series of treatments is in order. On May 3, 1984, four months after the initial treatment, the patient had gained full forward flexion. External rotation was not complete until September 1984 and this happened at a gym when the patient was using arm-strengthening equipment (Fieldnotes, 7/20/85). Thus eight months after the treatments had started at this clinic the patient had regained full mobility of her shoulder. But the time from when her shoulder first started to hurt, January 1983, until recovery, September 1984, was 20 months. When comparing to Reeves' study (1975), where the average time from initiation of problem to recovery was 30 months, and where no individual physical therapy treatments were given, there is ground to assume that the treatments given at this clinic and this patient's ability to endure them hastened recovery. However, this study says nothing about which single factor or which combination of factors that were most important. It could be the treatments themselves, and/or the patient doing exercises

in between treatments and thus maintaining the mobility, and/or spontaneous recovery.

The main purpose of each single treatment session was identified as an expectation and a claim: "Something is going to happen." Each session consisted therefore of several attempts to loosen up the shoulder. Only a few of them were successful. The treatment technique itself, stretching, segmented each session into phases of hands-on, where the therapist and the patient physically worked close together, and phases of hands-off, or phases of recovery, where the therapist no longer touched the patient.

For the treatment to be carried out, certain commands had to be used. The therapist's primary mode of speaking was identified as "giving instructions and feedback." The therapist displayed different styles of talking, and they were found to correspond to the activities at hand, while the patient's singular style of talking, "making conversation," remained unaffected by them. Thus the session contained both a "treatment dialogue" and a special form of "conversations." The treatment dialogue consisted of the therapist's use of a particular register, that is, her verbal and physical instructions and feedback, and the patient's inaudible, physical responses and vocalizations. A <u>register</u>, according to Cazden (1988) "is a

conventionalized way of speaking in a particular role, and is identified as a marker of that role" (p. 159).

Each statement by the therapist during the treatment dialogue built upon the physical response from the patient. There was a continuity in this dialogue in spite of its surface structure of being a string of commands with little coherence.

The conversations were initiated primarily by the patient, and the therapist became the respondent. Many times these conversations ended quickly and were therefore brief. These conversations, initiated by the patient, seemed at first to be quite separate from each other, to lack continuity. A content analysis revealed, however, that the patient repeatedly talked about the same theme, albeit with variations.

The two dialogues are intertwined throughout the session. This indicates that there are rapid but subtle shifts in the social relations between the patient and the therapist. The therapist is at one moment someone who gives instructions, who leads. At another moment she is someone who is expected to respond to a statement by the patient. Then again she is someone who is giving instructions. As soon as the patient starts talking about something, no matter the topic, she disrupts or violates the interactional structure which is set up implicitly by the therapist's first instruction. The therapist's return to a

new command reverts the structure again. A treatment dialogue and a brief conversation occur separately only in two phases each (see Figure 4:3).

These two dialogues indicate also that the treatment situation is defined in different ways. The treatment dialogue ascertains that this is a medical event. The brief conversations signify that it also is a social event.

Both the patient and the therapist "enact," that is, act in accordance with the medical definition, but it is primarily the patient who sustains the social definition. Her persistence in staying on the same topic, her shoulder, however, complicates or obscures this definition. These two definitions, and there might be more, exist side by side. Multiple definitions are also found in other studies of clinical encounters. Emerson (1970, pp.91-92) states that,

> Many situations where the dominant definition is occupational or technical have a secondary theme of sociality which must be implicitly acknowledged.... Sustaining a sense of solidness of a reality composed of multiple contradictory definitions takes unremitting effort.

Particularly,

> the patient's ambition to "understand what is really happening" may lead to undermining of the medical definition. (Emerson, 1970, p. 95)

Mishler (1984) addresses similar issues but names them the voice of medicine and the voice of the lifeworld.

As has been discussed earlier, the patient is keenly aware of what is going on during the session. She also tells what she experiences right then. Recalling that the patient is a social scientist, one might assume that it is easy for her to express herself in words, that she is more analytic than other patients. However, the words she uses, the events she talks about, are quite ordinary. She tells of how she stretches her arm when watching TV, her problem in bringing her arm all the way up when she is about to use the pulley at home, or how she has to rub her arm in the middle of lecturing to relieve the pain. Dr. Strauss reasons like any other patient who is concerned about her injury and whose life, for the time being, is "run by it."

Regarding the relationship between talk and the length of some phases, it was found that talk itself caused two phases to be prolonged (hands-on V and hands-off VII). These were also the same phases in which four of the six brief episodes of confusion occurred. In hands-off VI two episodes of confusion took place. Shifts in the therapist's style of talking were present in each of these three phases. The analysis of the six episodes identified how four unwritten rules were violated. These rules concerned primarily who was to lead and who was to follow. The therapist could shift between giving explicit and implicit

instructions regarding when to start a hands-on phase. If the therapist was occupied by something else, the patient should use that time to prepare for the next hands-on phase and not make the therapist wait. The patient should pay close attention to the therapist's postural shifts and read them properly.

Returning to the content of the patient's talk during the session that was analyzed in detail, we saw that whenever the patient stated something or started to talk about something, the topic was her shoulder. The patient talked mostly about the present soreness of her shoulder and speculated about the cause of it. She also commented upon the immediate outcome of the stretchings. So did the therapist, but to a lesser degree. "The sore spot" was a topic both referred to on different occasions, but only the therapist talked about future plans of treatment, and did so toward the end of the session.

Then, assuming that whatever was talked about could carry other implicit messages, the talk itself was analyzed anew. Although the primary responsibility for a physical therapist is to help a patient restore function, this does not exclude other aspects of healing. By looking first at some psychological aspects of treatment situations, then seeing the treatment situations as instances of teaching and learning, the talk took on another meaning. As the patient, spontaneously, took every opportunity to talk

about her shoulder, this was interpreted as a means of coming to grips with or accepting her present status. The mere process of talking about a problem or a concern and do so in the presence of a listener, familiar with the problem itself, was interpreted to be psychologically beneficial for the patient. This, in turn, would place the therapist in the role of a listener, where the act of listening would be the therapy.

As the patient would talk about her shoulder and its mobility or lack of mobility, she would also learn more about her shoulder joint, or discover new aspects of it. This took place during each ongoing treatment. By making her bodily experiences explicit, she, at the same time, offered the therapist something to learn. And at each session, the therapist found out/learned about the status of the patient's shoulder. This was inferred to be done through her listening to the patient, through her brief examinations, through her close monitoring of the patient and the consequent minor adjustments in her treatment. Her attentiveness to the patient's signals of pain during the hands-off phases was also interpreted as instances of learning about the patient.

Issues Illuminated in This Study

Several issues have been illuminated in this study. First, there is the notion that physical therapy sessions are interactionally accomplished. This means that both the patient and the therapist do something all the time, and they take account of what the other party is doing. Scheflen (1973) says, "All participants hold postures and facial expressions at all times and they move together" (p. 6).

To describe, for instance, the treatment dialogue as "an audible instruction by the therapist followed by an inaudible, physical response by the patient" points only to the sequential/reciprocal dimension of the process of communication. What is left out is the simultaneous or complementary dimension. In other words, at the same time as the therapist gives instructions, the patient hears her words and shows that she is listening. Although it is easy to identify speaking as an active process, listening is not a process of passive reception, but an activity that involves production (Erickson, 1986a). And "Given this interdependence, an intimate kind of conversational cooperation is continually necessary among all the conversational partners engaged in interaction" (Erickson & Shultz, 1982, p. 18).

The second issue stressed in this study is that any encounter or any session is a local production, the outcome of which is difficult to predict. In spite of adhering to the same treatment routine, each session is negotiated anew by the patient and the therapist. Anything that happened during the ongoing session was potentially accessible to both the patient and the therapist, but what events they paid attention to and how they interpreted particular instances differed between the two.

The third issue brought up is that of knowledge and power. The inherent asymmetry between the patient and the therapist is grounded on their different knowledge and their different status. One, the therapist, possesses knowledge in the form of medical and technical expertise. The patient's knowledge is of another kind. She has experience from working in hospitals, from being hospitalized after a car accident, and from teaching social science. She is also, in a profound sense, experienced with and knowledgeable about frozen shoulder. Both the patient and the therapist reveal what they know throughout the sessions. The patient continually displays her knowledge by providing relevant information about the status of her shoulder; by showing when "too much is too much"; by making her own evaluations of what is taking place in her shoulder joint explicit; by formulating questions to herself regarding lack of progress and then providing alternative

answers; and by not accepting the therapist's claims of good results if nothing remarkable has happened. By placing her arm in proper position before being instructed to do so, her familiarity with the treatment routine is revealed. In other words, this patient trusts her own experiences.

Clearly, the patient and the therapist had the same general goal in mind: to improve range of motion of the patient's shoulder. However, they had different local moment to moment goals within the sessions. Both defined the treatment situation as a medical event; the patient also turned it into a social event. The therapist saw learning as an important outcome of the treatment; the patient saw it as a way to understand different phenomena but also as a means to gain control over what was going on. Both possessed knowledge which was similar as well as different.

What were the particular consequences of the patient's demonstration of her knowledge? How did it affect the ongoing treatment? Did it hamper the striving toward a consensus, essential to maintaining an efficient work relationship? Some disagreements or attitudes persisted throughout the sessions. These were their different opinions of how pain should be expressed; their evaluations of the overall progress; when, during the treatment, they were convinced or sure of the status of the shoulder; and what time perspective they used. But, more precisely,

evidence of interactional dissonance was found when particularly confusing moments were analyzed. Those brief episodes revealed the following:

> The patient and the therapist missed each other physically.
>
> They talked past each other.
>
> They contradicted one another.
>
> They had different criteria for judging a stretch "good" or not.

One cause for their talking past each other can be the fact that both, occasionally, "think out loud." That is, what they say is not addressed to the other party, it is more a way of having a private conversation with the situation itself. What is displayed, unwittingly or not, is their own way of thinking, of reasoning around what is happening. For the other party present it becomes difficult to discriminate whether one is being told something and is requested to respond or react or whether one should just keep quiet. When thinking about talk as being directed to someone, the therapist alternates among talking directly to the patient, talking with the patient, talking to the patient's shoulder via the patient, and carrying on her own conversation with the situation. The patient alternates among talking directly to the therapist, talking with her, and conversing with the situation at hand.

The participants gave evidence of sensing this difficulty. For example, the therapist reported early on in the study that she was aware of some of these very subtle problems. She thought of Dr. Strauss as a "hard" patient, as someone who wanted to control the treatment, to "run the show." As this analysis has demonstrated, the patient did lead many times. She initiated several hands-on phases; she initiated the termination of every hands-on phase; she rejected several of the therapist's propositions; she introduced topics for conversations. This was obvious particularly during the last videorecorded session. Their difficulties in reaching consensus did remain. The patient implicitly and explicitly challenged the therapist's professional authority. To find out whether the therapist's impression of the patient as "being in charge" was congruent with her own experience, the patient was asked if she had had any "say" over the treatment. She responded in the following way:

> As to your question, I feel that mostly I was 'done to,' that I had little or no control over the treatments. I did know, of course, that if I made enough of a fuss that Kathy would stop, or shift to a new exercise--but mostly I felt that I was a body to whom awful things had to be done. None of the exercises (if that is what they should be called) were generated by me, and even if I cooperated by trying my best to do what I was told, did things at home, etc., it still felt/feels as if I was 'done to.' Even knowing, of course, that if I did not want to be crippled I <u>had</u> to be done to. (Letter, 2/13/85)

One finds here that the patient did perceive herself as being "done to" with few opportunities to affect the situation. The analysis of the data shows that this is contrary to the therapist's perception. One explanation for their different understandings is that what the patient calls "cooperation" is what the therapist considers "resistance." This brings us back to the issue of power or control.

Who should be in control? The one representing the medical establishment or the one representing her own body? Or can one accept that control continuously shifts from one person in a dyad to the other? Bateson (1972, p. 267) writes,

> A human being in relation with another has very limited control over what happens in that relationship. He is part of a two-person unit, and the control which any part can have over any whole is strictly limited.

Despite the fact that the patient and the therapist in this study were knowledgable and competent people, the fundamental difference between the two remained. And they knew all along who was the patient and who was the therapist. The original roles persisted and with them lack of equality. Erickson and Rittenberg (1987) state that the asymmetry in knowledge and power between a service provider and a receiver of services is manifest even during the most

routine examination. And "That asymmetry is inconsistent with the American ideal of equality among persons" (1987, p. 403).

One explanation for the talk that took place is that the patient and the therapist in different ways tried to compensate even for this discrepancy. All the patient's initiatives to conversation must first of all be considered as a sign of trying to make the situation more balanced. Several actions of both give the impression of offering participation on a more equal basis, but do so only to a certain degree. For instance, the therapist, through her treatment and her explanations, helps or teaches or encourages the patient to pay close attention to her shoulder joint, her muscles, and the movements of her arm. On the other hand, she does not need the patient's accounts of her experiences. The patient, who demonstrates a willingness to cooperate, provides plausible explanations for lack of progress. However, it is unclear if those same suggestions are invitations to serious discussions about and reflections upon the treatment itself. Each "offer" is ambiguous and raises the question whether authentic participation is intended or not. And how is this related to control?

A Second Analysis of the Physical Therapy Literature

Turning to the physical therapy literature, in the light of the findings from this study it is possible to analyze why such phenomena as control and participation are presented in the way they are and to suggest complementary views. To recapitulate briefly, the way practice is described, treatment and communication are conceptualized in the literature as going from the therapist to the patient. The therapist's rational and intentional actions are held up but not the patient's. The therapist is the one who provides or facilitates healing for the patient. The patient is someone who needs help and who either is motivated to get well and to comply with the treatment regimen or not. A contrasting relationship is thus set up between the two. All this indicates a way of looking at physical therapy as unidirectional and deterministic. It reinforces the medical definition of the situation.

The descriptions of physical therapy practice that prevail in the literature, and which might be representative of those which are used in physical therapy education as well, identify or equate, in a sense, physical therapy with what therapists do during "hands-on" phases. It is during hands-on phases that the therapist is "in control"; it is here that her competence comes into play; it is here that the purpose of the session is visible in

concrete actions. However, in such a model several features remain implicit and others are excluded: the patient's participation in the form of silent, physical responses on which the therapist grounds her feedback; the patient's talk in the middle of treatment which turns the therapist into someone who listens; the right time to start a hands-on phase, which many times means that the therapist is someone who waits; the right time to terminate a hands-on phase, which turns the therapist into someone who bargains; and all that happens during the hands-off phases. Thus what is focused upon in the literature does justice to only half of what happens in treatment situations and, consequently, only half of what the therapist actually does.

The same goes for descriptions of the patient. Her problems are naturally given the most attention, but her other attributes are seldom considered. This study shows that while a patient does bring problems, she can also provide solutions. By talking about her dilemma, she can turn the treatment session into something psychologically beneficial for herself. By formulating her opinions or attitudes regarding her condition, she also teaches the therapist about them. By telling about her experience, she shows that she learns, how she learns, and what she learns. It might well be that a patient learns things that a therapist never intended to teach or considered herself to be teaching.

As for the therapist's work, her instructions and feedback are treated as natural properties of her professional responsibilities in the literature. That the patient, given time and motivation, learns what the therapist teaches is also taken for granted. What other things a patient learns as well are seldom discussed. Evidence of additional learning or unintended consequences of a therapist's teaching is reported by Taussig (1980). In that case, a therapist's instructions unwittingly made a patient distrust her own experience so that she became unable to rely on anybody else's help but the hospital staff's. When the patient was asked (Taussig, 1980) why nobody but a professional could help her walk, she responded:

> Because she (Becky) would teach you wrong, when a professional already knows and has evaluated your muscle strength.... But Becky hasn't been taught how to grab me or stabilize me.... or tell me which muscles to use to keep myself from collapsing. So, see, she can't help me professionally.... That technician still has her mind working on far beyond mine. Mine is strictly in trying to accomplish what she has already learned and knows. (p. 8)

When questioned again why this Becky could not help her exercise, the answer was that "She doesn't know the extent of your energies ... The professional has to figure this out before she starts the exercises" (Taussig, 1980, p. 8). Taussig then asked, "You yourself wouldn't know the

capacity of your own energy so you could tell?" The patient exclaimed, "No! No!" Taussig (1980) interprets this as a sign of the complete alienation of the patient's own senses and states that

> The critical issue centers on the evaluation of incapacity and of feelings, such as pain, and following that on the treatments necessary. Here is where the professionals deprive the patients of their sense of certainty and security concerning their self-judgement. (p. 9)

He also warns that an aura of benevolence can conceal issues of control and manipulation in treatment situations.

Although Dr. Strauss, the patient with a frozen shoulder, continued to rely upon her own perception and her own experience, the impact of the most mundane work of the therapist, to give instructions and feedback, must be reconsidered. Every utterance has both a literal, referential meaning and an implicit social meaning. In other words, each simple instruction and evaluation by the therapist is powerful in several ways. It can make a patient do something; it can help a patient learn something; it can stress the particularities of the relationship between the patient and the therapist.

The following section provides some suggestions for practitioners and researchers, based on the findings from this study.

Implications for Therapy

This study has attempted to provide an alternative way of looking at treatment situations. As such, it has aimed at describing how complex any treatment situation is. The people that are involved, who come together for a specific purpose, form a group which develops certain ways of working together. Both the patient and the therapist in this study felt responsible for the outcome of the treatment. Both of them were serious about the purpose of the treatment, but they perceived and enacted their responsibilities differently. The session that has been studied in detail here is an example of what happens when a patient's condition has gotten slightly worse. A minor impairment, that is, a stiffer shoulder, disturbs the patient. The therapist is thus working with a patient who is frustrated but still eager to work for improvement.

In order to facilitate working with patients whose condition lasts for a long time, <u>therapists might try to attend immediately to what the patient brings up early in the treatment</u>. If a therapist simply tries to eliminate or "talk away" a patient's frustration, the result can be the reverse. Even if the therapist is eager to start the specific treatment, room should still be given for the patient to express whatever she wants to. Otherwise the same phenomenon can appear in physical therapy situations

that Korsch, Gozzi, and Francis (1968) found in their study, namely, that patients, in this case mothers of children at an emergency clinic, stopped listening to those doctors who did not take their concerns seriously. Those mothers could not recall what instructions they had been given, and consequently did not comply with the treatment regimen.

Caution should also be taken not to classify everything a patient says as a sign of frustration even if the topic is the injury itself. At the same time a therapist is thinking about how demanding it is to listen to a patient's story, she might remind herself to accept that and avoid the temptation to change the topic. This suggestion disagrees with one of Shepard's (1986), namely, that a therapist should take advantage of her position and turn conversations away from the patient's specific bodily concerns. This thesis argues that time should be allowed to examine more closely and reflect upon <u>what</u> a patient says about her physical problem. This might best be done after the treatment session. In other words, <u>to understand the patient ethnographically</u>, that is, to discover the perspective from which the patient reasons and to take those findings seriously, might benefit both the patient and the therapist. It might result in realizing that treatment plays a role for the patient which may differ from what the therapist believes. It can also result in

realizing that the patient is influenced more by factors outside of the treatment situation than by the instructions she is given.

By doing this ethnography, insights can be gained about how the patient perceives her condition; how she tries to understand what has happened to her and what is happening to her, and how she experiences the ongoing session itself. The impact of the treatment situation upon the patient might also be rediscovered.

A therapist should aware of how quickly one's role can change. Comments during daily practice which are merely meant to be feedback upon the patient's performance might in fact change the working relationship. A word of praise might remind the patient about the different status between herself and the therapist. With only a brief phrase, the therapist steps out of the working relationship and becomes or takes the position of someone who judges somebody else's performance. Saying, "Your shoulder is functional. You can use it the way it is" to a patient who already knows this is like saying, "It is my professional responsibility to evaluate your condition properly and to let you know what I have found out." But behind this lies a misconception or bad habit. It might not be necessary for a patient to be told or informed about something she has concretely experienced herself. It might in fact indicate the the therapist has not paid attention to what the patient has

said and demonstrated during the ongoing session. It might indicate that the therapist has refrained from learning from the patient.

The professional's primary responsibility for each session should be to find the answer to the question, "What sense does the patient make of her condition today?" To assume that a patient's impressions or attitudes are static over time is to underestimate the impact that any event, or life itself, has upon a patient. The changeability of a patient's attitudes must be recognized and accepted. The same flexibility should be held toward the patient's perception of the outcome of the treatment. Even if improvement is measurable in degrees, the patient might not be pleased at all. Or the situation can be the reverse. In other words, it might be naive to assume that a good treatment outcome, from the therapist's point of view, makes the patient equally pleased.

No matter what, therapists must not expect that patients' attitudes are stated directly. Rather, they appear in different forms, in different words, at different times during each session. Therapists should neither expect that patients will fully embrace the professional's assessment of the condition, nor try to impose the medical definition of the condition upon the patient. Such impositions can lead to a patient losing one of her "trump cards," namely, "the practical knowledge she has acquired

about her illness and the medical institution" (Lacoste, 1981, p. 179).

Another way for the therapist to avoid confrontation with the patient in the treatment situation is to accept or acknowledge whatever opinion or comment the patient makes before stating her own, whether this confirms or disconfirms the patient's. And, attempts should be made to figure out how oneself and the patient one is working with do reach consensus. An alternative approach is to conceptualize treatments as negotiated achievements, as described by Green Schwartz and Kahne (1983). By reflecting upon issues like these and getting accustomed to this way of analysis, a therapist could learn to think about the therapeutic process and not only the therapeutic outcome.

Implications for Research

The theoretical and methodological issues this study raises with respect to face to face interactions concern first of all the treatment dialogue itself, but also its inter-weaving with the brief conversations. The relationship between the vocal instructions and the non-linguistic responses that has been found in this study argues that kinesics might be expanded to see movements as not solely in connection with one's own talk but in connection with somebody else's. To learn also to see

movements as propositions or statements equally powerful as vocal ones might lead to the recognition of their meaningfulness.

The continuous weaving of the treatment dialogue with the brief conversations, with the therapist being responsible for the vocal part of the treatment dialogue and the patient initiating most of the conversations, shows that there are rapid shifts in participation structure throughout a session. This challenges the notion of professional authority being firmly part of the occupational role. Only at certain points in time is this the case.

Problems in medical encounters, which are frequently addressed in the literature, can be related to these rapid shifts, but they can also be caused by the different styles the professional and the patient use while talking. While the professional dominantly uses particular registers, the patient dominantly speaks in the most ordinary way, identified in this study as "making conversation." Further studies are needed in this field.

Another area of research that this study bears on is the field of pedagogy, of teaching and learning. Studies of practice can contribute new insights into the role of knowledge, including cognitive as well as bodily knowledge, in treatment situations. By assuming that the patient and the therapist possess and express both cognitive and bodily

knowledge in the course of treatments, one can study how this is done. Such studies encourage new analytic perspectives on teaching and learning that are pertinent to the field of physical therapy.

Based on Erickson's discussions about staff development in teaching (1986c), the following axioms and questions could serve therapists and researchers alike as grounds for rethinking the nature of physical therapy.

1. Every patient and every therapist is working on something or doing something all the time. The question a therapist or researcher can ask is "What is the patient/the therapist occupied with right now?"

2. Everyone is someplace. That is, nobody is ever no place. The question can be "Where is the patient/the therapist right now and what is she working on?"

3. Everyone is continually making sense. "It is not that some people make more sense than others or that the teacher is making sense and the children are learning how to make sense, everybody is making sense all the time" (Erickson, 1986c, p. 16). One can therefore ask "What sense is the patient/the therapist making of what is going on right now?"

4. Everyone teaches and learns. But who is teaching what? Who is teaching whom? Where and when does this teaching take place? Therapists should ask, "What does this patient know? What is this patient trying to teach me? Why

is the patient trying to teach me this right now? How does this patient learn?"

5. Not everything that happens in a treatment situation is accessible or visible to both the patient and the therapist. One cannot attend consciously to everything that happens, as many things go on at the same time. The question becomes "What is visible and what is not for the patient/the therapist in this session?"

6. Any treatment situation is influenced by things or actions that have taken place prior to the ongoing treatment. It is also influenced by the anticipation of future actions. The question can be formulated as "What past and future actions play a role in this treatment situation?"

Implications for Education

The findings from this study are suggestive of implications for professional development and physical therapy programs, as the study has questioned the relationship between a patient and a therapist; as it has questioned what is therapeutic about treatment; and as it has questioned ways of gaining knowledge.

One way to provide an opportunity for experienced physical therapists and teachers of physical therapy programs, and thus indirectly physical therapy students, to

reframe their thinking on these matters is to present videorecordings of treatment situations. This can be done in a fashion similar to what was briefly described in chapter three under the heading "Issues of Trustworthiness." One prerequisite is that the videotape to be shown is thoroughly analyzed beforehand. The advantage of making frequent revisits to the same scene permits uncovering of how treatment situations unfold in real time. It allows for paying attention to one feature on the videotape at a time or to the combination of several ones. It challenges inferences made too fast. Discussions can be organized around the following exercises:

1. Comparisons between individually held assumptions about the profession and the visible carrying out of practice can be made.

2. Knowledge acquired from textbooks about a certain condition can be compared and contrasted to knowledge derived from working with patients having that condition.

3. Attention can selectively be paid to how patients express their knowledge, how they verbalize their experience, how they understand the same experience, how time alters their understanding, what logic or lack of logic they see in the origin and development of their condition, and how they come to cope.

4. Listening for clues to intervention that many patients directly and indirectly give during treatment can be practiced.

5. Theories of communication, vocal and non-vocal, can be contrasted to the practice of communication, with all its complexities and the complications that inevitably are part of any interaction.

6. Attention can be paid to moments when "things go wrong," in order to establish what is happening when "things go right." This is not meant to search for difficulties, but the smoothness of actions when "things go right" needs to be contrasted to more unsynchronized actions in order to be "seen."

7. Discovery the local moment to moment co-production of any treatment situation in focusing upon the contextualization cueing of the participants.

8. Awareness of the inseparateness of language and movements, one's own and others, and the implications they carry, alone and together.

9. Questioning the concept of motivation.

Another way to learn about those same issues or concepts, for physical therapy students and experienced therapists alike, is to have one or more videotapes made of oneself when working with patients. These videotapes should then be discussed with a social scientist or a behavior scientist. To study one's own behavior in treatment

situations will facilitate uncovering, for instance, what a patient says and does; what one hears the patient say; and what movements or words by a patient one responds to or ignores. It will help in rethinking what physical therapy treatments do to patients. It will help in rethinking the purpose of physical therapy.

Finally, in order to understand clinical practice and subsequently improve treatment situations, more naturalistic studies of therapeutic encounters and relationships need to be carried out. By using concepts of teaching, learning, and communication, fruitful insights can be gained about the social complexities of treatment situations.

EPILOGUE

Six years after this study on July 15, 1990 the patient, the physical therapist and I met again. It was the first time we had met outside of a treatment situation, this time over dinner. The therapist had invited the two of us and the first topic that came up was, naturally, that of the patient's shoulder. How was it doing? It proved that the patient had had no more problems, that she still had full mobility of her shoulder. She demonstrated full forward flexion and full external rotation, but was unsure at first of how to position her arm.

When the therapist jokingly said "You must have used the pulley," the patient shook her head. Instead, she had regularly been going to exercise classes ever since 1984, because she was going to make sure that "This was never going to happen again." "This" referred both to the condition itself and to the treatments.

The patient recalled the awful pain her shoulder had caused her and that <u>no one</u> could understand what it was like. This was said while glancing at the therapist, as if to say "You were the only one."

The patient described vividly the treatment sessions, remembering many details. She brought up some of the things the therapist had said, which the therapist denied,

claiming, with a smile "I wouldn't say anything like that."

The therapist talked about the treatment sessions in a different way. She commented upon my presence during the treatments and stated that it had been good to have me around, good to "break the monotony."

When talking about this dissertation, both were interested in reading it. The patient because there were lots of things she did not remember or had chosen not to remember, "It was such an awful experience to have a frozen shoulder"; the therapist because she wanted to find out "what she was doing in her work."

Thus, six years later the patient and the therapist interacted much in the same way they had done before. Their recollections of the treatment sessions confirmed how differently they had experienced the same situations. And still, there were some things the patient had not learned. The pulley, important to the therapist, was not so to the patient; active exercises were.

The reliance upon the therapist as someone who would not only help the patient regain mobility but also as someone who would understand, strengthens the argument that treatment sessions serve multiple functions.

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APPENDICES

APPENDIX A

DATE AND NUMBER OF "STEPS ON LADDER"

TIME	NUMBER	
	RIGHT ARM	LEFT ARM
1/18/84	20	
1/20/84	22	
1/23/84	21	
1/25/84	23	
2/15/84	25	28
2/27/84	25	
2/29/84	27	
3/29/84	28	
4/12/84	28	
5/01/84	30	31
5/31/84	29	30

All numbers are recorded in fieldnotes of the same date.

APPENDIX B

Physical Therapist Consent Form

Ms. Kerstin Ek, a doctoral student at the College of Education, Michigan State University, is conducting a study to explore what communication skills are required in the delivery of physical therapy. "Improved communication, improved care" is the topic for her dissertation.

Ek would like to ask your general consent to be a participant in the project. This consent includes your permission for her to observe your interaction with others.

1. You are under no obligation to participate in this project, and you may withdraw your consent at any time.
2. The notes from Ek's observations of your interaction will be kept locked in her file. No one will be allowed to see these notes without your written permission except for Ek and Dr. Frederick Erickson, a member of her doctoral committee. Since Ek will use some ofthe information contained in the notes as part of her dissertation and consequent teaching endeavours, she will disguise the names of all the persons and places (yours included) to prevent anyone from identifying you.
3. The observations Ek will make and discuss with you are for research and educational purposes only.Neither you nor any other person - including your supervisors, patients, or Ek - will use the observations in evaluating any health professional's behavior, or in pursuing any legal or administrative action.
4. Ek will be pleased to talk to you further about these and other aspects of the project at any time. She can be reached at (517) 355-6006 or (517) 353-6413.

I have read and understand this form. I have had a chance to discuss the project with Ek. This consent form includes having Ek observe my interaction with others. I agree that data from these observations will be used accordingly to the conditions stated above.

Name: _____

Hospital: _____

Witness: _____

Date: _____

APPENDIX C

Physical Therapist Consent Form for Video and Audio Taping

Ms. Kerstin Ek, a doctoral student at the College of Education, Michigan State University, is conducting a study to explore what communication skills are required in the delivery of physical therapy. "Improved communication, improved care" is the topic for her dissertation.

Ek would like to ask your permission to make a video or audio tape of your behavior for her project.

1. You are under no obligation to make the video or audio tape. At any time you can withdraw from the video or audio taping process or have the video or audio tape erased.
2. Ek will review the tape with you as part of her project. She may use portions of the video or audio tape or transcribed sections as part of a training course in communications skills for physical therapists.
3. The video and audio tape will be labelled with an anonymous code (not with your name) and it will be kept locked in Ek's file. The video and audio tapes are intended to be used for research and teaching purposes only.
4. Ek will be pleased to talk to you further about these and other aspects of the project at any time. She can be reached at (517) 355-6006 or (517) 353-6413.

I have read the patient's consent form and agree to participate in the project, recognizing the possible risk that the video and audio tape might be subpoenaed in a legal dispute. I have read this form and I consent to have

a tape recording made of my behavior on _____ (day) at _____ (place and situation). I agree that the use of this tape will be goverened by the conditions stated above.

Signature of the physical therapist: _____

Hospital: _____

Witness; _____ Date: _____

APPENDIX D

Patient Consent Form for Observation and/or Video or Audio Taping

Ms. Kerstin Ek, a doctoral student at the College of Education, Michigan State University, is conducting a study to explore what communication skills are required in the delivery of physical therapy. "Improved communication, improved care" is the topic for her dissertation.

Ek would like to ask your consent to observe and/or video or audio tape your interaction for her project.

Here is some information about the video or the audio tapes, the observations and their use.

1. You are under no obligation to agree to make the video or audio tape or allow the observations. At any time during or after the video or audio taping,you can withdraw consent and have the video or audio taping stopped, or have the video or audio tape erased, once it has been made.
2. The notes from the observations will be kept locked in Ek's file. No one will be permitted to see the notes except Ek and Dr. Frederick Erickson, a member of her doctoral committee. Since she will use some of the information contained in her notes as part of her dissertation and as part of a training course in communication skills for physical therapists, she will disguise all names (including yours) to prevent anyone from identifying you.
3. The video and audio tapes will be kept locked in Ek's file, labelled with a code number (not your name). Ek will review the video tape with the physical therapist to help her improve her

communication with patients. Part of the video and audio tape or transcribed sections of them may be used in Ek's dissertation and the training course she intends to develop and your name, and if you so wish, your image will be changed so no one will recognize you.

4. The observational notes and/or the video and audio tapes are intended to be used for research and teaching purposes only.
5. Ek will be pleased to talk to you further about these and other aspects of the project at any time.
   She can be reached at (517) 355-6006 or (517) 353-6413.

I have read this form and I consent to the following.

(Please select one and cross out the others).

a. to have a video tape made of my behavior

b. to have an audio tape made

c. to have observations made of my behavior

d. to have a video or audio tape and observation made

of my behavior.

I agree to the use of the tape or observations under the

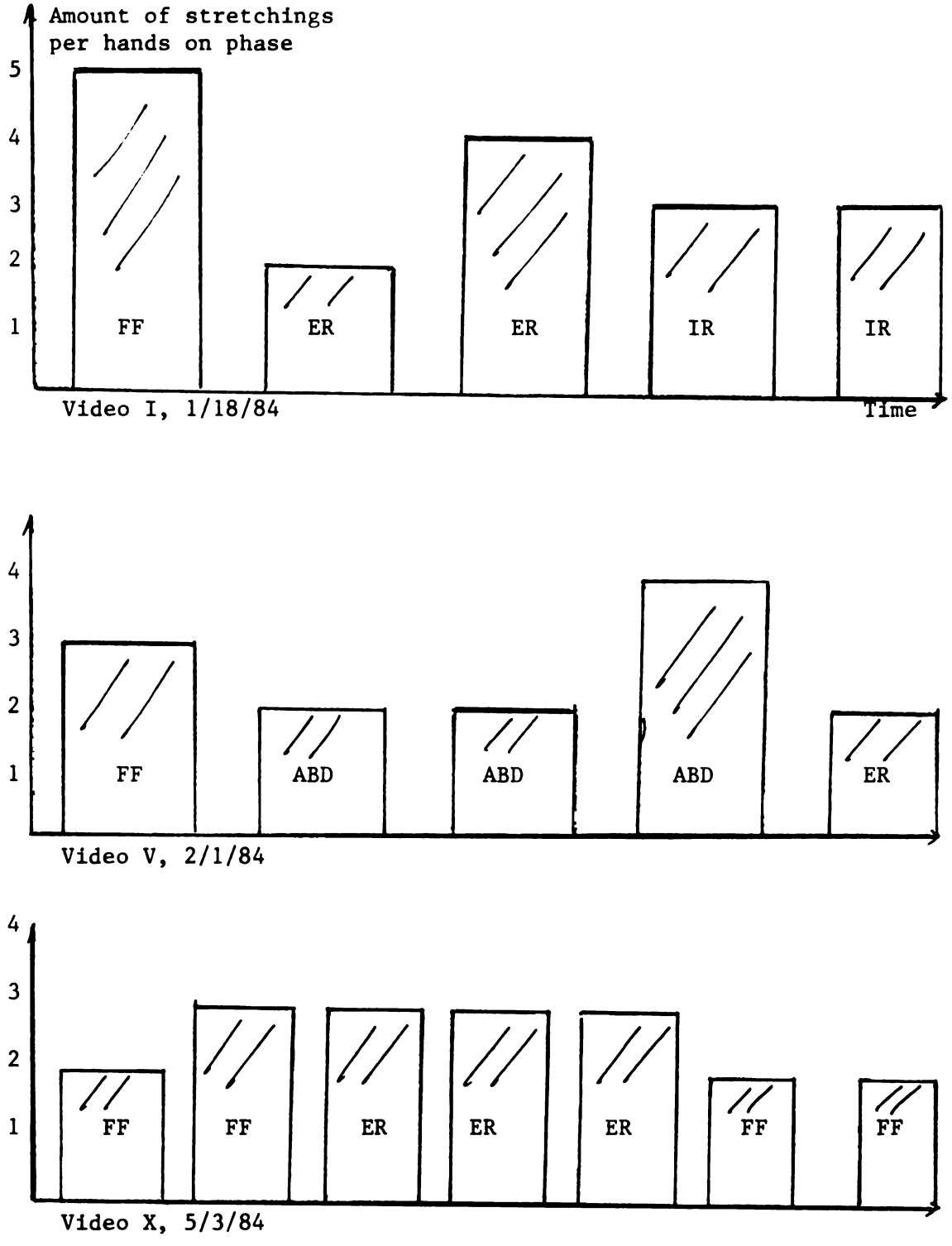
conditions stated above.

Signature of the patient: _____

Place: _____

Witness: _____ Date: _____

APPENDIX E



Amount of phases and stretchings per hands-on phase on three different occasions. Filled bars = Hands-on phases; Space in between = Hands-off phases; FF=Forward Flexion; ER=External Rotation; IR=Internal Rotation; ABD=Abduction

APPENDIX F

TRANSCRIPT: HANDS-ON VI (FORWARD FLEXION)

Hands-off VI

T: Yeah That's really looks better than when we started out
Hands-on VI P: Yeah
Let me get it out to the side Is that painful At that place You do better at this one

P: Yeah ((P exhales))

T: Okay

P: It hurts right in here

T: Okay Okay Go push (6 s) Give it a real hard push ... ____ .. Good and relax

P: Ah ...

T: Reach wa::y out ..

P: Ah

T: Push again (6 s) And relax .... And reach You're reaching _____

P: Maybe _____

T: Hm

P: Maybe the difference is that it is just hard for me to tolerate two days in a row

T: Uhum

((P exhales))

T: Okay .... Go down ____ .....

P: Ah

T: Real tender You have Yeah it's hard then

P: Aha

T: To let go
P: Aha

T: To let me stretch ..

P: Yeah it was real sore in class when I was lecturing I had I kept I had to keep rubbing my shoulder

Hands-on VI T: Hm

Hands-off VII

APPENDIX G

TRANSCRIPT: E 6:1

31:59
P exhales ....
(Pain in face)

T: We can stop and then we can go a little further You wanna do that

32:04
P: I don't care Ah I think I just wanna stop
(Whispers) (Pain in face)

T: Okay I'll hold it right there

32:09
P: Ah ....
(Pain in face)

(T gives an extra push before bringing the arm down)
32:13

32:14
T: Move it back
That's good ...
(P's face in pain)
(T starts rubbing P's upper arm and back of shoulder. As T brings the arm down she slumps slightly)

32:20
P: Ah A::h I can
(T removes her right hand, goes on rubbing P's upper arm, rolls towards P's head, slumps more)

T: Not hurting that bad Yeah Not hurting that bad right there
(T's voice drowns P's words. T's hand on back of P's shoulder)

P: No it's not in the back It hurts more up
(Normal tone of voice. P touches upper arm)

here

32:32

T: That one loosened up quite good ... Not too bad

32:37

(T removes her left hand)

P exhales

32:41

(P stretches right arm toward ceiling)

32:42

(T stretches her back)

32:43

P: Good stretch hm

(Happy voice)

32:45

T: Uhum Tough one

(10 s)

(T scratches left wrist. P stretches arm toward ceiling, bends at elbow, stretches up again, keeps arm straight, moves it slightly backwards)

32:51

(P sighs, then puts down upper arm on table, 90 degrees at elbow. P "slaps" elbow on table once more, T smiles. P sighs)

32:55

(P turns face toward T. T nods)

32:56

T: Yeap That way Over the head

(T points three times toward the wall behind P's head)

32:59

(P puts arm in position for ER)

33:00

T: No

(P rolls back on left side, puts both hands on stomach, closes her eyes, while T shows FF. T then slaps right hand on table)

P: Blah

(P sighs, adjusts head on pillow, moves it closer to T)

33:03
(P slaps both arms on table, sighs)

33:04
T: You do good with rest in between

APPENDIX H

TRANSCRIPT: TRANSITION HANDS-ON V/HANDS-OFF VI

P exhales ....

T: We can stop and then we can go a little further You wanna do that

P: I don't care Ah I think I just wanna stop

T: Okay I'll hold it right there

P: Ah ....

T: Move it back That's good ...

P: Ah A::h I can [

T: Not hurting that bad Yeah Not hurting that bad right there]

P: No it's not in the back It hurts more up here

Hands-on V

T: That one loosened up quite good ... Not too bad

Hands-off VI

((P exhales))

P: Good stretch hm

T: Uhum Tough one (10 s)

T: Yeap That way Over the head No

P: Blah ((exhales))

T: You do good with rest in between

APPENDIX I

DATE AND MEASUREMENT OF SHOULDER MOBILITY IN DEGREES

TIME	FF	ABD	ER	IR
10/07/83	150	85-90	50	WNL
10/25/83	164	125	63	WNL
01/09/84	90	75	X	X
01/25/84	95	85	5	20
01/27/84	--	70	--	--
01/30/84	100	90	--	--
02/01/84	100	90 (P)	--	--
02/06/84	105	95	10	30
03/16/84	140 (P)	130 (P)	35	55
03/29/84	160 (P) 145 (A)	--	50 (P) 45 (A)	--
04/12/84	160 (P) 145 (A)	--	--	--
05/22/84	160	--	30	--

FF: Forward Flexion
ABD: Abduction
ER: External Rotation
IR: Internal Rotation
WNL: Within normal limits
X: Not checked, too much guarding

P: Passively
A: Actively

These measurements are recorded in the therapist's progress notes. Those from 1983 are carried over from the patient's previous treatments at another physical therapy department.