

THE STRUCTURE OF MAGIC I

A Book about Language
and Therapy

By
RICHARD BANDLER
and
JOHN GRINDER

Science and Behavior Books, Inc.
Palo Alto, California 94306

© Copyright 1975 by Science and Behavior Books, Inc. Printed in the United States of America. All rights reserved. This book or parts thereof may not be reproduced in any form without written permission of the Publisher.

Library of Congress Card Number 75-12452
ISBN 08314-0044-7

Cover design from an original oil painting expressly done for
Magic I by Josh Dootan.

RC

780.5

Typography by Penguin ≈ Santa Clara, California

.B32

DEDICATION

*We dedicate this book
to
Virginia Satir*

*in appreciation for giving us
her intuitions about
people.*

*These intuitions are
the basis of what
follows
in this book.*

*Thank you, Virginia,
We
love you.*



TABLE OF CONTENTS

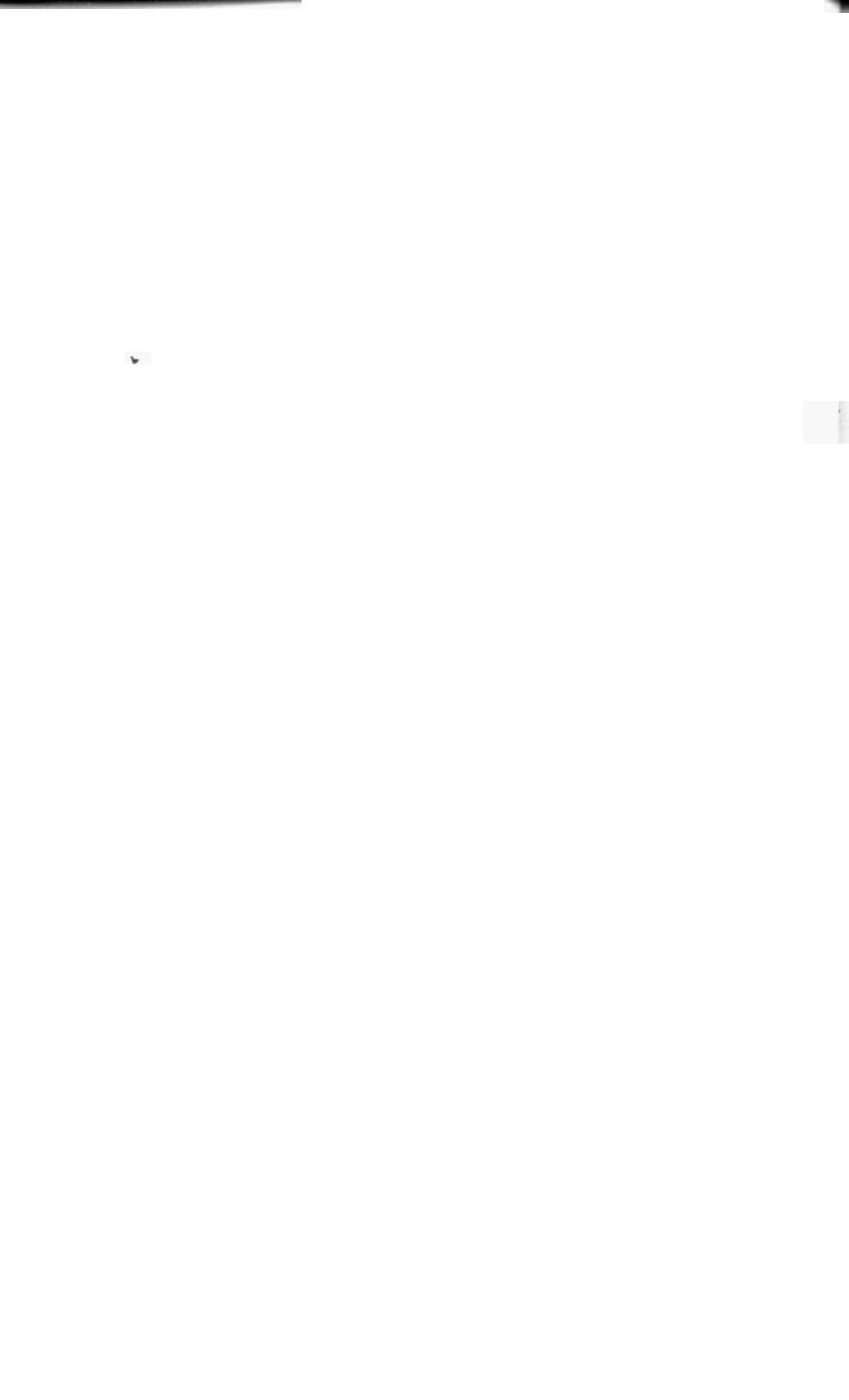
Preface

Warning to the Reader	1
Chapter 1 — THE STRUCTURE OF CHOICE	5
Experience and Perception as an Active Process	8
Models and Therapy	13
So What?	18
Chapter 2 — THE STRUCTURE OF LANGUAGE	21
The Meta-Model for Language	24
Some Universals of the Human Linguistic Process	25
The Transformational Model	27
An Overview	35
Chapter 3 — THE STRUCTURE OF MAGIC	39
The Meta-Model	40
Deep Structure and Beyond	45
Challenging Deep Structure	46
An Overview	53

Chapter 4 – INCANTATIONS FOR GROWTH AND POTENTIAL	57
Deletion	59
Distortion – Nominalizations	74
Generalization	80
Well-Formed in Therapy	107
Chapter 5 – INTO THE VORTEX	111
Transcript 1	112
Transcript 2	134
Chapter 6 – ON BECOMING A SORCERER'S APPRENTICE	155
The Second Ingredient: Reference Structures	157
Enactment: The Instant Replay of Experience	164
Guided Fantasy – A Journey into the Unknown	166
Therapeutic Double Binds	169
Other Maps for the Same Territory	172
Congruity	174
Family Therapy	176
Conclusion – STRUCTURE OF THE FINAL INCANTATION OF BOOK I	179
TABLE OF CONTENTS FOR THE STRUCTURE OF MAGIC II	181
Appendix A: A BRIEF OUTLINE OF TRANSFORMATIONAL GRAMMAR	183
Appendix B: SYNTACTIC ENVIRONMENTS FOR IDENTIFYING NATURAL LANGUAGE PRESUPPOSITIONS IN ENGLISH	211
Glossary	215
Bibliography	219

ACKNOWLEDGMENTS

We would like to thank all of those who have been helpful in the completion of this book: Jim Anderson and Kristofer Bakke, without whom this book would have taken twice as long, and the makers of Folgers Coffee, without whose fine product we would not have made it through the long nights.



FOR WORD

WOW! What could anyone say about having their work looked at by four fine eyes in the heads of two very capable human researchers? This book is the outcome of the efforts of two intriguing, smart, young men who are interested in finding out how change takes place and in documenting the process. They seem to have come up with a description of the predictable elements that make change happen in a transaction between two people. Knowing what these elements are makes it possible to use them consciously and, thus, to have useful methods for inducing change.

I often say to people that I have a right to be a slow learner but educable. What this means to me as a therapist is that I have only one thought — to help the people who come to me in pain to make changes in their lives. How I use my body, my voice, my eyes, my hands, in addition to the words and the way I use words, is my only tool. Since my goal is to make change possible for everyone, every someone offers a new challenge.

Looking back, I see that, although I was aware that change was happening, I was unaware of the specific elements that went into the transaction which made change possible. For years, I wondered what it would be like to be on the other end of me, to view myself working, to view the process of change from the other side. The authors spent hours looking at video tapes and listening to audio material, and they found patterns emerging which they could document. I do something, I feel it, I see it, my gut responds to it — that is a subjective experience. When I do it with someone

else, their eyes, ears, body sense these things. What Richard Bandler and John Grinder have done is to watch the process of change over a time and to distill from it the patterns of the *how* process. What they learned relates particularly, in a sophisticated way, to mathematics, physics, neurology and linguistics.

It would be hard for me to write this Foreword without my own feeling of excitement, amazement and thrill coming through. I have been a teacher of family therapy for a long time, as well as a clinician and a theoretician. This means that I have seen change taking place in many families, and I have been involved in training many family therapists. I have a theory about *how* I make change occur. The knowledge of the process is now considerably advanced by Richard Bandler and John Grinder, who can talk in a way that can be concretized and measured about the ingredients of the *what* that goes into making the *how* possible.

Virginia M. Satir

INTRODUCTION

It is a strange pleasure to write an introduction for this book because John Grinder and Richard Bandler have done something similar to what my colleagues and I attempted fifteen years ago.

The task was easy to define: to create the beginnings of an appropriate theoretical base for the describing of human interaction.

The difficulty lay in the word "appropriate" and in the fact that what was to be described included not only the event sequences of successful communication but also the patterns of misunderstanding and the pathogenic.

The behavioral sciences, and especially psychiatry, have always avoided theory, and it is easy to make a list of the various maneuvers whereby theory could be avoided: the historians (and some anthropologists) chose the impossible task of making not *theory* but more *data* out of what was known — a task for detectives and courts of law. The sociologists trimmed the complex variations of known fact to such an ultimate simplicity that the clipped nuggets could be counted. Economists believed in transitive preference. Psychologists accepted all sorts of internal explanatory entities (ego, anxiety, aggression, instinct, conflict, etc.) in a way reminiscent of medieval psycho-theology.

Psychiatrists dabbled in all these methods of explanation; they searched for narratives of childhood to explain current behavior, making new data out of what was known. They attempted to create statistical samples of morbidity. They wallowed in internal and mythical entities, ids and archetypes. Above all, they

borrowed the concepts of physics and mechanics — energy, tension, and the like — to create a scientism.

But there were a few beginnings from which to work: the “logical types” of Russell and Whitehead, the “Games Theory” of Von Neumann, the notions of comparable form (called “homology” by biologists), the concepts of “levels” in linguistics, Von Dornarus’ analysis of “schizophrenic” syllogisms, the notion of discontinuity in genetics and the related notion of binary information. Pattern and redundancy were beginning to be defined. And, above all, there was the idea of homeostasis and self-correction in cybernetics.

Out of these scattered pieces came a hierarchic classification of orders of message and (therefore) of orders of learning, the beginnings of a theory of “schizophrenia” and with it an attempt, very premature, to classify the ways in which people and animals code their messages (digital, analogic, iconic, kinesis, verbal, etc.).

Perhaps our greatest handicap at that time was the difficulty which the professionals seemed to experience when they tried to understand what we were doing. Some even tried to count “double binds” in recorded conversations. I treasure somewhere in my files a letter from a funding agency telling me that my work should be more clinical, more experimental, and, above all, more quantitative.

Grinder and Bandler have confronted the problems which we confronted then and this series is the result. They have tools which we did not have — or did not see how to use. They have succeeded in making linguistics into a base for theory and simultaneously into a tool for therapy. This gives them a double control over the psychiatric phenomena, and they have done something which, as I see it today, we were foolish to miss.

We already knew that most of the premises of individual psychology were useless, and we knew that we ought to classify modes of communicating. But it never occurred to us to ask about the effects of the modes upon interpersonal relations. In this first volume, Grinder and Bandler have succeeded in making explicit the syntax of how people avoid change and, therefore, how to assist them in changing. Here they focus on verbal communication. In the second volume, they develop a general model of communication and change involving the other modes of communication which human beings use to represent and communicate their experience. What happens when messages in digital mode are flung at an analog thinker? Or when visual presentations are offered to an auditory client?

We did not see that these various ways of coding — visual,

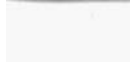
auditory, etc. — are so far apart, so mutually different even in neurophysiological representation, that no material in one mode can ever be of the same logical type as any material in any other mode.

This discovery seems obvious when the argument starts from linguistics, as in the first volume of the present series, instead of starting from culture contrast and psychosis, as we did.

But, indeed, much that was so difficult to say in 1955 is strikingly easier to say in 1975.

May it be heard!

Gregory Bateson
Kresge College
University of California, Santa Cruz



Preface

Down through the ages the power and wonder of practitioners of magic have been recorded in song and story. The presence of wizards, witches, sorcerers, shamen, and gurus has always been intriguing and awe inspiring to the average person. These people of power, wrapped in a cloak of secrecy, presented a striking contradiction to the common ways of dealing with the world. The spells and incantations they wove were feared beyond belief and, at the same time, sought constantly for the help they could provide. Whenever these people of power publicly performed their wonders, they would both shatter the concepts of reality of that time and place and present themselves as having something that was beyond learning. In modern time, the mantle of the wizard is most often placed upon those dynamic practitioners of psychotherapy who exceed the skill of other therapists by leaps and bounds, and whose work is so amazing to watch that it moves us with powerful emotions, disbelief, and utter confusion. Just as with all wizards of the ages of the earth whose knowledge was treasured and passed down from sage to sage — losing and adding pieces but retaining a basic structure — so, too, does the magic of these therapeutic wizards also have structure.

The Prince and the Magician

Once upon a time there was a young prince who believed in all things but three. He did not believe in princesses, he did not believe in islands, he did not believe in God. His father, the king, told him that such things did not exist. As there were no prin-

cesses or islands in his father's domains, and no sign of God, the prince believed his father.

But then, one day, the prince ran away from his palace and came to the next land. There, to his astonishment, from every coast he saw islands, and on these islands, strange and troubling creatures whom he dared not name. As he was searching for a boat, a man in full evening dress approached him along the shore.

"Are those real islands?" asked the young prince.

"Of course they are real islands," said the man in evening dress.

"And those strange and troubling creatures?"

"They are all genuine and authentic princesses."

"Then God must also exist!" cried the prince.

"I am God," replied the man in evening dress, with a bow.

The young prince returned home as quickly as he could.

"So, you are back," said his father, the king.

"I have seen islands, I have seen princesses, I have seen God," said the prince reproachfully.

The king was unmoved.

"Neither real islands, nor real princesses, nor a real God exist."

"I saw them!"

"Tell me how God was dressed."

"God was in full evening dress."

"Were the sleeves of his coat rolled back?"

The prince remembered that they had been. The king smiled.

"That is the uniform of a magician. You have been deceived."

At this, the prince returned to the next land and went to the same shore, where once again he came upon the man in full evening dress.

"My father, the king, has told me who you are," said the prince indignantly. "You deceived me last time, but not again. Now I know that those are not real islands and real princesses, because you are a magician."

The man on the shore smiled.

"It is you who are deceived, my boy. In your father's kingdom, there are many islands and many princesses. But you are under your father's spell, so you cannot see them."

The prince pensively returned home. When he saw his father, he looked him in the eye.

"Father, is it true that you are not a real king, but only a magician?"

The king smiled and rolled back his sleeves.

"Yes, my son, I'm only a magician."

"Then the man on the other shore was God."

"The man on the other shore was another magician."

"I must know the truth, the truth beyond magic."

"There is no truth beyond magic," said the king.

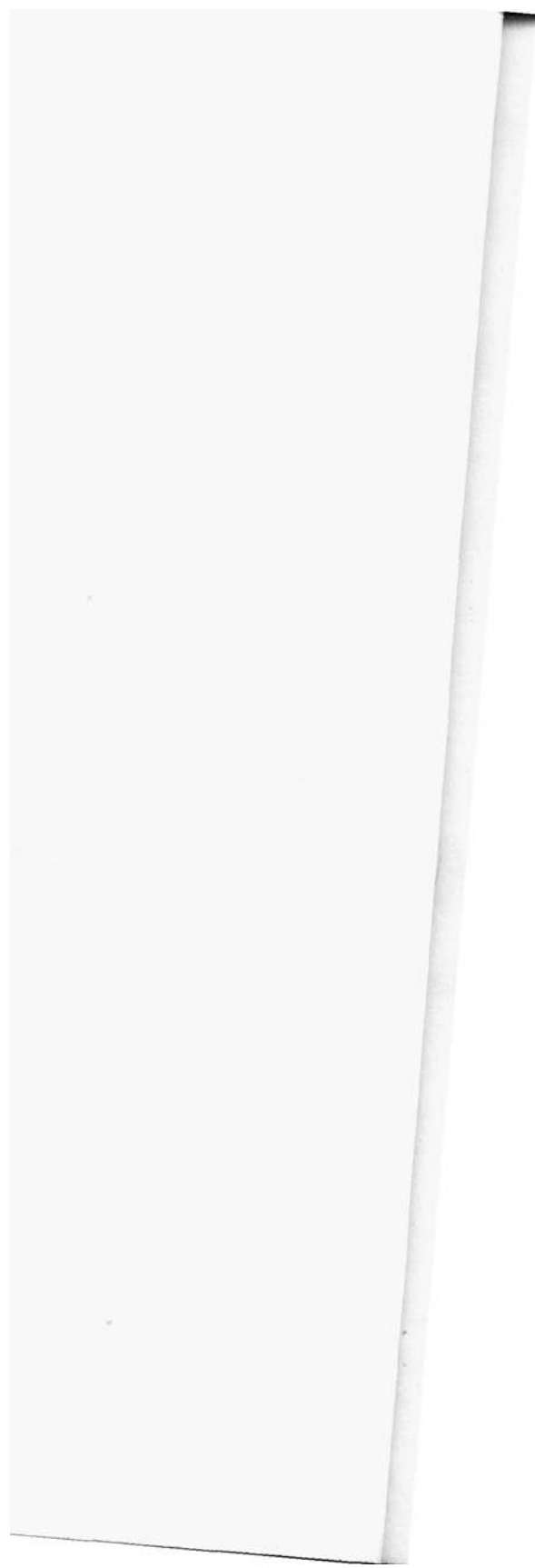
The prince was full of sadness. He said, "I will kill myself."

The king by magic caused death to appear. Death stood in the door and beckoned to the prince. The prince shuddered. He remembered the beautiful but unreal islands and the unreal but beautiful princesses.

"Very well," he said, "I can bear it."

"You see, my son," said the king, "you, too, now begin to be a magician."

Reprinted from *The Magus*, by John Fowles,
Dell Publishing Co., Inc.; pp. 499-500.



Warning to the Reader

The central task of psychology, whether experimental or applied, is the understanding of human behavior. Human behavior is extremely complex. To say, however, that our behavior is complex is not to deny that it has structure. In general, modern psychology has attempted to understand human behavior by breaking it down into relatively separate areas of study — for example, the areas of perception, of learning, of language behavior, of motor skills. As our understanding of each of these areas grows, we continue to uncover the structure of the human behavior being described — to find that human behavior is rule governed.

To say that human behavior is rule governed is not to say that we can understand it in simple stimulus-response terms. In the study of human languages, for example, the kind of rules required to describe this behavior is beyond the capabilities of S-R theories (Chomsky, 1957). It is useful for an adequate understanding of this book that you distinguish between rule-governed behavior and determined behavior.

Continuing with the example of human languages, the number of possible sentences in each human language (e.g., English, Spanish, etc.) is infinite. In other words, the number of verbal descriptions of human experiences is limitless. At the same time, the number of forms (syntax) in which this infinite set of meanings is represented is highly restricted — has structure — and, therefore, may be described by a set of rules. This sequence of words is an English sentence. It has structure, as can be demon-

strated by considering the result of reversing the order of words:

Sentence English an is words of sequence this.

Similarly, in the case of other types of complex human behavior, there is an infinite number of distinct acts. The form of these acts will have structure — and, therefore, will be describable by some set of rules. To say that human behavior is describable by some set of rules is not to warrant that our behavior is determined or predictable.

The most sophisticated study of human, rule-governed behavior is the study of human language systems. Specifically, a group of linguists known as transformational grammarians has developed a set of rules describing the forms which we use to represent and communicate our experience with language. Although transformational grammar is a young discipline (initiated in 1955), it has already had a profound effect on experimental psychology, especially modern learning theory. It has yet to have an impact on applied psychology. This book is designed to make the insights of transformational grammar available and usable to those people who work with complex human behavior.

There are three important pieces of information in addition to the above background which we want you to have as you begin this book:

1. What's in the book;
2. How to use the book;
3. What you can expect to gain from using the book.

1. What's in the Book

This book is designed to give you an explicit set of tools which will help you to become a more effective therapist. Chapter 1 shows that we do not operate directly on the world in which we live, but rather that we create models or maps of the world and use these maps to guide our behavior. Further, it states that effective therapy implies some change in the way that a client represents his experience.

Chapter 2 shows you the structure of one specific way human beings represent their experiences — human language systems. Chapter 3 presents a way of using the structure of language systems as a set of tools for operating in therapy. These tools are compatible with every form of psychotherapy of which we are aware. Chapter 4 presents a step-by-step procedure for learning and using these tools. Chapter 5 is composed of two transcripts with commentary showing the use of these tools in therapy. Chapter 6 integrates these tools with a number of well-known, non-verbal techniques from already established forms of psychotherapy.

2 How to Use this Book

This book is not a novel, and we recommend that you not attempt to read it as you would a novel. This book is a manual to teach you a set of tools which will increase your effectiveness as a therapist. As with any manual, it should be read and reread.

To begin this learning process for yourself, a general overall understanding of Chapters 1, 2, and 3 is adequate. Naturally, the more thoroughly you understand these chapters, the more effectively you will be able to apply the specific techniques presented in Chapter 4.

When you reach Chapter 4, slow down. This chapter consists of a set of step-by-step instructions to give you practice in the use of the techniques. Since this book, the first of a series, is primarily concerned with verbal techniques, most of the techniques are questions based on the *form* of the client's communication in therapy. Each of the techniques presented in Chapter 4 should be studied by itself in order to give you the optimum skill to increase your effectiveness as a therapist. Each of these techniques has at least one step-by-step exercise. To acquire these skills, you must practice them — USE THE EXERCISES.

Chapter 5 is *not* an example of what we regard as powerful therapy. Chapter 5 is designed to show you how the various techniques work in conjunction with one another. Read through the transcript with its commentary, paying attention to the choices that the therapist has and the flow of the verbal exchange between the therapist and the client. You may also wish to cover the commentary and to consider each of the client's sentences in turn, to determine whether you can identify all of the choices each of these sentences presents to you as a therapist.

Read through Chapter 6 carefully — its purpose is to teach you to use Chapter 4 techniques to identify the appropriateness of some of the better known, non-verbal techniques. If any of the non-verbal techniques presented in this chapter are techniques in which you are already trained, use them as a reference point to integrate other techniques which you find useful in your therapy. If none of your specific techniques is presented, pay particular attention to which of the Chapter 4 techniques you are using in therapy when you become aware of an appropriate place for you to employ one of your own specific techniques. This will begin the process of integration of the tools presented in this manual with your own style of therapy.

3. What You Can Expect to Gain from Using this Book

Using this book in the way we suggest will make you a more

effective therapist. This will happen specifically by:

1. Learning a specific set of questioning techniques based on the client's verbal communications;
2. Learning how the use of particular non-verbal techniques may be indicated by verbal cues.

The overall effect of this knowledge will be to give you a clear, explicit strategy for your work in therapy.

Chapter 1

THE STRUCTURE OF CHOICE

... operations of an almost mysterious character, which run counter to ordinary procedure in a more or less paradoxical way. They are methods which give an onlooker the impression of magic if he be not himself initiated or equally skilled in the mechanism.

H. Vaihinger, *The Philosophy of As If*, p. 11

Out of the ranks of modern psychotherapy have emerged a number of charismatic superstars. These people seemingly perform the task of clinical psychology with the ease and wonder of a therapeutic magician. They reach into suffering, pain, and deadness of others, transforming their hopelessness into joy, life and renewed hope. Though the approaches they bring to this task seem varied and as different as day and night, they all seem to share a unique wonder and potency. Sheldon Kopp described his experience of one such person in his book *Guru* (p. 146):

Perls had enormously powerful personal presence, independence of spirit, willingness to risk going wherever his intuitive feelings took him, and a profound capacity to be intimately in touch with anyone who was open to working with him. . . . It is not unusual to find yourself in tears, or exhausted, or joyful, after watching another being guided through such an experience. So brilliant was his intuition and so powerful were his techniques that sometimes it took Perls only minutes to reach the person on the hot seat. You might be some stuck, rigid, long-dead character,

seeking help and yet fearing that it would come and change things. He would put you on the hot seat, then do his magic. If you were willing to work, it was almost as though he could reach over, take hold of the zipper on your facade, and pull it down so quickly that your tortured soul would fall out onto the floor between the two of you.

Perls was not, and most certainly is not, the only therapist to present himself or herself with such magical potency. Virginia Satir and others we know seem to have this magical quality. To deny this capacity or to simply label it *talent*, *intuition*, or *genius* is to limit one's own potential as a people-helper. By doing this, one misses the opportunity to learn to offer those people who come to us an experience which they may use to change their lives to enjoy the fullness of living. Our desire in this book is not to question the magical quality of our experience of these therapeutic wizards, but rather to show that this magic which they perform — like other complex human activities such as painting, composing music, or placing a man on the moon — has structure and is, therefore, learnable, given the appropriate resources. Neither is it our intention to claim that reading a book can insure that you will have these dynamic qualities. We especially do not wish to make the claim that we have discovered the "right" or most powerful approach to psychotherapy.¹ We desire only to present you with a specific set of tools that seem to us to be implicit in the actions of these therapists, so that you may begin or continue the never-ending process to improve, enrich, and enlarge the skills you offer as a people-helper.

Since this set of tools is not based upon some pre-existing psychological theory or therapeutic approach, we would like to present the simple overview of the human processes out of which we have created these tools. We call this process *modeling*.

Through a Glass Darkly

Where the logical function actively intervenes, it alters what is given and causes it to depart from reality. We cannot even describe the elementary processes of the psyche without at every step meeting this disturbing — or shall we say helpful? — factor. As soon as sensation has entered the sphere of the psyche, it is drawn into the whirlpool of the logical processes. The psyche quite of its own accord alters both what is given and presented. Two things are to be distinguished in this process: First, the

actual forms in which this change takes place; and secondly, the products obtained from the original material by this change.

The organized activity of the logical function draws into itself all the sensations and constructs an inner world of its own, which progressively departs from reality but yet at certain points still retains so intimate a connection with it that transitions from one to the other continually take place and we hardly notice that we are acting on a double stage — our own inner world (which, of course, we objectify as the world of sense-perception) and also an entirely different and external world.

H. Vaihinger, *The Philosophy of As If*, pp. 159-160

A number of people in the history of civilization have made this point — that there is an irreducible difference between the world and our experience of it. We as human beings do not operate directly on the world. Each of us creates a representation of the world in which we live — that is, we create a map or model which we use to generate our behavior. Our representation of the world determines to a large degree what our experience of the world will be, how we will perceive the world, what choices we will see available to us as we live in the world.

. It must be remembered that the object of the world of ideas as a whole [the map or model — RWB/JTG] is not the portrayal of reality — this would be an utterly impossible task — but rather to provide us with an instrument for finding our way about more easily in the world.

H. Vaihinger, *The Philosophy of As If*, p. 15.

No two human beings have exactly the same experiences. The model that we create to guide us in the world is based in part upon our experiences. Each of us may, then, create a different model of the world we share and thus come to live in a somewhat different reality.

... important characteristics of maps should be noted. A map is not the territory it represents, but, if correct, it has a similar structure to the territory, which accounts for its usefulness. . .

A. Korzybski, *Science & Sanity*, 4th Ed., 1958, pp. 58-60.

We want to make two points here. First, there is a necessary difference between the world and any particular model or repre-

sentation of the world. Second, the models of the world that each of us creates will themselves be different. There are a number of ways in which this can be demonstrated. For our purposes, we have divided them into three areas:² neurological constraints, social constraints, and individual constraints.

EXPERIENCE AND PERCEPTION AS AN ACTIVE PROCESS

Neurological Constraints

Consider the human receptor systems: sight, hearing, touch, taste, and smell. There are physical phenomena which lie outside the limits of these five accepted sensory channels. For example, sound waves either below 20 cycles per second or above 20,000 cycles per second cannot be detected by human beings. Yet these physical phenomena are structurally the same as the physical waves which fall between these limiting figures: the physical waves which we call *sound*. In the human visual system, we are able to detect wave forms only between 380 and 680 milli-microns. Wave forms above or below these figures are not detectable by the human eye. Again, we perceive only a portion of a continuous physical phenomenon as determined by our genetically given neurological limitations.

The human body is sensitive to touch — to contact on the surface of the skin. The sense of touch provides an excellent example of the profound influence our own neurological system can have on our experience. In a series of experiments (Boring, 1957, pp. 110-111) over a century ago, Weber established the fact that precisely the same real world situation is perceived by a human being as two totally distinct tactile experiences. In his experiments, Weber found that our ability to perceive being touched at two points on the surface of our skin varied dramatically depending upon where on the human body the two points were located. The smallest distance between two points which are experienced as two separate points on the little finger must be expanded thirty times before the two points can be distinguished when applied to the upper arm. Thus, a whole range of identical, real-world stimulus situations are perceived as two totally different experiences solely as a function of our nervous system. When touched on the little finger, we experience it as being touched in two places, and on the upper arm as being touched in one place. The physical world remains constant and our experience of it shifts dramatically as a function of our nervous system.

Similar differences between the world and our experience of it

can be demonstrated for the other senses (Boring, 1957). The limitations of our perception are clearly recognized by scientists conducting experiments with the physical world as they develop machines which extend these limits. These instruments sense phenomena which lie outside the range of our senses, or outside of our ability to discriminate, and present them as signals which fall within our sensory range — signals such as photographs, pressure gauges, thermometers, oscilloscopes, Geiger counters, and alpha wave detectors. Thus, one way in which our models of the world will necessarily differ from the world itself is that our nervous system systematically distorts and deletes whole portions of the real world. This has the effect of reducing the range of possible human experience as well as introducing differences between what is actually going on in the world and our experience of it. Our nervous system, then, initially determined genetically, constitutes the first set of filters which distinguish the world — the territory — from our representations of the world — the map.

THROUGH A GLASS DARKLY WITH GLASSES WITH SOCIAL PRESCRIPTIONS

Social Constraints

... The suggestion is that the function of the brain and nervous system and sense organs is in the main eliminative and not productive. Each person is at each moment capable of remembering all that has ever happened to him and of perceiving everything that is happening everywhere in the universe. The function of the brain and the nervous system is to protect us from being overwhelmed and confused by this mass of largely useless and irrelevant knowledge, by shutting out most of what we should otherwise perceive or remember at any moment, and leaving only that very small and special selection which is likely to be practically useful. According to such a theory, each one of us is potentially Mind at Large. . . . To make biological survival possible, Mind at Large has to be funneled through the reducing valve of the brain and nervous system. What comes out the other end is a measly trickle of the kind of consciousness which will help us to stay alive on the surface of this particular planet. To formulate and express the contents of this reduced awareness, man has invented and endlessly elaborated upon those symbol-systems and implicit philosophies which we call languages. Every indi-

vidual is at once the beneficiary and the victim of the linguistic tradition into which he has been born — the beneficiary inasmuch as language gives access to the accumulated record of other people's experience, the victim insofar as it confirms in him the belief that reduced awareness is the only awareness, and as it bedevils his sense of reality, so that he is all too apt to take his concepts for data, his words for actual things.

Aldous Huxley, *The Doors of Perception*, New York: Harper & Row, 1954, pp. 22-23.

A second way in which our experience of the world differs from the world itself is through the set of social constraints or filters (prescription glasses) — we refer to these as social genetic factors.³ By social genetics, we refer to all the categories or filters to which we are subject as members of a social system: our language, our accepted ways of perceiving, and all the socially agreed upon fictions.

Perhaps the most commonly recognized social genetic filter is our language system. Within any particular language system, for example, part of the richness of our experience is associated with the number of distinctions made in some area of our sensation.⁴ In Maidu, an American Indian language of Northern California, only three words⁵ are available to describe the color spectrum. They divide the spectrum as follows (the English words given are the closest approximations):

lak	tit	tulak
(red)	(green-blue)	(yellow-orange-brown)

While human beings are capable of making 7,500,000 different color distinctions in the visible color spectrum (Boring, 1957), the people who are native speakers of Maidu habitually group their experience into the three categories supplied by their language. These three Maidu color terms cover the same range of real-world sensation which the eight (specific) color terms of English do. Here the point is that a person who speaks Maidu is characteristically conscious of only three categories of color experience while the English speaker has more categories and, therefore, more habitual perceptual distinctions. This means that, while English speakers will describe their experience of two objects as different (say, a yellow book and an orange book), speakers of Maidu will typically describe their experience of the identical real-world

situation as being the same (two *tulak* books).

Unlike our neurological genetic limitations, those introduced by the social genetic filters are easily overcome. This is most clearly demonstrated by the fact that we are able to speak more than one language — that is, we are able to use more than one set of social linguistic categories or filters to organize our experience, to serve as our representation of the world.⁶ For example, take the ordinary sentence: *The book is blue*. *Blue* is the name that we, as native speakers of English, have learned to use to describe our experience of a certain portion of the continuum of visible light. Misled by the structure of our language, we come to assume that *blue* is a property of the object that we refer to as book rather than being the name which we have given our sensation.

In perception, the sensation complex *sweet-white* is constantly occurring in the substance *sugar*. The psyche then applies to this combination the category of a thing and its attributes: *The sugar is sweet*. Here, however, the *white* appears also as an object. *Sweet* is an attribute. The psyche is acquainted with the sensation *white* in other cases, where it appears as an attribute, so that, in this case too, *white* is treated as an attribute. But the category thing-attribute is inapplicable if *sweet* and *white* are attributes and no other sensation is given. Here language comes to our help, and by applying the name *sugar* to the whole perception, enables us to treat the single sensation as attributes. . . . Who authorized thought to assume that *white* was a thing, that *sweet* was an attribute? What right had it to go on to assume that both were attributes and then mentally add an object as their carrier? The justification can be found neither in the sensations themselves nor in what we now regard as reality. . . . All that is given to consciousness is sensation. By adding a Thing to which sensations are supposed to adhere as attributes, thought commits a very serious error. It hypostasizes sensation, which in the last analysis is only a process, as a subsistent attribute, and ascribes this attribute to a thing that either exists only in the complex of sensations itself, or has been simply added by thought to what has been sensed. . . . Where is the *sweet* that is ascribed to the sugar? It exists only in the act of sensation. . . . Thought not only changes immediate sensation thereby, but withdraws further and further from reality and becomes increasingly entangled in its own forms. By means of the *creative faculty* — to use this scientific term — it has invented a Thing which is

supposed to possess an Attribute. This Thing is a fiction, the Attribute as such is a fiction, and the whole relationship is a fiction.

H. Vaihinger, *The Philosophy of As If*, p. 167.

The categories of experience which we share with other members of the social situation in which we live — for example, the common language which we share — are a second way in which our models of the world differ from the world itself.

Notice that, in the case of the neurological constraints, in normal circumstances, the neurological filters are the same for all human beings — this is the common basis of experience that we share as members of the species. The social genetic filters are the same for the members of the same social-linguistic community but there are a large number of different social-linguistic communities. Thus, the second set of filters begins to distinguish us from each other as human beings. Our experiences begin to differ more radically, giving rise to more dramatically different representations of the world. The third set of constraints — the individual constraints — are the basis for the most far-reaching differences among us as humans.

THROUGH A GLASS DARKLY WITH GLASSES WITH INDIVIDUAL PRESCRIPTIONS

Individual Constraints

A third way in which our experience of the world can differ from the world itself is through a set of filters we call individual constraints. By individual constraints we refer to all the representations we create as human beings based upon our unique personal history. Every human being has a set of experiences which constitute his own personal history and are as unique to him as are his fingerprints. Just as every person has a set of distinct fingerprints, so, too, does each person have novel experiences of growing up and living, and no two life histories will ever be identical. Again, though they may have similarities, at least some aspects are different and unique to each person. The models or maps that we create in the process of living are based upon our individual experiences, and, since some aspects of our experiences will be unique to us as a person, some parts of our model of the world will be singular to each of us. These uncommon ways each of us represents the world will constitute a set of interests, habits, likes, dislikes, and rules for behavior which are distinctly our own. These differences in our

experiences will guarantee that each of us has a model of the world which in some way will be different from any other person's model of the world.

For example, two identical twins might grow up together in the same home with the same parents, having almost identical experiences, but each, in the process of watching their parents relate to each other and to the rest of the family, might model their experiences differently. One might say: my parents never loved each other very much — they always argued, and my twin sister was the favorite — while the other might say: my parents really cared about each other — they discussed everything extensively and they really favored my twin sister. Thus, even in the limiting case of identical twins, their experiences as persons will give rise to differences in the way they create their own models or perceptions of the world. In cases in which our discussion is of unrelated persons, the differences created in personal models will be greater and more pervasive.

This third set of filters, the individual constraints, constitutes the basis for the profound differences among us as humans and the way we create models of the world. These differences in our models can either be ones that alter our prescriptions (socially given) in a way that enriches our experience and offers us more choices, or ones that impoverish our experience in a way that limits our ability to act effectively.

MODELS AND THERAPY

Our experience has been that, when people come to us in therapy, they typically come with pain, feeling themselves paralyzed, experiencing no choices or freedom of action in their lives. What we have found is not that the world is too limited or that there are no choices, but that these people block themselves from seeing those options and possibilities that are open to them since they are not available in their models of their world.

Almost every human being in our culture in his life cycle has a number of periods of change and transition which he must negotiate. Different forms of psychotherapy have developed various categories for these important transition-crisis points. What's peculiar is that some people are able to negotiate these periods of change with little difficulty, experiencing these periods as times of intense energy and creativity. Other people, faced with the same challenges, experience these periods as times of dread and pain — periods to be endured, when their primary concern is simple

survival. The difference between these two groups appears to us to be primarily that the people who respond creatively to and cope effectively with this stress are people who have a rich representation or model of their situation, one in which they perceive a wide range of options in choosing their actions. The other people experience themselves as having few options, none of which are attractive to them — the “natural loser” game. The question for us is: How is it possible for different human beings faced with the same world to have such different experiences? Our understanding is that this difference follows primarily from differences in the richness of their models. Thus, the question becomes: How is it possible for human beings to maintain an impoverished model which causes them pain in the face of a multi-valued, rich, and complex world?

In coming to understand how it is that some people continue to cause themselves pain and anguish, it has been important for us to realize that they are not bad, crazy, or sick. They are, in fact, making the best choices from those of which they are aware, that is, the best choices available in their own particular model. In other words, human beings' behavior, no matter how bizarre it may first appear to be, makes sense when it is seen in the context of the choices generated by their model.⁷ The difficulty is not that they are making the wrong choice, but that they do not have enough choices — they don't have a richly focused image of the world. The most pervasive paradox of the human condition which we see is that the processes which allow us to survive, grow, change, and experience joy are the same processes which allow us to maintain an impoverished model of the world — our ability to manipulate symbols, that is, to create models. So the processes which allow us to accomplish the most extraordinary and unique human activities are the same processes which block our further growth if we commit the error of mistaking the model for the reality. We can identify three general mechanisms by which we do this:⁸ Generalization, Deletion, and Distortion.

Generalization is the process by which elements or pieces of a person's model become detached from their original experience and come to represent the entire category of which the experience is an example. Our ability to generalize is essential to coping with the world. For example, it is useful for us to be able to generalize from the experience of being burned when we touch a hot stove to a rule that hot stoves are not to be touched. But to generalize this experience to a perception that stoves are dangerous and, therefore, to refuse to be in the same room with one is to limit unnecessarily our movement in the world.

Suppose that the first few times a child is around a rocking chair, he leans on the back and falls over. He might come to a rule for himself that rocking chairs are unstable and refuse to ever try them again. If this child's model of the world lumps rocking chairs with chairs in general, then all chairs fall under the rule: Don't lean on the back! Another child who creates a model which distinguishes rocking chairs from other kinds of chairs has more choices in her behavior. From her experience, she develops a new rule or generalization for using rocking chairs only — Don't lean on the back! — and, therefore, has a richer model and more choices.

The same process of generalization may lead a human being to establish a rule such as "Don't express feelings." This rule in the context of a prisoner-of-war camp may have a high survival value and will allow the person to avoid placing himself in a position of being punished. However, that person, using this same rule in a marriage, limits his potential for intimacy by excluding expressions which are useful in that relationship. This may lead him to have feelings of loneliness and disconnectedness — here the person feels that he has no choice, since the possibility of expressing feelings is not available within his model.

The point here is that the same rule will be useful or not, depending upon the context — that is, that there are no right generalizations, that each model must be evaluated in its context. Furthermore, this gives us a key to understanding human behavior that seems to us to be bizarre or inappropriate — that is, if we can see the person's behavior in the context in which it originated.

A second mechanism which we can use either to cope effectively or to defeat ourselves is *Deletion*. Deletion is a process by which we selectively pay attention to certain dimensions of our experience and exclude others. Take, for example, the ability that people have to filter out or exclude all other sound in a room full of people talking in order to listen to one particular person's voice. Using the same process, people are able to block themselves from hearing messages of caring from other people who are important to them. For example, a man who was convinced that he was not worth caring about complained to us that his wife never gave him messages of caring. When we visited this man's home, we became aware that the man's wife did, indeed, express messages of caring to him. However, as these messages conflicted with the generalization that the man had made about his own self-worth, he literally did not hear his wife. This was verified when we called the man's attention to some of these messages, and the man stated that he had not even heard his wife when she had said those things.

Deletion reduces the world to proportions which we feel capable of handling. The reduction may be useful in some contexts and yet be the source of pain for us in others.

The third modeling process is that of *Distortion*. Distortion is the process which allows us to make shifts in our experience of sensory data. Fantasy, for example, allows us to prepare for experiences which we may have before they occur. People will distort present reality when rehearsing a speech which they will later present. It is this process which has made possible all the artistic creations which we as humans have produced. A sky as represented in a painting by Van Gogh is possible only as Van Gogh was able to distort his perception of the time-place in which he was located at the moment of creation. Similarly, all the great novels, all the revolutionary discoveries of the sciences involve the ability to distort and misrepresent present reality. Using the same technique, people can limit the richness of their experience. For example, when our friend mentioned earlier (who had made the generalization that he was not worth caring for) had the caring messages from his wife pointed out to him, he immediately distorted them. Specifically, each time that he heard a caring message that he had previously been deleting, he turned to us, smiling, and said, "She just says that because she wants something." In this way, the man was able to avoid allowing his experience to contradict the model of the world he had created, and, thereby, he prevented himself from having a richer representation, blocking himself from a more intimate and satisfying relationship with his wife.

A person who has at some time in his life been rejected makes the generalization that he's not worth caring for. As his model has this generalization, he either deletes caring messages or he reinterprets these messages as insincere. As he is unaware of any caring messages from others, he is able to maintain the generalization that he isn't worth caring about. This description is an example of the classical positive feedback loop: the self-fulfilling prophecy, or forward feedback (Pribram, 1967). A person's generalizations or expectations filter out and distort his experience to make it consistent with those expectations. As he has no experiences which challenge his generalizations, his expectations are confirmed and the cycle continues. In this way people maintain their impoverished models of the world.

Consider the classical psychological set or expectancy experiment by Postman and Bruner:

... In a psychological experiment that deserves to be far better known outside the trade, Bruner and Postman asked

experimental subjects to identify on short and controlled exposure a series of playing cards. Many of the cards were normal, but some were made anomalous, e.g., a red six of spades and a black four of hearts. Each experimental run was constituted by the display of a single card to a single subject in a series of gradually increased exposures. After each exposure the subject was asked what he had seen, and the run was terminated by two successive correct identifications.

Even on the shortest exposures many subjects identified most of the cards, and after a small increase all the subjects identified them all. For the normal cards these identifications were usually correct, but the anomalous cards were almost always identified, without apparent hesitation or puzzlement, as normal. The black four of hearts might, for example, be identified as the four of either spades or hearts. Without any awareness of trouble, it was immediately fitted to one of the conceptual categories prepared by prior experience. One would not even like to say that the subjects had seen something different from what they identified. With a further increase of exposure to the anomalous cards, subjects did begin to hesitate and to display awareness of anomaly. Exposed, for example, to the red six of spades, some would say: That's the six of spades, but there's something wrong with it — the black has a red border. Further increase of exposure resulted in still more hesitation and confusion until finally, and sometimes quite suddenly, most subjects would produce the correct identification without hesitation. Moreover, after doing this with two or three of the anomalous cards, they would have little further difficulty with the others. A few subjects, however, were never able to make the requisite adjustment of their categories. Even at forty times the average exposure required to recognize normal cards for what they were, more than 10 per cent of the anomalous cards were not correctly identified. And the subjects who then failed often experienced acute personal distress. One of them exclaimed: "I can't make the suit out, whatever it is. It didn't even look like a card that time. I don't know what color it is now or whether it's a spade or a heart. I'm not even sure now what a spade looks like. My God!" In the next section we shall occasionally see scientists behaving this way, too.

Either as a metaphor or because it reflects the nature

of the mind, that psychological experiment provides wonderfully simple and cogent schema for the process of scientific discovery. In science, as in the playing card experiment, novelty emerges only with difficulty, manifested by resistance, against a background provided by expectation. Initially, only the anticipated and usual are experienced even under circumstances where anomaly is later to be observed.

The generalization that the people in the experiment made was that the possible color/shape pair would be the same as they had always experienced: black with clubs and spades, red with hearts and diamonds. They supported their generalization by distorting either the shape or color dimensions in the anomalous cards. The point is that, even in this simple task, the mechanism of generalization and its supporting process of distortion prevented the people from correctly identifying what was possible for them to see. The identification of funny-looking cards flashed onto a screen does little for us. However, the experiment is useful in that it's simple enough to show the same mechanisms which give us the potential of enriching or impoverishing all that happens to us as human beings — whether we are driving a car, attempting and achieving intimacy in a relationship, or, literally, what we will experience in every dimension of our lives.

SO WHAT?

The therapeutic “wizards” we described earlier come from various approaches to psychotherapy and use techniques that appear to be dramatically different. They describe the wonders they perform with terminologies so distinctive that their perceptions of what they do seem to have nothing in common. Many times we have watched these people working with someone and heard comments from onlookers which implied that these wizards of therapy make fantastic intuitive leaps which make their work incomprehensible. Yet, while the techniques of these wizards are different, they share one thing: They introduce changes in their clients’ models which allow their clients more options in their behavior. What we see is that each of these wizards has a map or model for changing their clients’ models of the world — i.e., a Meta-model — which allows them to effectively expand and enrich their clients’ models in some way that makes the clients’ lives richer and more worth living.

Our purpose in this book is to present to you an explicit Meta-model, that is, a Meta-model which is learnable. We want to

make this Meta-model available to anyone who wishes to expand and enrich the skills they have as people-helpers. Since one of the main ways in which therapists can come to know and understand their clients is through language, and since language is also one of the primary ways all humans model their experiences, we have focused our work on the language of therapy. Fortunately, an explicit model of the structure of language has been developed independent of the context of psychology and therapy by transformational grammarians. Adapted for use in therapy, it offers us an explicit Meta-model for the enrichment and expansion of our therapeutic skills and offers us a valuable set of tools to increase our effectiveness and, thus, the magical quality of our own therapeutic work.

If you wish either to understand more about the language exchange in the therapeutic encounter or to increase the effectiveness and magical quality of your therapeutic work, *The Structure of Magic* offers a viable way to proceed. Magic is hidden in the language we speak. The webs that you can tie and untie are at your command if only you pay attention to what you already have (language) and the structure of the incantations for growth which we present in the remainder of this book.

FOOTNOTES FOR CHAPTER 1

1. In fact, part of what we will establish in the course of this book is that expressions such as *the right approach* or *the most powerful approach* are incomplete expressions. The questions that come to mind that we would ask to get the material to make the expressions complete are: *approach to what? right for whom? most powerful compared with what? most powerful for what purpose?* We have also provided a glossary of terms. We invite you to use it whenever you encounter a new or unfamiliar term.

2. We want to point out that we find this division (of the way that the model that each of us creates of the world will necessarily differ from the world) into three categories useful for our purposes of presenting the discussion of modeling by human beings. We are not suggesting that these three categories of differences are the only ones, or correct ones, or an exhaustive way of understanding the process of modeling. Furthermore, we are not suggesting that these three categories can be usefully distinguished from one another in all cases. Rather, consistent with the principles of modeling we are presenting, we find it useful for understanding the process of modeling itself.

3. We adopt this unusual terminology — *social genetics* — to remind the reader that social constraints on the behavior of members of society have as profound effect on shaping their perceptions as do neurological constraints.

Also, that neurological constraints, initially genetically determined, are subject to challenge and change just as are constraints initially socially determined. For example, the dramatic success which researchers have had in gaining voluntary control over portions of the so-called involuntary nervous system in humans (e.g., alpha wave) as well as in other species shows that neurological constraints are challengeable.

4. This is only one of the more obvious ways in which languages shape the habitual perceptions of native speakers (Grindor and Elgin, 1972, pp. 6-7, and the writings of Benjamin Whorf and Edward Sapir). An annotated bibliography is also provided at the end of this book.

5. Actually, from a purely linguistic point of view, the Maidu language has only two words to describe the color spectrum, *lak* and *tit*. The third word presented in the text is complex, having two meaningful parts or morphemes:

tu — urine and *lak* — red

We are interested, however, not in the results of a linguistic analysis, but rather in the habitual perceptions of the native speaker of Maidu. William Shipley, of the University of California, Santa Cruz, provided the Maidu information.

6. Those of you who have learned to speak more than one language fluently will notice how your perception of the world and of yourself shifts when you shift from one language to the other.

7. This has been clearly recognized by people like Gregory Bateson and R. D. Laing in their work on the schizophrenic family. Readers of Sherlock Holmes will also recognize this as one of his principles.

8. Again, we wish to point out that our categories do not impose any necessity on the structure of reality — we have found these categories useful in organizing our own thinking and actions, both in presenting this material and in therapy; that is, in developing our model for therapy. We suspect that most readers will, if they think about the usual meanings of the terms, come to see Generalization and Deletion as special cases of Distortion.

Chapter 2

THE STRUCTURE OF LANGUAGE

One way in which human beings distinguish themselves from other animals is by the creation and use of language. The importance of language in coming to understand the history and present situation of the human race cannot be overestimated. As Edward Sapir has expressed it:

The gift of speech and a well-ordered language are characteristic of every known group of human beings. No tribe has ever been found which is without language, and all statements to the contrary may be dismissed as mere folklore. There seems to be no warrant whatever for the statement which is sometimes made that there are certain people whose vocabulary is so limited that they cannot get on without the supplementary use of gesture, so that intelligible communication between members of such a group becomes impossible in the dark. The truth of the matter is that language is essentially perfect of expression and communication among every known people. Of all aspects of culture, it is a fair guess that language was the first to receive a highly perfected form and that its essential perfection is a prerequisite to the development of culture as a whole.

Edward Sapir, *Culture, Language and Personality*,
by D. Mandelbaum, (ed.)

All the accomplishments of the human race, both positive and negative, have involved the use of language. We as human beings use our language in two ways. We use it first of all to represent our

experience — we call this activity reasoning, thinking, fantasizing, rehearsing. When we are using language as a representational system, we are creating a model of our experience. This model of the world which we create by our representational use of language is based upon our perceptions of the world. Our perceptions are also partially determined by our model or representation in the ways we discussed in Chapter 1.

Notice that, since we use language as a representational system, our linguistic representations are subject to the three universals of human modeling: Generalization, Deletion, and Distortion. Secondly, we use our language to communicate our model or representation of the world to each other.¹ When we use our language to communicate, we call it talking, discussing, writing, lecturing, singing. When we are using our language for communication, we are presenting our model to others. This book, for example, presents a partial model of our experiences in therapy.

When humans communicate — when we talk, discuss, write — we usually are not conscious of the process of selecting words to represent our experience. We are almost never conscious of the way in which we order and structure the words we select. Language so fills our world that we move through it as a fish swims through water. Although we have little or no consciousness of the way in which we form our communication, our activity — the process of using language — is highly structured. For example, if you select any sentence in this book and reverse the order of the words in that sentence, or number the words 1, 2, 3, and move every odd word to the right over the even numbered word next to it, the sequence of words you are left with is nonsense. By destroying the structure of the sentence, it no longer makes sense; it no longer represents a model of any experience. Take this last sentence as a demonstration example.

Original version:

By destroying the structure of the sentence, it no longer makes sense; it no longer represents a model of any experience.

After reversing the word order:²

**Experience any of model a represents longer no it; sense makes longer no it, sentence the of structure the destroying by.*

After moving every odd numbered word to the right over the even numbered words:

**Destroying by structure the the of it sentence, longer no sense; makes no it represents longer model a any of experience.*

To say that our communication, our language, is a system is to say that it has structure, that there is some set of rules which identify which sequences of words will make sense, will represent a model of our experience. In other words, our behavior when creating a representation or when communicating is rule-governed behavior. Even though we are not normally aware of the structure in the process of representation and communication, that structure, the structure of language, can be understood in terms of regular patterns.

Fortunately, there is a group of academicians who have made the discovery and explicit statement of these patterns the subject of their discipline — transformational grammar. In fact, transformational grammarians have developed the most complete and sophisticated explicit model of human, rule-governed behavior. The notion of human, rule-governed behavior is the key to understanding the way in which we as humans use our language.

We can be fairly sure that a child has some rule system if his production [of sentences and phrases — JTG] is regular, if he extends these regularities to new instances, and if he can detect deviations from regularity in his own speech and the speech of others. This is, generally, what psycholinguists mean when they speak of the child's learning, or forming, or possession of linguistic rules. Note that I have left out the most stringent test for the existence of rules, namely: Can the individual state the explicit rule? ... Explicit statement of rules is irrelevant to our concerns here and is an entirely different sort of ability than we are considering here. As Susan Ervin-Tripp has put it:

To qualify as a native speaker ... one must learn ... rules. ... This is to say, of course, that one must learn to behave as though one knew the rules.

(Slobin, 1967, p. x)

What this means from the point of view of the scientific observer is that it is possible to describe the speaker's behavior in terms of rules. Such a description, however, should not be taken to imply that the particular rules devised by the scientist are actual entities existing inside the individual in a definite psychological or physiological sense.

(Slobin, *Psycholinguistics*, Scott, Foreman & Co., 1971, p. 55)

The linguist's objective is to develop a grammar — a set of rules — which states what the well-formed patterns for any particular

language are. This discipline is based on the brilliant work of Noam Chomsky, who initially developed a methodology and set of formal models for natural language.³ As a result of the work of Chomsky and other transformationalists, it has been possible to develop a formal model for describing the regular patterns in the way we communicate our model of our experience. We use language to represent and communicate our experience — language is a model of our world. What transformational grammarians have done is to develop a formal model of our language, a model of our model of our world, or, simply, a Meta-model.

THE META-MODEL FOR LANGUAGE

Language serves as a representational system for our experiences. Our possible experiences as humans are tremendously rich and complex. If language is adequately to fulfill its function as a representational system, it must itself provide a rich and complex set of expressions to represent our possible experiences. Transformational grammarians have recognized that to approach the study of natural language systems by directly studying this rich and complex set of expressions would make their task overwhelming. They have chosen to study not the expressions themselves, but the rules for forming these expressions (syntax). Transformational grammarians make the simplifying assumption that the rules for forming this set of rich expressions can be studied independently of content.⁴ For example, people who speak English as their native language make a consistent distinction between:

- (1) *Colorless green ideas sleep furiously.*
- (2) **Furiously sleep ideas green colorless.*

Even though there is something peculiar about the first group of words, people recognize that it is grammatical or well formed in some way that the second group of words is not. What we are demonstrating here is that people have consistent intuitions about the language they speak. By consistent intuitions, we mean that the same person presented with the same group of words today and a year from now will make the same judgments about whether they are a well-formed sentence of his language. Furthermore, different native speakers will make the same judgments about whether the same group of words is a sentence or not. These abilities are a classic example of human, rule-governed behavior. Although we are not conscious of *how* we are able to behave consistently, nevertheless, we do.

Transformational grammarians have created a model which

represents that rule-governed behavior — those consistent intuitions about sentences. The formal model in linguistics provides a solution to whether a particular group of words is a sentence or not, for example. The transformational model represents other kinds of linguistic intuitions also. Since the model is a description of human, rule-governed behavior, the way that we determine whether the rules of the model, fit or not is by checking them against the intuitions of the native speakers — intuitions available to every native speaker.

SOME UNIVERSALS OF THE HUMAN LINGUISTIC PROCESS

In Chapter 1, we discussed the three major processes of human modeling — Generalization, Deletion, and Distortion — three ways in which the model which we create will differ from the thing which it models. These processes apply, of course, with full force in the case of linguistic representations. Seen from this point of view, a large portion of the work which has been done by transformational linguists is the discovery and explicit statement of the way these three universals of representation are realized in the case of human language systems. Our ability and experience in using our language system to represent and communicate is so extensive that we are able to reflect on the process itself to the extent that we have consistent intuitions about that process. The purpose of the transformational model of language is to represent the patterns in the intuitions that we have about our language system. These intuitions are available to every native speaker of every language. The three major categories of linguistic intuitions which we have selected as relevant for our purposes are: Well-formedness, Constituent Structure, and Logical Semantic Relations.

- I. Well-Formedness:** The consistent judgments which native speakers make about whether or not groups of words are sentences of their language. Consider the following three groups of words:

- (3) *Even the president has tapeworms.*
- (4) *Even the president has green ideas.*
- (5) *Even the president have tapeworms.*

The first is identified as well formed; that is, it conveys a meaning to the native speakers and they recognize it as being syntactically well formed; (2) is semantically ill formed; that is, it communicates no meaning that the native speaker recognizes as possible; (3) is syntactically ill formed although we

may be able to assign some meaning to it.

- II. Constituent Structure:** The consistent judgments that native speakers make about what goes together as a unit or constituent inside a sentence of their language. For example, in the sentence

(6) *The Guru of Ben Lomond thought Rosemary was at the controls.*

the words *The* and *Guru* go together in some way as a unit that *Guru* and *of* do not. These smaller level constituents go to make up larger units; for example, *The Guru* and *of Ben Lomond* go together in some way that *of Ben Lomond* and *was* do not.

- III. Logical Semantic Relations:** The consistent judgments which native speakers make about the logical relations reflected in the sentences of their language.

1. **Completeness:** Native speakers, when presented with a verb of their language, are able to determine how many and what kinds of things between which this verb connects or describes a relationship. For example, the verb *kiss* in English implies a person kissing and a person or thing being kissed. The verb *hit* implies a person or thing hitting, a person or thing being hit, and an instrument being used for the hitting.
2. **Ambiguity:** Native speakers recognize that a single sentence such as

(7) *Investigating FBI agents can be dangerous.*

or

(8) *Maxine took Max's shirt off.*

communicates two distinct meanings. Sentence (7) can be understood to mean either:

(9) *FBI agents who are conducting investigations can be dangerous.*

or

(10) *To investigate FBI agents is possibly dangerous.*

In sentence (8), it is unclear whether Maxine was wearing Max's shirt and took it off herself or she took Max's shirt off Max himself.

3. **Synonymy:** Native speakers recognize that both of the following sentences have the same meaning or convey the same message.

(11) *Sandy looked up the number.*

- (12) *Sandy looked the number up.*
4. *Referential Indices:* Native speakers can determine whether a word or phrase picks out a particular object in their experience such as *my car* or whether it identifies a class of objects: *cars*. Furthermore, they make consistent judgments about whether two (or more) words refer to the same object or class, e.g., the words *Jackson* and *himself* in the sentence
- (13) *Jackson changed himself.*
5. *Presuppositions:* Native speakers can determine what the experience of the speaker is for him to say a sentence. For example, if I say the sentence
- (14) *My cat ran away.*
- you are entitled (have reason) to believe that, in my experience of the world, it's true that
- (15) *I have a cat.*

These three general categories of intuitions that human beings have about their language are represented explicitly in the transformational model.

THE TRANSFORMATIONAL MODEL

We will describe how the consistent intuitions we identified about our language are represented in the Meta-model — the model of transformational grammar.

Linguists using this model work to represent these intuitions which are available to every native speaker in an explicit way. Native speakers have two kinds of consistent intuitions about every sentence of their language. They are able to determine how the smaller units, such as words, go together to make up the sentence (intuitions about constituent structure) and also what a complete representation of the sentence would be (the completeness of the logical representation). For example, when presented with a sentence:

(16) *The woman bought a truck.*

a native speaker can group the words into constituents or larger level units such as:

/The woman/ and /bought/ and /a truck/

They will, in turn, group these units into

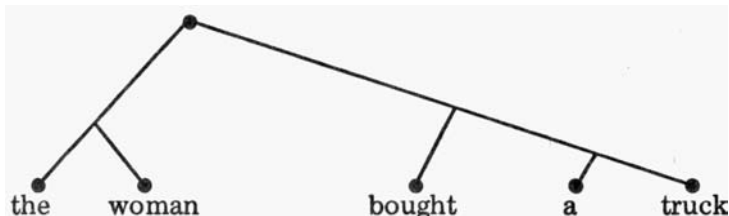
/The woman/ and /bought a truck/

The linguist represents these intuitions about what goes together inside a sentence by placing words which form a constituent (such

as *the* and *woman*) in what linguists call a tree structure which looks like:

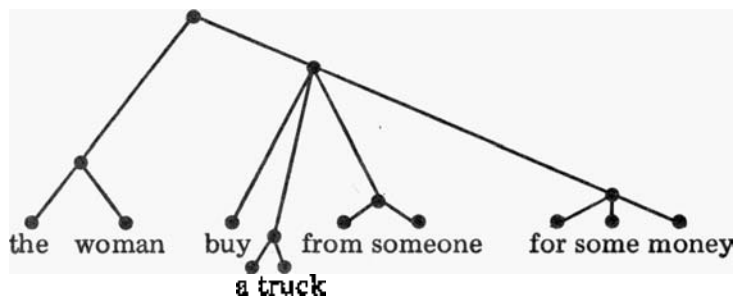


The rule is that words which we as native speakers group into a single constituent are attached to the same point or node in the tree structure. The tree structure representation for (16) is:



This is called the Surface Structure.

The second kind of consistent intuitions that native speakers have about a sentence such as (16) is what a complete representation of its meaning or logical semantic relation would be. One way which these intuitions are represented is:



This is called the Deep Structure.

We are demonstrating how, within the transformational model, each sentence is analyzed at two levels of structure corresponding to two consistent kinds of intuitions which native speakers have: Surface Structure — in which their intuitions about constituent structure are given a tree structure representation — and Deep Structure — in which their intuitions, about what a complete representation of the logical semantic relations is, are given. Since the model gives two representations for each sentence (Surface

Structure and Deep Structure), linguists have the job of stating explicitly how these two levels are connected. The way in which they represent this connection is a process or derivation which is a series of transformations.

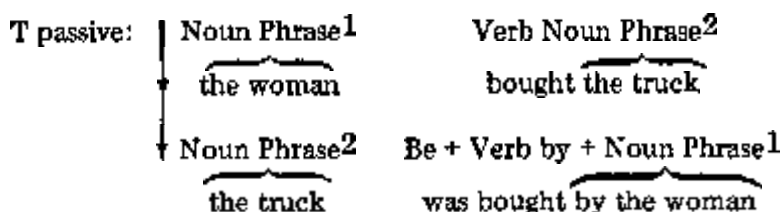
What Transformations Are

A transformation is an explicit statement of one kind of pattern which native speakers recognize among the sentences of their language. For example, compare the two sentences:

(17) *The woman bought the truck.*

(18) *The truck was bought by the woman.*

Native speakers recognize that, although these Surface Structures are different, the message communicated, or Deep Structures, of these two sentences is the same. The process by which these two sentences are derived from their common Deep Structure is called a derivation. A derivation is a series of transformations which connects the Deep Structure and the Surface Structure. The derivation of one of these two Surface Structures includes the transformation called the Passive Transformation. If you examine (17) and (18), you will notice that the order of the words is different. Specifically, the phrases *the woman* and *the truck* have been transposed. Transformational grammarians state this pattern as:



where the symbol \rightarrow means "can be transformed into"

Notice that the statement of this pattern is not limited to just the two sentences (17) and (18), but is general in English:

- (19) a. *Susan followed Sam.*
b. *Sam was followed by Susan.*
- (20) a. *The tapeworm ate the president.*
b. *The president was eaten by the tapeworm.*
- (21) a. *The bee touched the flower.*
b. *The flower was touched by the bee.*

This is a simple example of how two Surface Structures whose derivations differ by only one transformation — the Passive Transformation applied in the derivation of the (b) versions, but not the (a) versions — are formed. Derivations can be much more complex; for example:

- (22) a. *Timothy thought that Rosemary was guiding the spaceship.*
 b. *The spaceship was thought by Timothy to have been guided by Rosemary.*

What all these pairs of sentences demonstrate is that Deep Structures may differ from their related Surface Structures by having the elements or words occur in a different order. Notice that in each pair of sentences, although the word order is different, the meaning appears to be constant. For each pair of sentences which have the same meaning, but different word orders, the linguist states a transformation which specifies exactly the pattern — the way the word order may differ.

Thus, the way that the native speaker's intuition of synonymy is represented is by stating a transformation which relates the two or more Surface Structures which are synonymous or have the same meaning. For each set of two or more Surface Structures which are synonymous, therefore, the transformational linguist states what the formal patterning is — the transformation. The test for synonymy intuitionally is to attempt to imagine whether it would be possible in our (or any imaginary) consistent world that one of the Surface Structures you are testing for synonymy would be true (false) and the other Surface Structure not true (not false). If they always have the same value (both true or both false); they are synonymous. This is known as the paraphrase test. There are a number of word-order-changing transformations which linguists have identified. The following pairs show some of these patterns:

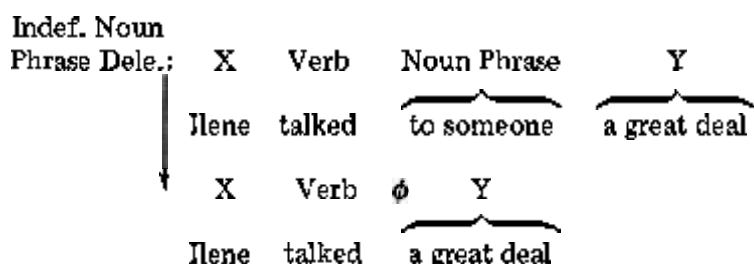
- (23) a. *I want Borsch.*
 b. *Borsch, I want.*
 (24) a. *It is easy to scare Barry.*
 b. *Barry is easy to scare.*
 (25) a. *George gave Martha an apple.*
 b. *George gave an apple to Martha.*
 (26) a. *The Watergate 500 stumbled away.*
 b. *Away stumbled the Watergate 500.*
 (27) a. *Writing this sentence is easy.*
 b. *It is easy to write this sentence.*

Each of these transformations specifies a way in which word orders can differ, and as a group are called Permutation Transformations.

Permutation Transformations are one of the two major classes of transformations; the other is called Deletion Transformations. For example:

- (28) a. *Ilene talked to someone a great deal.*
 b. *Ilene talked a great deal.*

In the (b) version of (28), one of the Noun Phrases (i.e., to someone) has been deleted or removed. The general transformation which states this pattern is called Indefinite Noun Phrase Deletion.



where X and Y are cover symbols or variables for any word(s) in those positions

Once again, there are a number of deletion transformations which linguists have identified:

- (29) a. *Fluffo went to the store and Tab went to the store too.*
 b. *Fluffo went to the store and Tab went too.*
 (30) a. *Tripod ate something.*
 b. *Tripod ate.*
 (31) a. *Natural struck the wall with something.*
 b. *Natural struck the wall.*

In each of these pairs, the process or derivation of the second version includes a transformation which has deleted part of the complete logical semantic representation which is present in Deep Structure. Again, the meaning appears to remain the same even as elements of the Deep Structure are deleted.

Linguists distinguish two types of deletion transformations — Free Deletion, or deletion of indefinite elements, and Identity Deletion. Notice in the example pairs:

Ilene talked to someone a great deal.

Ilene talked a great deal.

Tripod ate something.

Tripod ate.

Natural struck the wall with something.

Natural struck the wall.

the element which has been deleted is an indefinite phrase (*to someone, something, with something*), while in the example pair:

Fluffo went to the store and Tab went to the store too.

Fluffo went to the store and Tab went too.

a phrase which is definite (*to the store*) has been deleted. The general rule is that indefinite elements may be deleted from any sentence. There are special conditions which must be met before a definite element may be deleted. Notice, for example, the definite element *to the store*, which was legitimately deleted in the last sentence pair, occurs twice in that sentence, with the result that, after the deletion has occurred [(b) portion], one copy of the element is still present and no information has been lost.

Thus, Surface Structures may differ from their associated Deep Structure in two major ways:

- *The words may occur in a different order — Permutation Transformation*
- *Parts of the complete logical semantic representation may fail to appear in Surface Structure — Deletion Transformation.*

One additional way in which Deep Structure representation may differ from the Surface Structures which represent them is by the process of Nominalization. Essentially, the process of nominalization occurs when the transformations of the language change what occurs in the Deep Structure representation as a process word — a verb or predicate — into an event word — a noun or argument — in the Surface Structure representation. For example, compare the (a) and (b) versions of the following pairs of sentences:

(32) a. *Susan knows that she fears her parents.*

b. *Susan knows her fear of her parents.*

(33) a. *Jeffery recognizes that he hates his job.*

b. *Jeffery recognizes his hatred of his job.*

(34) a. *Debbie understands that she decides her own life.*

b. *Debbie understands her decision about her own life.*

In the second version of each of the three pairs, what occurs in the first version as a verb or process word appears as a noun or event word. Specifically,

fears —————> fear

hates —————> hatred

decides —————> decision

Both Deletion and Permutation transformations may participate in this complex transformational process. For example, if permutation transformations had applied in the above nominalizations, we would have:

(32) c. *Susan knows the fear by her of her parents.*

(33) c. *Jeffery recognizes the hatred by him of his job.*

(34) c. *Debbie understands the decision by her about her life.*

If, however, Deletion transformations had applied⁵ in the above nominalizations, we would have the Surface Structure representations:

(32) d. *Susan knows the fear.*

(33) d. *Jeffery recognizes the hatred.*

(34) d. *Debbie understands the decision.*

Whether Nominalization occurs with or without Deletion and Permutation transformations, its effect is to convert the Deep Structure representation of a process into the Surface Structure representation of an event.

What is important in this presentation is not the technical details nor the terminology that linguists have developed, but rather the fact that the intuitions available to each of us as a native speaker can be given a representation. Thus, the process of representation is itself represented. For example, the two major ways in which what we accept as a well-formed sentence can differ from its complete semantic representation is by distortion (Permutation Transformation or Nominalization) or removal of material (Deletion Transformation). As an example, each person who speaks English is able to consistently decide which groups of English words are well-formed sentences. This information is available to each of you. The transformational model represents this information. Thus, in the model, a group of words is said to be well formed if there is a series of transformations which convert the complete representation of Deep Structure into some Surface Structure.

Referential indices are involved in the transformational model in one important way for our purposes. Deletion Transformations are sensitive to referential indices. As mentioned previously, words or noun phrases may not be legitimately deleted by a Free dele-

tion transformation if they bear a referential index which connects them to some person or thing. This shows up as a change in meaning if this condition is not met and the transformation is applied. Notice the difference between:

- (35) a. *Kathleen laughed at someone.*
 b. *Kathleen laughed.*
 (36) a. *Kathleen laughed at her sister.*
 b. *Kathleen laughed.*

The (b) version of (35) is understood to mean roughly the same thing as the (a) version, but the (b) version of (36) conveys less information and means something different. This example shows the general condition which a Free deletion transformation must meet to apply legitimately — that the element being deleted may not have a referential index which connects to some specific part of the speaker's model of his experience. In effect, this means that each time a Free deletion transformation has applied the deleted element necessarily had no referential index in the Deep Structure representation — that is, it was an element which is not connected to anything in the experience of the speaker.

In addition to the way that referential indices interact with the set of Deletion transformations, we as native speakers have full intuitions about their general use. Specifically, each of us as a native speaker can consistently distinguish words and phrases such as *this page*, *the Eiffel Tower*, *the Vietnam War*, *I*, *the Brooklyn Bridge*, . . . which have a referential index from words and phrases such as *someone*, *something*, *everyplace that there is trouble*, *all the people who didn't know me*, *it*, . . . which do not have a referential index. The first set of words and phrases identifies specific portions of the speaker's model of his experience while the second group does not. This second group of words and phrases without a referential index is one of the major ways in which the modeling process of Generalization is realized in natural language systems.

In recent work in linguistics, transformationalists have begun to explore how presuppositions work in natural language. Certain sentences imply that certain other sentences must be true in order for them to make sense. For example, if I hear you say:

- (37) *There is a cat on the table.*

I may choose to believe that there is a cat on the table or not and, either way, I can make sense out of what you are saying. However, if I hear you say:

- (38) *Sam realized that there is a cat on the table.*

I must assume that there is, in fact, a cat on the table in order to make any sense out of what you are saying. This difference shows

up clearly if I introduce the negative element *not* into the sentence.

(39) *Sam doesn't realize that there is a cat on the table.*

This shows that when one says the sentence which means the opposite — the one that denies what the first one claims is true — one still must assume that there is a cat on the table in order to make sense out of the sentence. A sentence which must be true in order for some other sentence to make sense is called the presupposition of the second sentence.

AN OVERVIEW

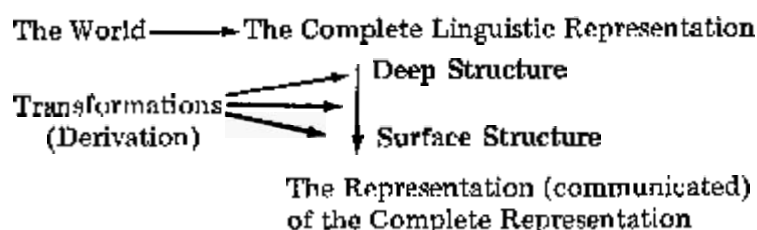
The parts of the transformational model relevant for our purposes have been presented. Viewed together, they constitute a representation of the process that humans go through in representing their experience and communicating that representation. When humans wish to communicate their representation, their experience of the world, they form a complete linguistic representation of their experience; this is called the Deep Structure. As they begin to speak, they make a series of choices (transformations) about the form in which they will communicate their experience. These choices are not, in general, conscious choices.

The structure of a sentence can be viewed as the result of a series of syntactic choices made in generating it. The speaker encodes meaning by choosing to build the sentence with certain syntactic features, chosen from a limited set.

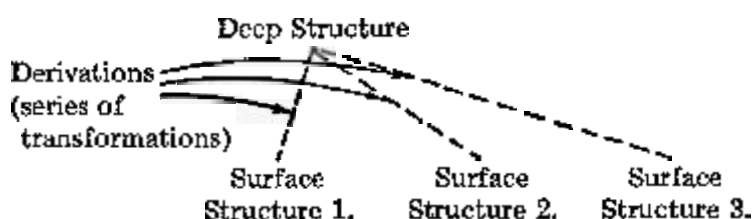
(T. Winograd, *Understanding Natural Language*, p. 16, in *Cognitive Psychology*, Vol. 3, no. 1, Jan., 1972)

Our behavior in making these choices is, however, regular and rule governed. The process of making this series of choices (a derivation) results in a Surface Structure — a sentence or sequence of words which we recognize as a well-formed group of words in our language. This Surface Structure itself can be viewed as a representation of the full linguistic representation — the Deep Structure. The transformations change the structure of the Deep Structure — either deleting or changing the word order — but do not change the semantic meaning. Graphically, the entire process can be viewed as: (See top of page 36)

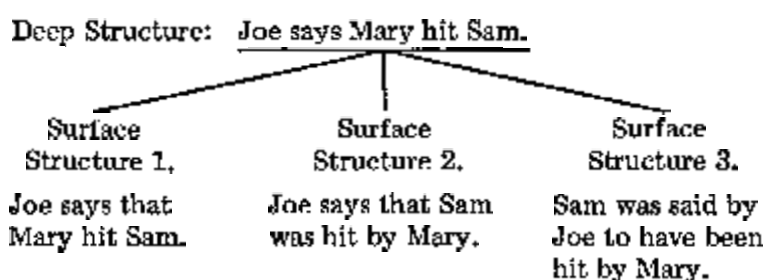
The model of this process is a model of what we do when we represent and communicate our model — a model of a model — a



Meta-model. This Meta-model represents our intuitions about our experience. For example, our intuition of synonymy — the case in which two or more Surface Structures have the same semantic meaning, i.e., the same Deep Structure — is represented as:



In terms of a specific example, then:

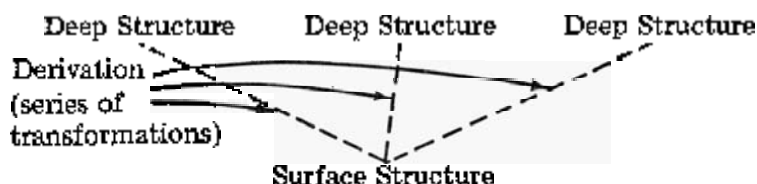


Synonymy in the Meta-model means that the same Deep Structure is connected with more than one Surface Structure.

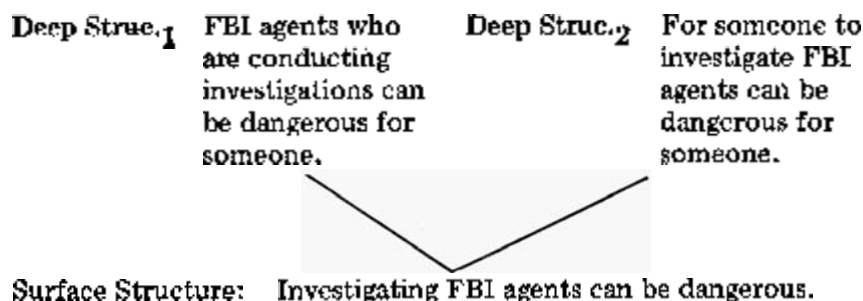
Ambiguity is the opposite case. Ambiguity is the intuition that native speakers use when the same Surface Structure has more than one distinct semantic meaning and is represented as: (See top of page 37)

Ambiguity In the Meta-model is the case wherein more than one Deep Structure is connected by transformations with the same Surface Structure.

The intuition of well-formedness is represented in the Meta-model in that any sequence of words is well formed just in case



As a specific example:



there is a series of transformations (a derivation) which carries some Deep Structure into that sequence of words — a Surface Structure. Thus, the Meta-model is an explicit representation of our unconscious, rule-governed behavior.

SUMMARY

Human language is a way of representation of the world. Transformational Grammar is an explicit model of the process of representing and of communicating that representation of the world. The mechanisms within Transformational Grammar are universal to all human beings and the way in which we represent our experience. The semantic meaning which these processes represent is existential, infinitely rich and varied. The way in which these existential meanings are represented and communicated is rule governed. Transformational Grammar models not the existential meaning, but the way that infinite set is formed — the rules of representations themselves.

The nervous system which is responsible for producing the representational system of language is the same nervous system by which humans produce every other model of the world —

thinking, visual, kinistic, etc. . . . The same principles of structure are operating in each of these systems. Thus, the formal principles which linguists have identified as part of the representational system called language provide an explicit approach to understanding any system of human modeling.

FOOTNOTES FOR CHAPTER 2

1. This use of language to communicate is actually a special case of the use of language to represent. Communication is, in this way of thinking, the representation to others of our representation to ourselves. In other words, we use language to represent our experience — this is a private process. We then use language to represent our representation of our experience — a social process.

2. The symbol * will be used in this book to identify sequences of English words which are not well-formed sentences of English.

3. We provide an appendix, which presents the transformational model more thoroughly, and a selective, annotated bibliography for those who wish to further examine the transformational model of language.

4. This is not true of all linguists who may refer to themselves as transformationalists. The present split in the field — Extended Standard Theorists and Generative Semanticists — is not relevant for our purposes in adapting certain portions of the Transformational model for our Meta-model for therapy. The recent work, especially by people in Generative Semantics, will be useful, we believe, in expanding the Meta-model we present here. See the bibliography for sources.

5. Strictly speaking, the deletion of the elements deleted in the text is not legitimate from a purely linguistic point of view, as they are carrying referential indices — the process, however, is typical of clients in therapy.

Chapter 3

THE STRUCTURE OF MAGIC

One of the mysteries in the field of therapy is that, although the various schools of therapy have very different forms, they all succeed to some degree. This puzzle will be solved when the effective methods shared by the different psychotherapies can be described in a single set of terms, thus making the similarities explicit and thereby learnable by therapists of any school.¹

...this list of similarities [among the various forms of psychotherapy — RB/JG] is hardly comprehensive; there would seem to be sufficient indication that a more thorough study of all forms of psychotherapy in terms of their similar formal patterns would be rewarding. A more rigorous science of psychotherapy will arrive when the procedures in the various methods can be synthesized down to the most effective strategy possible to induce a person to spontaneously behave in a different matter.

J. Haley, *Strategies of Psychotherapy*, 1967, p. 85

The one feature that is present in all forms of therapy when they are successful is that the people in therapy change in some way. This change is given different names by different schools of therapy, such as: 1) fixing, 2) cure, 3) growth, 4) enlightenment, 5) behavior modification, etc. Whatever the name given the phenomenon, it somehow makes the person's experience richer and better. This is not surprising as every form of therapy claims to help people operate more successfully in the world. When people change, their experience and model of the world is different. No

matter what their techniques, the different forms of therapy make it possible for people to change their model of the world and some make part of that model new.

What we are offering here is not a new school of therapy, but rather a specific set of tools/techniques which are an explicit representation of what is already present to some degree in each form of therapy. The unique aspects of the Meta-model we are presenting are: first, that it is based on the intuitions already available to every native speaker, and second, it is an explicit model in that it is learnable.

THE META-MODEL

The Meta-model we are presenting is in large part inspired by the formal model developed in transformational linguistics. Since the transformational model was created to answer questions which are not immediately connected with the way that humans change, not all portions of it are equally useful in creating a Meta-model for therapy. Thus, we have adapted the model, selecting only the portions relevant for our purposes and arranging them in a system appropriate for our objectives in therapy.

In this chapter, we will present our Meta-model for therapy. Here, our intention is to give you an overall picture of what is available in the Meta-model and how it works. In the two succeeding chapters, we become specific, showing you in a step-by-step format how to apply the Meta-model techniques. For this chapter, we urge you to read through the discussion and attempt to get the overall image we present. We will sharpen and detail that image in the following chapters.

Deletions: The Missing Parts of the Model

In most forms of therapy (with the possible exclusion of some physical therapies) one of the things that goes on is a series of verbal transactions between the "client" and the "therapist." One of the common features of the therapeutic encounter is that the therapist tries to find out what the client has come to therapy for; what the client wants to change. In our terms, the therapist is attempting to find out what model of the world the client has. As clients communicate their models of the world, they do it in Surface Structures. These Surface Structures will contain deletions such as those described in the last chapter. The way that the client uses language to communicate his model/representation is subject to the universal processes of human modeling such as deletion.

The Surface Structure itself is a representation of the full linguistic representation from which it is derived — the Deep Structure. In the case wherein the linguistic process of deletion has occurred, the resulting verbal description — the Surface Structure — is necessarily missing for the therapist. This piece may also be missing from the client's conscious model of the world. If the model of the client's experience has pieces missing, it is impoverished. Impoverished models, as we stated before, imply limited options for behavior. As the missing pieces are recovered, the process of change in that person begins.

The first step is for the therapist to be able to determine whether the client's Surface Structure is a complete representation of the full linguistic representation from which it is derived — the Deep Structure. At this point in time, therapists either have a highly developed sense of intuitions based upon their experiences or they may use the explicit Meta-model to recover the missing pieces. In the Meta-model, the intuitions, which every native speaker of the language has, come into play. The client says:

I'm scared.

The therapist now checks his (or her) intuitions to determine whether the client's Surface Structure is complete. One way of doing this (we present this process in detail in the following chapters) is to ask yourself whether you can think of another well-formed sentence in English which has the same process word *scare* and more noun arguments than the client's Surface Structure with that same verb *scare*. If you can think of such a Surface Structure, then the client's Surface Structure is incomplete.

Therapists are now faced with three broad options.² They may accept the impoverished model, they may ask for the missing piece, or they may guess at it. The first option, accepting the impoverished model, presents the difficulty of making the process of therapy slow and tedious, as it places total responsibility for recovering the model's missing pieces on the client, who is there for assistance in this process in the first place. We are not suggesting that change is not possible in this process, but that it requires a longer period of time than is necessary. The second choice is for the therapist to ask for the piece that has been linguistically deleted:

C: *I'm scared.*

T: *Of what?*

Either the client supplies the material in his model that has been linguistically deleted and the therapist's understanding of that model becomes more complete, or the piece missing from the client's verbal expression is also missing from his model. Clients

begin the process of self-discovery and change as they begin to work to fill in the missing pieces and become actively involved in this process of self-discovery — expanding themselves by expanding their model of the world.

Therapists have a third choice — they may, from long experience, have an intuition about what the missing piece is. They may choose to interpret or guess at the missing piece. We have no quarrel with this choice. There is, however, the danger that any form of interpretation or guessing may be inaccurate. We include a safeguard for the client in our Meta-model. The client tries the interpretation or guess by the therapist by generating a sentence which includes that material and checks his intuitions to see whether it fits, makes sense, is an accurate representation of his model of the world. For example, the therapist may have a strong intuition that the client is scared of his father. His intuition may be based upon previous therapy or upon his recognition of a particular body posture or movement he has seen the client use at other times when the subject of his father has come up. In this case, the exchange may go:

C: *I'm scared.*

T: *I want you to try saying this and see whether it fits for you: "My father scares me."*

What he is asking the client to do here is to say the Surface Structure containing his guess or interpretation and see whether it fits the client's full representation, the Deep Structure.³ If this new Surface Structure containing the therapist's intuition about the identity of the deleted portion of the client's original Surface Structure fits the client's model, he will typically experience a certain sensation of congruity or recognition. If not, the Meta-model techniques are available as a guide for recovering the missing material which actually fits the client's model. The safeguard for the client's integrity is for the therapist to be sensitive to the client's intuitions and experience by having the client judge whether the therapist's guess is accurate for his model by saying the sentence and seeing whether it fits.

The need for therapists to be aware of the integrity of their clients has been widely recognized. Polster and Polster (1973, p. 68) comment:

There is no precise yardstick to identify the limits of an individual's power to assimilate or express feelings which have explosive possibilities, but there is a basic safeguard — not forcing or seducing him into behaviors which he himself has not largely set up.

In general, the effectiveness of a particular form of therapy is associated with its ability to recover "suppressed" or missing pieces of the client's model. Thus, the first step in acquiring this set of tools is to learn to identify the pieces missing in the model — specifically, to identify the fact that linguistic deletion has occurred. The pieces that are missing in the Surface Structure are the material which has been removed by the Deletion Transformations. Recovering the missing material involves a movement toward a fuller representation — the Deep Structure.

Distortion: Process → Event

One of the ways people become immobilized is to turn an ongoing process into an event. Events are things which occur at one point in time and are finished. Once they occur, their outcomes are fixed and nothing can be done to change them.⁴ This way of representing their experience is impoverishing in the sense that clients lose control of ongoing processes by representing them as events. Linguists have identified the linguistic mechanism for turning a process into an event. This is called nominalization and is discussed in the last chapter. The therapist's ability to challenge the distorted portions of the client's model involving the representation of processes as events requires that the therapist be able to recognize nominalizations in the client's Surface Structures. This can be accomplished by examining the client's Surface Structure — check each of the non-verbs in the sentence, asking yourself whether you can think of a verb or adjective which is closely associated with it in appearance/sound and meaning. (Again, a more detailed procedure will be given in Chapter 4.) For example, as the client begins to discuss some ongoing process in his life — the continuing process of his deciding to avoid confronting someone about something — he may represent this process in his Surface Structure by the phrase *my decision*:

I really regret my decision.

The therapist, checking for distortions, identifies the noun *decision* as being similar in appearance/sound and meaning to the process word *decide* — thus, a nominalization.

The task of the therapist is to help the client see that what he has represented in his model as a closed, finished event is an ongoing process which may be influenced by him. There are a number of ways of accomplishing this. For example, the therapist may ask how the client feels about his decision. When the client responds that he is dissatisfied, the therapist asks what it is that stops him from reconsidering his decision. The client responds, and the therapist continues to apply the techniques of the Meta-

model. Here, the therapist is working to reconnect the event with the present process.

Another challenge the therapist may use is:

You have made your decision and there is nothing which you can imagine that would change your decision?

Again, the client responds with a Surface Structure which the therapist may use, along with the Meta-model, as a guide to his next move in inducing change in the client.

The effect of systematically applying these two techniques:

- (a) Recovery of pieces removed by the deletion transformations from the Deep Structure.
- (b) Transformation of nominalizations back into process words they were derived from — the Deep Structure.

yields a fuller representation of the client's model — the linguistic Deep Structure from which the client's initial verbal expressions, or Surface Structures, were derived. This process actively involves the client in filling in the missing pieces and in turning things represented as events back into processes, thereby beginning the process of change.

Deep Structures are fullest linguistic representations of the client's experience. They may differ from that **person's** experience in a number of ways which are already familiar to you. These are the three features which are common to all human modeling processes: Deletion, Distortion, and Generalization. These are the universal processes of human modeling — the way that people create any representation of their experience.

The intuitions which are represented in the transformational model of language are special cases of these three principles; for example, sentences or Surface Structures which have no expressed subject are examples of the process of deletion. To develop an image of the model the client has, this missing piece has to be restored; the expression has to be reconnected with its source — its fullest representation. In the case of a Surface Structure, its source and fullest representation is the Deep Structure. In the case of the Deep Structure, the client's experiences are the source for the representation. While Deep Structure is the fullest linguistic representation, it is derived from a fuller, richer source — the sum total of the client's experiences.⁵ Not surprisingly, the same universal processes of human modeling which give us a systematic way of assisting the client in going from an impoverished Surface Structure to a complete linguistic representation — the Deep Structure — provide a systematic way of connecting the linguistic representation for that person to the set of full experiences from which the full linguistic representation is derived.

Deep Structure and Beyond

As we have repeatedly pointed out, individuals who find themselves in therapy and wish help in changing are typically there because they feel that they do not have enough choices, that they are unable to behave other than they do. Furthermore, however peculiar their behavior may appear to us, it makes sense in their model of the world.

The therapist has succeeded in involving the client in recovering the Deep Structure — the full linguistic representation. The next step is to challenge that Deep Structure in such a way as to enrich it. The therapist has a number of choices at this point. The basic principle here is that people end up in pain, not because the world is not rich enough to allow them to satisfy their needs, but because their representation of the world is impoverished. Correspondingly, then, the strategy that we as therapists adopt is to connect the client with the world in some way which gives him a richer set of choices. In other words, since the client experiences pain by having created an impoverished representation of the world and forgetting that the representation is not the world, the therapist will assist the client in changing just in case he comes to behave in some way inconsistent with his model and thereby enriches his model. There are a number of ways of accomplishing this, many of which have been described in detail. The importance of clear sensory channels, the uncovering of patterns of coping with stress learned in the family system, the childhood traumas, the imposition of therapeutic double binds — are all examples of the emphases which the various forms of psychotherapy have selected as their way of challenging the client's impoverished model. Whatever the school of therapy and whatever its typical emphasis and form of treatment, when successful it characteristically involves two features:

- (1) A large amount of communication in the form of language.⁶
- (2) A change in the client's representation/model of the world.

What we offer in our Meta-model relates directly to both of these features of successful therapy. Language is both a representational system and the means or process of communicating our representation of the world. The processes which we go through to communicate our experience are the same processes which we go through in creating our experience. Seen in this way, the recovery of the full Deep Structure from the Surface Structure corresponds to the uncovering of the client's full linguistic model of the world; the challenge to the client's Deep Structure is directly a challenge

to the client's full linguistic representation. The same tools/techniques apply to both.

The processes by which people impoverish their representation of the world are the same processes by which they impoverish their expression of their representation of the world. The way that people have created pain for themselves involves these processes. Through them they have created an impoverished model. Our Meta-model offers a specific way to challenge these same processes to enrich their model. First, the Meta-model specifies the process of moving from Surface Structure to Deep Structure. The process of the moving from a Surface Structure with a deletion to the full Deep Structure not only provides the therapist with an accurate image of the client's model, but in the process the client may, in fact, expand the model in attempting to recover the deletion for which the therapist is asking. Second, it supplies a format for challenging the Deep Structure and reconnecting it with the person's experience, thus making change possible.

Having recovered the client's linguistic model of the world, the therapist may now select any one, or more than one, of a number of techniques of treatment which he feels useful in the context. The therapist may, for example, choose to impose a therapeutic double-bind (Haley, 1973) or to use an enactment technique (Perls, 1973), to assist in the process of change, or continue to challenge the client's model by purely verbal work. In each of these cases, language is involved. The effectiveness and potency of a therapist is intimately connected with the richness of his Meta-model — the number of choices he has and his skill in combining these options. Our focus in this work will be on the verbal/digital, not the non-verbal/analogical techniques, for two reasons:

- (1) Verbal transactions are a significant form of communication in all styles of therapy.
- (2) We have developed a model for natural language which is explicit.

We will show in detail later that the Meta-model which we have created from the Transformational Grammar model for a therapeutic Meta-model can be generalized to non-verbal systems of communication as well.²

Challenging Deep Structure

For the therapist to challenge the Deep Structure is equivalent to demanding that the client mobilize his resources to reconnect his linguistic model with his world of experience. In other words, the therapist here is challenging the client's assumptions that his linguistic model is reality.

Challenging Generalizations

One element that a client's model will possess which typically impoverishes his experience is that of generalization. Correspondingly, the Deep Structure which represents the impoverished portion of the model will contain words and phrases which have no referential index and verbs which are incompletely specified.

Clarity Out of Chaos — the Noun/Arguments

As the missing pieces of the client's Deep Structure are recovered, the model of the client's experience may become more complete, yet it may still be unclear and unfocused.⁸ The client says:

C: *I'm scared.*

T: *Of what?*

C: *Of people.*

At this point, the therapist either has a well-developed set of intuitions about what to do next or he may use our explicit Meta-model as a guide. One explicit way of determining which portions of the verbal expression (and the model it represents) are unfocused is to check for noun arguments that have no referential index. The therapist again has three basic choices: to accept the unfocused model, to ask a question which demands focusing of the model, or to guess what the focused model may be. The choice made by the therapist here has the same consequences as did his attempting to recover pieces missing in the model. If the therapist chooses to ask for the missing referential index, he simply says:

Who, specifically (scares you)?

If, on the other hand, the therapist has an intuition about the identity of the noun phrase which has no referential index, he may decide to guess. In this case, the same way of safeguarding the client's integrity is available if the therapist chooses to guess.

C: *I'm scared.*

T: *Of what?*

C: *Of people.*

The therapist decides to guess who it is who *specifically* scares the client. Employing the safeguard we recommend, the therapist asks the client to say the Surface Structure which incorporates the therapist's guess.

T: *I want you to try saying this and see whether you feel it fits for you: "My father scares me."*

The client now says the Surface Structure incorporating the guess or interpretation and determines whether it fits his model. In either case, the therapist is responding - challenging the client's generalization by demanding that the client connect this generali-

zation with his specific experience — by demanding a referential index. This, the next step in the process of the therapist's understanding the client's model, is the challenge to the noun arguments which have no referential index.

The word "people" does not pick out a specific individual or group of individuals in the client's model. The client may supply the referential index missing in the verbal expression and available in his model and the therapist's understanding of his model is thus more focused, or the referential index may be missing in the client's model also. If that portion of the client's model is also unfocused, the question by the therapist allows the client to work toward clarifying his model and to become more involved in the process.

Notice that the client may produce a number of responses such as "people who hate me," "all the people I always thought were my friends," "everyone I know," "some of my family," none of which have referential indices — they are intentional, not extensional, descriptions of the person's experience.⁹ They represent generalizations which are still not connected to the client's experience. The therapist continues to challenge these formulations by asking:

Who, specifically?

until they get from the client a verbal expression which has a referential index. Finally, the client responds:

My father scares me.

The demand by the therapist for full Deep Structure representations which include only words and phrases which have referential indices is a demand that the client re-connect his generalizations with the experience from which they came. Next, the therapist asks himself whether the image he has of the client's model is clear and focused.

Clarity Out of Chaos — Verb/Process Words

Both the nouns in the verbal expression:

My father scares me.

have referential indices (*my father* and *me*). The process word or verb in the expression, however, gives us no clear image of precisely how the experience took place. We know that the client is scared and that his father scares him, but how, exactly, his father scares him is incompletely represented — what, specifically, is it that he *does* which scares him. The therapist asks the client to focus his image by the question:

How does your father scare you?

This is again a request by the therapist for the client to connect his

generalization to the experience from which it was derived. The answer to this question by the client is a new Surface Structure which the therapist now examines for completeness and clarity, asking himself whether all the portions of the full Deep Structure representation are reflected in that Surface Structure. The therapist continues to examine the Surface Structures generated by the client, recovering the Deep Structure and challenging the Deep Structure for generalizations which make the model unfocused and incompletely specified until the image that the therapist has of the client's model is clear.

Challenging Deletions

When human beings create their linguistic models of the world, they necessarily select and represent certain portions of the world and fail to select and represent others.¹⁰ Thus, one way in which the full linguistic representation — the Deep Structure — will differ from the experience which it represents is by being a reduced version of the client's full experience of the world. This reduction may, as we said before, be a useful reduction, or it may impoverish the model in such a way that it creates pain for that person. The techniques available to the therapist to assist the client in recovering portions of his experience which he did not represent in his model are many. In the area of combined verbal-non-verbal techniques, for example, the client might be asked to enact the specific situation from which he generalized and to describe his experience fully as he re-lives it — thus presenting the portion of his experience to which he had failed previously to give a linguistic representation. This re-connects the client with his experience and simultaneously provides the therapist with valuable content as well as an understanding of how the person typically represents his experiences. Again, our intention in this study is to focus on the linguistic techniques.

The therapist's task is to challenge deletions which are not useful; those which cause pain are ones which are associated with areas of impossibility, areas in which the client literally cannot see any choices other than ones which are unsatisfactory — ones which are painful. Typically, an area in which an impoverishing deletion has occurred is one in which the client's perception of his potential is limited — he seems to be blocked, stuck, doomed. . . .

The technique of recovering the full linguistic representation works and it is learnable, as there exists an explicit representation — the Deep Structure — with which the Surface Structure can be compared. This is essentially the process of comparing a representation (Surface Structure) with the full model from which it was

derived — the Deep Structure. The Deep Structures themselves are derived from the full range of experience available to human beings. The Deep Structure is available to any native speaker by intuition. The world of experience is available to anyone willing to experience it. As therapists, we identify as a deletion from the client's model any option which we can imagine that we would have, or anyone whom we know would have, in the same situation.

At this point, the deletion from the experience of the client's model of the world will often be so obvious to therapists that they may begin to offer suggestions/advice about alternative ways of dealing with the problem. It is likely we would agree with many of the suggestions made by the therapist, as our experience would include these alternatives, but, in our experience, suggestions or advice which fall into the gaps created by deletion in a client's model are relatively ineffective. These deletions have impoverished the client's model, and it is precisely those portions of the client's possible experience which the therapist is recommending that are not represented in the model. Here, typically, the client will either "resist" or not hear the options, as he has deleted them from his model. Thus, we suggest that the therapist keep these suggestions until the client's model is rich enough to encompass them.

An additional advantage to the therapist's withholding suggestions and involving the client in challenging his own model and creating his own solutions is that the therapist avoids becoming bogged down in content and is able to focus, instead, on the process of directing the client's coping. That is, the therapist uses his Meta-model to operate directly on the client's impoverished model.

We have identified a number of questions which are useful in assisting the client in expanding his model. When clients approach the limits of their models, they often say things such as:

I can't trust people.

It's impossible for me to trust people.

Now, since we as therapists know that either we ourselves have been able to trust others or we know someone who has succeeded in trusting someone else, we are aware that the world is rich enough to allow the client to come to trust people — it's that person's model which prevents it. The question for us then becomes: How is it that some people are able to trust others but our client is not? We get this directly by asking the client to explain the difference in his model which makes this impossible. That is, we ask:

What is it that stops you from trusting people?

or

What would happen if you trusted people?

A full answer to this question by the client will restore some of the deleted material. The client, of course, will respond in some Surface Structure. The therapist has the tools available for evaluating these verbal responses -- the processes of restoring the Deep Structure, of focusing portions of the image which are unclear. These same tools serve the therapist in assisting the client to change by re-connecting the client with his experience. The therapist has a goal, using the techniques of the Meta-model, to gain a clear, fully focused image of the client's model which has a rich set of choices for the client in the areas in which the client has pain. The use of the question:

What stops you from...?

is crucial in re-connecting the client to his experience in such a way as to give him access to material which was formerly deleted and, therefore, not represented in his model.

Distortion

By distortion, we refer to things which are represented in the client's model but are twisted in some way which limits his ability to act and increases his potential for pain. There are a number of ways in which the Deep Structure may be distorted from the world in such a way as to create pain.

Semantic Well-Formedness

One way in which people distort their model and cause themselves pain is by assigning outside of their control responsibilities which are within their control. Linguists have identified certain expressions semantically ill-formed. For example:

George forced Mary to weigh 114 pounds.

Their generalization is that people cannot legitimately be said to be able to cause other people to do things which are not within their voluntary control. We have generalized the notion of semantic ill-formedness to include sentences such as:

My husband makes me mad.

The therapist can identify this sentence as having the form:

Some person causes some person to have some emotion.

When the first person, the one doing the causing, is different from the person experiencing the anger, the sentence is said to be semantically ill-formed and unacceptable. The semantic ill-formedness of sentences of this type arises because it, literally, is not possible for one human being to create an emotion in another human being -- thus, we reject sentences of this form. Sentences

of this type, in fact, identify situations in which one person does some act and a second person *responds* by feeling a certain way. The point here is that, although the two events occur one after another, there is no necessary connection between the act of one person and the response of the other. Therefore, sentences of this type identify a model in which the client assigns responsibility for his emotions to people or forces outside his control. The act itself does not cause the emotion; rather, the emotion is a response generated from a model in which the client takes no responsibility for experiences which he *could* control.

The therapist's task at this point is to challenge the model in some way which assists clients in taking responsibility for their responses. This can be accomplished in a number of ways. The therapist may ask if she becomes angry every time her husband does what he does. The therapist has a number of choices at this point. For example, if the client maintains that she always becomes angry when her husband does this, the therapist may challenge that by asking how, specifically, he makes her angry. If, on the other hand, the client admits that sometimes her husband does what he does and she doesn't become angry, the therapist may ask her to identify what is different at the times that this act of her husband's fails to have its "automatic" effect. We will present these techniques in the next two chapters.

Again, these techniques will allow the therapist to re-connect the client with his experience and to untwist the limiting distortions.

Presuppositions

What may at first appear to us as therapists as bizarre behavior or peculiar statements by clients will make sense to us in their models. To have a clear image of the client's model is to understand how that behavior or those statements make sense. This is equivalent to identifying the assumptions that the client is making in his model of the world. Assumptions in a model show up linguistically as presuppositions of the client's sentences. Presuppositions are what is necessarily true for the statements that the client makes to make sense (not to be true, but just to be meaningful) at all. One short-cut method for therapists to identify the portions of the client's model which are impoverished is to be able to recognize the presuppositions of the client's sentences. The client states:

I realize that my wife doesn't love me.

The therapist may respond by identifying the presupposition and challenge it directly by bringing the presupposition of the Surface

Structure out into the open for examination and challenge. In order to understand the sentence at all, it is necessary for the therapist to accept the presuppositions:

Her husband doesn't love her.

There is an explicit test for what, if any, presuppositions a sentence has. The therapist takes the Surface Structure and forms a new sentence which is the same as the old one except that it has a negative word in it attached to the first verb — in this case the sentence:

I don't realize that my husband doesn't love me.

Then, the therapist simply asks himself whether the same sentence would have to be true in order for this new sentence to make sense. Any sentence which must be true for both the client's statement and the new statement, which was formed by the old statement plus the negative word, to make sense is a presupposition. Presuppositions are particularly insidious as they are not presented openly for consideration. They identify in the model some of the basic organizing principles which limit the client's experience.

Once the therapist has identified the presuppositions of the client's statements, he may challenge it directly by the techniques we have already identified in the Deletion Section.

SUMMARY

When therapy, whatever its form, is successful, it involves a change in the clients' models in some way which allows clients more choice in their behavior. The methods which we have presented in the Meta-model are effective in enriching a client's model of the world — which entails that some aspect of his model is new. It's important that this new portion of his model be solidly connected with his experience. To insure this, clients must actually exercise, practice, become familiar with, and experience their new choices. Most therapies have developed specific techniques for accomplishing this: e.g., psychodrama, homework, tasks, etc. The purpose of these techniques is to integrate the new aspect of his model into the client's experience.

OVERVIEW

Successful therapy involves change. The Meta-model, adapted from the transformational model of language, provides an explicit

method for understanding and changing clients' impoverished models. One way to understand the overall effect of this Meta-model is in terms of well-formedness. As native speakers, we can consistently distinguish between groups of words which are well formed — i.e., sentences — and groups of words which are not well formed. That is, we can intuitively make the distinction between what is well formed in English and what is not. What we are proposing here is that there is a subset of the well-formed sentences of English which we recognize as well formed in therapy. This set, the set of sentences which are well formed in therapy and acceptable to us as therapists, are sentences which:

- (1) Are well formed in English, and
- (2) Contain no transformational deletions or unexplored deletions in the portion of the model in which the client experiences no choice.
- (3) Contain no nominalizations (process → event).
- (4) Contain no words or phrases lacking referential indices.
- (5) Contain no verbs incompletely specified.
- (6) Contain no unexplored presuppositions in the portion of the model in which the client experiences no choice.
- (7) Contain no sentences which violate the semantic conditions of well-formedness.

By applying these well-formedness conditions to the client's Surface Structures, the therapist has an explicit strategy for inducing change in the client's model.¹¹ Using these grammatical conditions appropriate for therapy, therapists enrich their model independently of the particular form of therapy they do. While this set of tools will greatly increase the potency of any form of therapy, we are aware that there is a great deal going on in the therapeutic encounter which is not solely digital (verbal). Rather, we are saying that the digital system is important, and we are offering an explicit Meta-model. The nervous system which produces digital communication (e.g., language) is the same nervous system which generates the other forms of human behavior which occur in the therapeutic encounter — analogical communication systems, dreams, etc. The remainder of this book is designed to accomplish two things: first, to familiarize you with the use of the Meta-model we have presented, and secondly, to show you how the general processes of the Meta-model for the digital can be generalized to these other forms of human behavior.

FOOTNOTES FOR CHAPTER 3

1. We highly recommend the excellent work by Jay Haley, Gregory Bateson and his associates, Paul Watzlawick, Janet Beavin, and Don Jackson. Their studies appear to us to be, at present, the closest approximation along with the Meta-model to achieving this goal.

2. We are aware that the three options discussed here do not exhaust all the logical or, indeed, practical possibilities. The therapist could, for example, ignore completely the Surface Structure the client presents. The three categories of response by the therapist that we discuss seem to us to be the most frequent.

3. In Chapter 6 we will return to this technique under the general heading of *Congruity Technique*. Here, simply, the client, by uttering the Surface Structure, calls up the Deep Structure. If the Surface Structure corresponds to a Deep Structure which fits his model (is congruent with his model), the client will experience some recognition.

4. In Chapter 2, as well as in the remainder of the book, we adopt the standard philosophical linguistic view that only nouns in the Surface Structure which correspond to verbs in Deep Structure are the result of nominalizations: the change of the representation of a process into an event. A more radical view is that even Surface Structure nouns which, by the standard linguistic analysis, do not correspond to verbs in Deep Structure are the representation of a process by an event. In this view, the noun *chair* is the event representation of what we actually experience in the process of perception, manipulation, . . . one which has space-time coordinates and duration. The difference, then, between parts of our experience which are represented in Deep Structure as verbs and those which are represented as nouns is essentially the amount of difference or change we experience in what is represented: *chairs* change slowly and undramatically, while *meetings* change more quickly and dramatically.

5. We will return to consider this subject systematically in Chapter 6 under the title of *Reference Structures* — the sum total of the client's experience — the source from which the full linguistic representation is derived.

6. The limiting case is the physical therapies (e.g., Rolfing, Bioenergetics, Shiatsu, . . .) which emphasize working on the physical representational system — that is, human beings represent their experiences in their body posture, movements, typical muscle contractions, tonus, . . . We return to this topic in Chapter 6. Even in this limiting case, the therapist and the client, typically, talk to one another.

7. This is the focus of Chapter 6 and of *Structure of Magic II*.

8. In fact, from the discussion of the types of deletion transformations in Chapter 2, it follows that every case of Free Deletion is the deletion of a Deep Structure noun argument which had no referential index.

9. The intentional-extensional distinction is borrowed from logic. An extensional definition of a set is one which specifies what the members of the set are by simply listing (i.e., enumerating) them; an intentional definition of a set is one which specifies what the members of the set are by giving a rule or procedure which sorts the world into members and non-members of the set. For example, the set of all humans over six feet in height who live in Ozona, Texas, can be given extensionally by a list of the people who, in fact, live in Ozona, Texas, and are taller than six feet, or intentionally by a procedure, say, for example:

- (a) Go to the official directory of residents of Ozona, Texas.
- (b) Find each person on the list and determine whether he is taller than two yardsticks placed end to end.

Korzybski (1933, Chap. 1) has an interesting discussion of this distinction. Notice that, in general, lists or a set specified extensionally have referential indices while sets intentionally given have no referential index.

10. We say *necessarily* as models are, by definition, reduced with respect to what they represent. This reduction is at the same time their value and their danger, as we discussed in Chapter 1.

11. In listening to and evaluating the Surface Structure answers that clients present to these questions, all the Meta-model techniques apply. In addition, we have found it effective to demand that the clients give *how* (i.e., process) answers rather than *why* (i.e., justification) answers to these questions.

Chapter 4

INCANTATIONS FOR GROWTH AND POTENTIAL

In the last chapter, we presented the Meta-model for therapy. This Meta-model is based on the intuitions which you already have available to you as native speakers of your language. The terminology, however, that we have adapted from linguistics may be new to you. This chapter is designed to present material which allows you to familiarize yourself with how to apply, specifically, the Meta-model. We recognize that, just as with any new set of tools, making ourselves competent with it requires some initially focused attention. This chapter provides each therapist who wishes to incorporate this Meta-model into his techniques and way of proceeding in the therapeutic encounter an opportunity to work with the principles and materials of the Meta-model. By doing this, you will be able to sensitize yourself, to be able to hear the structure of the verbal communications in the therapeutic encounter, and, thereby, to sharpen your intuitions.

The various specific linguistic phenomena which we will present that you will come to recognize and act upon are the specific ways the three universals of human modeling are realized in human language systems. As we introduce each specific linguistic phenomenon, we will identify which of these processes — Generalization, Deletion, or Distortion — is involved. The point is for you to come to recognize and obtain from the client communication which consists wholly of sentences which are well formed in therapy. You, as a native speaker, are able to determine which sentences are well formed in English; the following examples are designed to sharpen your ability to detect what is well formed in

therapy — a subset of sentences that are well formed in English. We will present the material in two steps: recognition of what is well formed in therapy and what to do when you have identified in therapy a sentence which is not well formed.

EXERCISE A

One of the most useful skills that you can exercise as a therapist is that of distinguishing what clients represent with their Surface Structures from what you may understand their surface to imply. The question of therapists projecting onto their clients is not a new one. Also, even if a therapist may from his experience understand more about what a client is saying than the client himself may realize, the ability to distinguish is vital. If the client fails to represent something the therapist understands to be there, it is just that piece of information the client may have left out of his representation, or it's just that piece of information which may cue the therapist to use some technique of intervention. In any event, the ability to distinguish what is represented from what you, yourself, supply is vital.

The difference between what you, as a therapist, may understand the client's Surface Structure to imply and what that Surface Structure literally represents comes from you. Those elements that you, yourself, supply may or may not fit the client's model. There are a number of ways to determine whether what you supply is fitting for the client. Your skill as a therapist will increase as your skill in making this distinction increases. What we would like you to do next is to read the following sentence, then close your eyes and form a visual image of what the sentence represents.

The client: *I'm afraid!*

Now examine your image. It will include some visual representation of the client and some representation of the client's being afraid. Any detail beyond these two images was supplied by you. For instance, if you supplied any representation of what the client fears, it came from you and may or may not be accurate. Try this once and read this second Surface Structure; close your eyes and make a visual image.

The client: *Mary hurt me.*

Now examine your image. It will include some visual representation of some person (Mary) and some visual representation of the client. Now look closely at how you represented the process of hurting. The verb hurting is a very vague and unspecific word. If you represented the process of hurting, study your image carefully. Perhaps you had an image of Mary physically striking the client, or perhaps an image of Mary saying something mean to the client. You may have had an image of Mary walking through the room that the client was sitting in without speaking to the client. All of these are possible representations of the client's Surface Structure. In each of them you have added something to the representation of the verb to form an image for yourself. You have ways of determining which, if any, of these representations fits the client — you may ask the client to more fully specify the verb *hurt*, ask the client to enact a specific situation in which Mary hurt him, etc. The important piece is your ability to distinguish between what you supply and what the client is representing with his Surface Structure.

DELETION

The purpose of recognizing deletions is to assist the client in restoring a fuller representation of his experiences. Deletion is a process which removes portions of the original experience (the world) or full linguistic representation (Deep Structure). The linguistic process of deletion is a transformational process — the result of deletion transformations — and a special case of the general modeling phenomenon of Deletion wherein the model we create is reduced with respect to the thing being modeled. Deep Structure is the full linguistic representation. The representation of this representation is the Surface Structure — the actual sentence that the client says to communicate his full linguistic model or Deep Structure. As native speakers of English, therapists have intuitions which allow them to determine whether the Surface Structure represents the full Deep Structure or not. Thus, by comparing the Surface Structure and the Deep Structure, the therapist can determine what is missing. Example:

(1) *I'm confused.*

The basic process word is the verb *confuse*. The verb *confuse* has the potential of occurring in sentences with two arguments or noun phrases — in sentences such as:

(2) *I'm confused by people.*

Since the verb *confuse* occurs in sentence (2) with two argument nouns (*I* and *people*), the therapist can conclude that Surface Structure (1) is not a full representation of the Deep Structure from which it was derived. In a step-by-step format, the procedure can be outlined as follows:

Step 1: *Listen* to the Surface Structure the client presents;

Step 2: Identify the verbs in that Surface Structure;

Step 3: Determine whether the verbs can occur in a sentence which is fuller — that is, has more arguments or noun phrases in it than the original.

If the second sentence has more argument nouns than the original Surface Structure presented by the client, the original Surface Structure is incomplete — a portion of the Deep Structure has been deleted. The first step in learning to recognize deletions is to identify sentences in which deletions have occurred. Thus, for example, sentence (3) is an essentially complete representation of its Deep Structure:

(3) *George broke the chair.*

On the other hand, sentence (4) is an incomplete representation of its Deep Structure:

(4) *The chair was broken.*

The following set of sentences contains some Surface Structures which are complete — no deletions — and some which are incomplete — deletions have occurred. Your task is to identify which of the following set of Surface Structures are complete and which contain deletions. Remember that you decide whether deletions have occurred — some of the sentences may be ill formed in therapy for reasons other than deletion. Additional exercises will give you practice in correcting the other things about these sentences which make them ill formed in therapy.

(5) *I feel happy.* incomplete

(6) *I'm interested in continuing this.* complete

(7) *My father was angry.* incomplete

(8) *This exercise is boring.* incomplete

(9) *I'm irritated about that.* complete

The set of sentences below consists wholly of Surface Structures which are incomplete. For each one, you are to find another sentence which has the same process word or verb and which is fuller — that is, has more noun phrases or arguments. Next to each of the incomplete sentences, we have provided an example of a fuller version using the same verb. We suggest that you cover the fuller version, which we have provided, with paper and write out a fuller version of your own before looking at the one we present.

For example, with the Surface Structure:

(10) *I'm scared.*

one fuller version would be:

(11) *I'm scared of people.*

or another would be the Surface Structure:

(12) *I'm scared of spiders.*

The point, of course, is not to try to guess which fuller version we would happen to present, but to provide yourself with the experience of finding fuller versions of incomplete Surface Structures.

(13) *I have a problem.* I have a problem with people.

(14) *You're excited.* You're excited about being here.

(15) *I'm sad.* I'm sad about my mother.

(16) *I'm fed up.* I'm fed up with you.

(17) *You're disturbing.* You're disturbing me.

The next group of sentences consists of Surface Structures which have more than one verb and may have zero, one or two deletions. Your task is to determine whether deletions have occurred and, if so, how many. Remember to check each verb separately as each may be independently associated with deletions.

For example, the Surface Structure

(18) *I don't know what to say.*

has one deletion associated with the verb *say* (*say to whom*).

The Surface Structure

(19) *I said that I would try.*

has two deletions, one associated with the verb *said* (*said to whom*) and one with the verb *try* (*try what*).

(20) <i>I talked to a man who was bored.</i>	2 deletions: 1 with <i>talked</i> , 1 with <i>bored</i> .
--	---

(21) <i>I hoped to see my parents.</i>	no deletion
--	-------------

(22) <i>I want to hear.</i>	1 deletion: with <i>hear</i> .
-----------------------------	-----------------------------------

(23) <i>My husband claimed he was frightened.</i>	2 deletions: 1 with <i>claimed</i> , 1- with <i>frightened</i> .
---	--

(24) <i>I laughed and then I left home.</i>	1 deletion: with <i>laughed</i> .
---	--------------------------------------

In each of the following Surface Structures, there is at least

one deletion. Find a fuller version for each Surface Structure.

- | | |
|---|--|
| (25) <i>You always talk as though you're mad.</i> | You always talk to me as though you're mad at someone. |
| (26) <i>My brother swears that my parents can't cope.</i> | My brother swears to me that my parents can't cope with him. |
| (27) <i>Everybody knows that you can't win.</i> | Everybody knows that you can't win what you need. |
| (28) <i>Communicating is hard for me.</i> | My communicating to you my hopes about changing myself is hard for me. |
| (29) <i>Running away doesn't help.</i> | My running away from my home doesn't help me. |

One of the ways in which Deep Structure process words may occur in Surface Structure is in the form of an adjective which modifies a noun. In order for this to happen, deletions must occur. For example, the Surface Structure

- (30) *I don't like unclear people.*

contains the adjective *unclear*. Another Surface Structure which is closely associated with this last sentence is¹

- (31) *I don't like people who are unclear.*

In both of these Surface Structures, there have been deletions associated with the word *unclear* (*unclear to whom about what*). Thus, one fuller version is:

- (32) *I don't like people who are unclear to me about what they want.*

In the next group of Surface Structures, identify the deletions and present a fuller version of each of the sentences.

- | | |
|---|---|
| (33) <i>I laughed at the irritating man.</i> | I laughed at the man who irritated me. |
| (34) <i>You always present stupid examples.</i> | You always present examples to me which are stupid to me. |
| (35) <i>Self-righteous people burn me up.</i> | People who are self-righteous about drugs burn me up. |
| (36) <i>The unhappy letter surprised me.</i> | The letter which made me unhappy surprised me. |
| (37) <i>The overwhelming price of food disturbs me.</i> | The price of food which overwhelms me disturbs me. |

The point of practicing recognition of deletions in Surface Structures is to make you conscious of and to sharpen the intuitions that you already have as a native speaker. The point is to be aware that deletions have occurred. The next section is designed to allow you to practice assisting the client in recovering the deleted material.

WHAT TO DO

Once the therapist has recognized that the Surface Structure the client has presented is incomplete, the next task is to help the client recover the deleted material. The most direct approach we are aware of is to ask specifically for what is missing. For example, the client says:

(38) *I'm upset.*

The therapist recognizes that the Surface Structure is an incomplete representation of the Deep Structure from which it came. Specifically, it is a reduced version of a Deep Structure which has a fuller Surface Structure representation of the form:

(39) *I'm upset about someone/something.*

Thus, to recover the missing material, the therapist asks:

(40) *Whom/what are you upset about?*

or more simply

(41) *about whom/what?*

In the following group of Surface Structures, your task is to formulate the question or questions which most directly ask for the deleted material. We've provided examples of the kinds of questions which will elicit the deleted material. Again, we suggest that you cover the questions which we have provided and work out your own appropriate questions for each of the incomplete Surface Structures.

(42) *I feel happy.*

happy about
whom/what?

(43) *My father was angry.*

angry at
whom/what?

(44) *This exercise is boring.*

boring to whom?

(45) *I'm scared.*

scared of
whom/what?

—(46) *I have a problem.*

a problem with
whom/what?

(47) *I don't know what to do.*

to do about
whom/what?

(48) *I said that I would try.*

said to whom?
try what?

(49) *I talked to a man who was
bored.*

talked about
what? bored with
whom/what?

(50) *I want to hear.*

want to hear
whom/what?

* (51) *My husband claimed he was
frightened.*

claimed to
whom?
frightened about
whom/what?

- | | |
|--|---|
| (52) <i>You always talk as though you're mad.</i> | talk to whom?
mad at
whom/what? |
| (53) <i>My brother swears that, my parents can't cope.</i> | swears to whom?
can't cope with
whom/what? |
| (54) <i>Communicating is hard for me.</i> | whose
communicating?
communicating
about what? to
whom? |
| (55) <i>Running away doesn't help.</i> | whose running
away? running
away from
whom/what? |
| (56) <i>I don't like unclear people.</i> | unclear about
what? unclear to
whom? |
| (57) <i>I laughed at the irritating man.</i> | the man who was
irritating to
whom? |
| (58) <i>You always present stupid examples.</i> | present examples
to whom?
examples who
thinks are stupid? |
| (59) <i>Self-righteous people burn me up.</i> | self-righteous
about what? |
| (60) <i>The unhappy letter surprised me.</i> | whom did the
letter make
unhappy? |
| (61) <i>The overwhelming price of food disturbs me.</i> | who was
overwhelmed? |

SOME SPECIAL CASES OF DELETION

We have identified three special classes of Deletions. These are special in the sense that we encounter them frequently in therapy, and the Surface Structure forms that they have can be identified directly.

Class I: Real Compared to What?

The first special class of deletions which we wish to identify involves comparatives and superlatives. Specifically, the portion of the Deep Structure deleted is one of the terms of a comparative or superlative construction. Comparatives and superlatives have two forms in English.

(A) Adjective, plus the ending *er*

as in: faster

better

smarter

and Adjective plus the ending *est*

as in: fastest

best

smartest

or

(B) *more/fewer* plus Adjective

as in: *more* interesting

more important

fewer intelligent

and *most/least* plus Adjective

as in: *most* interesting

most important

least intelligent

Comparatives, as the name suggests, involve a comparison of (minimally) two distinct things. For example, the Surface Structure:

(62) *She is better for me than my mother.*

includes both of the things compared (*she* and *my mother*). The class of Surface Structure which we characterize as involving the deletion of one term of the comparative construction includes, for example:

(63) *She is better for me.*

where one term of the comparison has been deleted. This kind of deletion is also present in Surface Structures such as:

(64) *She is a better woman for me.*

where the comparative adjective appears in front of the noun to which it applies.

The comparatives formed with *more* appear in the two examples:

(65) *She is more interesting to me.*

(66) *She is a more interesting woman to me.*

Again, one of the terms of the comparative has been deleted. In the case of superlatives, one member of some set is selected and identified as most characteristic or having the highest value in the set. For example, in the Surface Structure:

(67) *She is the best.*

(68) *She is the most interesting.*

the set from which *she* has been selected is not mentioned.

The following set of Surface Structures is composed of examples of deletion of one term of a comparative or the deletion of the reference set or a superlative. These examples are presented to allow you to develop your ability to identify deletions of this class.

(69) *She is most difficult.*

(70) *He chose the best.*

(71) *That is the least difficult.*

(72) *She always leaves the harder job for me.*

(73) *I resent happier people.*

(74) *More aggressive men get what they want.*

(75) *The best answer is always more difficult to find.*

(76) *I've never seen a funnier man.*

In coping with this class of deletions, the therapist will be able to recover the deleted material using two simple questions:

For comparatives:

The comparative adjective, plus compared to what? e.g., more aggressive compared to what? or, funnier than what?

For superlatives:

The superlative, plus with respect to what? e.g., the best answer with respect to what? the most difficult with respect to what?

In a step-by-step format, the procedure is:

Step 1: *Listen* to the client, examining the client's Surface Structure for the grammatical markers of the comparative and superlative construction; i.e., Adjective plus *er*, *more/less* plus Adjective, Adjective plus *est*, *most/least* plus Adjective.

Step 2: In the case of comparatives occurring in the client's Surface Structuring, determine whether both terms that are being compared are present; in the case of superlatives, determine whether the reference set is present.

Step 3: For each deleted portion, recover the missing material by using the questions suggested above.

Class II: Clearly and Obviously

The second class of special deletions can be identified by *ly* adverbs occurring in the Surface Structures the client presents. For example, the client says:

(77) *Obviously, my parents dislike me.*

or

(78) *My parents obviously dislike me.*

Notice that these Surface Structures can be paraphrased by the sentence

(79) *It is obvious that my parents dislike me.*

Once this form is available, the therapist can more easily identify what portion of the Deep Structure has been deleted. Specifically, in the example, the therapist asks

(80) *To whom is it obvious?*

Surface Structure adverbs which end in *ly* are often the result of deletions of the arguments of a Deep Structure process word or verb. The paraphrase test can be used by the therapist to develop his intuitions in recognizing these adverbs. The test we offer is that, when you encounter an adverb ending with *ly*, attempt to paraphrase the sentence in which it appears by:

- (a) Deleting the *ly* from the Surface Structure adverb and placing it in the front of the new Surface Structure you are creating.
- (b) Add the phrase *it is* in front of the former adverb.
- (c) Ask yourself whether this new Surface Structure means the same thing as the client's original Surface Structure.

If the new sentence is synonymous with the client's original, then the adverb is derived from a Deep Structure verb and deletion is involved. Now, by applying the principles used in recovering missing material to this new Surface Structure, the full Deep Structure representation can be recovered.

In the following set of Surface Structures, determine which of them includes an adverb which has been derived from the Deep Structure verb.

(81) <i>Unfortunately, you forgot to call me on my birthday.</i>	=	It is unfortunate that you forgot to call me on my birthday.
--	---	--

- | | | |
|--|---|---|
| (82) <i>I quickly left the argument.</i> | ≠ | It is quick that I left the argument. |
| (83) <i>Surprisingly, my father lied about his drinking.</i> | = | It is surprising for my father to lie about his drinking. |
| (84) <i>She slowly started to cry.</i> | ≠ | It is slow that she started to cry. |
| (85) <i>They painfully avoided my questions.</i> | = | It is painful that they avoided my questions. |

Once the therapist has identified the adverbs that have been derived from Deep Structure verbs by paraphrasing the client's original Surface Structure, he may apply the methods for recovering deleted material to the Surface Structure paraphrase. In a step-by-step procedure, therapists can handle this particular class of deletion by:

- Step 1: Listen to the client's Surface Structure for *ly* adverbs.
- Step 2: Apply the paraphrase test to each *ly* adverb.
- Step 3: If the paraphrase test works, examine the new Surface Structure.
- Step 4: Apply the normal methods for recovering the deleted material.

Class III: Modal Operators

The third class of special deletions is particularly important in recovering material which has been deleted in going from the client's experience to his full linguistic representation — Deep Structure. These Surface Structures often involve rules or generalizations that the clients have developed in their models. For example, the client says:

- (86) *I have to take other people's feelings into account.*
- or
- (87) *One must take other people's feelings into account.*
- or
- (88) *It is necessary to take other people's feelings into account.*

You will be able to identify a number of deletions in each of these Surface Structures on the basis of the principles and exercises we

have already presented (e.g., feelings about whom/what?). The deletion we want to draw your attention to here, however, is a larger scale deletion. These Surface Structures make the claim that something must occur — they immediately suggest to us the question, "Or what?" In other words, for us, as therapists, to come to understand the client's model clearly, we must know the consequences to the client of failing to do what the client's Surface Structure claims is necessary. We understand Surface Structures of this class to be of the logical form:

It is necessary that S¹ or S²

where S¹ is what the client's Surface Structure claims is necessary and S² is what will happen if S¹ isn't done — the consequence or outcome of failing to do S¹ — then S¹ and S² are the deleted material. Thus, the therapist may ask:

(89) *Or what will happen?*

or, in a more expanded form

(90) *What would happen if you failed to _____?*

where you substitute the appropriate part of the client's original Surface Structure in the _____. Specifically, using the above as an example, the client says

(91) *One must take other people's feelings into account.*

The therapist may respond,

(92) *Or what will happen?*

or, more fully,²

(93) *What would happen if you failed to take other people's feelings into account?*

These Surface Structures can be identified by the presence of what logicians call modal operators of necessity. These have the Surface forms in English of:

have to as in *I/You have to . . .*
one has to . . .

necessary as in *It is necessary . . .*
Necessarily, . . .

should as in *One/you/I should . . .*

must as in *I/you/one must . . .*

The therapist may use these as cue words to recognize this special class of Surface Structures. In the following set, form a question which asks for the consequence or outcome of failing to do what the Surface Structure claims is necessary. We use the two question forms we suggested above in the following exercise. Note that these are not the only two possible question forms but, in fact, any question which recovers the deleted material is appropriate.

- | | |
|---|---|
| (94) <i>It is necessary to behave properly in public.</i> | What would happen if you failed to behave properly in public? |
| (95) <i>One should always take people seriously.</i> | What would happen if you failed to take people seriously? |
| (96) <i>I must not get involved too deeply.</i> | What would happen if you got involved too deeply? |
| (97) <i>People have to learn to avoid conflict.</i> | What would happen if you failed to learn to avoid conflict? |

There is a second set of important cue words, what logicians have identified as modal operators of possibility. Again, these operators typically identify rules or generalizations from the client's model. For example, the client says:⁴

- (98) *It's not possible to love more than one person at a time.*
- or,
- (99) *No one can love more than one person at a time.*
- or,
- (100) *One can't love more than one person at a time.*
- or,
- (101) *One may not love more than one person at a time.*
- or,
- (102) *No one is able to love more than one person at a time.*

Again, based on your experience in identifying deletions, you can find in these Surface Structures deletions from the Deep Structure representation. However, we want to identify in these examples a deletion which occurs going from the client's experience to the Deep Structure representation. Specifically, on hearing Surface Structures of this class, we want to ask what it is that makes whatever the client's Surface Structure claims is impossible, impossible. In other words, we understand these Surface Structures to

be of the general logical form:

S¹ prevents S² from being possible

where S² is what the client's Surface Structure claims is impossible and S¹ is the missing material. Thus, the therapist may ask,

(103) *What makes _____ impossible?*

or,
(104) *What prevents you from _____?*

or,
(105) *What blocks you from _____?*

or,
(106) *What stops you from _____?*

where the _____ contains what the client's Surface Structure claims is impossible.

Specifically, using the above example, the therapist may ask,

(107) *What makes your loving more than one person impossible?*

or,
(108) *What prevents you from loving more than one person at a time?*

or,
(109) *What blocks you from loving more than one person at a time?*

or,
(110) *What stops you from loving more than one person at a time?*

Surface Structures of this class can be easily identified by the following cue words and phrases:

not possible as in *it's not possible*

can as in *no one can*
nobody can

may as in *no one may*
nobody may

can't as in *I/you/one/people can't*

able as in *no one is able*
nobody is able

impossible as in *it's impossible*

unable as in *I/you/one/people are unable*

These cue words occurring in the client's Surface Structures identify rules or generalizations which correspond to limits in the client's model of the world. Such limits are often associated with the client's experience of limited choice or an unsatisfactory, limited set of options. In the following set of Surface Structures, form a question for each which (when answered) would recover the deleted material.

- | | |
|--|--|
| (111) <i>It's impossible to find someone who's really sensitive.</i> | What prevents you from finding someone who's really sensitive? |
| (112) <i>I can't understand my wife.</i> | What prevents you from understanding your wife? |
| (113) <i>I am unable to express myself.</i> | What prevents you from expressing yourself? |
| (114) <i>No one is able to understand me.</i> | What prevents them from understanding you? |

The value of identifying and recovering deletions of this scope can hardly be overestimated, as they directly involve portions of the client's model wherein he experiences limited options or choices. In a step-by-step outline:

Step 1: *Listen* to the client; examine the client's Surface Structure for the presence of the cue words and phrases identified in this section.

Step 2: (a) If modal operators of necessity are present, use a question form asking for the deleted consequence or outcome of failing to do what the client's Surface Structure claims is necessary, and (b) if the modal operators of possibility are present, use a question form asking for the deleted material which makes impossible what the client's Surface Structure claims is impossible.

DISTORTION – NOMINALIZATIONS

The linguistic process of nominalization is one way the general modeling process of Distortion occurs in natural language systems. The purpose of recognizing nominalizations is to assist the client in re-connecting his linguistic model with the ongoing dynamic processes of life. Specifically, reversing nominalizations assists the client in coming to see that what he had considered an event, finished and beyond his control, is an ongoing process which can be changed. The linguistic process of nominalization is a complex transformational process whereby a process word or verb in the Deep Structure appears as an event word, or noun, in the Surface Structure. The first step in reversing nominalizations is to recognize them. Therapists, as native speakers, may use their intuitions to identify which elements of the Surface Structure are, in fact, nominalizations. For example, in the Surface Structure,

(115) *I regret my decision to return home.*

the event word or noun *decision* is a nominalization. This means that in the Deep Structure representation there appeared a process word or verb, in this case the verb *decide*.

(116) *I regret that I'm deciding to return home.*

True nouns will not fit into the blank in the phrase *an ongoing _____*, in a well-formed way. For example, the true nouns *chair*, *kite*, *lamp*, *fern*, etc., do not fit in a well-formed way — **an ongoing chair*, **an ongoing kite*, etc. However, nouns such as *decision*, *marriage*, *failure*, derived from Deep Structure verbs, do fit — *an ongoing decision*, *an ongoing marriage*, etc. Thus, therapists may train their intuitions using this simple test. In a step-by-step format, the therapist may recognize nominalizations by:

Step 1: Listen to the Surface Structure presented by the client.

Step 2: For each of the elements of the Surface Structure which is not a process word or verb, ask yourself whether it describes some event which is actually a process in the world, or ask yourself whether there is some verb which sounds/looks like it and is close to it in meaning.

Step 3: Test to see whether the event word fits into the blank in the syntactic frame, *an ongoing _____*.

For each non-verb occurring in the client's Surface Structure which either describes an event which you can associate with a process or for which you can find a verb which is close in sound/appearance and meaning, a nominalization has occurred. For example, there are several nominalizations in the sentence:

- (117) *Their failure to see their own children received no recognition.*

Both event words *failure* and *recognition* are derived from Deep Structure verbs (*an ongoing failure, an ongoing recognition*). The Surface Structure

- (118) *I dashed in front of the car.*

on the other hand, contains no nominalizations.

In the following set of Surface Structures, you are simply to decide which sentences contain nominalizations. Again, we suggest you judge each Surface Structure for yourself before looking at the comments we have provided.

- | | | | |
|--|---|---|--|
| (119) <i>My divorce is painful.</i> | 1 | | 1 nominalization (<i>divorce</i>) |
| (120) <i>Our terror is blocking us.</i> | 1 | " | (<i>terror</i>) |
| (121) <i>My wife's laughter causes my anger.</i> | 2 | " | (<i>laughter, anger</i>) |
| (122) <i>Your refusal to leave here forces my departure.</i> | 2 | " | (<i>refusal, departure</i>) |
| (123) <i>Your perceptions are seriously wrong.</i> | 1 | " | (<i>perception</i>) |
| (124) <i>Your projection causes me injury.</i> | 2 | " | (<i>projection, injury</i>) |
| (125) <i>My confusion has a tendency to give me no relief.</i> | 3 | " | (<i>confusion, tendency, relief</i>) |
| (126) <i>I resent your question.</i> | 1 | " | (<i>question</i>) |

- | | |
|--|--|
| (127) <i>I'm afraid of
both your rage
and your help.</i> | 2 nominalization (<i>rage,
help</i>) |
| (128) <i>His intuitions
are remarkable.</i> | 1 " (<i>Intuitions</i>) |

In the next set of Surface Structures, reverse each nominalization by creating a closely associated Surface Structure which translates the nominalization back into an ongoing process. For example, from the sentence

- | | | |
|--|---|--|
| (129) <i>I am surprised at her
resistance to me.</i> | → | I am surprised that she
is resisting me. |
|--|---|--|

The point here is not whether you can create a new sentence which matches the one we suggest, but that you sharpen your ability to translate a nominalized process back into an ongoing process. The sentences we offer are only examples. Remember that neither the original Surface Structure nor the ones corrected for nominalization will be well formed in therapy until they meet all the other well-formedness conditions.

- | | |
|--|--|
| <i>My divorce is painful.</i> | My wife and I
divorcing is
painful. |
| <i>Our terror is blocking us.</i> | Our being
terrified is
blocking us. |
| <i>My wife's laughter causes my anger.</i> | My wife's
laughing causes
me to feel angry. |
| <i>Your refusal to leave here forces
my departure.</i> | Your refusing to
leave here forces
me to depart. |
| <i>Your perceptions are seriously
wrong.</i> | The way you
are/What you are
perceiving is
seriously wrong. |

<i>Your projection causes me injury.</i>	The way that you are/What you are projecting injures me.
--	--

<i>My confusion has a tendency to give me no relief.</i>	My being confused tends to stop me from feeling relieved.
--	---

<i>I resent your question.</i>	I resent what you are asking/the way you are asking me.
--------------------------------	---

<i>I'm afraid of both your rage and your help.</i>	I'm afraid of both the way you rage at me and the way you help me.
--	--

<i>His intuitions are remarkable.</i>	The way he intuites things/What he intuites is remarkable.
---------------------------------------	--

We are aware that we have a number of choices when we encounter nominalizations. We may choose to question the nominalization directly. For example, given the Surface Structure:

(130) *The decision to return home bothers me.*

we may directly challenge the idea that *the decision* is an irrevocable, fixed and finished event from which the client has disassociated himself by asking,

(131) *Is there any way that you can imagine changing your decision?*

or, again,

(132) *What is it that prevents you from changing your decision?*

or, again,

(133) *What would happen if you reconsidered and decided not to return home?*

In each of these cases, the therapist's questions require a response by the client which involves his taking some responsibility for the process of deciding. In any event, the therapist's questioning helps

the client to re-connect his linguistic model of the world with the ongoing processes which are present there.

Nominalizations are complex psychologically as well as linguistically. Our experience is that they rarely occur by themselves; rather, we encounter them more frequently in a form which involves violations of one or more of the other well-formed-in-therapy conditions. Since we have already presented the exercises on deletion, we will now give you a set of Surface Structures which contain both nominalizations and deletions. We ask that you identify both the nominalization and the deletion, and that you formulate a question or series of questions which both translates the nominalization back into a process form and asks for the material which has been deleted. For example, given the Surface Structure

The decision to return home bothers me.

one question which both translates the nominalization back into a process form and simultaneously asks for the deleted material is:

(134) *Who is deciding to return home?*

Again, we suggest that you attempt to formulate your own question(s) before looking at the examples we offer. The example questions we present are dense — we suggest in practice that a series of questions be used, asking for a piece at a time.

- | | |
|--|---|
| (135) <i>My pain is overwhelming.</i> | Your feeling pain
about
whom/what is
overwhelming
whom? |
| (136) <i>It's my fear that gets in my way.</i> | Your being afraid
of whom/what
gets in your way
of what? |
| (137) <i>I have hope.</i> | What are you
hoping for? |
| (138) <i>My son's beliefs worry me.</i> | Your son believes
what that worries
you? |

- (139) *Your bigoted suspicion annoys me.* Bigoted toward whom/what?
What is it that you are suspecting?

EXERCISE B

Since in Meta-model training seminars we have found nominalizations to be the most difficult phenomena for people to learn to recognize, we have devised the following exercise.

Form a visual image from the following sentences. In each case, see if you can imagine placing each of the non-process or non-verb words in a wheelbarrow.

I want to make a chair.

I want to make a decision.

Notice that all the non-verb words in the first sentence (*I, chair*) can be placed in your mental wheelbarrow. This is not the case with the second sentence (*I, decision*). *I* can be placed in a wheelbarrow but a *decision* cannot. In the following sets of sentences, use this same visual test to train yourself in recognizing nominalizations.

I have a lot of frustration.

I have a lot of green marbles.

I expect a letter.

I expect help.

My fear is just too big.

My coat is just too big.

I lost my book.

I lost my temper.

I need water.

I need love.

Horses frighten me.

Failure frightens me.

The tension bothers me.

The dragon bothers me.

At least one nominalization occurs in each of the preceding pairs. You may check the accuracy of your visual test by now applying the purely linguistic test, *an ongoing* in front of the nominalization. The same word which fits into the linguistic frame — *an ongoing* — will not fit into your mental wheelbarrow.

GENERALIZATION

How To Get a Clear Image of the Client's Model

One of the universal processes which occur when humans create models of their experiences is that of Generalization. Generalization may impoverish the client's model by causing loss of the detail and richness of their original experiences. Thus, generalization prevents them from making distinctions which would give them a fuller set of choices in coping with any particular situation. At the same time, the generalization expands the specific painful experience to the level of being persecuted by the universe (an insurmountable obstacle to coping). For example, the specific painful experience "Lois doesn't like me" generalizes to "Women don't like me." The purpose of challenging the client's generalizations is to:

- (1) Re-connect the client's model with his experience.
- (2) Reduce the insurmountable obstacles which result from generalizations to something definite with which he can begin to cope.
- (3) Insure detail and richness are present in the client's model, thus creating choices based on distinctions which were not previously available.

Linguistically, we are aware of two important ways which we use to identify the generalizations in the client's model. At the same time, these provide us with a vehicle for challenging these generalizations. These are the processes of:

- (1) Checking for referential indices for nouns and event words;
- (2) Checking for fully specified verbs and process words.

Referential Indices

The ability of the therapist to determine whether the Surface Structures presented by the client are connected with the client's experience is essential for successful therapy. One explicit way of determining this is for the therapist to identify words and phrases in the client's Surface Structure which do not have a referential

index. For example, in the Surface Structure

(140) *People push me around.*

the noun *people* carries no referential index and, therefore, fails to identify anything specific in the client's experience. On the other hand, the sentence

(141) *My father pushes me around.*

contains two nouns (*my father* and *me*), both bearing a referential index which identifies something specific in the client's model.

Again, a step-by-step procedure is available.

Step 1: *Listen* to the client's Surface Structure, identifying each non-process word.

Step 2: For each of these, ask yourself whether it picks out a specific person or thing in the world.

If the word or phrase fails to pick out a specific person or thing, then the therapist has identified a generalization in the client's model. In the following set of Surface Structures, decide for each noun or phrase whether it does or does not have a referential index making it well formed in therapy.

(142) <i>Nobody pays any attention to what I say.</i>	<i>Nobody</i> and <i>what</i> have no referential index.
---	--

(143) <i>I always avoid situations I feel uncomfortable in.</i>	<i>Situations I feel uncomfortable in</i> no index.
---	--

(144) <i>I like dogs that are friendly.</i>	<i>Dogs that are friendly</i> — no index.
---	--

(145) <i>I saw my mother-in-law yesterday.</i>	All nouns have indices.
--	----------------------------

(146) <i>One should respect others' feelings.</i>	<i>One</i> and <i>others'</i> — no indices.
---	--

(147) <i>It's painful for us to see her this way, you know.</i>	<i>It, us, you</i> and <i>this way</i> — no indices.
---	--

(148) <i>Let's not get bogged down in details.</i>	<i>Us</i> and <i>details</i> — no indices.
--	---

(149) *There's a certain feeling in this room.* *A certain feeling*
— no index.

(150) *Everybody feels that way sometimes.* *Everybody, that way, sometimes*
— no indices.

Once the therapist has identified the words and phrases without referential indices, it is quite easy to ask for these. Only two questions are required:

(151) *Who, specifically?*

(152) *What, specifically?*

In requiring the client to supply referential indices by answering these questions, the client re-connects the generalizations in his model with his experiences. In the next set of Surface Structures, formulate the question appropriate for getting the missing referential index.

Nobody pays any attention to what I say. Who, specifically?
What, specifically, do you say?

I always avoid situations I feel uncomfortable in. What situations, specifically?

I like dogs that are friendly. What dog, specifically?

It's painful for us to see her this way, you know. Who, specifically, is full of pain?
Who, specifically, is *us*? What way, specifically? Who, specifically, is *you*?

Everybody feels that way sometimes. Who, specifically?
What way, specifically? What time, specifically?

There is a special case which we like to emphasize of certain words which have no referential index. This, specifically, is the set

of words which contains universal quantifiers such as *all, each, every, any*. The universal quantifier has a different form when combined with other linguistic elements such as the negative element — *never, nowhere, none, no one, nothing, nobody*. Universal quantifiers, and words and phrases containing them, have no referential index. We use a special form of challenge for the universal quantifier and words and phrases containing it. For example, the Surface Structure presented before:

Nobody pays any attention to what I say.

may be challenged as we suggested before or with the challenge:

(153) *You mean to tell me that NOBODY EVER pays attention to you AT ALL?*

What we are doing here is emphasizing the generalization described by the client's universal quantifier by exaggerating it both by voice quality and by inserting additional universal quantifiers in the client's original Surface Structure. This challenge identifies and emphasizes a generalization in the client's model. At the same time, this form of challenge asks clients if there are any exceptions to their generalizations. A single exception to the generalization starts the client on the process of assigning referential indices and insures the detail and richness in the client's model necessary to have a variety of options for coping.

C: *Nobody pays any attention to what I say.*

T: *Do you mean to tell me that NOBODY EVER pays attention to you AT ALL?*

C: *Well, not exactly.*

T: *OK, then; who, specifically, doesn't pay attention to you?*

Once the therapist has identified a generalization it can be challenged in several ways.

(a) As mentioned in the section on universal quantifiers, generalizations can be challenged by emphasizing the universal nature of the claim by the Surface Structure by inserting universal quantifiers into that Surface Structure. The therapist now asks the client to check the new generalization explicit in this Surface Structure against his experience. For example, the client says:

C: *It's impossible to trust anyone.*

T: *It's always impossible for anyone to trust anyone?*

The purpose of the therapist's challenge to the generalization is to re-connect the client's generalization with the client's experience. The therapist has other options in the way that he may challenge the client's generalizations.

(b) Since the purpose of challenging the client's generalizations is to re-connect the client's representation with his experi-

ence, one very direct challenge is, literally, to ask the client whether he has had an experience which contradicts his own generalization. For example, the client says:

C: *It's impossible to trust anyone.*

T: *Have you ever had the experience of trusting someone?*
or

Have you ever trusted anyone?

Notice that, linguistically, the therapist is doing several things: Relativizing the generalization to the client's experience by shifting the referential index from no index (the missing indirect object of the predicate *impossible* [i.e., *impossible for whom?*]) and the missing subject of the verb *trust*) to linguistic forms carrying the client's referential index (i.e., *you*).

(c) A third way of challenging generalizations of this form is to ask the client whether he can imagine an experience which would contradict the generalization. The client says:

C: *It's impossible to trust anyone.*

T: *Can you imagine any circumstance in which you could trust someone?*

or,

Can you fantasize a situation in which you could trust someone?

Once the client has succeeded in imagining or fantasizing a situation which contradicts the generalization, the therapist may assist the client in opening up this part of his model by asking what the difference between the client's experience and the client's fantasy is, or what prevents the client from achieving the fantasy. Notice that one of the most powerful techniques here is to connect the client with the immediate experience that he is having, i.e., relativize the generalization to the process of ongoing therapy directly. The therapist may respond:

Do you trust me right now in this situation?

If the client responds positively, his generalization has been contradicted. If he responds negatively, all the other techniques are available, e.g., asking what, specifically, is preventing the client from trusting the therapist in this situation.

(d) In the event the client is unable to fantasize an experience which contradicts his generalization, the therapist may choose to search his own models to find a case in which he has had an experience which contradicts the client's generalization. If the therapist can find some experience of his own which is common enough that the client also may have had it, he may ask whether that experience contradicts the client's generalization.

C: *It's impossible to trust anyone.*

T: *Have you ever gone to the doctor (or to the dentist, ridden in a bus or taxi or airplane, or . . .)? Did you trust the doctor (or dentist, or bus driver, or . . .)?*

Once the client has admitted that he has had an experience which contradicts his generalization, he has re-connected his representation with his experience and the therapist is able to explore the differences with him.

(e) Another approach to challenging the client's generalization is for the therapist to determine what makes the generalization possible or impossible. This technique is described in the section on modal operators of necessity (this chapter, p. 69).

C: *It's impossible to trust anyone.*

T: *What stops you from trusting anyone?*

or,

What would happen if you trusted someone?

(f) Often the client will offer generalizations from his model in the form of generalizations about another person. For example:

C: *My husband is always arguing with me.*

or,

My husband never smiles at me.

Notice that the predicates *argue with* and *smile at* describe processes which are occurring between two people. The form of the two sentences is: The subject (the active agent), the verb (the name of the process), and the object (the non-active person involved in the process). In both of the above examples, the client represents himself as the passive member of the process — the object of the predicate — thus avoiding any responsibility for the process or relationship. The generalizations which are reported by the client in these two Surface Structures involved a special kind of deletion — the Deep Structure is adequately represented by these Surface Structures but there is a deletion in the process of representing the client's experience by these Deep Structures. In other words, the client has deleted a portion of his experience when he represented it with the Deep Structure from which these Surface Structures are derived. The image of the processes or relationships of *arguing with* and *smiling at* are incomplete as only one person in the relationship is being described as having an active role. When faced with Surface Structures of this type, the therapist has the choice of asking for the way the person characterized as passive is involved in the process. One very specific and often potent way of asking for this information is to shift the referential indices contained in the client's generalization. In the examples given the shift would be:⁴ (See page 86)

Making these shifts in referential indices, the therapist creates a

↓ *My husband*
↓ *me (the client)*

and ↓ *me*
↓ *My husband*

new Surface Structure based on the client's original Surface Structure. Specifically:

↓ *My husband always argues with me.*
↓ *I always argue with my husband,*

and

↓ *My husband never smiles at me.*
↓ *I never smile at my husband.*

Once the referential indices shift, the therapist may then ask the client to verify these new Surface Structures with the question:

Do you always argue with your husband?

and

Do you ever smile at your husband?

Here an additional linguistic distinction is available which may be useful to the therapist: predicates which describe processes or relationships between two people are of two different logical types:

(a) **Symmetrical predicates:** Predicates which, if accurate, necessarily imply that their converse is also accurate. The predicate *argue with* is of this logical type. If the Surface Structure:

My husband always argues with me.

is accurate, then necessarily the Surface Structure:

I always argue with my husband.

is also accurate. This property of symmetrical predicates is represented linguistically by the general form:

If a Surface Structure of the form *X Predicate Y* is true and Predicate is a symmetrical predicate, then necessarily the Surface Structure of the form *Y Predicate X* is also true.

If you are arguing with me, then, necessarily, I am arguing with you. This same point is made by the expression, "It takes two to make an argument." In the case of applying the referential index shift technique to Surface Structures the therapist knows that the result will be a generalization which is necessarily implied by the original. This technique assists the client in re-connecting his representation with his experience.

(b) **Non-Symmetrical Predicates:** Predicates which describe a relationship whose converse is not necessarily true. The predicate

smile at is of this logical type. If the Surface Structure:

My husband never smiles at me.

is accurate, then it may or may not be true that the converse Surface Structure (with the referential indices shifted) is also accurate:

I never smile at my husband.

While there is no logical necessity that the converse of a Surface Structure with a non-symmetrical predicate will be accurate, our experience has been that the converse is frequently psychologically accurate. That is, often when the client states a generalization about another person (especially if the relationship between the client and the person being characterized is an important one for the client), the converse is true. Traditionally, this phenomenon has been referred to in some forms of psychotherapy as projection. Whether the converse of the client's Surface Structure turns out to be accurate, by asking the client to verify it, the therapist begins to recover the missing material and to help the client re-connect his representation with his experience.

(c) Clients sometimes present generalizations from their model in the form:

X or Y

For example, a client says:

C: *I have to take care of other people.*

to which the therapist may reply (as outlined in the section on modal operators):

T: *Or what will happen?*

C: *Or they won't like me.*

Thus, the full generalization is:

I have to take care of other people or they won't like me.

This generalization involves a claim that there is a necessary causal relationship between the client's taking care of (or not taking care of) other people and other people's liking the client. The same claim is involved in the Surface Structure:

If I don't take care of people, they won't like me.

In fact, within formal systems, the logical equivalence holds.⁵

$X \text{ or } Y \quad = \quad \text{not } X \rightarrow Y$

Whether the clients present their generalizations in the *X or Y* form spontaneously or supply the second portion — the outcome or consequence — upon questioning, their generalizations may be restated by the therapist in the equivalent *if... then...* form. Once the therapist has had the client verify the *if... then...* form of his generalization, he may challenge it by introducing

negatives into both portions of the generalization and presenting the resulting Surface Structure to the client:

If you do take care of other people, they will like you?

The therapist may use this reversal technique in combination with other techniques; for example, some of those discussed under modal operators or universal quantifiers, yielding the Surface Structure challenge:

If you do take care of other people, will they necessarily
always *like you?*

Complex Generalization — Equivalence

We want to point out one additional, frequently occurring form of generalization which is somewhat more complex than the ones which we have so far considered in this section. These complex generalizations involve Surface Structures which are equivalent in the client's model. Typically, the client says one of these Surface Structures, pauses, and then says the second. The two Surface Structures characteristically have the same syntactic form. For example, the client says:

My husband never appreciates me. . . . My husband never smiles at me.

The two Surface Structures are syntactically parallel:

Noun¹ + Universal Quantifier + Verb + Noun²

where Noun¹ = my husband

Noun² = me (the client)

Notice that one of these Surface Structures (the first) involves a violation of one of the well-formed-in-therapy conditions; specifically, the client is claiming knowledge of one of her husband's inner states (*appreciate*) without stating how she got her knowledge — a case of mind-reading. In the second Surface Structure, the process of one person's smiling or failing to smile at another person is described — a verifiable experience which doesn't require knowledge of the inner state of that other person. Both of these sample Surface Structures are generalizations which may be challenged (using the technique described in the section on universal quantifiers). Here, however, we wish to offer a short-cut technique which often yields dramatic results. The therapist first checks to see if the two Surface Structures are, in fact, equivalents in the client's model. This is easily done by directly asking whether the two Surface Structures are equivalents:

C: *My husband never appreciates me . . . My husband never smiles at me.*

T: *Does your husband's not smiling at you always mean that he doesn't appreciate you?*

Here the client is faced with a choice — the client will deny the equivalence and the therapist may ask how the client does, in fact, know that her husband doesn't appreciate her, or the client verifies the equivalence. If the equivalence of these two Surface Structures is verified, the therapist applies the referential index shift technique:

↓ *My husband*
↓ *me (the client)*

↓ *me (the client)*
↓ *My husband*

This results in the transformation of the Surface Structure from:
Does your husband's not smiling at you always mean that he doesn't appreciate you?

to the Surface Structure:

Does your not smiling at your husband always mean that you don't appreciate him?

Let's review what has happened:

1. The client says two Surface Structures which are separated by a pause and have the same syntactic form — one involving mind-reading, the other not.

2. The therapist checks to see if the two Surface Structures are equivalent.

3. The client verifies their equivalence.

Thus, we have the situation:

(X not smiling at Y) = (X doesn't appreciate Y)
where X is the client's husband and Y is the client

4. The therapist shifts the referential indices and asks the client to verify the new generalization. The new Surface Structure has the same logical form:

(X not smiling at Y) = (X doesn't appreciate Y)
where X is the client and Y is the client's husband.

5. Typically, the client denies the equivalence when she is the active agent subject of the process.

(X not smiling at Y) ≠ (X doesn't appreciate Y)
where X is the client and Y is the client's husband

If the client accepts the new generalization, the therapist has all the usual options for challenging generalization. Our experience is that the client will seldom accept the new generalization.

6. The therapist may now begin to explore the difference between the two situations: the one in which the equivalence holds and the one in which it does not. The client, again, has re-connected her generalization with her experience. The overall exchange looks like:

C: *My husband never appreciates me. . . . My husband never smiles at me.*

T: *Does your husband's not smiling at you always mean that he doesn't appreciate you?*

C: *Yes, that's right!*

T: *Does your not smiling at your husband always mean that you don't appreciate him?*

C: *No, that's not the same thing.*

T: *What's the difference?*

Incompletely Specified Verbs

The second form of generalization which occurs in natural language systems is that of verbs which are not completely specified. For example, in the Surface Structures,

(154) *My mother hurt me.*

(155) *My sister kicked me.*

(156) *My friend touched me on the cheek with her lips.*

the image presented is increasingly more specific and clear. So, in the first, the mother referred to may have caused some physical hurt or the hurt may have been "psychological"; she may have done it with a knife or a word or a gesture, . . . all of this is left incompletely specified. In the next sentence, the sister mentioned may have kicked the speaker with her left or her right foot, but it is specified to have been her foot; where the speaker was kicked is left unspecified. In the third example, the image presented is even more specified — the way the friend mentioned made contact is stated (*touched with her lips*) and the place on the speaker's body where contact was made is also specified (*on the cheek*). Notice, however, that the duration of the contact, the roughness or gentleness, are left unspecified.⁶

Every verb of which we are aware is incompletely specified to some degree. How clear the image is that the verb presents is determined by two factors:

- (1) The meaning of the verb itself. For example, the verb *kiss* is more specific by its meaning alone than the verb *touch* — *kiss* is equivalent to a specific form of touching; namely, *touching with one's lips*.
- (2) The amount of information presented by the rest of the sentence in which the verb occurs. For example,

the phrase *hurt by rejecting* is more specified than simply the verb *hurt*.

Since every verb is to some degree incompletely specified, we suggest the following procedure:

Step 1: *Listen* to the client's Surface Structure, identifying the process words or verbs.

Step 2: Ask yourself whether the image presented by the verb in its sentence is clear enough for you to visualize the actual sequence of events being described.

If the therapist finds that the image he has from the verb and the accompanying words and phrases of the client's Surface Structure is not clear enough to visualize the actual sequence of events being described, then he should ask for a more completely specified verb. The question available to the therapist to clarify the poorly focused image is:

How, specifically, did X_____Y?

where X = the subject of the incompletely specified verb and Y = the incompletely specified verb plus the remainder of the client's original Surface Structure.

For example, given the Surface Structure

(157) *Susan hurt me.*

the therapist asks for a more fully specified image with the question

(158) *How, specifically, did Susan hurt you?*

For the next set of Surface Structures, formulate a question which, when answered, would clarify your image of the action being described.

(159) *My children force me to punish them.*

How, specifically, do your children force you to punish them?
Also, how, specifically, do you punish your children?

(160) *Sharon is always demanding attention from me.*

How, specifically, does she demand attention from you?

(161) *I always show Jane that I love her.*

How, specifically, do you show Jane that you love her?

(162) *My husband always ignores me.*

How, specifically, does your husband ignore you?

(163) *My family is trying to drive me crazy.*

How, specifically, is your family trying to drive you crazy?

Every Surface Structure which is well formed in English contains a process word or verb. No verbs that we have encountered have been completely specified. Therefore, every one of the client's Surface Structures is the occasion for the therapist to check to see whether the image presented is clear.

PRESUPPOSITIONS

Presuppositions are one linguistic reflex of the process of Distortion. The therapist's purpose in recognizing presuppositions is to assist the client in identifying those basic assumptions which impoverish his model and limit his options in coping. Linguistically, these basic assumptions show up as presuppositions of the client's Surface Structures. For example, to make sense out of the Surface Structure

(164) *I'm afraid that my son is turning out to be as lazy as my husband.*

the therapist has to accept as true the situation expressed by the sentence presupposed by this sentence. Specifically,

(165) *My husband is lazy.*

Notice that this last Surface Structure, the presupposition of the one before, does not appear directly as any part of the sentence which presupposes it. Linguists have developed a test for determining what the presuppositions of any given sentence are. Adopted for the Meta-model they are

Step 1: *Listen* for the main process word or verb in the client's Surface Structure — call this Sentence A.

Step 2: Create a new Surface Structure by introducing the negative word in the client's original Surface Structure on the main verb — call this Sentence B.

Step 3: Ask yourself what must be true for both A and B to make sense.

All of the things (expressed in the form of other sentences) which must be true for both A and B to make sense are the presuppositions of the client's original sentence. Specifically, in the case of

the sentence,

I'm afraid that my son is turning out to be as lazy as my husband.

by introducing the negative on the main verb (*afraid*), the therapist creates a second sentence,

(166) *I'm not afraid that my son is turning out to be as lazy as my husband.*

The point here is that, for the therapist to make sense out of this new Surface Structure, it must be true that

(165) *My husband is lazy.*

Since both the client's original Surface Structure and the new Surface Structure formed from it by introducing the negative element require that this last sentence (165) be true, this last Surface Structure is the presupposition of the client's original sentence.

In the succeeding set of Surface Structures, identify the presuppositions of each of the sentences.

(167) <i>If you are going to be as unreasonable as you were last time we discussed this, then let's skip it.</i>	— We discussed something. -- You were unreasonable the last time we discussed something.
--	---

(168) <i>If Judy has to be so possessive, then I'd rather not be involved with her.</i>	Judy is possessive.
---	---------------------

(169) <i>If Fred had enjoyed my company, he wouldn't have left so early.</i>	Fred didn't enjoy my company.
--	-------------------------------

(170) <i>If you knew how much I suffered, you wouldn't act this way.</i>	— I suffer. — You act out this way. — You don't know. . . .
--	---

(171) <i>Since my problem is trivial, I'd rather not take up valuable group time.</i>	My problem is trivial.
---	------------------------

Linguists have identified a large number of specific forms or syntactic environments in language in which presuppositions nec-

essarily occur. For example, any portion of a Surface Structure which occurs after the main verbs *realize*, *be aware*, *ignore*, etc., is a presupposition or necessary assumption of that Surface Structure. Notice that these specific forms or syntactic environments are independent of the content or meaning of the words and phrases used. We have included an appendix (Appendix B) which identifies these syntactic environments to assist those who wish to train themselves more thoroughly in the recognition of the language forms which carry presuppositions.

Having identified the presuppositions of the client's Surface Structures, the therapist may now challenge them. Due to the complexity of the presuppositions, the therapist has a number of choices.

1. The therapist may present the client with the presupposition implicit in his original Surface Structure directly. In doing this, the therapist can ask the client to explore this presupposition, using the other well-formed-in-therapy conditions. For example, the client says,

(172) *I'm afraid that my son is turning out to be as lazy as my husband.*

The therapist identifies the presupposition

(173) *My husband is lazy.*

and presents it to the client, asking her how, specifically, her husband is lazy. The client responds with another Surface Structure which the therapist evaluates for well-formedness-in-therapy.

2. The therapist may decide to accept the presupposition and apply the well-formed-in-therapy condition to the client's original Surface Structure, asking to specify the verb, recover the deleted material, etc.

We will present a set of Surface Structures which have presuppositions and give some possible ways of challenging them. Remember that the questions we offer are examples and do not exhaust all the possibilities.

(174) *If my wife is going to be as unreasonable as she was the last time I tried to talk to her about this, then I certainly won't try again.*

What, specifically, seemed unreasonable to you about your wife?

How, specifically, did your wife seem to you to be unreasonable?

- (175) *If Judy has to be so possessive, then I'd rather not be involved with her.* How, specifically, does Judy seem to you to be possessive?

SEMANTIC WELL-FORMEDNESS

The purpose of recognizing sentences which are semantically ill formed is to assist the client in identifying the portions of his model which are distorted in some way that impoverishes the experiences which are available to him. Typically, these impoverishing distortions take the form of limiting the client's options in some way that reduces the client's ability to act. We have identified some frequently occurring classes of semantic ill-formedness which we typically encounter in therapy. We present the linguistic characterization for each class below. The choices which the therapist has for dealing with the first two classes of semantically ill-formed Surface Structures are essentially the same. Therefore, we will present these choices in one section after we have presented both of these classes.

Cause and Effect

This class of semantically ill-formed Surface Structures involves the belief on the part of the speaker that one person (or set of circumstances) may perform some action which necessarily causes some other person to experience some emotion or inner state. Typically, the person experiencing this emotion or inner state is portrayed as having no choice in responding the way he does. For example, the client says,

- (176) *My wife makes me feel angry.*

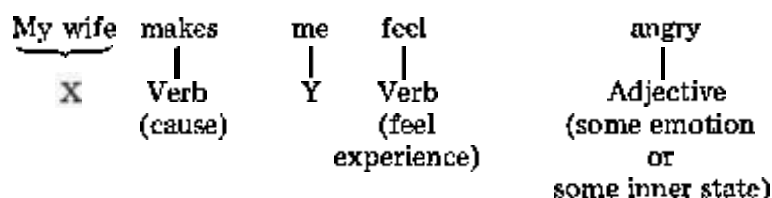
Notice that this Surface Structure presents a vague image in which one human being (identified as *My wife*) performs some action (unspecified) which necessarily causes some other person (identified as *me*) to experience some emotion (*anger*). Ill-formed Surface Structures which are members of this class can be identified by one of two general forms:

(A)	X	Verb (cause)	Y	Verb (feel experience)	Adjective (some emotion or some inner state)
-----	---	-----------------	---	------------------------------	---

where X and Y are nouns which have different referential

indices, i.e., refer to different people.

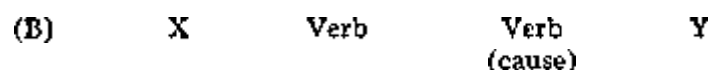
The Surface Structure presented above is of this form — namely:



The other general form which we frequently encounter is that of underlying Surface Structures such as:

(177) *Your laughing distracts me.*

The general form is:



where X and Y are nouns which have different referential indices, i.e., refer to different people.

Applying the general form to the example we have:



We will now present a set of Surface Structures, all of which are semantically ill formed in the way we have been discussing. This is to assist you in training your intuitions to recognize examples of this type of semantic ill-formedness.

- (178) *She compels me to be jealous.*
- (179) *You always make me feel happy.*
- (180) *He forced me to feel bad.*
- (181) *She causes me a lot of pain.*
- (182) *Your writing on the wall bothers me.*
- (183) *Their crying irritates me.*

In addition to Surface Structures which are of these two general forms, there are others which have a different form but have the same meaning relationships. For example, the Surface Structure

(184) *She depresses me.*

carries the same meaning relationship as the Surface Structure

(185) *She makes me feel depressed.*

In fact, to assist therapists in training their intuitions to recognize semantically ill-formed Surface Structures of this type, this paraphrase test can be used. Specifically, if the Surface Structure the client presents can be translated from

X	Verb	Y
1	1	1
1	2	1
1	3	1
1	4	1
1	5	1
1	6	1
1	7	1
1	8	1
1	9	1
1	10	1
1	11	1
1	12	1
1	13	1
1	14	1
1	15	1
1	16	1
1	17	1
1	18	1
1	19	1
1	20	1
1	21	1
1	22	1
1	23	1
1	24	1
1	25	1
1	26	1
1	27	1
1	28	1
1	29	1
1	30	1
1	31	1
1	32	1
1	33	1
1	34	1
1	35	1
1	36	1
1	37	1
1	38	1
1	39	1
1	40	1
1	41	1
1	42	1
1	43	1
1	44	1
1	45	1
1	46	1
1	47	1
1	48	1
1	49	1
1	50	1
1	51	1
1	52	1
1	53	1
1	54	1
1	55	1
1	56	1
1	57	1
1	58	1
1	59	1
1	60	1
1	61	1
1	62	1
1	63	1
1	64	1
1	65	1
1	66	1
1	67	1
1	68	1
1	69	1
1	70	1
1	71	1
1	72	1
1	73	1
1	74	1
1	75	1
1	76	1
1	77	1
1	78	1
1	79	1
1	80	1
1	81	1
1	82	1
1	83	1
1	84	1
1	85	1
1	86	1
1	87	1
1	88	1
1	89	1
1	90	1
1	91	1
1	92	1
1	93	1
1	94	1
1	95	1
1	96	1
1	97	1
1	98	1
1	99	1
1	100	1

where X and Y are nouns with different referential indices
into the general form (a)

X	Verb (cause)	Y	Verb (feel experience)	Adjective (emotion or inner state)
---	-----------------	---	------------------------------	--

where the adjective is a form related to the verb in the client's original Surface Structure

and the new Surface Structure means the same as the client's original Surface Structure, then the Surface Structure is semantically ill formed. As an additional example, the client says,

(186) *You bore me.*

To apply the paraphrase test, move the verb in this Surface Structure to the end of the new Surface Structure and put the verb *cause* or *make* in its original position, and insert the verb *feel* or *experience*, yielding,

(187) *You make me feel bored.*

The question now is whether this new Surface Structure and the client's original mean the same thing. In this case, they do, and the client's original Surface Structure is identified as being semantically ill formed. To assist you in training your intuitions in identifying this class of semantically ill-formed Surface Structures, we present the following set of sentences. Determine which of the Surface Structures are ill formed by using the paraphrase test with form (A).

(188) *Music pleases me.* = Music makes me feel pleased.

(189) *My husband likes me.* \neq *My husband makes me feel liked.*

(190) *Your ideas annoy me.* = Your ideas make me feel annoyed.

(191) *His plan insults me.* = His plan makes me
feel insulted.

- (192) *Policemen follow me.* ≠ Policemen make me
feel followed.

One additional, frequently occurring Surface Structure form in this class is

- (193) *I'm sad that you forgot our anniversary.*
or,
(194) *I'm sad since you forgot our anniversary.*
or,

- (195) *I'm sad because you forgot our anniversary.*

Once again, these three Surface Structures can be paraphrased by the Surface Structure:

- (196) *Your forgetting our anniversary makes me feel sad.*

Notice that this last Surface Structure is of the general form (B). Thus, a paraphrase test is again available here to assist you in training your intuitions. Specifically, if the client's Surface Structure can be paraphrased by a sentence of the general form (B), it is semantically ill formed.

We present an additional set of Surface Structures. Determine which of them are semantically ill formed by using the paraphrase test with form (B).

- (197) *I'm down since you won't help me.* = Your not helping me
makes me feel down.
(198) *I'm lonely because you're not here.* = Your not being here
makes me feel lonely.
(199) *I'm happy that I'm going to Mexico.* = My going to Mexico
makes me feel happy.

(Note: The paraphrase test works but the Surface Structure is not ill formed since both nouns, X and Y in the general form (B), have the same referential index.)

- (200) *She's hurt that you're not paying any attention to her.* = Your not paying any
attention to her
makes her feel hurt.

But,

In addition to the forms of Surface Structures which we have presented involving ways that the client experiences having no choice, we have found it useful in teaching other therapists in training to hear the cue word *but*. This conjunction *but*, which

translates in many of its uses logically as *and not*, functions to identify what the client considers the reasons or conditions which make something he wants impossible or which make something he doesn't want necessary. For example, the client says:

(201) *I want to leave home but my father is sick.*

When we hear Surface Structures of this form, we understand the client to be identifying a cause-effect relationship in his model of the world. Thus, we call Surface Structures of this general form Implied Causatives.

(202) *X but Y*

In the specific example above, the client is reporting what is a necessary causal connection in his model, namely, that his father's being sick prevents him from leaving home. The portion of the Surface Structure represented by X identifies something the client wants (i.e., *to leave home*) and the portion represented by Y identifies the condition or reason (i.e., *my father is sick*) that the client is blocked from getting X. We have identified one other common form Implied Causatives typically have in Surface Structures. The client says:

(203) *I don't want to leave home, but my father is sick.*

In this form of the Implied Causative the X represents something the client does *not* want (i.e., *to leave home*), and the Y represents the condition or reason that is forcing the client to experience the thing he doesn't want (i.e., *my father is sick*). In other words, the client's father's being sick is forcing the client to leave home. These are the two Implied Causatives that we have most frequently encountered. Both of the forms share the characteristic that the client experiences no choice. In the first case, he wants something (the X in the general form *X but Y*) and some condition is preventing him from getting it (the Y). In the second case, the client does not want something (the X), but something else (the Y) is forcing him to experience it. The following set of Surface Structures is composed of examples of Implied Causatives to assist you in recognizing the semantic relationship.

(204) *I would change but a lot of people depend on me.*

(205) *I don't want to get angry but she is always blaming me.*

(206) *I would like to get to the bottom of this, but I'm taking up too much of the group's time.*

(207) *I don't enjoy being uptight but my job demands it.*

Therapists have at least the following three choices in coping with Implied Causatives.

(a) Accept the cause-effect relationship and ask if it is always that way. For example, the client says:

(205) *I don't want to get angry but she is always blaming me.*

The therapist may respond:

(206) *Do you always get mad when she blames you?*

The client will often recognize times when she has blamed him and he has not gotten angry. This opens up the possibility of determining what the difference is between those times and when her blaming "automatically makes" the client angry.

(b) Accept the cause-effect relationship and ask the client to specify this relationship of Implied Causative more fully. To the client's Surface Structure above, the therapist may respond:

(207) *How, specifically, does her blaming you make you angry?*

The therapist continues to ask for specifics until he has a clear image of the process of Implied Causation as represented in the client's model.

(c) Challenge the cause-effect relationship. One direct way of doing this which we have found useful is to feed back a Surface Structure which reverses the relationship. For example, the client says:

(205) *I don't want to get angry but she's always blaming me.*

The therapist may respond:⁷

(208) *Then, if she didn't blame you, you wouldn't become angry, is that true?*

or, the client says:

(201) *I want to leave home but my father is sick.*

The therapist may respond:

(209) *Then, if your father weren't sick, you would leave home, right?*

This technique amounts to asking the client to reverse the condition in his model which is preventing him from achieving what he wants, or to reverse or remove the conditions in his model which are forcing him to do something he doesn't want to do and then asking whether this reversal gives him what he wants. Let's examine this process more carefully. If someone says to me:

I want to relax but my back is killing me.

I understand him to be saying:

I want to relax but $\left\{ \begin{array}{l} \text{I can't relax} \\ \text{I am not relaxed} \end{array} \right\}$ *because my back is killing me.*

Thus, Surface Structures of the form:

X but Y

involve a deletion. Their full form is:

X and not X because of Y

Using the previous example we have the initial Surface Structure:

I want to leave home but my father is sick.

which, using the equivalence we just suggested, has a full representation:

I want to leave home and $\left\{ \begin{array}{l} \text{I can't} \\ \text{I don't} \end{array} \right\}$ *leave home because*
my father is sick.

Once this fuller version of the original Surface Structure is available, the therapist may apply the reversal technique for Implied Causatives. From a Surface Structure of the form

X and not X because of Y

he forms a new reversed Surface Structure with only the second part of the fuller version:

not X because of Y.

This new Surface Structure consists of an *If . . . then . . .* construction with this latter portion of the full representation reversed where negatives have been added for both the X and the Y portions. In a step-by-step presentation:

- (1) Place the latter portion of the full representation in an *If . . . then . . .* construction in reversed order —

If (my father is sick), then $\left\{ \begin{array}{l} \text{I can't} \\ \text{I don't} \end{array} \right\}$ *leave home).*

$\left\{ \right\}$ *means one expression or the other/not both.*

- (2) Introduce negatives into both the *If* part and the *then* part —

If (my father weren't sick), then $\left\{ \begin{array}{l} \text{I can't} \\ \text{I don't} \end{array} \right\}$ *not*
leave home).

or, translating the double negatives into grammatical English:

If (my father weren't sick), then ($\left\{ \begin{array}{l} \text{I could} \\ \text{I would} \end{array} \right\}$ leave home).

- (3) Present the reversed generalization to the client for verification or denial.

If your father weren't sick, you would leave home?

This reversal technique has been, in our experience, very effective in challenging the Cause-Effect generalization involved. The client often succeeds in taking responsibility for his continuing decision to do or not to do what he originally claims someone or something else controls. To review, the reversal technique for Implied Causatives of the form *X but Y* involves the following steps:

- (1) Expand the client's original Surface Structure to its fuller version (with the deletion restored), using the equivalence:

(X but Y) \longrightarrow (X and not X because Y)

(I want to leave home) but (my father is sick) \longrightarrow (I want to leave home) and ($\left\{ \begin{array}{l} \text{I can't} \\ \text{I don't} \end{array} \right\}$ leave home) because (my father is sick)

- (2) Place the second portion of the restored Surface Structure — the portion after the *and* — in an *If . . . then . . .* construction in the reversed order: (See page 103)
- (3) Introduce negatives into the new Surface Structure in both the *If* and the *then* portions: (See page 103)

(2) (not X because Y) \longrightarrow (If Y, then not X)

$\left(\begin{array}{l} \text{I can't} \\ \text{I don't} \end{array} \right) \text{ leave home})$ because $\left(\begin{array}{l} \text{my father} \\ \text{is sick} \end{array} \right) \rightarrow \text{If } \left(\begin{array}{l} \text{my father} \\ \text{is sick} \end{array} \right) \text{ then } \left(\begin{array}{l} \text{I can't} \\ \text{I don't} \end{array} \right) \text{ leave home}$

(3) (If Y then not X) \longrightarrow (If not Y then not not X)

$\left(\begin{array}{l} \text{If my father} \\ \text{is sick} \end{array} \right) \text{ then } \left(\begin{array}{l} \text{I can't} \\ \text{I don't} \end{array} \right) \text{ leave home}) \rightarrow \left(\begin{array}{l} \text{If my father} \\ \text{isn't sick} \end{array} \right) \text{ then } \left(\begin{array}{l} \text{I can't} \\ \text{I don't} \end{array} \right) \text{ not leave home}$

(4) Present the final form of the new Surface Structure as a challenge to the client's original generalization:⁶

Well, then, if your father weren't sick, you would leave home?

(d) One additional technique which we have found useful is to strengthen the client's generalizations about Implied Causative by inserting the modal operator of necessity into the client's Surface Structure when we feed it back, asking the client to verify or challenge it. For example, the client says:

(201) *I want to leave home, but my father is sick.*

The therapist may respond:

(210) *Are you saying that your father's being sick necessarily prevents you from leaving home?*

The client often will balk at this Surface Structure since it blatantly claims that the two events, X and Y, are necessarily connected. If the client balks here, the way is opened for the client and the therapist to explore how it is not necessary. If the client accepts the strengthened version (with *necessarily*), the way is opened for

exploring how that necessary causal connection actually works, asking for more specifics about that connection. This technique works particularly well in conjunction with options (a) and (b) described above.

Mind Reading

This class of semantically ill-formed Surface Structures involves the belief on the part of the speaker that one person can know what another person is thinking and feeling without a direct communication on the part of the second person. For example, the client says:

- (211) *Everybody in the group thinks that I'm taking up too much time.*

Notice that the speaker is claiming to know the contents of the minds of all of the people in the group. In the following set of Surface Structures, identify those which contain the claim that one person knows the thoughts or feelings of another person.

- | | |
|---|-----|
| (212) <i>Henry is angry at me.</i> | yes |
| (213) <i>Martha touched me on the shoulder.</i> | no |
| (214) <i>I'm sure she liked your present.</i> | yes |
| (215) <i>John told me he was angry.</i> | no |
| (216) <i>I know what makes him happy.</i> | yes |
| (217) <i>I know what's best for you.</i> | yes |
| (218) <i>You know what I'm trying to say.</i> | yes |
| (219) <i>You can see how I feel.</i> | yes |

Another less obvious example of this same class is Surface Structures which presuppose that some person is able to read another's mind. For example,

- (220) *If she loved me, she would always do what I would like her to do.*
 (221) *I'm disappointed that you didn't take my feelings into account.*

These two cases of semantic ill-formedness — Cause and Effect and Mind-Reading — can be dealt with by the therapist in essentially the same way. Both of these involve Surface Structures which present an image of some process which is too vague to allow the therapist to form a clear picture of what the client's model is. In the first case, a process is described which claims that one person is performing some action which causes another person to experience some emotion. In the second case, a process is described which claims that one person comes to know what another person is thinking and feeling. In neither case is it given how, specifically, these processes are being accomplished. Thus, the therapist responds by asking, how, specifically, these processes

occur. In our experience, Surface Structures which include Cause and Effect and Mind-Reading identify portions of the client's model in which impoverishing distortions have occurred. In Cause and Effect Surface Structures, the clients feel that they literally have no choice, that their emotions are determined by forces outside of themselves. In Mind-Reading Surface Structures, the clients have little choice as they have already decided what the other people involved think and feel. Therefore, they respond on the level of their assumptions about what these others think and feel when, in fact, their assumptions about the others' thoughts and feelings may be invalid. Conversely, in Cause and Effect, the client may come to feel guilty or, at least, responsible for "causing" some emotional response in another. In Mind-Reading clients may systematically fail to express their thoughts and feelings, making the assumption that others are able to know what they are thinking and feeling. We are not suggesting that it is impossible for one human being to come to know what another is thinking and feeling but that we want to know exactly by what process this occurs. Since it is highly improbable that one human being can directly read another's mind, we want details about how this information was transferred. We view this as being very important, as in our experience the client's assumed ability to read another's mind and the client's assumptions that another can read his mind is the source of vast amounts of inter-personal difficulties, miscommunication and its accompanying pain. Even less probable from our experience is the ability of one person to directly and necessarily cause an emotion in another human being. Therefore, we label all Surface Structures of these forms semantically ill formed until the process by which what they claim is true is made explicit, and the Surface Structures representing this process are themselves well formed in therapy. The therapist asks for an explicit account of the process implied by Surface Structures of these two classes essentially by the question *how?* As before, in the section on incompletely specified verbs, the therapist is satisfied only when he has a clearly focused image of the process being described. This process might proceed as follows:

C: *Henry makes me angry.*

T: *How, specifically, does Henry make you angry?*

C: *He never considers my feelings.*

The therapist has at least the following choices:

(a) *What feelings, specifically?*

(b) *How do you know that he never considers your feelings?*

The therapist chooses to ask (b) and the client responds:

C: *Because he stays out so late every night.*

The therapist now has at least the following choices:

- (a) *Does Henry's staying out at night always make you angry?*
- (b) *Does Henry's staying out at night always mean that he never considers your feelings?*

The client's subsequent Surface Structures are subjected to the well-formed-in-therapy conditions by the therapist.

The Lost Performative

Each of us has noticed that in the therapeutic encounter clients characteristically make statements in the form of a generalization about the world itself, which include judgments which we recognize as being true of their model of the world. For example, the client says

(222) *It's wrong to hurt anyone's feelings.*

We understand this sentence to be a statement about the client's model of the world, specifically, a rule for himself. Notice that the form of the Surface Structure the client uses suggests a generalization which is true about the world; the Surface Structure is not relativized to the client. There is no indication in the Surface Structure that the client is aware that the statement made is true for his particular model; there is no indication that the client recognizes that there may be other possibilities. We translate this sentence, then, into the Surface Structure

(223) *I say to you that it's wrong for me to hurt anyone's feelings.*

Within the transformational model, linguists have presented an analysis which shows that every Surface Structure is derived from a Deep Structure which has a sentence of the form (see Ross, 1970)

(224) *I say to you that S*

where *S* is the Surface Structure. This higher sentence is called the Performative and is, in most cases, deleted by a transformation called Performative Deletion in its derivation to Surface Structures. Notice that, by this analysis, the Deep Structure explicitly identifies the speaker as the source of the generalization about the world; in other words, the sentence which shows up in Surface Structures as a generalization about the world is represented in Deep Structure as a generalization from the speaker's model of the world. The point of this is not to have the client present each Surface Structure preceded by the Performative, but rather to train ourselves as therapists to recognize that the generalizations which the client presents about the world are generalizations

about his model of the world. Once recognized, the therapist may challenge these generalizations in such a way that the client comes to see these generalizations as true for his belief system at a specific moment in time. Since these are generalizations about his beliefs, rather than generalizations about the world itself, the therapist may work to assist the client in developing other possible options within his model. This is particularly important in cases in which the generalization reduces the choices experienced by the client. This is typically associated with areas of the client's model in which he experiences pain and has limited options which he does not find satisfying. There are a number of cue words which we have found useful in identifying Surface Structures of this class. These include:

good, bad, crazy, sick, correct, right, wrong, only (as in: There is only one way. . .) true, false, . . .

These are only some of the cue words which you may find useful in identifying Surface Structures of this class. The identifying feature of this class is that the Surface Structures have the form of making generalizations about the world; they are not relativized to the speaker. Linguistically, all trace of the Performative has been deleted.

WELL FORMED IN THERAPY

We have presented an extended set of explicit examples which therapists can use to train their intuitions in identifying the phenomenon we called "well formed in therapy." This constitutes the explicit Meta-model for therapy. While we recognize that our Meta-model covers only a portion of the verbal communication which is possible in therapy, we present in the next chapter examples of therapy in which we have restricted the therapist totally to our Meta-model. This is artificial in that the Meta-model is a set of tools designed to be used in conjunction with the different possible approaches to therapy. We want you to imagine the potentially increased effectiveness of therapy conducted with our Meta-model incorporated into your specific approach to therapy. We want to remind you that, while our Meta-model is designed specifically for verbal communication, it is a special case of the general modeling that we, as humans, do. We will generalize our Meta-model to other forms of human representational systems in Chapter Six.

EXERCISE C

Each of the specific sections presented detail steps for you to go through in order to sharpen your intuitions regarding well formed in therapy. All that is required is that you read carefully and apply the step-by-step procedures outlined, and that you have access to some set of Surface Structures. The step-by-step procedures are presented here; the set of Surface Structures to which you may apply these techniques is available wherever people are talking. One specific way of obtaining Surface Structures to use in applying these techniques is to use your own internal voice (inner dialogue) as a source. We suggest that, initially, you use a tape recorder and tape your internal voice by speaking it out loud. Then use the tape as a source for applying the well-formed-in-therapy conditions. After you have had some practice in this, you may simply become aware of the inner dialogue and apply the conditions directly to these sentences without going through a tape recorder. This technique will provide you with a limitless source of sentences which you can use to train yourself.

We cannot overemphasize the need to practice and familiarize yourself with all of the material in Chapter Four. The step-by-step procedure makes this material learnable; whether or not you specifically learn this material will depend upon your willingness to practice. While the step-by-step procedure may at first feel somewhat artificial, after some practice it will become unnecessary for you to proceed in this manner. That is, after training yourself using these explicit methods, you will be able to operate in a rule-governed way, applying the well-formed-in-therapy conditions, without any need to be aware of the step-by-step procedures.

FOOTNOTES FOR CHAPTER 4

1. The general set of transformations which distinguish the derivation of the Surface Structure (30) in the text from the Surface Structure (31) is called Relative Clause Reduction in the linguistic literature. Both (30) and (31) are derived from the same Deep Structure.

2. Notice that the question

What would happen if you failed to take other people's feelings into account?

differs in one important way from the client's Surface Structure that it is derived from

One must take other people's feelings into account.

In the client's Surface Structure, the word *one* occurs as the subject noun argument of the verb *must take*, . . . The word *one* has no referential index. In forming the question, the therapist shifts the subject noun argument of the client's Surface Structure to a noun argument which has a referential index — specifically, the client — i.e., the word *you*. This kind of referential index shift will be treated in more detail in the section *Generalization*.

3. We present these two classes of modal operators as separate classes. They are, however, closely connected in the logical systems from which we borrow the terminology. For example, the following equivalence holds logically as well as psychologically:

not possible not (X) = necessary (X)

In English, the logical equivalence of the two distinct Surface Structures:

It is not possible to not be afraid = It is necessary to be afraid.

We separate the two classes for the purposes of presentation.

4. Readers familiar with elementary logical systems will recognize this as a case of the substitution rule in, for example, the propositional calculus. The only constraint is that when some term *me* is substituted for some other term *my husband*, then all instances of the term *my husband* must be replaced by the term *me*. The same constraint works well in the context of therapy.

5. The reader familiar with the most elementary of the logical systems can verify this formal equivalence using truth tables:

X	Y	X	V	Y	$\sim X \rightarrow Y$
T	T		T		T
T	F		T		T
F	T		T		T
F	F		F		F

Thus, the logical equivalence of

$X \vee Y$ and $\sim X \rightarrow Y$,

where \sim = the negation symbol

and \rightarrow = the implication symbol

In our experience they also have a psychological equivalence.

6. Here, in the analysis of verbs which are differentially specified, we suspect that some of the research currently being conducted in Generative Semantics (see McCawley, Lakoff, Grinder and Postal in the bibliography) will be particularly useful in expanding the Meta-model further.

7. Readers familiar with logical systems will notice a similarity between parts of the reversal technique for Implied Causatives and the formal rule of

derivation called **Contraposition**. The transformation of the original Surface Structure into the challenge by the therapist can be represented by the following sequence:

Line 1: *X but Y*

Line 2: *X and not X because Y*

Line 3: *not X because Y*

Line 4: *not Y and not not X*

Specifically, if the natural language connective *because* were to be interpreted as the logical connective *implies*, then the transformation between Lines 3 and 4 is the formal transformation **Contraposition**.

Chapter 5

INTO THE VORTEX

In this chapter we will present a series of (example) transcripts with a running commentary. Our point here is to provide for you the opportunity to see the Meta-model in operation. In order to present to you the clearest image of how the Meta-model operates, we have restricted the therapist in these sessions to the use of Meta-model techniques only. This restriction was placed upon the therapist to provide material for this book that would be a clear representation of the Meta-model and should not be taken as a statement by us that digital communication is all a therapist needs to know about. Neither is it a representation of the work that we do or that we would recommend that the therapist do. Rather, this is an opportunity for you to see the Meta-model in action and to see how each response that our clients provide in the form of a Surface Structure is an opportunity for the therapist to proceed in a variety of ways. This means, as you will see, that at any point in therapy you will have a number of relevant techniques available. We would like you to imagine the Meta-model techniques used in the following transcripts integrated with the form of therapy you already use, and to imagine how the Meta-model, in conjunction, could provide a rich set of choices for you as a therapist.

In the running commentary which we provide for the transcript, it is not our purpose to present the way we see the therapist seeing, hearing, feeling, and thinking about what is happening in the therapeutic encounter. We provide the commentary to first, show how what the therapist is doing may be explicitly described in terms of the Meta-model. We are making no claim that the

intermediate processes which are stated in our commentary as occurring in the model actually occur in the human beings whose behavior is being modeled.¹ For example, when our commentary points out that the therapist can identify a deletion in the client's Surface Structure by first determining whether he can create another well-formed Surface Structure of English wherein the process word or verb from the client's original Surface Structure appears with more arguments than it has associated with it in the original Surface Structure, and then can subsequently ask for the portion missing from the Deep Structure representation, we are not suggesting that this is, in fact, what the therapist is doing. Further, we are not recommending that you go through these steps. Secondly, in addition to offering the commentary as a way of showing you how verbal behavior in therapy may be understood in terms of the Meta-model, the running commentary will allow you to train and sharpen your intuitions further so that what is described in the commentary in a step-by-step process will become immediate for you. Our experience in training therapists in the Meta-model has been that, typically, they experience a phase in which they become aware that they are going through a step-by-step process. As they perfect this technique, it becomes automatic and drops out of their consciousness. Their behavior, however, is still systematic in this respect.

TRANSCRIPT 1

Ralph is 34 years old and works as assistant manager of a division of a large electronics firm.

The client was asked what he hoped to get out of the interview and began:

- (1) Ralph: *Well . . . I'm
not really
sure . . .*

The client is experiencing difficulty saying exactly what it is that he wants. Remember, one of the first tasks of the therapist is to understand the client's model (especially those portions which are impoverishing). The therapist here notices a deletion in the first Surface Structure the client presents. Specifically, he identifies the process or relationship word *sure*, and that the client has provided only one argument or noun (1) for the predicate *sure*. The therapist can determine

whether this Surface Structure is a full representation of the client's Deep Structure by asking himself whether he can create another well-formed Surface Structure of English with the predicate *sure* and which has more than one argument or noun. For example, the Surface Structure

() *I'm sure of the answer.*

In this Surface Structure, there are two arguments or nouns associated with *sure*: someone who is sure of something (in this case, *I*), and something that the person is sure of (in this case, *the answer*). Thus, the therapist knows by his intuitions as a native speaker of English that the client's Deep Structure contained a portion which does not appear in his Surface Structure — it has been deleted. The therapist chooses to try to recover the deleted material by asking for it.

- (2) Therapist: *You're not sure of what?*

Therapist asks for missing portion of Deep Structure.

- (3) R: *I'm not sure that this will be helpful.*

The client has produced a new Surface Structure containing the information which had been deleted from his first Surface Structure. The therapist listens to the client and examines his new sentence, noticing, (a) an argument or noun (*this*) associated with the verb *will be helpful* which has no referential index; (b) that the Surface Structure representation is incomplete — this predicate *helpful* occurs in well-formed Surface Structures of English with more than one argument or noun (e.g.,

() *You are being helpful to me.*)

Since *helpful* can occur with more than one argument noun as it did in the client's Surface Structure, the therapist knows that a portion of the client's Deep Structure has been deleted; (c) that the verb *helpful* is very incompletely specified; the Surface Structure presents the therapist with no clear image of the kind of help the client wants.

By recognizing the specific ways in which the client's Surface Structure fails to be well formed in therapy, the therapist has made a number of options available to himself, such as: (1) he may ask for the referential index — *You're not sure that what, specifically, will be helpful?*, (2) he may ask for the deleted material — *helpful to whom/what?*, (3) he may ask the client what specific kind of help he had hoped for, — *Helpful in what way?*

(4) T: *You're not sure what, specifically, will be helpful to whom?*

The therapist has chosen to go for both (1) and (2).

(5) R: *Well, I'm not sure that this experiment will be helpful. You see, when I first went to Dr. G., he asked me if I'd be willing to participate in this experiment, . . . and well, I feel that there's something I really*

The client is expressing concern that the experimental conditions — restricting the therapist to the Meta-model techniques — will not allow him to get the help that he wants. The therapist is attempting to understand the client's model and notices the following: (a) the client's first Surface Structure contains the nominalization *experiment* derived from the verb *to experiment*; it has two noun arguments associated with it which have

*need help with
but this is just an
experiment.*

been deleted — the person doing the experiment and the person or thing being experimented upon; (b) in the client's first Surface Structure, one of the arguments of the verb *helpful* has been deleted (specifically, *helpful to whom*); (c) also, in the client's first Surface Structure, the verb *helpful* is very incompletely specified — it presents no clear image; (d) in the latter part of the client's second Surface Structure, the noun *something* occurs — this noun has no referential index; (e) the Surface Structure noun *help* is a nominalization from the verb *help*, is very incompletely specified and has two deletions: it presents no clear image of the person or thing helping and the person or thing being helped; (f) again, the nominalization *experiment* occurs with both of the deletions mentioned in (a) above; (g) the client's last Surface Structure in this section is of the general form *X but Y* — the Implied Causative. Specifically, the implication is that the client wants something (*X = there's something that I really want help with*) and there is something which is preventing him from getting it, (*Y = this is just an experiment*).

(6) T: *How will this just
being on
experiment
prevent you from
getting the help
that you need?*

The therapist chooses to challenge the Implied Causative (g).

(7) R: *Experiments are
for research, but
there's something*

The client responds with a restatement of the Implied Causative, *X but Y*. Notice that it still con-

I really need help with.

tains (a) the old nominalization *experiment* with two deletions; (b) a new nominalization *research* with two deletions — the person doing the research, and the person or thing being researched; (c) the noun *something* which is missing a referential index; and (d) the old nominalization *help* with its two deletions.

- (8) T: *What, specifically, do you really need help with?*

The therapist lets the Implied Causative stand unchallenged and chooses to go after the referential index (c).

- (9) R: *I don't know how to make a good impression on people.*

The client presents a Surface Structure which he sees as providing the referential index for the noun *something* in his last Surface Structure. This new Surface Structure violates the well-formed-in-therapy conditions of (a) the nominalization *impression* with one deletion — the person or thing doing the impressing; (b) the adjective *good* in the phrase *good impression* is derived from a Deep Structure predicate *X is good for Y*, the X in this form is the impression, the Y has been deleted — i.e., who is the impression good for — who benefits from this action; (c) the noun *people* has no referential index; (d) the client's Surface Structure is semantically ill formed as he appears to be mind-reading. He states that he doesn't know how to make a good impression on people but fails to state how he knows that this is true. The way he knows he doesn't make a good impression is not stated.

- (10) T: *Let me see if I understand you — you are saying that this being just an experiment will necessarily prevent you from finding out how to make a good impression on people. Is that true?*
- The therapist chooses to ignore the ill-formedness of the client's new Surface Structure. He chooses instead to re-connect the answer to his question about the referential index back up with the Implied Causative the client presented earlier by simply substituting the answer he received back into his former question. Here he is checking with the client to make sure he understands the client's model and also, by strengthening the client's generalization by inserting a modal operator of necessity, he asks the client to verify or challenge the generalization.
- (11) R: *Well, . . . I'm not really sure . . .*
- The therapist's challenge of the client's generalization is successful — the client begins to waver.
- (12) T: *(interrupting) Well, are you willing to find out?*
- The therapist recognizes that his challenge has succeeded (he hears the client's Surface Structure — Well, I'm not really sure . . .) and moves quickly, asking the client to re-connect his generalization with his actual experience by trying to get the help he needs under these conditions.
- (13) R: *Yeah, o.k.*
- The client agrees to try.
- (14) T: *Who, specifically, don't you know how to make a good impression on?*
- The therapist now returns to the ill-formedness of the client's former Surface Structure above and chooses to go after the referential index missing on *people* in the phrase *a good impression on people*.
- (15) R: *Well, nobody.*
- The client fails to supply the referential index requested by the therapist.

pist. The word *nobody* is one of the special class of nouns and phrases which fails to refer as they contain the universal quantifier (logically: nobody = all persons not). The client is now claiming that in his model there is no one on whom he can make a good impression. Thus, the therapist may choose (a) to challenge the generalization, or (b) ask again for the referential index.

- (16) T: *Nobody? Can you think of anybody on whom you have ever made a good impression?*

The therapist mentions the word with the lack of referential index again and then asks the client to challenge the generalization by asking for an exception.

- (17) R: *Ah, mmm, . . . yeah, well, some people, but . . .*

Again the challenge works — the client recognizes some exceptions. His partial answer again (a) contains a noun phrase which fails to carry a referential index, and, (b) includes the beginning of a disqualifying *but* phrase.

- (18) T: *Now then, whom, specifically, don't you know how to make a good impression on?*

The therapist has again been successful in asking the client to challenge his generalization but still has not received a referential index for the noun phrase — he requests it again.

- (19) R: *. . . I guess what I have been trying to say is that women don't like me.*

The client responds by altering his statement from *I don't know how to make a good impression on people* to *women don't like me*. These two Surface Structures share two well-formedness violations: (a) they each contain a noun which carries no referential index (*people* and *women*), and (b) they each claim that the client is able to know

the emotional state of some other human being without presenting the description of how the client knows those things. The client's Surface Structure also contains a deletion associated with the verb *say* — the person to whom the client is saying what he is saying.

- (20) T: *Which woman, specifically?* The therapist chooses to request the referential index again.
- (21) R: *Most women I meet.* The client responds with a noun phrase which also fails to carry a referential index — notice the term *most* which we identified as one of the special set of words and phrases containing quantifiers which therefore fail to refer. The phrase gives no clear image.
- (22) T: *Which woman, specifically?* The therapist requests the referential index again.
- (23) R: *Well, most women really . . . but as you said that, I just started to think about this one woman — Janet.* The client initially failed to provide the referential index requested (i.e., *most women really*) and then provides it — the client identifies the woman in question and names her. Notice that the client's naming a person when the therapist requests a referential index clarifies and greatly focuses the client's model for the client but provides much less for the therapist. In addition, notice that there is a deletion of an argument noun associated with the predicate *think* (i.e., X thinks Y about Z) — specifically, what the client thought about Janet.
- (24) T: *Who's Janet?* The therapist has the referential index but requests information about who this person is in relation

to the client. It would, for example, make a difference to the therapist if Janet was the client's mother, daughter, wife, lover, sister, . . . The therapist ignores the deletion in the client's last Surface Structure.

- (25) R: *She's this woman I just met at work.* The client supplies some additional information.
- (26) T: *Now, how do you know that you didn't make a good impression on Janet?* The therapist is trying to develop a fully focused picture of the client's model of the world for himself. He has succeeded in getting a referential index for an argument noun which originally had no connection with the client's experience. The therapist now integrates this material — the argument noun with the referential index: Janet, the woman the client has just met at work — with the client's original generalization. Thus, the client's original generalization *I don't know how to make a good impression on people* becomes *I don't know how to make a good impression on Janet*. Notice that this new Surface Structure is connected with a specific experience which the client has had — generalizations block change; reconnecting the client's generalization with (at least) one of the experiences on which the generalization was based. The therapist, having integrated this material, begins to question the process of how the client knows that he didn't make a good impression on Janet — this is a choice which the therapist had previously — he now makes this choice and asks the client to describe how he knows that he didn't

make a good impression on Janet — challenging what appears to be mind-reading on the part of the client.

- (27) R: *Well, I just know...* The client fails to specify the process word, the verb, more completely.
- (28) T: *How, specifically, do you know?* The therapist again asks the client how he knows, specifically, that he didn't make a good impression on Janet.
- (29) R: *She just didn't like me.* Again, the client presents a Surface Structure in which he claims knowledge of another person's inner experience without specifying how he gained that knowledge — apparently mind-reading.
- (30) T: *How, specifically, do you know that Janet didn't like you?* The therapist continues to challenge the client's reports of mind-reading.
- (31) R: *She wasn't interested in me.* Again, the client claims knowledge of another's inner state.
- (32) T: *Interested in what way?* Again, the therapist challenges the mind-reading. Notice that there are two general forms the therapist has available for use in challenging semantically ill-formed Surface Structures which involve mind-reading. Either the form (a) *how do you know X?* where X is the client's Surface Structure (e.g., *she wasn't interested in you.*); or, as the therapist uses in this case, the form (b) *Verb in what way/manner?* where Verb is the verb from the client's original Surface Structure (e.g., *interested*). Both questions re-

quest that the client specify how the process occurred — essentially, a request to specify the process word or verb more completely.

- (33) R: *She didn't pay attention to me.* For the fourth successive time, the client provides a Surface Structure which involves mind-reading.
- (34) T: *How didn't she pay attention to you?* The therapist again challenges the client's mind-reading.
- (35) R: *She didn't look at me.* The client finally provides a Surface Structure in response to a request to specify a process which appears to be mind-reading, which identifies a situation which is verifiable — doesn't involve a mind-reading claim.
- (36) T: *Let me see if I understand this. You know that Janet wasn't interested in you because she didn't look at you?* The therapist substitutes the new non-mind-reading material into a Surface Structure which identifies it as the basis for the mind-reading claims that the client has been making. Here the therapist is checking to see whether he has understood the client's model of his experience. He requests verification from the client.
- (37) R: *That's right!* The client verifies the therapist's statement about his model.
- (38) T: *Is there any way you could imagine Janet not looking at you and her still being interested in you?* The therapist has offered a generalization and the client has verified it. Now notice the form of that Surface Structure (36): X because Y. The therapist, having had the client verify it, may now challenge this generalization, again asking the client to re-connect his generalization with his experience. The thera-

pist asks the client whether the connection between the X and Y connected by the relation word *because* in the general form *X because Y* always occurs.

(39) R: *Well, . . . I don't know, . . .*

The client wavers.

(40) T: *Do you always look at everyone you're interested in?*

The therapist challenges the generalization, again using the same technique — this time shifting the referential indices so that the generalization

↓ Janet look at you

↓ You look at everyone

↓ Janet interested in you

↓ You interested in everyone

(41) R: *I guess . . . not always. But just because Janet is interested in me doesn't mean that she likes me.*

The therapist's challenge to the client's Surface Structure succeeds — the client admits that his generalization is faulty. The next Surface Structure by the client invites the inference that he thinks that Janet doesn't like him. Notice that again the client is claiming knowledge of another's inner state.

(42) T: *How, specifically, do you know that she doesn't like you?*

The therapist again challenges the client's mind-reading by asking the client to specify the process more completely.

(43) R: *She doesn't listen to me.*

The client presents a new Surface Structure, again semantically ill formed (mind-reading). Notice that there is a difference — I can determine whether another is looking at me (note, not seeing me, just looking at me) simply by observing

her, but I cannot determine whether another is listening to me by simply observing her (nor can I determine whether she hears me by observing alone).

- (44) T: *How, specifically, do you know that she doesn't listen to you?* The therapist challenges the client's mind-reading Surface Structure by asking for a more complete specification of the process.
- (45) R: *Well, she doesn't ever look at me (beginning to get angry). You know how women are! They never let you know if they notice you.* The client retreats to the previous well-formed Surface Structure with, notice, the addition of a universal quantifier *ever*. The addition of this quantifier results in a generalization which the therapist may choose to challenge. Furthermore, the client's next Surface Structure presents several options to the therapist: (a) the client's assertion *You know* involves mind-reading; (b) the noun *women* carries no referential index; (c) the Surface Structure does not specify *how women are* — it simply asserts that the therapist knows. The process word or verb *are* is completely unspecified. The client's next Surface Structure fails (at least) two well-formed-in-therapy conditions: (a) the noun *they* occurs twice in the Surface Structure — it has no referential index,² and (b) the universal quantifier *never* identifies a generalization which may be challenged.
- (46) T: *Like who, specifically?* The therapist chooses to go after the referential index.
- (47) R: *(angry) Like my mother . . . ah, God damn it! She never was* The client identifies the missing referential index. The client's next Surface Structure has the same form as the previous Surface Struc-

interested in me.

tures (31, 36, 38, 41) — this time, however, the pronoun *she* refers to the client's mother, not Janet. The Surface Structure is semantically ill formed, as before, as the process by which the client has come to know that his mother wasn't interested in him is not specified.

- (48) T: *How do you know that your mother was never interested in you?*

The therapist challenges the client's Surface Structure, asking for a more fully specific process description.

- (49) R: *Every time I tried to show her that I cared about her, she never noticed it (begins to sob) ... why didn't she notice?*

The client's Surface Structure includes (a) two universal quantifiers (*every time* and *never*), thus identifying a generalization which the therapist may choose to challenge, and (b) three process words or verbs which are very incompletely specified (*show*, *care about*, *notice*) as they do not present a clear image to the therapist, and (c) one claim to knowledge of another's inner perception without specifying the process (*notice* in *she never noticed* ...).

- (50) T: *How, specifically, did you try to show her that you cared about her?*

The therapist now begins to clarify the image for himself by asking for a more fully specified description of the process. He chooses to ask first about the client's actions.

- (51) R: *(sobbing softly) Like all the time I used to come home from school and do things for her.*

This Surface Structure by the client contains (a) a universal quantifier *all the time* subject to challenge by the therapist, and (b) a noun argument *things* which has no referential index.

- (52) T: *What things, specifically, did*

The therapist continues to explore the client's model, specifically

you do for her?

attempting to get a clear image of the client's perception of his actions. He selects option (b).

- (53) R: *Well, I always used to clean up the living room and wash the dishes . . . and she never noticed . . . and never said anything.*

The client's Surface Structure offers the therapist the following four options: (a) three universal quantifiers (*always, never, never*), identifying three challengeable generalizations in the client's model; (b) the occurrence of the very incompletely specified verb *notice*; (c) a claim by the client of knowledge of another's perceptions (*notice*); (d) a deletion associated with the verb *say* (i.e., to whom?). In addition, notice the way the client first states *she never noticed*, then pauses and says, *she never said anything*. In our experience, two successive Surface Structures with the same syntactic form (i.e., noun-quantifier-verb. . .) separated only by a pause, identify two sentences which, for the speaker, are equivalent or nearly equivalent in meaning in the client's model. As in this case, such equivalences are very useful in coming to understand the connections between the client's experience and the way that experience is represented. For example, notice that the first of these two statements is a claim that the client has knowledge of another's perception while the second is semantically well formed, involving no mind-reading. If, in fact, the two statements are equivalences, the second one identifies the experience which is represented by the first (a semantically ill-formed Surface Structure), or, in other words, in the client's model, the client's

mother's not saying anything is equivalent to her not noticing.

(54) T: *Ralph, does your mother's not saying anything to you about what you used to do mean that she never noticed what you had done?*

The therapist has chosen to ignore the well-formed-in-therapy violations in the client's Surface Structure for the time being and checks to see whether the last two Surface Structures are, in fact, equivalences. Such generalizations are extremely important in coming to understand the client's experience.

(55) R: *Yeah, since she never noticed what I did for her, she wasn't interested in me.*

The client verifies the equivalence and supplies a third Surface Structure which, since it is substituted for one of the other two (specifically, *she didn't say anything*) is also equivalent. This third Surface Structure is: *she wasn't interested in me.* The client's Surface Structure also includes a universal quantifier *never*.

(56) T: *Let me get this straight: you're saying that your mother's not noticing what you did for her means that she wasn't interested in you?*

The therapist decides to verify the equivalence of these two Surface Structures.

(57) R: *Yes, that's right.*

The client again verifies the generalization involved.

(58) T: *Ralph, have you ever had the experience of someone's doing something for you and you didn't notice*

The therapist decides to challenge the client's generalization — here he chooses to begin the challenge by shifting the referential indices. (See page 128) and therefore, the generalizations are transformed: (See page 128)

*until after they
pointed it out
to you?*

| you (the client)
↓ someone/they

| your (client's) mother
↓ you (the client)

| your mother didn't notice . . .
↓ you didn't notice . . .

and

| you do something for your
mother
↓ someone do something for you

Notice that the effect of shifting the referential indices in this way is to place the client in the position of the active member of his original generalization — his mother, the person he is criticizing.

(59) R: *Well, . . . , yeah, I
remember one
time . . .*

The client at first hesitates, then admits that he has been in the position that he described his mother occupying in his original generalization.

(60) T: *Did you not
notice what they
had done for you
because you
weren't interested
in them?*

The therapist, having received the admission by the client that he has had this experience, interrupts him and asks if the equivalence

X not notice = X not interested is valid when he is the one who did not notice (i.e., *X* = the client), thereby challenging the generalization.

(61) R: *No, I just didn't
notice. . .*

The client denies this equivalence when he is the person not noticing.

(62) T: *Ralph, can you
imagine that your
mother just
didn't notice*

The therapist, having received a denial of the equivalence

X not notice = X not interested when *X* = the client, now reverses

when. . . .

the referential indices that he had shifted earlier. This results in the client's original equivalence statement: namely, that

X not noticing = X not interested
where X = client's mother

(63) R: *No, it's not the same.*

The client recognizes the therapist's challenge before he completes it, interrupts him, and denies that the two cases (where X = the client and where X = the client's mother) are the same. The Surface Structure he uses to deny this fails the well-formed-in-therapy conditions: (a) the pronoun *it* has no referential index, and (b) the second portion of the comparative has been deleted.

(64) T: *It? What's not the same as what?*

The therapist asks for both the referential index and the missing portion of the comparative.

(65) R: *My not noticing is not the same as my mother not noticing - see, she NEVER noticed what I did for her.*

The client fills in the information requested by the therapist. He then goes on to describe the difference between the two cases, namely, that his mother *never* noticed. This universal quantifier identifies a challengeable generalization.

(66) T: *Never?*

The therapist challenges the universal quantifier.

(67) R: *Well, not very many times.*

The client admits that there were exceptions, thereby coming closer to re-connecting his generalization with his experience.

(68) T: *Ralph, tell me about one specific time when your*

The therapist attempts to get the client to focus the model by asking for a specific exception to the client's initial generalization.

*mother noticed
what you had
done for her.*

- (69) R: *Well, once when
... yeah
(angrily), I even
had to tell her.*

One of the argument nouns associated with the verb *tell* has been deleted (tell what?).

- (70) T: *Had to tell her
what?*

The therapist asks for the missing piece of the Surface Structure.

- (71) R: *That I had done
this thing for her.
If she had been
interested enough
she would have
noticed it herself.*

The first Surface Structure includes a noun argument (*this thing*) and lacks a referential index. The client's second Surface Structure includes a deletion associated with the word *enough* (*enough for what*), and a pronoun *it* without a referential index.

- (72) T: *Interested enough
for what?*

The therapist asks for the deleted material.

- (73) R: *Interested enough
to show me that
she loved me.*

The client supplies the deleted material that the therapist requested. This new Surface Structure includes (a) a violation of the semantic well-formedness condition of mind-reading — the client claims to know whether his mother loved him without specifying how he got that information; (b) the verb *love* is very incompletely specified.

- (74) T: *Ralph, how did
you show your
mother that you
loved her?*

The therapist is attempting to gain a clear image of the way that the client and his mother communicated their feelings of caring for one another. He has been informed by the client that his mother wasn't interested enough to show him that she loved him. The therapist decides to employ the referential

index shift technique. Specifically, he makes the substitution

$\begin{array}{c} \downarrow \text{ your mother} \\ \downarrow \text{ you (the client)} \end{array}$	$\begin{array}{c} \downarrow \text{ you (the client)} \\ \downarrow \text{ your mother} \end{array}$
--	--

Thus, the portion of the client's last Surface Structure is transformed

*your mother show you that she
loved you*

*you show your mother that you
loved her*

Having made this shift in referential indices, the therapist asks the client to focus the image, asking for a more completely specified verb.

- (75) R: *By doing things
for her.*

The client presents a further specification of the verb, setting up the equivalence

X loves Y = X do things for Y
where X = the client and
Y = the client's mother

- (76) T: *Ralph, did your
mother ever do
things for you?*

The therapist now shifts the referential indices back to the original Surface Structure (73), and presents one half of the equivalence for the client's verification.

- (77) R: *Yes, but she
never really . . .
never let me
know for sure.*

The client agrees that his mother did do things for him, but he denies that the equivalence holds — that is,

X loves Y \neq X do things for Y
where X = the client's mother
Y = the client

The client's new Surface Structure presents the therapist with the following options: (a) ask for the difference in the two situations which makes the equivalence fail to hold (identified by the cue word *but*); (b) there are two occurrences of the challengeable universal quantifier

never; (c) a deletion associated with the verb *know* (i.e., know what?); (d) a very incompletely specified verb *know*.

- (78) T: *Never let you know what?*
The therapist chooses option (c) and asks for the deleted noun argument associated with the verb *know*.
- (79) R: *She never let me know for sure if she really loved me (still sobbing softly).*
The client supplies the missing noun argument. His Surface Structure includes (a) a challengeable universal quantifier *never*; (b) two very incompletely specified verbs *know* and *love*.
- (80) T: *Did you ever let her know for sure that you loved her?*
The therapist again chooses to use the referential index shift technique. The substitution that he uses is the same as the one that he employed in (74).
- (81) R: *She knew . . .*
The client's Surface Structure contains (a) a deletion associated with the verb *know*; (b) a violation of the semantic well-formedness condition, mind-reading; (c) a very incompletely specified verb *know*.
- (82) T: *How do you know she knew?*
The therapist chooses option (c).
- (83) R: *I . . . I . . . I guess I don't.*
The client wavers, and then admits that he is not able to specify the process by which his mother was supposed to have been able to know that he loved her. This is equivalent to stating that the process in his model is not specified.
- (84) T: *What prevents you from telling her?*
The client has been unable to identify the process by which his mother was supposed to have been

- able to know that he loved her. The therapist immediately moves to the technique of asking what is it that prevents the client from using the most direct way he knew of communicating his feelings of love to his mother.
- (85) R: *ummm . . .
ummm, maybe
nothing.* The client wavers, considering the obvious. His Surface Structure includes a very qualified *maybe* and the universal quantifier *nothing*.
- (86) T: *MAYBE?* The therapist works to get more of a commitment from the client.
- (87) R: *I guess I could.* The client admits the possibility.
- (88) T: *Ralph, do you
guess you could
also tell Janet
how you feel
about her?* The therapist now shifts referential indices again
- ↓ *client's mother*
↓ *Janet*
- and asks for a commitment from the client to change the communication process in that relationship so that it is more direct and requires no mind-reading.
- (89) R: *That's a little
scary.* The client hesitates; his Surface Structure contains (a) a noun argument without a referential index *that*; (b) a deletion of the noun argument associated with the verb *scary* (i.e., *scary to whom?*).
- (90) T: *What is a little
scary?* The therapist asks for the missing referential index.
- (91) R: *That I could just
go up and tell
her.* The client supplies the missing index and expresses doubt about the communication commitment that the therapist is asking for.

- (92) T: *What stops you?* The therapist uses the technique of asking for the generalization, the outcome of the client's action which he finds scary.
- (93) R: *Nothing, that's what's so scary.*
(laughing) The client recognizes that he has that choice.

The therapist at this point moved into non-Meta-model techniques, setting up a contract with Ralph to insure that the new possibilities which he had discovered would be acted upon.

TRANSCRIPT 2

This transcript session took place with a group of trainees who were witnessing a demonstration. Beth is a woman of about 28. She has been married once and has two small children. The demonstration begins:

- (1) B: *What should I do first?* The client begins by requesting direction from the therapist.
- (2) T: *Tell me what you are doing here; you said in the interview you wanted some help with something (referring to a two-minute interview an hour before in which five people were chosen for this demonstration).* The therapist begins by asking the client to specify what she is doing here and, referring to a previous conversation, asks her to verify and explain her request for help.
- (3) B: *Let's see, what am I doing here ... I ... I want help with ... well, it's my roommates.* The client sounds hesitant, somewhat confused; (a) she leaves a Surface Structure uncompleted — *help with ...*, pauses, then states ... *it's my roommates*. The verb *help* is very incompletely specified; (b) the nouns *it* and *roommates* have no referential indices.

- | | | |
|--------|---|--|
| (4) T: | <i>Roommates? ...</i> | The therapist decides to ask for a referential index on the noun argument <i>roommates</i> . |
| (5) B: | <i>(Interrupting)</i>
<i>Karen and Sue,</i>
<i>they share the</i>
<i>house with me.</i>
<i>We also have four</i>
<i>children between</i>
<i>us.</i> | The client supplies referential indices as requested by the therapist. She adds more information, thus allowing the therapist a somewhat clearer image of her model. |
| (6) T: | <i>What kind of help</i>
<i>would you like</i>
<i>with these two</i>
<i>people?</i> | The therapist makes the assumption that the noun argument <i>roommates</i> fits in the noun argument position of the sentence that the client left incomplete in her second comment. Presupposing this, the therapist returns to the client's original Surface Structure and asks the client to further specify the process word <i>help</i> . |
| (7) B: | <i>They don't seem</i>
<i>to understand</i>
<i>me.</i> | The client ignores the therapist's specific question and begins to describe her roommates. Notice that (a) the dative argument associated with the verb <i>seem</i> is missing/deleted; (b) the client is claiming knowledge of the inner experience of others without specifying how she got that information — a well-formed-in-therapy violation called mind-reading; (c) the client's Surface Structure includes the very unspecified verb <i>understand</i> . |
| (8) T: | <i>How do you</i>
<i>know they don't</i>
<i>understand you?</i> | The therapist challenges the client's Surface Structure for violating the semantic well-formedness condition (mind-reading). He asks the client to describe how she came to know how they don't understand her. |

- (9) B: *I guess, it's that they're too busy. . . .* The client's response fails to be well formed in therapy as: (a) the noun argument *it* has no referential index and, (b) the predicate *too busy* has a deletion associated with it (*too busy for what?*).
- (10) T: *Too busy for what?* The therapist asks for the deleted portion of the client's last Surface Structure.
- (11) B: *Well . . . too busy to see that I have needs.* The client supplies the missing material in the form of a new Surface Structure. The new Surface Structure includes a noun argument with no referential index (*needs*). This particular noun argument is a nominalization from the Deep Structure predicate *to need*.
- (12) T: *What needs?* The therapist asks for the referential index on the client's nominalization *needs*.
- (13) B: *That I would like for them to do something for me once in a while.* The client's new Surface Structure again lacks a referential index on what she wants from her roommates (*something in for them to do something*). The verb *do* is nearly as incompletely specified as possible.
- (14) T: *Such as what?* The therapist continues to ask for the missing referential index.
- (15) B: *They really have a lot of things to do, but sometimes I feel that they are insensitive.* Again, the client fails to respond to the question from the therapist.³ Her new Surface Structure is in violation of the well-formed-in-therapy conditions (a) missing referential index on . . . *a lot of things* . . . ; (b) missing referential index on *sometimes*; (c) the almost completely unspecified verb *do* in . . . *things to do* . . . ; (d) a missing dative noun

- argument associated with the verb *insensitive* (i.e., *insensitive to whom?*); (e) by using the verb *insensitive*, the client is claiming knowledge of the inner state of another without specifying the process by which she knows — mind-reading.
- (16) T: *Whom are they insensitive to?* The therapist asks for the missing noun argument associated with the verb *insensitive* [in Deep Structure, option (d) in above].
- (17) B: *Me. And...* The client supplies the missing argument and begins something else.
- (18) T: *In what way are they insensitive to you?* The therapist interrupts, choosing to ask the client to specify how she knows the others involved are insensitive to her — option (e).
- (19) B: *You see, I do a lot of things for them, but they don't seem to do anything for me.* Again the client fails to respond directly to the therapist's question. Her new Surface Structure violates the following well-formed-in-therapy conditions: (a) missing referential index on *a lot of things* and *anything*; (b) the nearly completely unspecified verb *do* occurs twice in the client's Surface Structure; (c) a challengeable universal quantifier in *anything*; (d) a deleted dative noun argument associated with the verb *seem* — *seem to whom?*
- (20) T: *What don't they do for you? What needs don't they see that you have?* The therapist asks for a couple of the missing referential indices on noun arguments that are floating around — the *anything*, from the client's Surface Structure (19) and the *needs* from the client's Surface Structure (11).

- (21) B: *I'm a person, too, and they don't seem to recognize that.*⁴
- The client continues to fail to respond to the therapist's question. The new Surface Structure contains (a) a presupposition carried by the word *too* at the end of the Surface Structure *I'm a person*. The implication is that someone else (unidentified) is a person — hence, no referential index; (b) a deleted dative noun argument associated with the verb *seem* — (*seem to whom?*); (c) the client is claiming knowledge of the inner state of another (... *they don't seem to recognize* ...) without stating how she got this information; (d) a relatively incompletely specified verb *recognize*.
- (22) T: *How don't they recognize that you're a person?*
- The therapist is trying to get an image clear to him of the client's model — he keeps returning to the specification of what the room-mates actually do — just as he did with (10), (14), (18), (20), and this request. The therapist challenges the ill-formedness of the relatively incompletely specified verb *recognize*.
- (23) B: *They, both of them, never do anything for me.*
- The client responds to the therapist with a Surface Structure which can be challenged on the grounds of: (a) a universal quantifier — *never*, identifying a generalization; (b) a noun argument associated with the general verb *do*, lacking a referential index — *anything*; (c) the nearly completely unspecified pro-verb⁵ *do*.
- (24) T: *They NEVER do ANYTHING for you?*
- The therapist chooses to challenge the generalization. He does it by emphasizing (voice quality) the uni-

versal quantifiers in the client's original Surface Structure when feeding the sentence back to the client for verification or denial.

- (25) B: *No, not never, but I always do things for them whether they ask or not.*

The therapist's challenge to the client's last generalization is successful (i.e., *No, not never*). She goes on to state a new generalization identified by: (a) the universal quantifier *always*; and containing (b) a noun argument without a referential index — *things*, (c) the nearly completely unspecified verb *do*, (d) the deletion of two noun arguments associated with the verb *ask* (*ask for/about what?* and *ask whom*). Remember, the therapist is still trying to find out who is doing what specifically for whom — what the client means when she says that her roommates fail to recognize her as a person.

- (26) T: *Let me see if I understand at this point. If someone recognizes that you are a person, then they will always do things for you whether you ask or not?*

The therapist thinks that he has identified a generalization — specifically, an equivalence between

$$X \text{ not recognize } Y \text{ as a person} = X \text{ do things for } Y \text{ whether } Y \text{ asks or not}$$

He puts the generalization in the form of an equivalence generalization and asks the client to confirm or deny it.

- (27) B: *Well, maybe not always, . . .*

The client balks at the generalization.

- (28) T: *I'm a bit confused at this point; could you tell me what*

The therapist returns to attempting to find out what, specifically, the client's roommates do that the client represents as not recognizing

*those things are
that they would
do if they
recognized that
you're a person?*

her as a person as he did in (22) and (26). He admits he is confused by what the client has said.

- (29) B: *You know, like
help with the
dishes or
babysitting, or
just anything.*

The client begins to clarify the image by mentioning some concrete things such as *help with the dishes* and *babysitting*. She then throws it away with the noun argument *anything*.

- (30) T: *Could you also
explain how your
roommates are
supposed to
know what these
things are that
you want done?*

The therapist has been asking repeatedly how the client knows what her roommates recognize (8), (18), and (20). Here, he makes a referential index shift and asks how (by what process) the client's roommates come to know what the client herself wants.⁶

- (31) B: *If they were
sensitive enough,
they would
know.*

The client responds in the patterned way we have seen already, specifically claiming that her roommates can know what she wants without specifying by what process they get this information. In addition, the client's Surface Structure includes well-formedness-condition violations: (a) deletion of a noun argument associated with the verb *sensitive* (*sensitive to whom?*); (b) a comparative deletion associated with the cue word *enough* in *sensitive enough* (i.e., *sensitive enough for what?*); (c) the deletion of a noun argument associated with the verb *know* (i.e., *know what?*).

- (32) T: *Sensitive enough
to whom?*

The therapist chooses to ask for one of the deleted arguments — option (a) in (31).

- (33) B: *To me.* The client supplies the missing noun argument requested by the therapist, relativizing the sensitivity (or rather, lack of it) of her roommates to her.
- (34) T: *If they were sensitive enough to you, then they should be able to read your mind?* The therapist now back-tracks to the client's Surface Structure (31) and challenges its semantic ill-formedness (mind-reading), option (d) in (31), directly by explicitly stating the assumption implicit in the client's sentence (31).
- (35) B: *Read my mind?* The client appears confused, taken aback by the therapist's explicit statement of her mind-reading assumption.
- (36) T: *Yes, how else could they know what you need and want? Do you tell them?* The therapist continues to challenge the client's very incomplete description of the process by which her roommates are supposed to know what she wants and needs, trying to get a clear image of the client's model (the therapist's question refers back to the client's Surface Structures (11), (13), and (19). The therapist at this point even offers one possible way that the process he's trying to get a clear image of might occur — *Do you tell them?*
- (37) B: *Well, not exactly . . .* The client denies that she lets her roommates know by telling them directly.
- (38) T: *Not exactly how?* The therapist continues to push for a description of the process.
- (39) B: *Well I kinda hint.* The client's Surface Structure has (a) a deleted noun argument associated with the verb *hint* — (i.e., *hint*

at what?); (b) the verb *hint* alone yields no clear image of how the client's roommates are supposed to know what she wants and needs; the already incompletely specified verb *hint* in combination with the qualifier *kinda* makes the image even vaguer; (c) a second deleted noun argument associated with the verb *hint* (i.e., *hint to whom?*).

- (40) T: *How do you kinda hint?*

The therapist decides to ask for a more complete specification of the process of *hinting* — option (b) in (39).

- (41) B: *I do things for them.*

The client states more completely the process of how she lets her roommates know what she wants and needs — how she *kinda hints* — that is, she does things for them. The new Surface Structure fails to be well formed in therapy as (a) it includes a noun argument which has no referential index — *things*; (b) it includes the nearly completely unspecified verb *do*; (c) this Surface Structure may be equivalent in the client's model — that is,

$$(X \text{ kinda hints} = (X \text{ does things} \\ \text{to } Y) \qquad \qquad \text{for } Y)$$

- (42) T: *Then, since you do things for them, they're supposed to know that you want them to do something in return?*

The therapist decides to check to see whether the client will verify this generalization [option (c) in (41)] by repeating the entire generalization to the client.

- (43) B: *It sounds sorta funny when you say it like that.*

As the client says, the generalizations from her own model when presented to her by the therapist in

a single statement sound funny; she wavers, not willing to verify the generalization. She uses the very incompletely specified verb *funny*.

- (44) T: *Sort of funny how?*

The therapist asks her to further specify her verb *funny*.

- (45) B: *Like I'm not being honest or something, but you just can't go around demanding things all the time or people will not want to give them to you.*

The client's Surface Structure includes violations of the following well-formed-in-therapy conditions: (a) a missing referential index on *something*; (b) a missing referential index on *you* (twice); (c) a missing referential index on *all the time*; (d) a missing referential index on *things*; (e) a missing referential index on *people*; (f) incompletely specified verbs *being honest* and *demand*; (g) a challengeable universal quantifier *all* in ... *all the time*; (h) a modal operator of possibility *can't* in ... *you can't go*; (i) a mind-reading semantic ill-formed violation in *people will not want* where the client claims to be able to know an inner state of others without specifying how she gets that information; (j) the cue word *but* which identifies a possible Implied Causative; (k) a missing noun argument associated with *demand* (*demand from whom?*).

- (46) T: *Wait a second; who can't go around demanding things all the time from whom?*

The therapist seems to be overwhelmed by the abundance of choices — he decides to ask for two of the violations — a referential index [option (h) in 45] and a missing noun argument [option (k) in (45)].

- (47) B: *I can't go around demanding things*

The client's Surface Structure includes both of the items requested

from Sue and Karen or they won't want to give me anything.

by the therapist [*who* (46) *I; from whom* (46) *Karen and Sue*]. In addition, her Surface Structure contains (a) modal operator of impossibility; (b) noun arguments with missing referential indices *things* in ... *go around demanding things*, and *anything* in ... *give me anything*; (c) a mind-reading violation; the client claims knowledge of an inner state (not only an inner state but a future inner state as well — crystal ball mind-reading) in the phrase ... *they won't want to*; (d) two unspecified verbs *demand* and *give* which present a very vague, unfocused image of the process. Notice, also, the overall form of the client's Surface Structure — X or Y where X contains a modal operator. In the section on modal operators, we pointed out that one technique for challenging generalizations involving modal operators in the form of sentences such as

I can't ...

or

It's impossible ...

or

One may not ...

is to ask the question, *or what?* Here the client has already supplied the outcome or consequence; that is, the *or what* part — *or Y*; specifically, ... *or they won't want to*; thereby identifying a full generalization in her model which may be challenged.

(48) T: *I thought you said that they didn't give you anything anyway.*

The therapist chooses to challenge the client's generalization. He does this by first translating the client's generalization into an equivalent form. The client says

X or Y: (I don't ask) or (they won't want to give)

As described in Chapter 4, Surface Structures of this form are equivalent to

If not X, then Y: If (I don't ask) then (they won't want to give)

or

If (I ask) then (they won't want to give)

The client's generalization now has the form

If I ask, they won't want to give. . .

Since the client has already told the therapist both that she doesn't ask (36), (37), (38), (39), (40), and (41), and that they don't give her what she wants or needs (11), (13), (15), (19), and (23), he knows that the reverse of the client's generalization is true in her experience; namely

If I don't ask, they won't want to give. . .

He, therefore, sees that the *If* part of the generalization is irrelevant, substitutes the word *anyway*, and presents this to the client for her verification or denial.

(49) B: *Well, they do sometimes, but not when I want it.*

The therapist's challenge works; the client denies her generalization. Her new Surface Structure includes: (a) two elements which lack referential indices — *sometimes* and *it*; (b) a very incompletely specified verb *do*; (c) the cue word *but*.

(50) T: *Do you ask them when you want something?*

The therapist is still trying to get a clear image of how the client and her two roommates communicate

to one another what they want and need. He asks her specifically whether she asks them when she wants something.

- (51) B: *(pause) . . . (Puts her hands in her lap and her face in her hands). Mui . . . kannnt (mumbling).* The client is experiencing a strong emotion.
- (52) T: *(Softly, but directly) Beth, do you ask when you want something?* The therapist persists in his attempt to get a clear image of the process by which the client expresses her needs and wants. He repeats the question.
- (53) B: *I can't* The client uses a modal operator of impossibility, leaving off the remainder of the sentence.
- (54) T: *What prevents you?* The therapist has now identified an important portion of the client's model. Here the client experiences no choice (53) and a great deal of pain (51). The therapist begins to challenge the limiting portion of the client's model by asking what, specifically, makes this impossibility for her impossible.
- (55) B: *I just can't, . . . I JUST CAN'T* The client simply repeats that it is not possible for her to ask — she again indicates that she has strong emotions in this area of her model by her changing voice quality and volume.
- (56) T: *Beth, what would happen if you asked for something when you want it?* The therapist continues to challenge the impoverishing portion of the client's model. He shifts to another of the Meta-model techniques described under modal

operators, asking for an outcome.

- (57) B: *I can't because people will feel pushed around if I ask for things from them.*

The client is willing to give the outcome. There are several violations of the well-formed-in-therapy conditions in her Surface Structure which may be challenged; (a) the modal operator *can't*; (b) the Cause-Effect relationship *X because Y* identified by the word *because*; (c) noun arguments with no referential indices, *people* and *things*; (d) a crystal-ball mind-reading violation . . . *people will feel pushed*; (e) a deletion noun argument associated with the verb *pushed around* — *pushed around by whom?*

- (58) T: *Do people ask for things from you?*

The therapist is going to challenge the necessity of the Cause-Effect relationship or generalization which the client has in her model. He begins by shifting referential indices

↓ <i>I (the client)</i>	↓ <i>people</i>
↓ <i>people</i>	↓ <i>I (the client)</i>

Thus, the part of the generalization that the therapist is focusing on shifts

↓ *I ask for things from people.*
↓ *People ask for things from me.*

Having made the shift, he presents the client with the result for verification or denial.

- (59) B: Yes.

The client verifies that she has had the experience

- (60) T: *Do you always feel pushed around?*

The referential index shift which the therapist began in (58) continues as he uses the same shift

↓ I (the client)	people
↓ people	I (the client)

Thus, the other portion of the client's original generalization becomes

↓ People feel pushed around . . .
↓ I feel pushed around . . .

The therapist now presents this piece of the transformed original Surface Structure, challenging it by emphasizing the universality of the claim with his voice quality emphasis on the universal quantifier *always*.

- (61) B: *No, not always, but sometimes I do.*

The client denies that the Cause-Effect relationship is necessary [option (b) under (57)]. Her new Surface Structure can be challenged on (a) missing referential index on *sometimes*; (b) nearly completely specified verb *do* or under the assumption that the pro-verb *do* refers back to *pushed around*, then the missing noun argument *pushed around by whom*, and a relatively unspecified verb *pushed around*; (c) the cue word *but*.

- (62) T: *Beth, are you aware that thirty minutes ago you came to me and asked if I would work with you? You asked for something for yourself?*

Instead of pursuing any of the violations of the well-formed-in-therapy conditions in the client's last Surface Structure, the therapist continues to challenge the Cause-Effect generalization [option (b) in (57)]. The therapist shifts the referential indices of the original generalization. (See page 149)

The therapist has relativized the client's generalization to the ongoing present in therapy. He calls

You (the client)	people
You (the client)	me (the
	therapist).

The result is:

You (the client) asked for some-
thing from people.

You asked for something from
me (the therapist).

her attention to this, an experience which contradicts the client's generalization. The therapist asks her to verify or deny this experience.

(63) B: *(pause) Yesssss*

The client verifies her experience.

(64) T: *Did I feel pushed around?*

The therapist invites the client to check out the remainder of her original Cause-Effect relationship [option (b) in (57)] with an exercise in reading the therapist's mind.

(65) B: *I don't think so.*

The client avoids the mind-reading while checking out the remainder of her generalization.

(66) T: *Then, could you imagine asking for something for yourself from one of your roommates and their not feeling pushed around?*

The therapist has succeeded in getting the client to deny the generalization in her model which is causing her dissatisfaction and pain (a) by shifting referential indices so that she recalls experiences she herself has had where she didn't feel pushed around when other people asked her for things, and (b) by connecting her generalization with her immediate experience in therapy. He now shifts referential indices again, this time back to the original difficulty the client has with her roommates. He first asks her if she can fantasize an exception to her original generalization

- with her roommates specifically.
- (67) B: *Yes, maybe.* The client verifies this possibility.
- (68) T: *Would you like to try?* The therapist moves to gain the client's commitment to an exception to her original generalization in actual experience as well as fantasy.
- (69) B: *Yes, I would.* The client indicates that she is willing to try an actual experiment with her roommates.
- (70) T: *And how will you know if your roommates feel pushed around?* The therapist, having received the client's commitment, returns to the central part of his image of the client's model which he has not yet clarified for himself — the process by which the client and her roommates let one another know what they each want and need — the same process he was trying to clarify in (8), (18), (22), (30), (34), (36), (40), and (42).
- (71) B: *Both of them would probably tell me.* The client supplies the information which clarifies the therapist's image of her model of how her roommates communicate to her how they're feeling.
- (72) T: *Beth, do you tell people when you feel pushed around?* The therapist now goes after the other half of the communication process: how she lets them know how she is feeling, what she wants.
- (73) B: *Not exactly, but I let them know.* The client's Surface Structure includes (a) a deletion of a noun argument associated with the verb *know*; (b) a very poorly specified verb phrase *let know*; (c) the cue word *but*.

- (74) T: *How do you let them know?* The therapist, who is still trying to get a clear image of how the client communicates her feelings to her roommates, challenges the poorly specified verb phrase.
- (75) B: *I guess just by the way I act; they should be able to tell.* The new Surface Structure includes violations of the following well-formed-in-therapy conditions: (a) referential index missing *the way*; (b) a very incompletely specified verb *act*; (c) a very incompletely specified verb phrase *be able to tell*; (d) a deletion of one of the noun arguments associated with the verb *tell (to tell what?)*; (e) the cue word *should*.
- (76) T: *How? Are they supposed to be able to read your mind again?* The therapist persists in demanding the specifics of the communication from the client to her roommates.
- (77) B: *Well, no.* The client denies that her roommates should be able to read her mind.
- (78) T: *What stops you from telling them directly that you don't want to do something or that you feel pushed around?* The therapist chooses to challenge the impoverished portion of the client's model again [option (b) in (57)].
- (79) B: *I couldn't hurt their feelings.* The client responds with a Surface Structure which involves: (a) a modal operator of impossibility; (b) a very unspecified verb *hurt*; (c) a semantically ill-formed Cause-Effect, *I cause them to feel hurt*, relationship; (d) missing referential index on *feelings*.

- (80) T: *Does telling someone no, or that you feel pushed around, always hurt their feelings?* The therapist chooses to challenge the semantic ill-formedness of Cause-Effect relationship [option (c) in (79)], emphasizing the universality by inserting the universal quantifier *always*.
- (81) B: *Yes, nobody likes to hear bad things.* The client verifies that the generalization is part of her model. In addition, her Surface Structure has violations: (a) missing referential index on *nobody*; (b) missing referential index on *things*; (c) a mind-reading violation, *nobody likes*; (d) a universal quantifier identifying a challengeable generalization — *nobody = all people not*; (e) a deletion associated with the Deep Structure predicate *bad* — *bad for whom?*
- (82) T: *Beth, can you imagine that you would like to know if your roommates feel pushed around by you so that you could be more sensitive to them?* The therapist decides to continue to challenge the impoverishing generalization in the client's model. He asks the client to imagine an experience which contradicts the generalization she has in her model, or to verify or deny it.
- (83) B: *Yes.* The client verifies it.
- (84) T: *Then, could you also imagine your roommates wanting to know when you feel pushed around so that they could become more sensitive to you?*
- | | |
|---------------------------------|---------------------------------|
| ↓ roommates
↓ I (the client) | ↓ I (the client)
↓ roommates |
|---------------------------------|---------------------------------|
- (85) B: *ummmmmmm (pause) I guess* The client hesitates, then verifies the fantasized situation. Her Sur-

you're right.

face Structure reply includes the deletion of a noun argument associated with *right*, i.e., *you're right about what?*

(86) T: *About what?*

The therapist asks for the deleted noun argument.

(87) B: *If I let them know when I feel pushed around or want something, then maybe they would be more sensitive.*

The client supplies the missing piece and acknowledges her understanding of how breaking her own generalization could be a good experience for her and her roommates.

The therapist at this point moved into some non-Meta-model techniques to give Beth a chance to integrate her new learnings and connect her new representations with her experience. This also allowed the therapist to see if there was anything else that interfered with Beth's communicating her needs to her roommates.

In this chapter, we have presented two transcripts which show therapists using the Meta-model techniques and only these techniques in the therapeutic encounter. Even with these artificial restrictions, the power of the Meta-model techniques is apparent. The Meta-model provides the therapist with a rich set of choices at each point in the therapeutic exchange. The overall effect of this results in an explicit direction or strategy for therapy — the enrichment and expansion of the limiting portions of the client's model. The Meta-model is not designed for use by itself, but rather as a tool to be integrated with the powerful techniques, verbal and non-verbal, available from the various forms of psychotherapy. We turn to this topic now.

FOOTNOTES FOR CHAPTER 5

1. This is the same point that we have made before. Models, including the Meta-models we present here, are not claims about actually occurring events within the person, people and processes being modeled, but rather are explicit representations of the behavior of those things which allows one to see the rule-governed nature of the person, people, and processes being

modeled. Such models represent the portions of the process which are systematic. For example, in the Meta-model, there is no representation for the distance between the client and the Tower of London at different points in the session — we doubt that the client's behavior is systematic in this way. Some models may have as part of their purpose the representation of the inferred internal events in the person, people and processes being modeled — these are called simulation models.

2. The word *they*, lacking referential indices in this sentence, may, in fact, refer back to the noun argument *women* in the previous Surface Structure. The noun argument *women* itself, however, also lacks a referential index.

3. Experienced therapists will recognize patterns in the way a client responds or fails to respond to his or her context — in this case, specifically, the therapist. The client has failed consistently to respond to the therapist's questions. We are presently at work on an explicit model of therapeutic techniques for challenging these kinds of patterns — see *The Structure of Magic II* (forthcoming).

4. The word *that* in the client's Surface Structure is missing a referential index — it may refer to the first clause *I'm a person, too*.

5. Linguists refer to the verb *do* as a *pro-verb*. It functions for verbs in a manner parallel to the word *it* for nouns, and is as devoid of specific meaning as the pronoun *it*.

6. The use of the referential index shift has proven in our experience to be particularly appropriate when the client is engaging in a great deal of mind-reading — the appropriate use of these more advanced techniques based on the verbal exchange will form part of the subject matter for *The Structure of Magic II*.

Chapter 6

ON BECOMING A SORCERER'S APPRENTICE

The different forms of psychotherapy are all effective to some extent, although they look very different to most observers. The fact that these seemingly different approaches to the therapeutic encounter are all to some extent effective was a puzzle for some years. During these years both practitioners and theoreticians spent much energy and creativity arguing the necessary superiority of one form of psychotherapy over the others. In recent years, fortunately, this kind of debate has begun to disappear and psychotherapists from different schools have begun to show a lively interest in the methods and techniques of others. As Haley has commented, (*Advanced Techniques of Hypnosis & Therapy*, pp. 530-535)

In the last decade, the idea of exploring new methods has been adopted by many psychiatrists and has led to such innovations as behavior therapy, conditioning treatment, and marital and family therapy. We have seen the passing of an emphasis upon ritual and a move toward judging therapeutic procedures by results instead of conformity to a particular school. It has even become respectable now to work in different ways with different types of patients . . . (Haley quoting Erickson directly) . . . "One of the important things to remember about technique . . . is your willingness to learn this technique and that technique and then to recognize that you, as an individual personality, are quite different from any of your teachers who taught you a particular technique. You need to extract from the

various techniques the particular elements that allow you to express yourself as a personality. The next most important thing about a technique is your awareness of the fact that every patient who comes in to you represents a different personality, a different attitude, a different background of experience. Your approach to him must be in terms of him as a person with a particular frame of reference for that day and the immediate situation."

People who come to us in therapy typically have pain in their lives and experience little or no choice in matters which they consider important. All therapies are confronted with the problem of responding adequately to such people. Responding adequately in this context means to us assisting in changing the client's experience in some way which enriches it. Rarely do therapies accomplish this by changing the world. Their approach, then, is typically to change the client's experience of the world. People do not operate directly on the world, but operate necessarily on the world through their perception or model of the world. Therapies, then, characteristically operate to change the client's model of the world and consequently the client's behavior and experiences.

Certain therapists, coming from dramatically different-appearing forms of psychotherapy, have come to be recognized as particularly effective in assisting clients in changing their experiences. Their behavior in psychotherapy appears to be extremely systematic to us in that they have a set of powerful techniques for directly challenging and expanding the client's model of the world. These techniques have been widely adopted by other therapists, but, unfortunately, without the dramatic results typical of this first group. The difference here seems to us to be that the first group of therapists have very clear intuitions about how to employ these techniques to challenge and expand the client's model. In other words, these psychotherapists are able to identify when the use of some particular technique is appropriate. The use of these same techniques by others often leads to very uneven results; sometimes they will succeed dramatically, other times they appear to miss altogether; at times the use of these techniques appears to be appropriate, at other times not.

We have thus far in this book presented a Meta-model for use by therapists in their verbal exchanges in the therapeutic encounter. The Meta-model is a tool that is available to therapists from any school of psychotherapy. Its practicality is two fold: first, it offers explicit direction (i.e., step-by-step and, therefore, learnable) for what to do next at any point in the therapeutic

encounter, and second, anyone who is a native speaker of English already has the intuitions necessary to use the Meta-model and he only needs to become conscious of these intuitions.

As we have stated repeatedly, our Meta-model does not, by any means, exhaust the choices or possibilities of what a therapist might do in the therapeutic encounter. Rather, it is designed to be integrated with the techniques and methods in already established forms of psychotherapy. The integration of the explicit Meta-model with the techniques and methods of therapy in which you are already skilled will not only expand the choices you have as a therapist, but it will increase the potency of your style of therapy by making the interventions you use directed explicitly at expanding your client's model of the world. Thus, the Meta-model gives the therapist an explicit strategy for therapy.

We have two major goals in this final chapter:

1. We will select and present a number of these techniques from different forms of psychotherapy; in each case, we will demonstrate how these techniques implicitly challenge and expand the client's model. Thus, they share with the explicit Meta-model we have presented here the goal of operating directly on the client's representation of the world.
2. We will show how these techniques link up with the explicit steps in our Meta-model in a way which indicates when their use is appropriate.

The Second Ingredient: Reference Structures

One of the features of our experience which made it possible for us to develop an explicit Meta-model for the language of therapy was that each of us as native speakers of our language have consistent intuitions as to what are the full linguistic representations — the Deep Structures — of each sentence or Surface Structure we hear. As therapists, we can come to know exactly what is missing from the client's Surface Structure by comparing it to the Deep Structure from which we know it is derived. Thus, by asking for what is missing, we begin the process of recovering and expanding the client's model — the process of change.

We will call the Deep Structure the reference structure for the sentence, or Surface Structure, which we hear from our clients. It is the reference structure in the sense that the Deep Structure is the source from which the Surface Structure sentence is derived. The Deep Structure is the fullest linguistic representation of the world, but it is not the world itself. The Deep Structure itself is derived from a fuller and richer source. The reference structure for

the Deep Structure is the sum total of all of the client's experiences of the world. The processes which specify what happens between the Deep Structure and the Surface Structure are the three universal processes of human modeling, the rules of representation themselves: Generalization, Deletion, and Distortion. These general processes have specific names and forms within the Meta-model which we have created with the concepts and mechanics suggested by the transformational model of language; for example, referential indices, deletion transformations and, semantic well-formedness conditions. These same three general processes of modeling determine the way that Deep Structures are derived from their source — the client's experience of the world. We suggest that the same set of specific concepts and mechanisms will continue to guide us in recovering the reference structure for the Deep Structure.¹

The Meta-model for therapy that we have developed and presented here is, as we have stated repeatedly, a formal model. It is, specifically, formal in two senses of the word:

1. It is a model which is explicit — that is, it describes what the structure of the process of therapy is in a step-by-step manner.
2. It is a model which deals with form, not content. In other words, the Meta-model is neutral with respect to the content of the therapeutic encounter.

The first sense in which our Meta-model is formal guarantees that it is available to anyone willing to learn it — that is, since it is an explicit description of a process, it is learnable. The second sense in which the Meta-model is formal guarantees that it will have universal applicability² — no matter what the subject or content of the particular therapeutic session, the exchange between the therapist and the client will involve Surface Structures; these Surface Structures are the material on which the Meta-model is designed to operate.

Notice that, since the Meta-model is independent of content, there is nothing in it which would distinguish the Surface Structures produced by a client who was talking about his last trip to Arizona from the client who was talking about some intensely joyous or painful experience that he recently had with a close friend. This is the point at which the therapist's particular form of psychotherapy will indicate the content of the therapeutic session. For us, for example, when a person comes to us in therapy, we feel that they have come with some pain, some dissatisfaction about their present situation, and we generally begin by asking what they hope to gain by coming to us — that is, what they want.

Their reply, no matter what it is, (even, *I don't know*) is in the form of a Surface Structure, and we move into the process of therapy by then applying the Meta-model techniques. The initial question that we ask is not a question which we have shown to be demanded by the Meta-model. Rather, it is a question which we have developed out of our experiences in therapy — that is, our experiences in therapy have led us to understand that one of the necessary components of the therapeutic experience is for us to learn what it is that has brought the client to therapy.

The reference structure for the full linguistic representation of Deep Structure is the full range of human experience. As humans, we can be certain that each experience that we have will include certain elements or components. For the purpose of understanding these components of the reference structure for Deep Structure, we can divide them into two categories: the sensations which originate in the world, and the contribution which we make with our nervous systems to these sensations as we receive and process them, organizing them into the reference structure for the linguistic Deep Structures of our language. The exact nature of the sensations which arise in the world are not directly knowable as we use our nervous systems to model the world, even reaching out with our receptor systems, setting and calibrating them (the concept of forward feedback — Pribram, 1967), in accordance with the expectations which we derive from our present model of the world. The model which we create is, of course, subject to certain constraints imposed by the world — if my model is too divergent from the world, it will not serve me as an adequate guide for my behavior in the world. Again, the way that the model each of us develops will differ from the world is in the choices (normally, not conscious) which we make as we employ the three principles of modeling. This makes it possible for each of us to entertain a different model of the world and yet live in the same real world. Just as Deep Structures include certain necessary components, so, too, does the reference structure for Deep Structures. For example, we receive sensations through the five (minimally) senses of sight, hearing, touch, taste, and smell. Thus, one component of the reference structure for which we as therapists may check is whether the Deep Structures include descriptions of sensations arriving through each of these five senses — that is, does the full linguistic representation include descriptions which represent the client's ability to see, hear, touch, taste and smell. If one of these senses is not represented, then we may challenge the representation, requiring the client to re-connect the Deep Structure with its reference structure and to recover the deleted sensations, thus

expanding and enriching the client's model.

While we have not yet developed an explicit structure for the range of human experience, we have some suggestions about what some of the necessary components of that reference structure will be. In addition to the check for the five senses, we have found it useful to employ a set of categories developed by Virginia Satir in her dynamic work in family systems and communication postures. Satir organizes the reference structure into three major components:

1. *The context* — what is happening in the world (i.e., in the client's representation of the world);
2. *The client's feelings* about what is happening in the world (as represented);
3. *The client's perceptions* of what others are feeling about what is happening in the world (as represented).

We are aware that, while the client's reports of feelings about what is happening will occur in the form of Surface Structures which are subject to the techniques of the Meta-model, we have not emphasized this as a necessary component of a well-formed Deep Structure. The client's feelings about what is happening in the world are, however, a necessary component of any well-formed reference structure. In other words, therapists may be sure that the reference structure is incomplete, or, in the terms we have developed in this book, not well formed, if the client's feelings are not represented in the reference structure. This is equivalent to saying that human emotions are a necessary component of human experience.

The point of mentioning this quite obvious fact is not to suggest that you, as a therapist, are not aware that people have feelings, but rather is the hope that you will recognize that, when you ask questions like, "How do you feel about that?" (whatever *that* might be) you are, in fact, asking your client for a fuller representation (than even Deep Structure) of your client's experience of the world. And what you are doing by asking this particular question is asking for what you know is a necessary component of the client's reference structure. This particular component of the reference structure is common to most therapies and is very useful information in our work as therapists. What is not common to most therapies and can make this question even more potent is that the client's answer will be a Surface Structure, subject to the well-formed-in-therapy conditions. This allows you to know more about your client's model, recovering one of the necessary components of the reference structure, and at the same time challenging and expanding the client's model. When

this common question is seen from the point of view of the Meta-model, an additional and very potent question suggests itself. This new question, which is characteristic of Satir's work, is: "How do you feel about your feelings about what is happening?" Consider this question in the light of the Meta-model. This is essentially a request on the part of the therapist for the client to say how he feels about his reference structure — his model of the world — focusing specifically on his feelings about the image that he has of himself in his model. This, then, is an explicit way of directly approaching what is called in many therapies the client's self-esteem — a very potent area of the client's reference structure and one closely connected with the possibility of change for that person. The following sequence between a therapist and a client shows the way that the therapist gets to this aspect of the client's reference structure:

- | | |
|--|--|
| (1) S: <i>Paul just doesn't care about cleaning up the house.</i> | The client's Surface Structure claims that the client has knowledge about the inner state of another without stating how she gained this knowledge — mind-reading — thus violating the semantic well-formed-in-therapy conditions. |
| (2) T: <i>How do you know he doesn't care about it?</i> | The therapist chooses to challenge this semantic violation by asking the client to specify the process more fully. |
| (3) S: <i>He told me.</i> | The client supplies the information requested. Her Surface Structure, however, contains a deletion associated with the predicate <i>tell</i> — tell what? |
| (4) T: <i>He told you what, specifically?</i> | The therapist asks for the missing material. |
| (5) S: <i>He said, "I don't care about whether the house is clean or not."</i> | The client supplies the material. |

- (6) T: *How do you feel about his telling you he doesn't care about whether the house is clean or not?* The therapist, using his knowledge that the client's reference structure must include her feelings about Paul's behavior as a necessary condition for being a well-formed-in-therapy reference structure, asks for that component.
- (7) S: *I feel angry — in fact, damn mad . . . that's what we fight about all the time.* The client supplies her feelings about Paul's behavior. Her new Surface Structure includes a universal quantifier (*all*) which identifies a generalization which the therapist may challenge.
- (8) T: *How do you feel about feeling angry?* The therapist ignores the violation of the well-formed-in-therapy condition concerning generalizations, and, instead, chooses to shift levels, asking the client about her feelings about her image of herself in her model of the world (her reference structure).
- (9) S: *How do I feel about feeling angry?* The client appears to be initially confused by the therapist's question requiring her to shift levels. This is a common reaction to such level shifts in our experience; clients, however, do have the resources to deal with this kind of maneuver.
- (10) T: *Yes, how do you feel about feeling angry at Paul?* The therapist repeats the question.
- (11) S: *Well, I don't feel so good about it.* The client supplies her feelings about her feelings — her self-esteem.

The therapist begins to explore the client's model at this new level by asking her to specify her verb more fully. Changes at this level — the level of self-esteem — are extremely important, since a

person's self-image affects the way a person organizes his entire experience or reference structure. Therefore, changes at this level of structure permeate the client's entire model of the world.

These particular categories and techniques of Satir's offer a beginning to determine the set of the minimum necessary components for completeness of the well-formed-in-therapy reference structures. In observing extremely effective therapists, such as Satir, we have identified other types of categories which we offer as part of the set of minimum components which must be present for a reference structure to be well formed with respect to completeness, another way of checking for completeness in the client's reference structures. These include:

- (a) The way the client is representing his past experiences in the present — these are often in the form of rules about his behavior;
- (b) The way the client is representing his present experience in the present — that is, what the client is aware of now;
- (c) The way the client is representing his possible future experiences in the present — that is, his expectations of what he expects the outcome of his behavior will be.

Notice that the four initial components presented by Satir (client's feelings, others' feelings, the context, client's feelings about his feelings) will occur as components of each of these three representations — the past, the present, and the future — as the client is representing them now. We have found these categories very useful in organizing our model and behavior in therapy in attempting to assist clients in developing complete reference structures. As you will have noticed in the explicit techniques of the Meta-model as presented in Chapters 3, 4, and 5, the Meta-model includes techniques for recovering and challenging the categories of the reference structure outlined here. Rules, based on the client's experience as represented in the present, are another name for generalizations based on the client's experience, as are the client's expectations. In each case, the client will present the material the therapist requests when challenging and enriching the client's model in the form of Surface Structures which are subject to the well-formed-in-therapy conditions which the Meta-model specifies. The point of presenting these categories is to offer some clear suggestions about what the necessary components of a complete, well-formed reference structure for the linguistic Deep Structure might be. Additional suggestions as to what the necessary components of a complete reference structure might be have been offered by various philosophers (any of the well-known

western philosophers who dealt explicitly with epistemology — for example, in the empiricist tradition, Locke, Berkeley, Hume, and in the idealist tradition, Kant, Hegel, Vaihinger, etc.) and semanticists, logicians, linguists (for example, Korzybski, Humboldt, Carnap, Tarski, Chomsky, Katz, etc.).

For the remainder of this chapter we will select and discuss a number of techniques from different forms of psychotherapy. It is not our intention to teach these techniques here. Rather, in each case, we will show how the technique, as presently used, implicitly challenges the client's representation of the world, and how each of these techniques may be integrated with the Meta-model. We have selected these particular techniques simply because we are familiar with them and know from our experience that they are powerful therapeutic tools. We would also like to state that we are by no means saying they are any more powerful than other techniques, or that they lend themselves more readily to being integrated with the Meta-model, but rather we wish to provide a cross-section of techniques and chose from the ones we know.

Enactment: The Instant Re-Play of Experience

By *enactment* we refer to those techniques that involve the client in dramatizing an actual or fantasized experience. Enactment may involve only the client or it may involve other participants as well.

By taking the word as an absolute, never investigating its personal significance, the word acquires a life of its own. Reifying the word in this way removes it from its practical function as a more or less efficient way of referring to a process which remains alive and has continually changing referents. Enactment is one way of keeping alive the words a person uses to characterize himself or someone else. Keeping his language connected to action permits feelings of change and growth. . . .

(L. and M. Polster, *Gestalt Therapy Integration*, p. 00)

The solution (to the question of what the set of necessary components of a complete reference structure is) is complex. Fortunately for psychotherapy, this solution is not required for therapy to proceed. One way of avoiding this difficulty and at the same time gaining access to something closer to the client's reference structure is to have the client present the experiences from which the full linguistic representation was derived.³ For example, the client has difficulty expressing anger toward her husband. We

know this as she began by presenting a series of Surface Structures which we then subjected to the well-formed-in-therapy conditions, finally arriving at the full linguistic representation. At this point, in order to determine what the reference structure from which this full linguistic representation was derived is, we may ask the client to enact a specific occasion on which she was unable to express her anger at her husband. In addition to re-connecting the client's Deep Structures with a fuller approximation to their reference structures, the techniques of enactment typically accomplish two other things:

1. The client, in re-creating his experience, becomes aware of parts of the reference structure or experience which had no representation in the Deep Structure;
2. Enactment gives the therapist access to two important things:
 - (a) A close approximation to the reference structure itself — the client's experience — and, therefore, provides the therapist with a wealth of accurate material to use in the therapeutic encounter;
 - (b) The opportunity to see an example of modeling by the client directly. In other words, through enactment, the therapist has available an approximate reference structure. By comparing it with the client's verbal description of that experience, the therapist has an example of the generalizations, deletions and distortions typical of the client.

A number of things occur when the client enacts his experience. First, the client's present experience itself comes to challenge and expand his model of the world, as he experiences it in his enactment possibilities which had been previously deleted, and some of the missing portions of the representation are recovered. Secondly, the portions of the client's model which were vague and unfocused are clarified, as the enactment is a specific experience — equivalent to the supplying of referential indices by the client, in this case experientially rather than linguistically. The enactment is essentially a dramatization of what the client has represented as an event — the enactment itself denominalizes the representation; that is, it transforms the event back into a process, and, in this process, presents a much more fully specified image of the process (equivalent to more fully specifying the verb in Meta-model techniques). These four aspects of a typical enactment taken together result in an experience which lies in part outside the boundaries of the client's initial linguistic representation. Since the enactment technique implicitly challenges the client's model by these four

aspects, if the enactment technique is integrated with the Meta-model techniques the result is that the enactment technique itself becomes more powerful and direct by explicitly challenging the client's linguistic representation.

In any therapeutic situation in which the technique of enactment is fully integrated with the Meta-model, the therapist has an extremely rich set of choices. Common to all of these is the suggestion that the therapist have the client describe his ongoing experience during the dramatization. This ongoing description, as well as any other verbal communications by the client to other participants in the enactment, will, of course, be a series of Surface Structures. The therapist subjects these Surface Structures to the well-formed-in-therapy conditions by using Meta-model questioning. This insures that the material which the enactment technique makes available *implicitly* is recovered in a completely *explicit* manner. The enactment technique is designed to make available a close approximation to the reference structure from which the impoverished portion of the client's linguistic representation was derived. The richer approximation to reference structure provided by enactment includes both verbal and analogical forms of communication. In addition to subjecting the client's reports of the ongoing experience, and his communications to other participants, to the well-formed-in-therapy conditions, the therapist has available this fuller representation — the enactment experience itself which the therapist may use as an approximate reference structure to compare directly with the client's verbal description.

The therapist may wish to use some of the necessary components of a complete reference structure suggested previously. The therapist may, for example, insure by questioning that the client is representing his feelings about the enactment experience explicitly by asking directly for those feelings. Or, for example, the therapist may pay particularly close attention to whether the client explicitly represents sensations gained through each of the five senses — that is, the therapist may check to see whether the client looks at and sees clearly the actions of the other participants in the dramatization, or the therapist may check to see whether the client listens and hears clearly the things said by himself and by the other participants in the dramatization.

Guided Fantasy — A Journey into the Unknown

By *guided fantasy* we refer to the process in which clients use their imagination to create a new experience for themselves.

Fantasy is an expansive force in a person's life — it reaches

and stretches beyond the immediate people environment or event which may otherwise contain him. . . . Sometimes these extensions (fantasy) can gather such great force and poignancy that they achieve a presence which is more compelling than some real-life situations. . . . When these fantasies can emerge in the therapy experience, the renewal of energy may be vast, sometimes bordering on the unassimilable and often marking a new course in the individual's sense of self.

(Polster & Polster, *Gestalt Therapy Integrated*, 1973, p. 255.)

The purpose of guided fantasy is to create an experience for the client which, at least in part if not in its entirety, has not been previously represented in his model. Thus, guided fantasies are most appropriately used when the client's representation is too impoverished to offer an adequate number of choices for coping in this area. Most typically, these are cases where the client is either in a situation or feels that he will be in a situation in which he hasn't sufficient representation in his model to respond in a way that he thinks is adequate. Often, the client experiences a great deal of uncertainty and fear about the resolution of these situations. For example, a client feels blocked from expressing his feelings of softness and tenderness toward his son. He has never expressed these feelings and is very apprehensive about what will happen if he does, although he has no clear idea of what that happening might be. Here, we may choose to use a guided fantasy technique — having the client create by fantasy the experience which he both wants and fears. This experience will serve as a reference structure for the client, assisting him in overcoming his fear and ultimately giving him more choice in this area of his life. Guided fantasy, then, serves as a tool for the therapist in accomplishing two things:

1. It provides the client with an experience which is the basis for a representation in his model where previously there had been either no representation or inadequate representation. This provides him with a guide for future behavior and coping in this area;
2. It provides the therapist with an experience which the therapist can use to challenge the client's presently impoverished model.

In addition to these gains for both the therapist and the client, a guided fantasy is an opportunity for the therapist to observe the client creating not only a new experience but also a representation

of that experience. Here, the therapist sees in the creation of this new fantasy experience the universal modeling processes of Generalization, Deletion and Distortion as they are typically employed by the client. The employment of the guided fantasy experience is parallel to the Meta-model technique of recovery of large-scale deletions under the category of modal operators. This technique differs from the process of enactment in that enactment recovers and brings into the present experience of the client something quite close to a reference structure from the client's *past*, while guided fantasy creates a reference structure for the client in the *present*.

Since guided fantasy is the creation of a reference structure, the therapist may wish to use the necessary components of a complete reference structure suggested previously in guiding the client's fantasy. Specifically, for example, the therapist may, by questioning, direct the client to report on his feelings at different points in the fantasy, or direct the client's attention to one or more of the five senses to insure a complete reference structure emerges in the client's fantasy.

We have found, in our experience, that guided fantasies often take the form of a metaphor rather than a direct representation of the "problem" that the client first identifies. For example, a client comes to a therapy session complaining that she is unable to get angry at someone with whom she works. Using the Meta-model techniques, we discover that the client also feels unable to express anger at her father and husband, and, in fact, she is unable to identify anyone at whom she feels she could express anger. There are a number of techniques available in the Meta-model to challenge this generalization; however, guided fantasy is particularly appropriate for situations in which the client has little or no representations in his model for such experiences. If, through the technique of guided fantasy, the client succeeds in expressing anger at someone in his fantasy (it doesn't matter whom), then he will have created a new reference structure which contradicts the generalization in his model. Often, once the client has successfully generated reference structures which contradict the generalization in his model, the generalization disappears, and the problems that were a result of the generalization also disappear or are reduced.

For example, once a young woman came into a seminar in which Meta-model techniques were being taught. Before the seminar began, she burst out into a frantic episode in which she claimed she was terrified that she was going crazy. Using Meta-model techniques, the teacher was able to determine that she felt she was losing control and did not know what was happening to

her; her life was in turmoil, her future a frightening and dismal unknown. The teacher of the seminar asked her to close her eyes and tell him what she saw. After some initial difficulty, she proceeded to describe herself as standing on the edge of a large crevasse which was steep and foreboding. The teacher told her to slowly proceed into the crevasse and explore it, asking her to continually report on what she experienced, giving details of sight, hearing, feeling, smelling, and constantly reassuring her she could proceed through each obstacle. She finally proceeded down and back up, remarking, when she arrived at the top again, that it was still a gloomy day but that somehow she felt better. When she opened her eyes, her fear was gone and she felt that she could survive all that faced her. This experience offered a new reference structure in which this young woman was able to face an unknown experience; this new reference structure also expanded her model in such a way that it allowed her to believe that somehow she would survive whatever was happening to her in her life.

By the solution or resolution of a "problem" by metaphor in guided fantasy, we refer to a situation in which the client uses guided fantasy to create a new reference structure or experience in which he achieves that which was formerly not possible. Once the new situation — the one created in the fantasy — is successfully resolved, the "problem" which the client originally had either disappears or at least becomes less formidable, and, typically, the client feels able to cope with it. The created "problem" and the original "problem" must share a similarity of structure — they must both be "problems" relating to the same impoverishing generalization in the client's model of the world.⁴

Once a therapist has succeeded in developing a guided fantasy with his client, this fantasy, itself, is an experience available for the enactment process.

Therapeutic Double Binds

By *therapeutic double binds* we mean situations, imposed upon the client by the therapist, in which any response by the client will be an experience, or reference structure, which lies outside the client's model of the world. Thus, therapeutic double binds implicitly challenge the client's model by forcing him into an experience which contradicts the impoverishing limitations of his model. This experience then comes to serve as a reference structure which expands the client's model of the world. In the Meta-model, when the therapist uncovers an impoverishing generalization in the client's model, particularly one which involves a Cause-Effect, semantically ill-formed violation and/or a modal oper-

ator, the therapist may challenge this generalization by asking the client whether this generalization is necessarily or always true (see, *Techniques for Challenging Generalizations*, Chapter 4), to identify and dramatize an experience which contradicts this generalization (enactment), or, in a case in which the client does not have such an experience available, the therapist may ask the client to create an experience which contradicts his generalization (through the technique of guided fantasy). If these three techniques fail to produce the contradictory experience, or if the therapist is so inclined, he may choose to create a double-bind situation in which the client's response is an experience which contradicts the client's impoverishing generalization.

During one therapeutic session, in the course of using Meta-model techniques with a group, the therapist assisted the client in arriving at the generalization which was true in her model; namely, "I can't say *NO* to anyone because I can't hurt anyone's feelings." In this particular case, the therapist chose to use the Meta-model technique of asking what, specifically, would happen if the client were to say *NO* to someone. Her reply was that they would be badly hurt, that they might even die. Noticing the lack of a referential index of the noun argument *anyone*, the therapist decided to ask who, specifically, might be hurt and die. The client, now greatly agitated, recounted a traumatic experience from her childhood when she had said *NO* to her father's request to stay at home with him. Upon returning home later that same evening, the client discovered her father had died, and she had taken the responsibility for his death, attributing it to her having said *NO* to him.

The therapist now moved into an enactment technique, asking the client to recreate the situation described with her father. Even after the enactment technique showed that the original experience from which the client had made the generalization was one in which she had had no choice about whether she would stay with her father or not, she adamantly refused to give up her generalization. Here, although the enactment technique proved useful in recovering the traumatic experience, providing material which challenged certain other generalizations in the client's model, it did not, in itself, contradict the client's generalization about the consequences of saying *NO* to someone. In this case, note that the recovery and enactment of the original experience from which the client made a generalization did not contradict the generalization; it simply identified the source of the generalization. Thus, after the enactment, the client's model was still impoverished in this area — she still could not imagine saying *NO* to someone without

there being unacceptable consequences. The therapist in this case next chose to use a therapeutic double-bind technique. What the therapist did was to tell the client to go around the room to each of the people in the group and say *NO* about something to each. The client reacted strongly, refusing to perform the task, making further statements such as

NO! It's impossible for me to say NO to people!

You can't expect me to do it just because you ask me to.

The client continued in this way for several minutes, refusing to carry out the task set for her by the therapist, until the therapist pointed out that she had, in fact, been saying *NO* to the therapist during this time! The therapist then pointed out that he had not been hurt and certainly had not died, contrary to her generalization. This experience was so powerful for the client that she was immediately able to move around the room and say *NO* to the other members of the group.

Consider the position in which the therapist placed the client by demanding that she say *NO* to the members of the group:

1. The client had stated her generalization
I can't say NO to anyone. . . .
2. The therapist structured a therapeutic double bind with the demand that the patient
Say NO to each of the people in this group.
3. Notice the choices available to the client; she may
 - (a) Say *NO* to each member of the group,
 - or
 - (b) Say *NO* to the therapist.
4. Whichever choice the client makes, she generates an experience which contradicts her original generalization. This experience serves the client as a reference structure to guide her in representing her world in richer terms.

The therapist makes the contradictory nature of the new experience explicit by pointing out (using the Meta-model technique) that the Cause-Effect relationship which the client's generalization claimed was necessarily true failed to be true in this experience.

One of the ways in which we have found therapeutic double binds particularly useful is in the area referred to by many therapists as homework. By homework we mean contracts which we make with the clients in which they agree to perform certain actions between therapeutic sessions. In the area of therapeutic double binds in homework, a client in a therapy session uncovered the generalization that

I can't try anything new because I might fail.

When the therapist, using Meta-model techniques, asked what

would happen if she did try something new and failed, she replied that she wasn't sure, but that it would be very bad. She expressed a great deal of fear of the consequences of failing at something new and again stated that it was impossible, therefore, for her to try something new. At this point, the therapist decided to impose a therapeutic double bind and use the time between sessions for carrying out this bind. He made a contract with her that she would, each day between this session and the next, try something new and fail at it. Again, notice the structure of the situation created by this demand by the therapist of the client:

1. The client has the generalization in her model
I can't fail at anything new;
2. The therapist structures a double bind with the contract
Each day, between this session and the next, you will try something new and fail at it;
3. Notice the choices available to the client:
 - (a) She can try something new each day between this session and the next and fail at it, thus fulfilling the contract,
 - or
 - (b) She can fail to fulfill the contract, itself a new experience;
4. Whichever situation occurs, the client will have an experience which will contradict her generalization and give her a reference structure which increases the amount of her choices available in the world as represented in her model.

We are not suggesting that double binds constitute the only kind of homework, but rather that homework can consist of a double bind, and, further, that generalizations can be challenged by experiences extending after the interview or session itself. It is necessary only that these experiences create some new reference structure that contradicts the impoverishing portions of the client's model.

We would also like to state at this point that homework assignments also are useful for giving clients a direct chance to try out any new dimensions created in their models in the course of a therapeutic session.

Other Maps for the Same Territory

Human beings represent their experiences with systems other than language. The most basic distinction which has been offered as a way to understand the different maps that we, as humans, develop to guide ourselves in the world is the one between digital and analogical representational systems (see Bateson, 1973;

Wilden, 1973, for example). The best known digital representational system is the one which is the focus of our Meta-model — the natural language system. The most commonly referred to example of an analogical representational system is body expression. There are a number of therapies which deal primarily with these body or analogical representational systems. For example, therapies such as Rolfing, Bio-energetics, etc. challenge and expand the client's model by operating directly upon the client's analogical representation of the world of his experience. One point at which these two types of representational systems come together is in the use of voice quality — an analogical system — which is used to carry and express the primary digital system, natural language. One frequently cited example of a mixed system is that of dreams, wherein both digital and analogical representations are present.

For the purpose of therapy, it is essential for the therapist to understand that the full linguistic representation — the set of Deep Structures — is, itself, a derived model or representation of the world. Beyond the full linguistic representation is what we have referred to as the reference structure — that person's most complete representational system, the stored experiences that constitute that person's life history. This most complete model — the person's life experiences — is the reference structure not only for the set of Deep Structures which are the basis of the primary digital representational system, but also for those experiences which serve as the reference structures for the other human representational systems, analogical as well as digital.

One of the most powerful skills which we exercise as communicators and therapists is our ability to represent and communicate our experiences in any of the representational systems which we have available as humans. Further, experienced therapists will recognize the power of assisting clients in shifting their representational systems. For example, a client states that she has a severe headache. This is equivalent to the client's informing the therapist that she has represented some specific experience kinesthetically in a way which is causing her pain. One very powerful choice which the therapist has is to have her shift representational systems. Specifically, assuming that the therapist has already identified that the client has a highly developed ability to represent her experiences visually, the therapist tells the client to close her eyes and describe the specifics of the headache, at the same time forming a clearly focused image of the headache. There are variations of this which the therapist may employ to assist the client in achieving a visual representation. For example, he may have the

client breathe deeply and, once a rhythm of breathing has been established, have the client exhale the headache forcefully onto a chair in front of her, creating a visual image there. The outcome of this shift of representational system is assisting the client in representing her experience in a representational system in which she will not cause herself pain. The power of the technique of shifting the client's experiences from one representational system to another can hardly be overestimated. In Volume II of *The Structure of Magic*, we present an explicit model for the identification and utilization of the client's most frequently employed representational system.

Congruity

Different portions of a person's reference structure can be expressed by different representational systems. These may occur simultaneously. There are two logical possibilities when two distinct representational systems are expressing different portions of the person's reference structure simultaneously.

First, the portion of the person's reference structure which one representational system is expressing fits with the portion of the person's reference structure which the other representational system is expressing. We refer to this situation as a consistent double message, or congruity or congruent communication by the person involved.

Secondly, the portion of the reference structure which one representational system is expressing does not fit with the portion of the reference structure which the other representational system is expressing. We refer to this situation as an inconsistent double message, incongruity or incongruent communication. For example, if, in a therapeutic session, the client is sitting calmly in a chair and speaking with a quiet, controlled voice, and states

I am really furious — God damn it, I'm not going to stand for this.

we have a classic example of an inconsistent double message or incongruent communication. The digital system (language) and an analogical system (body and voice quality) do not match.

One of the most impoverishing situations which we have encountered in therapy is the situation wherein a person maintains contradictory portions of his reference structure. Typically, these contradictory portions have the form of two contradictory generalizations which apply to the same area of behavior. Most frequently, the person whose reference structure includes these inconsistent generalizations has the experience of being immobilized, being profoundly confused, or oscillating between two in-

consistent forms of behavior. This can be recognized by the therapist when he sees an incongruent or inconsistent double-message communication.

Notice that, in each of the techniques which we have presented in this chapter thus far, the overall strategy that the therapist has adopted is that specified explicitly by the Meta-model, to challenge and expand the impoverished portions of the client's model. Characteristically, this takes the form of either recovering (enactment) or creating (guided fantasy) therapeutic double binds, a reference structure which contradicts and, therefore, challenges the limiting generalizations in the client's model. In this case, the incongruent communication is, itself, an indicator of the two portions of a person's inconsistent reference structure, two generalizations which can serve as contradictory reference structures for each other. The therapist's strategy here is to bring the two contradictory generalizations into contact. This can be most directly accomplished by bringing these generalizations into the same representational system.

For example, during a therapeutic session, the therapist using Meta-model techniques assists a client in identifying a generalization in his model:

I should always appreciate my mother for all the things she did for me.

Notice that from the Meta-model techniques alone this Surface Structure presents the therapist with a number of choices (the modal operator *should*; the universal quantifiers *always*, *all*; the lack of a referential index on the noun argument *things*). However, when the client was uttering this Surface Structure, the therapist observed that he had clenched his right fist and was gently pounding the arm of the chair in which he was sitting. This identifies an incongruent message. Ignoring for the time being the violations of the well-formed-in-therapy conditions in the client's Surface Structure, the therapist chooses to bring the incongruent pieces of the client's behavior into the same representational system. He does this by asking the client to express the analogical portion of the incongruent communication in the digital system. The client eventually responds with the Surface Structure:

I should always appreciate my mother for what she did for me, but she always sided with my father, and that pissed me off.

Using Meta-model techniques, these two contradictory generalizations were kept in contact in the same representational system until the generalizations were challenged and the client arrived at a new model with more richness and detail — that he appreciated his

mother for some actions and resented her for other actions.

One indication that the client's model is enriched is when there is *congruent* communication where there had previously been *incongruent* communication. This alignment of the person's separate representational systems which previously had been incongruent is a powerful experience for a client,⁵ and is usually extremely noticeable to experienced therapists.

Family Therapy

By *family therapy* we refer to those therapies that conduct the therapeutic encounter with an entire family instead of an identified patient or client.

All the above approaches are predicated on the necessity for viewing the symptoms of the identified patient or patients within the total family interaction, with the explicit theoretical belief that there is a relationship between the symptom of the identified patient and the total family interaction. The extent to which the therapist "believes" in family therapy will determine his emphasis on techniques that convey this orientation to the patient.

(*Therapy, Comm. & Change*, p. 250)

The forms of family therapy with which we are most familiar make extensive use of the concept of congruity (Satir, Baleson, etc.). Here, congruent communication can be a useful tool for looking at individual members of the family or at the family as a unit. In fact, frequently recurring patterns of incongruent communication are claimed to be a major source of schizophrenia (see Jackson, 1967).

So far, we have focused exclusively on the Meta-model for therapy as a way to dictate an explicit strategy for individual therapy. We would now like briefly to raise the question of the relationship between our Meta-model and family therapy. Simply put, the overall strategy of the Meta-model is to identify, challenge and expand the impoverished and limiting portions of the individual's model of the world. One of the best indicators of an impoverished or limited portion of a person's model is an area of experience in which the person has pain or dissatisfaction. Similarly, in families, pain serves as a clear indication of impoverished and limited models of experience. In the context of family therapy, the same formal Meta-model principles apply. There is, however, at least one serious complication: a family system is more than a collection of the models of the individual members of that family. Specifically, in addition to the model of the world which

each member has, the family has a shared model of themselves as a family and the way that they interact. Within their model, each family member has a model of the shared model of themselves as a part of the family unit. To get some idea of how complicated even a three-person family is, consider the following:

Suppose that we designate the family members by the letters *a*, *b*, and *c*. In this family system, there are the following perceptions or models (minimally):

- a's model of himself;
- b's model of herself;
- c's model of himself;
- a's model of himself and b together;
- a's model of himself and c together;
- a's model of b and c together;
- a's model of himself with b and c together,
- b's model of herself and a together;
- b's model of herself and c together;
- b's model of a and c together;
- b's model of herself with a and c together,
- c's model of himself and a together;
- c's model of himself and b together;
- c's model of a and b together;
- c's model of himself with a and b together.

Issues of therapeutic strategy — whose model is it most useful to challenge and expand initially and how much, the degree of congruity of the models of the family system which each family member assumes he or she shares with the other family members — are all complications which do not arise in the context of individual therapy. We are presently working on an explicit, expanded Meta-model for family systems which takes these complications into consideration.

SUMMARY

In this chapter, we have presented a number of techniques from different, established forms of psychotherapy. Human beings have a number of representational systems, one of which is language. Each of these systems is derived from the sum total of the experiences which the individual has had — the reference structure. By recovering old, or creating new, reference structures, each of these techniques constitutes an implicit challenge to, and, therefore, an expansion and enrichment of, the client's model of the world. Furthermore, we have indicated how each of these

tools may be integrated with the Meta-model techniques, resulting in an explicit strategy for therapy. One of our purposes has been to show how integration with the Meta-model techniques of the specific techniques of these different psychotherapies makes them more direct and, thus, more powerful. We invite you to imagine how the Meta-model tools could help you to improve, enlarge, and enrich the skills that you offer as a people-helper, thus beginning or assisting you on the road as a sorcerer's apprentice.

FOOTNOTES FOR CHAPTER 6

1. We intend to present a more complete and refined representation of reference structures and the specific mechanisms which map them into the various representational systems which humans use (e.g., the Deep Structures of language) in *The Structure of Magic II*.

2. The Meta-model we present is universal for therapy conducted in English. We are convinced that it can be easily adapted to other languages, as they are constructed on the same formal principles.

3. The enactment technique necessarily yields a representation closer to the reference source — the original experiences — than does the linguistic representation alone, as enactment involves linguistic representation plus other representational systems (e.g., the semantic/physical representational system). Here, the skill of the therapist in assisting the client in recalling and enacting the original experience is very important.

4. M. Erickson presents a clear case of this principle of solution by metaphor in *Advanced Techniques of Hypnosis and Therapy* (pp. 299-311).

5. This experience of alignment or congruity is part of the basis of the safeguard for the integrity of the client. As mentioned in Chapter 3, if the client deletes a portion of his Surface Structure or fails to assign a referential index to some element in his Surface Structure, the therapist has several choices. The therapist may have a strong intuition as to what the deleted portion of the Surface Structure is or what the identity of the missing referential index is. The therapist may choose to act on this intuition rather than to ask the client for the missing information. The safeguard for the client consists of the therapist's having the client say a Surface Structure which incorporates that intuition:

C: *I'm scared.*

T: *I want you to say this and pay attention to how you feel as you say it: "I'm scared of my father."*

The client then says the Surface Structure proposed by the therapist and pays attention to see whether he has an experience of alignment or an experience of congruity. If the result is congruent, the therapist's intuition is confirmed. If not, the therapist may use the Meta-model technique of asking for the missing material.

Conclusion

STRUCTURE OF THE FINAL INCANTATION OF BOOK I

It is not our purpose in this book to deny the magical quality of the therapeutic wizards whom we have experienced, but rather to show that magic, like other complex human activities, has structure and, given the resources, is, therefore, learnable. This book is one resource for a sorcerer's apprentice. This book, itself, like the magic it describes, has a structure.

Human beings live in a real world. We do not, however, operate directly or immediately upon that world, but rather we operate with a map or a series of maps which we use to guide our behavior. These maps, or representational systems, necessarily differ from the territory which they model by the three universal processes of human modeling: Generalization, Deletion, and Distortion. When people come to us in therapy expressing pain and dissatisfaction, the limitations that they experience are typically in their *representation* of the world, not in the world itself.

The most thoroughly studied and best understood of the representational systems of maps is human language. The most explicit and complete model of natural language is transformational grammar. Transformational grammar is, therefore, a Meta-model — a representation of the structure of human language — itself a representation of the world of experience.

Human language systems are themselves derived representations of a more complete model — the sum total of the experience the particular human being has had in his life. Transformational linguists have developed a number of concepts and mechanisms which describe how the way that people actually speak — their

Surface Structures — is derived from their full linguistic representation, the **Deep Structures**. The transformational Meta-model describes these concepts and mechanisms explicitly; these are specific cases of the general modeling processes of Generalization, Distortion and Deletion.

Adapting the concepts and mechanisms of the transformational model of the human representational system of language for the purposes of therapy, we developed a formal Meta-model for therapy. The Meta-model is formal because:

- (a) It is explicit; that is, it describes the process of therapy in a step-by-step manner, guaranteeing that the Meta-model is learnable. This results in an explicit strategy for therapy.
- (b) It is independent of content, dealing with the form of the process, and, therefore, has universal applicability.

The Meta-model relies only upon the intuitions which every native speaker has of his language. The overall implication of the Meta-model for therapy is the notion of *well formed in therapy*. This is a set of conditions which must be met by the Surface Structures which the client uses in therapy in order for these structures to be acceptable. Using this appropriate grammar for therapy, we, as therapists, can assist our clients in expanding the portions of their representations which impoverish and limit them. This results in enriching their lives in such a way that they experience more options in their behavior, more opportunities to experience the joys and richness that life has to offer. When integrated with the people-helper skills which you already have available to you as a therapist, this process of growth and change is profoundly amplified. This language of growth is then truly **THE STRUCTURE OF MAGIC**.

We are delighted to point out not only that the last incantation for growth and potential is that you yourself can use this language of growth to enrich the skills you have as a people-helper, but also that you can use this language of growth to enrich your *own* life and your *own* potential as a human being.

To be continued in *The Structure of Magic II*.

Table of Contents for *THE STRUCTURE OF MAGIC II*

By John Grinder and Richard Bandler

PART I.

Representational Systems — Other Maps for the Same Territory

1. The Structure of the Choice of Choice: Possible Analogue Maps.
2. The Meta-Map of Maps: Identifying the Most Frequently Chosen System of Representation
3. Meta — So What: Change within a Representational System
4. Meta-Tactics I: Changing Representational Systems

PART II.

Incongruity

1. Incongruency: Expanding the Double-Bind Theory
2. Contradictions: A Vice and a Tool
3. Meta — So What: Utilization of Polarity Splits
4. Meta-Tactics II

PART III.

Fuzzy Functions: The Neurology of Choice

PART IV.

Formal Notation

1. Vocabulary
2. Axioms
3. Transformations/Rules of Derivation
4. Generative Formulae

PART V.

Family Therapy — The Delicate Flower

1. What is US: The Family as System
2. What can be US
3. A New US
4. Meta-Tactics

APPENDIX I.

Examples of Utilization of Formal Notation

APPENDIX II.

Future Plans

Appendix A

A BRIEF OUTLINE OF TRANSFORMATIONAL GRAMMAR

What we want to do in this appendix is to present a basic sketch of the structure of human language systems. This sketch is drawn from a formal theory of language known as transformational grammar and constitutes only the briefest outline of that theory.¹

The theory of transformational grammar was developed to explicitly describe patterning in human language systems. You and I, as human beings, have consistent intuitions about the structure of our language and about its transformational grammar as a formal representation of those intuitions. For example, native speakers of English agree that the sequence of English words in (A) forms a sentence of their language while the sequence of words in (B) does not:

(A) *Hans' mother called Sigmund up.*

(B) *Called mother Sigmund Hans up.*

Furthermore, our intuitions are that the words *Hans* and *mother* go together in some way that the words *mother* and *called* do not. Again, when given sentence (C), a native speaker will recognize it as having a special relationship to (A).

(C) *Hans' mother called up Sigmund.*

which he will describe as *saying the same thing or having the same meaning*. Finally, a native speaker of English will identify (D) as a member of a special set of sentences

(D) *Murdering peasants can be dangerous.*

which constitutes the set of ambiguous sentences in English. These different classes of intuitions that you and I have, as native

speakers of a natural language, can be described as:

1. Intuitions which allow me to consistently decide which sequences of words in my language constitute sentences (that is, well-formed sequences) of my language. We will refer to this as *well-formedness*.
2. Intuitions which allow me consistently to decide which words in a sentence go together to form a higher level unit or constituent. We will refer to this as *constituent structure*.
3. Intuitions which allow me consistently to decide which sentences have which kind of logical/semantic relations, relations such as, Which sentences of different structure or form have the same meaning? I will refer to this as *synonymy*. Relations such as, Which sentences have more than one meaning? we will refer to as *ambiguity*.

The grammar of a natural language is intended to represent these three classes of intuitions. The central data that a transformational grammar is designed to present in a systematic way are the intuitions native speakers such as you and I have about the structure of our language. By *consistently decide* we mean both that when we are presented with the same sentence at any two points in time our intuitions about its structure will be constant and also that other native speakers will have the same intuitions about the structure of that sentence. This behavior that we, as native speakers, exhibit is rule-governed behavior. That is to say that, although we may not be conscious of or able to articulate the rules that we use when we make intuitional judgments about the structure of our language, our behavior can be described by some set of explicit rules. Linguists construct grammars by developing these systems of rules. One of the things which such systems specify is which sequences of words in the language are well formed, that is, are sentences. This characteristic of rule systems addresses the first question, the membership question. In what follows, we distinguish between the *components* of the system and the *mechanics of the components* of that system. The major components of the system and the system itself do not involve concepts that are particularly difficult. We want to caution the reader not to become bogged down in the mechanics of the system, and for this reason we have separated them from the system proper.

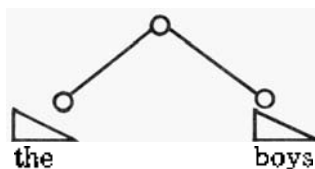
WELL-FORMEDNESS AND CONSTITUENT STRUCTURE

One way of thinking about how grammars work, with respect to well-formedness, is to imagine the situation in which we have a large basket full of small slips of paper. Each slip of paper has a word of the English language written on it. Our friend, Atiko, is with me. Atiko is a member of a tribe called the Dasenetsch of South East Ethiopia. He does not speak or understand English. He draws out ten slips of paper at a time, arranging them from left to right in front of him in the order that he drew them from the basket. Now his task is to decide whether each sequence of ten words constitutes a well-formed sequence of English. We are able to assist him only by supplying him with a grammar or system of rules which he can use to decide whether the sequence is, in fact, well formed. Considered from this point of view, a grammar is a decision procedure which partitions the set of all possible sequences of English words into a set of well-formed sequences and a set of ill-formed sequences. Since Atiko does not know the English language, the rules must be explicit; the process that he uses cannot rely upon his intuitions to make judgments on any of the sequences. Further, if the system of rules constitutes an adequate grammar (with respect to well-formedness), then each member of the well-formed set will be judged well formed by native speakers of English and no member of the other set will be identified as well formed by native speakers. We will present the kind of rule systems used by transformational linguists shortly. These rule systems will be more intelligible if we first discuss constituent structure. Consider sentence (1) below.

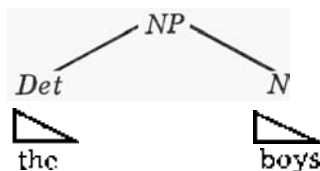
(1) *Dick admitted Spiro had contacted the boys at ITT.*

Sentence (1) is judged by me, by you, and by all speakers of English to be well formed. Now, ask yourself whether you can detect any internal structure to the sentence. For example, do you find that the words *the* and *boys* go together in some intuitive way that the words *boys* and *at* do not? Or, again, do the words *had* and *contacted* go together in some way that *contacted* and *the* do not? For native speakers of English, the answer is *yes* for both of the questions. We can continue through the sentence, using our intuitions about the internal structure of the sentence to decide how to group the individual words in the sentence into higher level, multiple-word units. After we complete this first run through the sentence, we can begin again, this time grouping the initial groupings or constituents into higher level constituents. For example, the constituents *had contacted* and *the boys* go together in some way that *Spiro* and *had contacted* do not. This procedure

is iterative. The intuitions of native speakers of English, like you and me, about the constituent structure of their language are consistent. To repeat, by consistent we mean that, given the same sentence now and again in ten years, our judgments about its internal structure will be constant. Furthermore, our judgments will match those of other native speakers of the language. Within the theory of transformational grammar, these kinds of intuitions are represented by what are called *tree structures*. There is a simple procedure for going from our intuitions to tree representation: words that go together in my intuitive groupings are dominated by (attached to) the same tree node. *The* and *boys* go together according to our intuitions about the initial groupings; therefore, the tree representation will include the structure



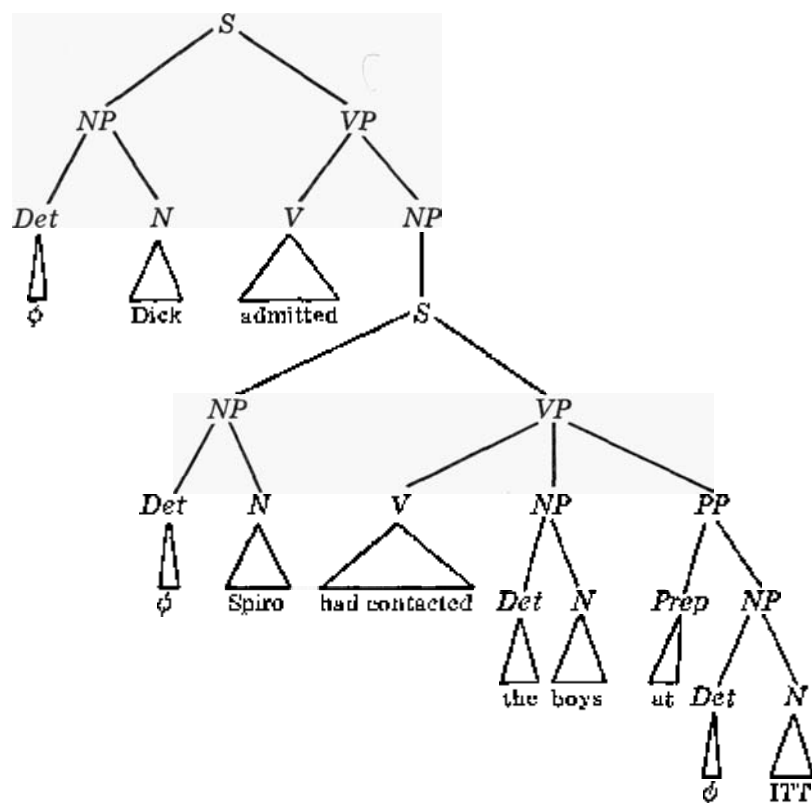
In actual tree representations, the nodes (here represented by O's) carry labels which identify their parts of speech, such as *S* for Sentence, *NP* for Noun Phrase, *VP* for Verb Phrase, *N* for Noun, *V* for Verb, *Det* for Determiner, *PP* for Prepositional Phrase, *Prep* for Preposition, etc. The actual representation for the constituent *the boys* looks like



The tree (2) represents our intuitions about the internal structure of sentence (1): (See page 187)

Now, knowing the procedure for mapping onto tree representations from intuitions about grouping or constituent structure, you can read through the tree structures and see whether your intuitions match ours. For example, the words *had contacted the boys at ITT* form a constituent (*VP*), but not *Spiro* and *had contacted*. This is reflected in the tree structure by the fact that the first sequence is exhaustively dominated (by exhaustively, we mean that the node that dominates these words dominates these words and no others) by a single node, but there is no single node

(2)



which exhaustively dominates the words *Spiro* and *had contacted*. We pointed out earlier that grammars are systems of rules. What, then, does the system of rules which specifies the tree structure (2) look like? In order to make the answer to this question more intelligible to you, we want to take a brief excursion into formal or logical systems.

Formal Systems

Formal systems are composed of three components:²

- a vocabulary
- a set of axioms
- a set of rules of formation or derivation.

The more important concepts (for our purposes here) of formal systems can be illustrated by an extremely simple system — call it *SIMPLE*.³ (See page 188)

System SIMPLEvocabulary: \perp , \lceil , $*$ set of axioms: $*$

rules of formation or derivation:

(a) $* \longrightarrow *$ ((b) $* \longrightarrow \phi$ (The symbol ϕ represents the empty sequence.)

The symbol $_$ means that the material which appears on the left-hand side of it may be replaced by (be re-written as) the material on the right-hand side of the symbol. Now, let's turn SIMPLE on and watch the way it operates. The Meta-rule (a rule about rules) for formal systems of this class specifies that we must justify each statement that we make in the system. There are two possible justifications: either what we write down is an axiom of the system or it is a substitution specified by the rules of derivation from the line which we have just written. To begin, since there are no existing lines, the first line must be the axiom of the system

<i>line</i>	<i>justification</i>
$*$	axiom of the system

Now, we examine the line which we have just written and determine whether any of the symbols written there are on the left-hand side of the rules of derivation. The symbol $*$ is the only candidate, and, in fact, appears on the left hand of both of the rules of derivation for SIMPLE. We then choose one of the rules and write the next line

<i>line</i>	<i>justification</i>
$*$	axiom of the system
) $*$ (by rule of derivation (a)

We now repeat the procedure, scanning the last line and comparing the symbols there with the symbols which appear on the left hand of the rewrite arrows. Within this system, as long as we continue to choose rule of derivation (a), the procedure will continue.⁴

Suppose we choose the rule (a) twice more (See page 189). When we examine the bottom line of the sequence, we find no symbols which occur on the left hand of a re-write arrow. The

<i>line</i>	<i>justification</i>
*	axiom of the system
) * (by rule of derivation (a)
)) * ((by rule of derivation (a)
))) * (((by rule of derivation (a)

What happens now if we choose rule of derivation (b)?

<i>line</i>	<i>justification</i>
*	axiom of the system
) * (by rule of derivation (a)
)) * ((by rule of derivation (a)
))) * (((by rule of derivation (a)
)))) ((((by rule of derivation (b)

procedure now terminates. The results of the procedure, the collection of the lines top to bottom, is called the **derivation**. The final line of any such derivation is called a **theorem** of the system and is said to have been **proven** in the system. Finally, a sequence in the vocabulary of a system is said to be **well formed** if it is a theorem of that system. Looking at the system from an overall point of view, we can see that a sequence in the vocabulary of that system is well formed with respect to that system, just in case there is a derivation proceeding from an axiom of the system by means of the rules of derivation to a sequence which contains no symbol which occurs on the left-hand side of one of the rules of derivation for that system, a theorem. If we collect all of the theorems of a system, we have the set of well-formed sequences in the vocabulary of the system.

Now, we want to explicitly draw the parallelism between the system SIMPLE and natural language systems. The first task that we have when functioning as a linguist is to specify the set of well-formed sequences in the vocabulary of the natural language system for which we are attempting to construct a grammar. Using SIMPLE as a model, then, if we were able to specify a system of rules which gave as theorems for all the sequences of words in that language which native speakers judged to be well formed, then we would have succeeded in answering the membership question.

Some Mechanics of the Membership and Constituent Structure Issues

Let's see what a system of rules for natural language might be.

System DEEP

Vocabulary: *S* (Sentence), *NP* (Noun Phrase), *VP* (Verb Phrase), *N* (Noun), *Det* (Determiner), *V* (Verb), *PP* (Prepositional Phrase), *Prep* (Preposition)

Axiom: *S*

Rules of derivation:

$$(a) S \rightarrow NP \quad VP$$

$$(b) NP \rightarrow \left\{ \begin{array}{l} Det \ N \ (PP) \\ S \end{array} \right\}$$

$$(c) VP \rightarrow V \ (NP) \ (PP)$$

$$(d) PP \rightarrow Prep \ NP$$

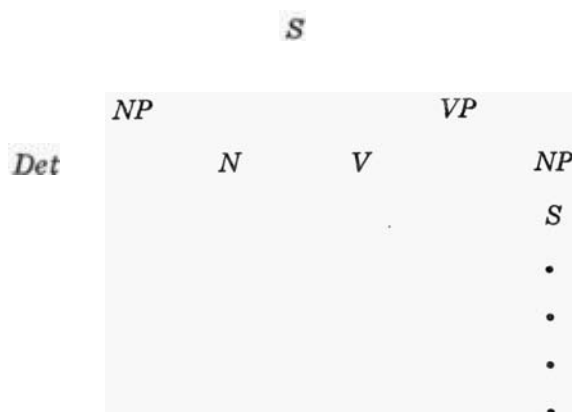
$$NP \rightarrow \left\{ \begin{array}{l} Det \ N \ (PP) \\ S \end{array} \right\}$$

where symbols within parenthesis may be omitted and symbols within brackets represent a disjunctive choice, i.e., choose either one line of symbols or the other but not both.

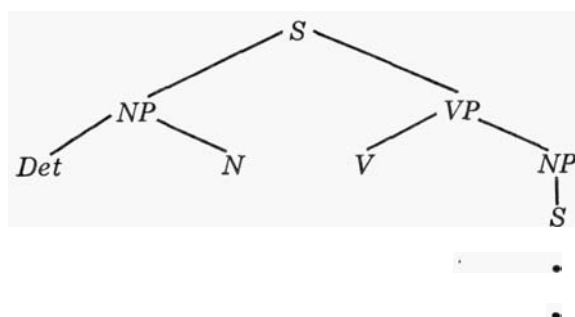
The Meta-rule for this system is the same as that mentioned for SIMPLE — each line of the derivation must either be an axiom or must be derivable from the previous line by a rule of derivation. Applying the procedure we used for SIMPLE, we have

line	justification
<i>S</i>	axiom of the system
<i>NP VP</i>	by rule of derivation a
<i>Det N VP</i>	by rule of derivation b
<i>Det N V NP</i>	by rule of derivation c
<i>Det N V S</i>	by rule of derivation b
<i>Det N V NP VP</i>	by rule of derivation a
<i>Det N V Det N VP</i>	by rule of derivation b
<i>Det N V Det N V NP PP</i>	by rule of derivation c
<i>Det N V Det N V Det N PP</i>	by rule of derivation b
<i>Det N V Det N V Det N Prep NP</i>	by rule of derivation d
<i>Det N V Det N V Det N Prep Det N</i>	by rule of derivation b

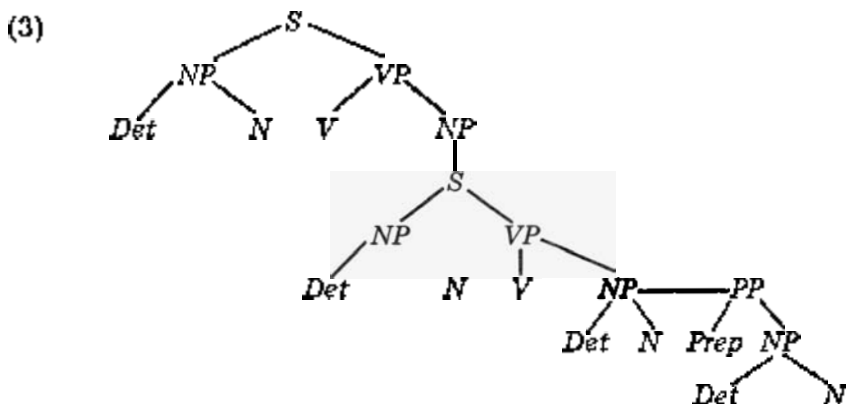
It is not difficult to map from derivations to tree representation; return to the first line of the derivation and begin reading down the derivation line by line. In each line, one rule of derivation was applied to replace one symbol by some other symbol (a). The rest of the symbols in the line have simply been carried down or re-copied from the line immediately above. These symbols carry no new information and are, therefore, redundant. We remove the redundancy by erasing or leaving out all of the symbols in each successive line of the derivation which are not affected by the rule of derivation which was applied. If we perform this operation for this first few lines of derivation, we have the figure



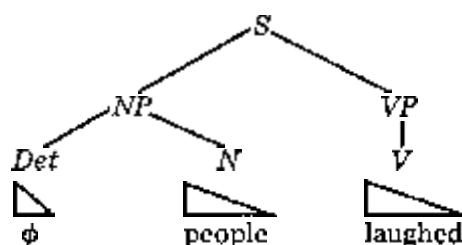
Now, we return to the first line of the derivation, and as we read down, we connect the symbol which was replaced in the upper line of each adjacent pair of lines with the symbol(s) which replaced it in the lower line of the pair. The results for the first few lines look like this:



When we carry out these two procedures for the entire derivation, we have the tree representation



This tree structure is identical to tree structure (2) which we discussed earlier except that the words of English attached to the lowest nodes in tree (2) are missing from this tree. To apply these, we need a lexicon (or enlarged dictionary). This lexicon gives all of the words of English with certain additional information. For example, verbs are listed in this lexicon showing in what kind of tree structure they can be placed. The verb *admit* may fit into a tree structure under a *V* node if that *V* node is followed by an *NP* node,⁵ as in tree structure (2), but it cannot be placed in a tree structure under a *V* node if nothing follows that *V* node, as in



This kind of information listed in the lexicon prevents ill-formed sequences such as⁶

**People admit*

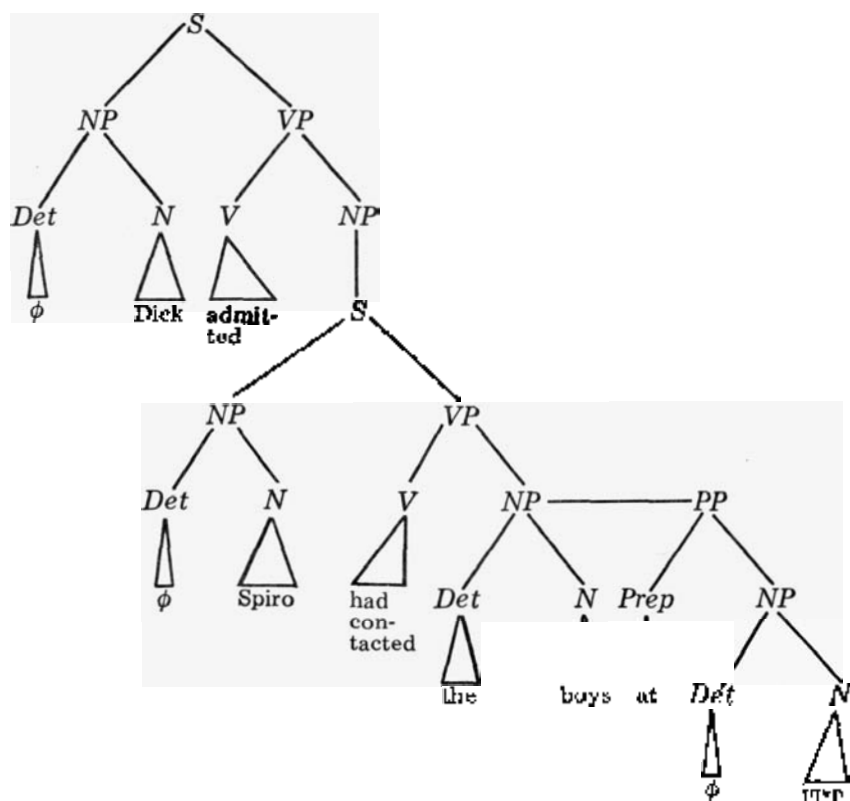
**Dick laughed Spiro had contacted the boys at ITT*

For nouns, the lexicon gives information showing with what kinds of verbs the noun may be used. This information prevents ill-formed sequences such as⁷

**The wall laughed*

**The wall admitted Spiro had contacted the boys at ITT*

In general, then, the lexicon contains sufficient information to capture the dependencies between verbs and their accompanying noun phrases. Given the lexicon, we now need only a rule of substitution which checks the information in the lexicon against the tree structure and places the word involved under the lowest node if there is no conflict between the information in the lexicon and the structure of the tree. If we carry out this substitution operation for tree (3), one of the resulting trees will be tree (2), repeated here for convenience.



What, then, does the system DEEP do for us? First, DEEP represents intuitions about the constituent structure. How? Examine the rules of derivation for DEEP. Take rule (d), for example.

$PP \rightarrow Prep\ NP$

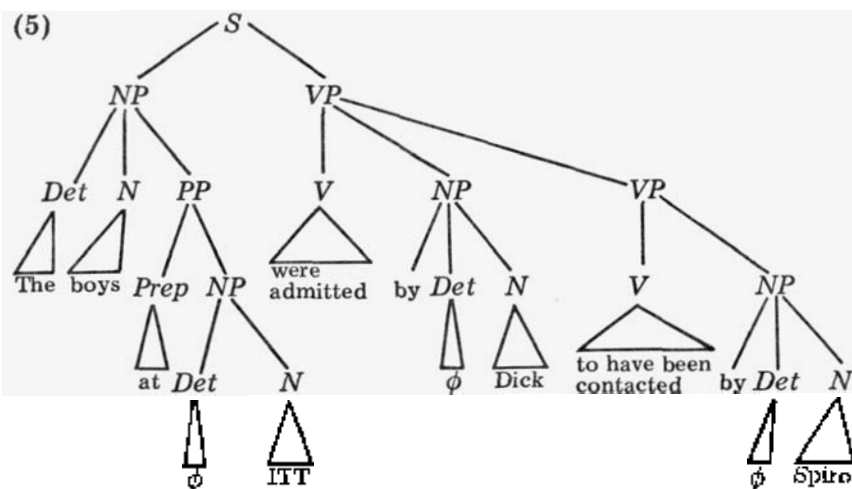
In addition to being interpreted simply as a rule of derivation, rule

(d) can be interpreted as a rule of constituent structure; it makes the general claim that prepositional phrases (in English) are composed of a preposition followed by a noun phrase. More generally, each of the rules of derivation specifies that the symbols which appear on the right-hand side of the re-write arrow are the constituents which are exhaustively dominated by, and therefore replacements for, the symbol which appears on the left-hand side of the arrow. Secondly, the system DEEP is a first approximation for a system which represents intuitions about well-formedness; that is, what are the sentences of English. The answer provided by DEEP is all the theorems of DEEP. How do we decide whether the answer provided by DEEP is accurate? In principle, we just turn DEEP on, collect all of the theorems, and compare that set to the set of sentences identified by native speakers of the language. Practically, however, we can show that DEEP is not a complete answer simply by finding one well-formed sentence of English which is not a theorem of DEEP. Sentence (4) is one such sentence.

(4) *The boys at ITT were admitted by Dick to have been contacted by Spiro.*

How do we decide whether (4) is a theorem of DEEP? First, we go through (4) using our intuitions to determine what the appropriate groupings and, therefore, tree representations for them are. We notice on the initial grouping, for example, that the words *at* and *ITT* go together in some way that neither *boys* and *at* nor *ITT* and *were* do. On the second run through the sentence, we notice that the constituents *were admitted* and *by Dick* go together in a way that neither *at ITT* and *were admitted* nor *by Dick* and *to have been contacted* do. After proceeding systematically through the sentence, we can represent our intuitions by tree structure (5). (See page 195)

Our intuitions represented in this tree structure make several interesting claims. They claim that there is a constituent composed of *by*, followed by a *Det*, followed by an *N*, wherein all three of these constituents are exhaustively dominated by the node *NP*. This claim is sufficient to demonstrate that DEEP is only a partial answer to the membership question. How? By examining the rule of DEEP which specifies what constituents are exhaustively dominated by *NP*, that is, rule of derivation (b). Since no rule of derivation expands *NP* as *by + Det + N*, we see that in no derivation of DEEP (and, therefore, in no theorem of DEEP) can there be a case in which an *NP* directly dominates the element *by*. In order for that configuration to arise, there would have to have been a rule for the form. We, therefore, can conclude that there is



at least one well-formed sequence of English which DEEP fails to enumerate. But before we try to find a way to supplement DEEP with an additional system or some additional rules of derivation, we want to talk about our intuition about synonymy.

SYNONYMY

Check your intuitions about the relationship between sentence (2) and sentence (4), repeated below.

(2) *Dick admitted Spiro had contacted the boys at ITT.*

(4) *The boys at ITT were admitted by Dick to have been contacted by Spiro.*

Native speakers of English judge the sentences (2) and (4) to be synonymous. Synonymy is a relationship which holds between two (or more) sentences when they always have the same truth value — they are always both true or always both false. In other words, assume that the words *Dick* and *Spiro* and *the boys at ITT* refer to the same things as they are used in both sentences (2) and (4). Can you imagine a world, logically consistent, in which one of these sentences is true and the other false? If you are unable to, then the pair is said to be synonymous.⁸ So, not only does sentence (4) represent a counter example to the claim that DEEP is an adequate grammar with respect to well-formedness, but it — along with sentence (2) — brings up the issue of how intuitions of synonymy are to be represented, how to determine which sentences of different form or structure have the same meaning. In

other words, you and I, as native speakers of English, recognize that, although they are of a radically different form or structure, sentences (2) and (4) have a special meaning relationship called synonymy. In both of the sentences, there is an activity or relationship of *admitting* being described. This activity is being carried out by some individual named Dick; the individual(s) to whom an admission is being made is not specified, and what is being admitted is that *Spiro had contacted the boys at ITT*. Furthermore, there is an additional activity or relationship being described, that of *contacting*. This activity of contacting is being carried out by an individual named Spiro, the person(s) being contacted are specified as the boys at ITT, and what Spiro was contacting the boys at ITT about is left unspecified. The kind of intuitions that we are describing now are referred to as meaning or logical relationships. Again borrowing some terminology from logical systems, we will refer to activities or relationships such as *admitting* or *contacting* as *predicates*.⁹ The noun phrases that are associated with these relationships or predicates we will call *the arguments of the predicate*. Using these terms, we can characterize the meaning relations in sentences (2) and (4). The major meaning relationship or predicate in these synonymous sentences is *admit*. The predicate *admit* has three arguments, the individual making the admission (i.e., Dick), the individual to whom the admission is being made (not specified), and the thing that is being admitted (Spiro had contacted the boys at ITT). We can represent these intuitions using a form from logical systems,

(6) admit^3 (Dick, _____, Spiro had contacted the boys at ITT)

where the super-script 3 on the predicate specifies the number of arguments associated with that predicate, and the blank space indicates a missing argument. The third of these arguments is complex, itself being composed of a predicate with its arguments.

(7) contact^3 (Spiro, the boys at ITT, _____)

The unspecified argument of the predicate *contact* is the argument which specifies what it was that the boys at ITT were contacted by Spiro about. We can combine the information in (6) and (7) into a single form

(8) admit^3 (Dick, _____, [contact^3 [Spiro, the boys at ITT, _____]])

These meaning relationships are represented in the theory of transformational grammar at the level of the theorems of DEEP. If you examine sentence (2), you will notice that, except for the arguments that are missing altogether, the logical or meaning relations are expressed directly. For example, the predicates and

their arguments are located contiguously, and the grammatical relations (such as subject of the verb [the first noun phrase to the left of the verb] and logical relations [such as which argument is in first position]) are parallel. The subject of the verb *admit* and the first argument of the predicate is the same noun phrase *Dick*. Notice that the fact that the grammatical relations and the logical relations parallel each other and the fact that sentences (2) and (4) are synonymous could be represented if there were some way of deriving both (2) and (4) from the same structure. This, in fact, is the function that transformations have in grammatical systems.

The Transformational Component

On the basis of what we have already said, there are at least two difficulties that transformations must resolve: the transformational system must represent intuitions about the well-formedness of sentences such as (4), not represented by DEEP, and transformations must represent the intuition that you and I have that the two sentences (2) and (4) mean the same thing, the relationship of synonymy. Both of these objectives can be accomplished by having transformations from the system DEEP and then having transformations derive all of the sentences of the language as the theorems of that system from the theorems of DEEP. The derivation of synonymous sentences is then effected in this way: two (or more) sentences will be considered synonymous just in case they are derived from the same axiom. We want to take a closer look at the transformational system.

The Mechanics of the Transformational Component

The transformational system looks like

System/TRANS

Vocabulary: The vocabulary of system DEEP plus variable names *X*, *Y*, *Z*, etc.

Axioms: The theorems of the system DEEP.

Rules of derivation: The transformations of English.

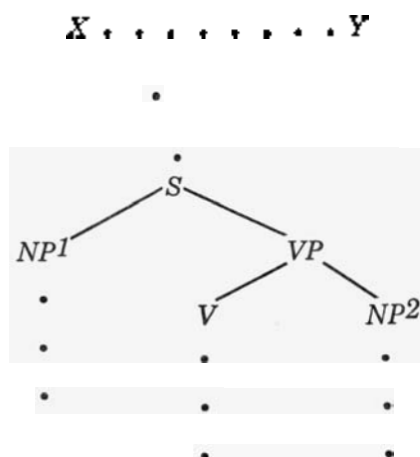
In DEEP, the rules of derivation were of the form

$A \rightarrow BCD$

that is, some symbol is replaced by some other symbol(s). In TRANS, the rules of derivation are somewhat different. Each consists of two parts: the *structural index* and the *structural change*. The purpose of the structural index is to identify the structure of the tree representations which are to be transformed or operated upon. We take the PASSIVE transformation as an example. The structural index for the PASSIVE transformation is:

$X NP1 V NP2 Y$

We read this formula as follows: the structural index of the PASSIVE transformation picks out any tree structure which has the following form: Any sequence of nodes (covered by the variable name *X*), followed by a noun phrase (identified as *NP1*), followed by a verb, followed by another noun phrase (identified as *NP2*). This formula of labeled nodes identifies a whole class of tree representations with the structure specified by the formula, tree representations that are as follows:



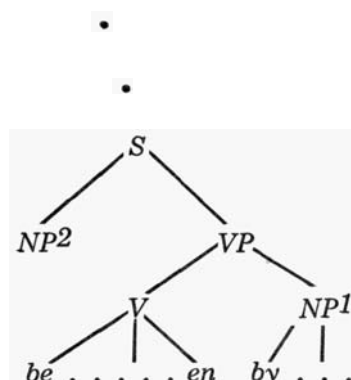
Once the appropriate tree representations are picked out by the structural index, then they may be transformed or mapped into a new tree structure. The purpose of the second part, the structural change, is to specify what changes are to be made to the input tree; that is, the structural change specifies the structure of the output tree. The structural change for the PASSIVE transformation is:

X *NP2* be + *V* + en by + *NP1* *Y*

The structural change of a transformation can be interpreted as instruction for how we are to change the input tree in order to get the right output tree. Specifically, the structural change for the PASSIVE transformation specifies that the structure of the output tree will be all the same nodes which were originally covered by the variable *X*, followed by the noun phrase which in the input tree was to the right of the verb (*NP2*), followed by the element *be*, followed by the verb, followed by the element *en*, followed by the element *by*, followed by the noun phrase which originally

appeared to the left of the verb (*NP1*). So, in tree form, the output of the transformation looks like

X Y

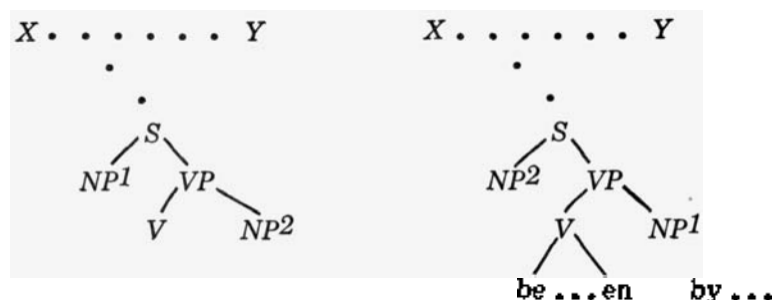


In more general terms, then, the effect of the PASSIVE transformation is, first of all, to permute or alter the order of the two *NPs* identified in the structural index, and secondly, to add some new elements.¹⁰ To show the similarity between this kind of rule of derivation and that of the system DEEP, note that we can present this transformation in the same format as the one that we used for the rules of derivation of DEEP¹¹

X NP1 V NP2 Y → *X NP2 be + V + en by + NP1 Y*

where the material which appears on the left-hand side of the arrow is the structural index and the material which appears on the right-hand side of the arrow is the structural change. I want to point out several differences between the two types of rules: the rules of DEEP accept as input and give as output linear sequences of symbols, while the rules of TRANS accept as input and give as output hierarchically arranged tree structures. The rules of DEEP are stated in a vocabulary which does not include variables, while those of TRANS use variables extensively, and finally, the rules of TRANS have the power to change more than one symbol at a time while those of DEEP do not. In general, the rules of TRANS are much more powerful than the rules of DEEP. Using the tree representations, I show the effect of the transformation PASSIVE (see page 200).

In the grammar of English, linguists have been able to identify a number of transformations. At this point in the presentation of



the system, I want to mention only one additional transformation – RAISING.

$$\begin{array}{ccccccc}
 X & V & [& NP & Y] & Z \rightarrow & X & V & NP & [& Y] & Z \\
 & & & S & S & & & & S & S & &
 \end{array}$$

The overall derivation has the same effect as any derivation in a formal system: it carries the axioms of the system by the rules of derivation into the theorems or well-formed sequences (and, in this case, tree structures) of the system. If you compare the theorem for which we have just given the derivation with the tree representation (4), you will discover that, except for a few node differences which are affected by some minor clean-up transformations of English, the two trees are identical. Now, how does this account for the intuitions of well-formedness and synonymy? First, we showed that the system DEEP failed to account for at least one well-formed sentence of English, namely, sentence (4). Notice now that DEEP plus TRANS, in fact, accounts for that sentence. In order for us to explain how the synonymy question is handled, we need to develop some terminology.

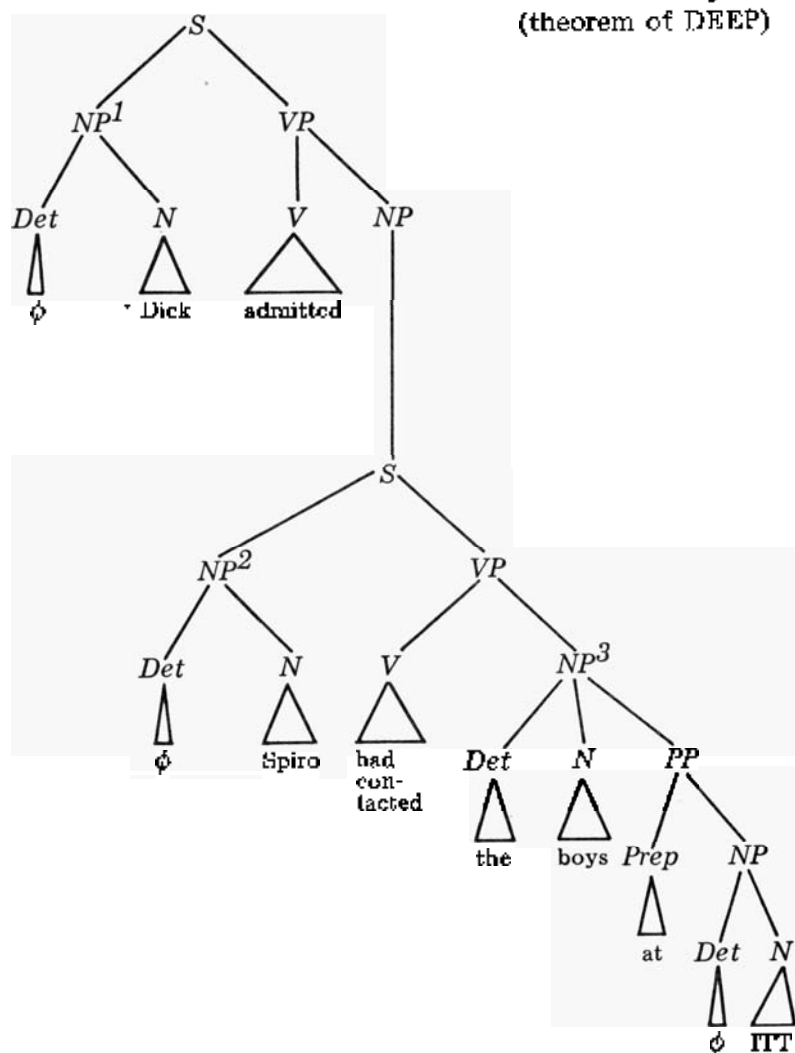
The Complete Model

Within the theory of transformational grammar, each sentence receives a double analysis: an analysis of the constituent structure, or what things go together, and an analysis of the meaning, or logical relations. Transformational grammar makes the claim that, in order to capture the consistent intuitions that you and I have as native speakers of English, two distinct levels of structure must be identified. These are called the Deep Structure and the Surface Structure. The Deep Structure is the level of structure in which the meaning or logical relations information is stated for the sentence under analysis, the Surface Structure is the level of

(a)

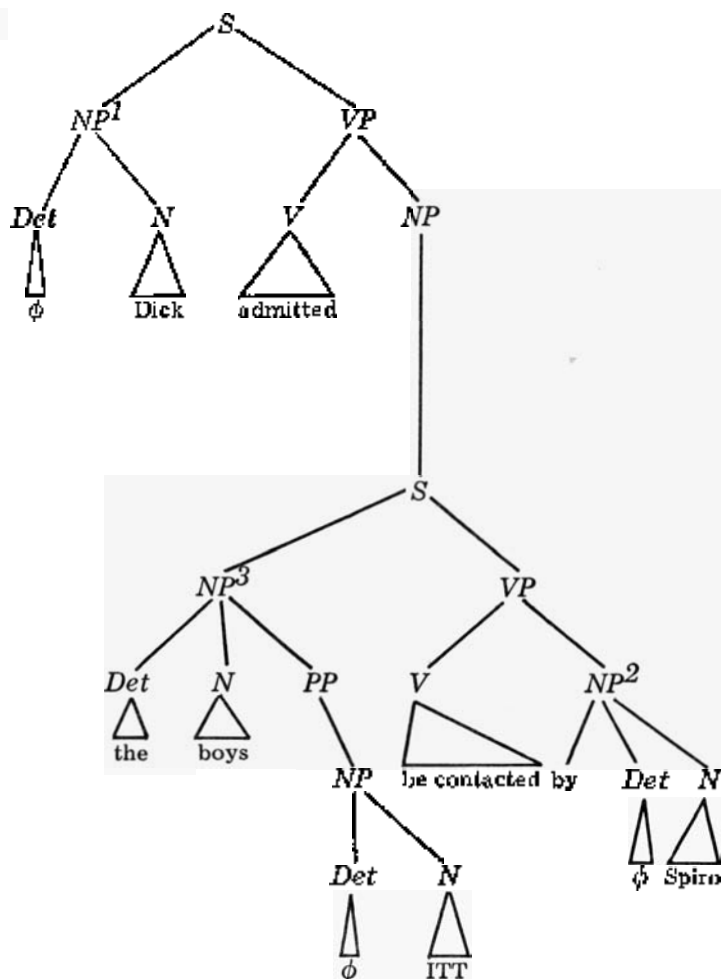
line

justification
 axiom of the system
 (theorem of DEEP)

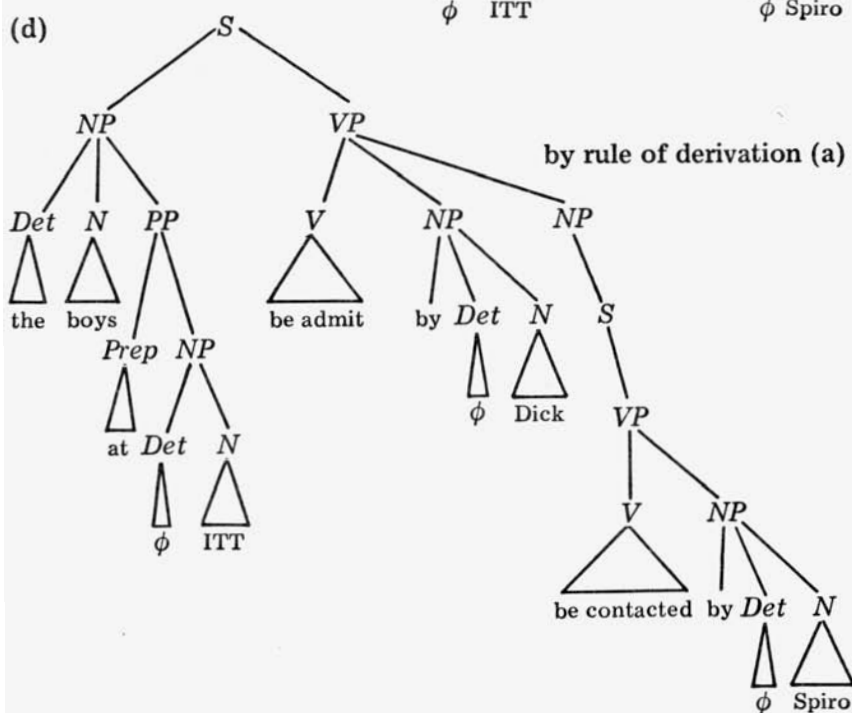
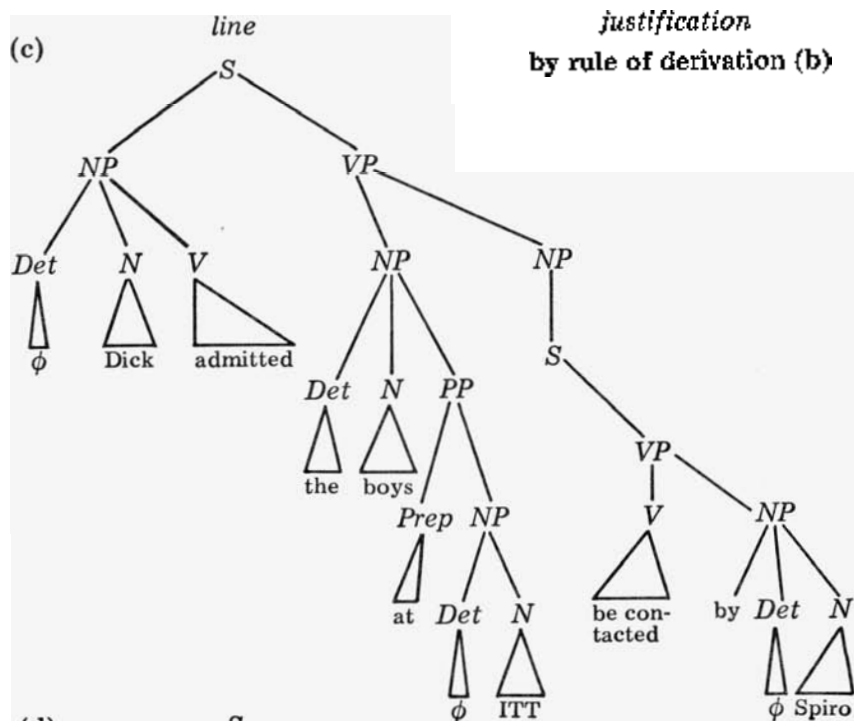


by rule of derivation (a)

(b)



by rule of derivation (a)

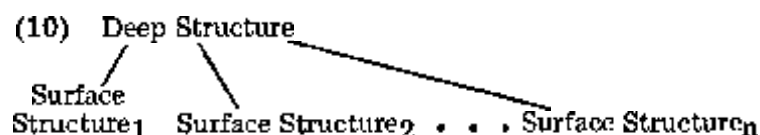


structure in which constituent structure information is stated. The Surface Structure is the form that the sentence actually has when it is used by you and me as native speakers of the language. The Deep Structure never appears directly in the use of the language, although you and I have consistent intuitions about the relations which hold between the elements of the Deep Structure. In terms of the systems that we have been presenting, the Deep Structures of English are the set of theorems for the system DEEP. The theorems of TRANS are the set of Surface Structures of English.

Deep Structures of English — meaning or logical relations (theorems of DEEP)

Surface Structures of English — constituents structure relations (theorems of TRANS)

Now for the relationship of synonymy. The relationship of synonymy is said to hold between two Surface Structures of English if they are derived from the same Deep Structure. Since the point at which meaning relations are stated for the sentences of English is at the level of Deep Structure, the transformations which change the form of that sentence as it goes through its derivation to Surface Structure add no dimensions of meaning. In other words, the meaning of a sentence is independent of the post Deep Structure form that it receives by the transformations which map it into Surface Structure. Another way of stating this result is to say that two theorems of the system TRANS have the same meaning (i.e., are synonymous) just in case they are derived from the same axiom. Figure (10) shows this relation of synonymy.



So each Surface Structure derived from the same Deep Structure is synonymous with every other Surface Structure derived from that same source. Take sentences (2) and (4), which are synonymous:

(2) *Dick admitted Spiro had contacted the boys at ITT.*

(4) *The boys at ITT were admitted by Dick to have been contacted by Spiro.*

There are a number of additional sentences which are theorems of TRANS derived from the same axiom. For example:

(11) *That Spiro had contacted the boys at ITT was admitted by Dick.*

(12) *Dick admitted to someone that Spiro had contacted the boys at ITT about something.*

If you examine sentence (11) carefully, you will see that it is the result of a derivation from the same Deep Structure which includes only one application of the rules of derivation (a), that is, the PASSIVE transformation. Sentence (12) is more important. Remember the discussion of the kind of information which the lexicon contains regarding verbs; specifically, we characterized the verb *admit* as a three-place predicate.

*admit*³ (person admitting, person being admitted to, thing admitted)

In sentence (2), which we have been calling the theorem of DEEP, the counter argument is missing.

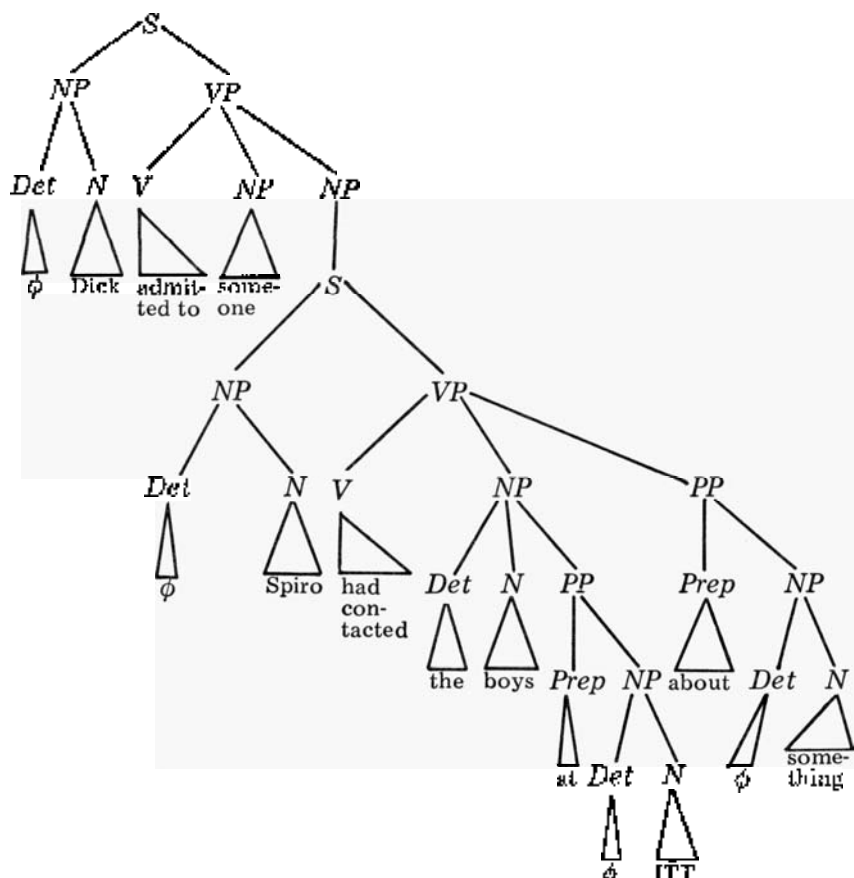
*admit*³ (*Dick*, _____, *Spiro had contacted the boys at ITT*)

Now we can correct an earlier simplification. The actual theorem of DEEP, the Deep Structure underlying (2), (4), and (11), is the tree structure for (12), in which all of the arguments of the predicate *admit* have a representation. The tree structure looks like the following (see page 206).

Since sentence (2) and sentence (12) are synonymous, the system TRANS must derive them from the same theorem. The Surface Structure sentence (12) is virtually identical with its Deep Structure.¹² Two noun phrase arguments are missing from the Surface Structure (2). This fact uncovers for us a distinct and extremely important class of transformations of English. The transformations that we have presented up to this point have had the effect of permuting or changing the order of noun phrase arguments in the tree structure; these are referred to as Permutation transformations. The transformations involved in the derivation of sentence (2) in the system TRANS have, as their effect, the removal of constituents from the tree structure; these constitute the class of Deletion transformations. The specific transformation which is involved in the derivation of (2) is called *Unspecified NP Deletion*. It was applied twice in the derivation of (2) to remove the two constituents *to someone* and *about something*. The existence of this transformation, then, allows us to understand the relationship, that is, the derivation, between axiom (12) and theorem (2).

What we have presented so far is the representation of the consistent intuitions about language for which any adequate grammar of a natural language system must provide. Figure (13) may help you to visualize the entire system (see page 207).

Further, it is at the level of Deep Structure that the meaning of logical relations is stated, while it is at the level of Surface

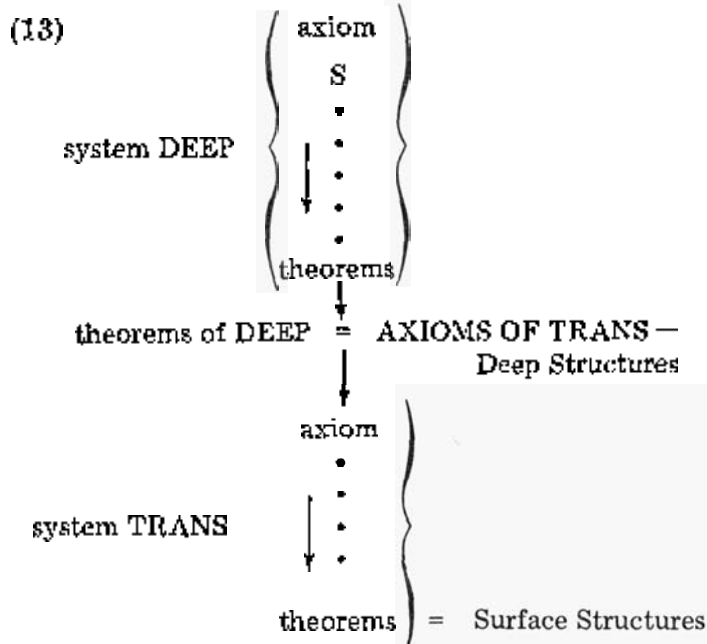


Structure that the constituent structure relations are stated. The set of well-formed membership question sentences in the language is the set of all theorems of TRANS. The intuition of synonymy is answered as every Surface Structure derived from the same Deep Structure is synonymous with every other Surface Structure derived from that Deep Structure.

The last of the three intuitions can now be represented, *ambiguity*. Ambiguity refers to the experience native speakers have when they understand a sentence to have more than one distinct meaning. Sentence (14) is the example of an ambiguous sentence which we presented earlier.

(14) *Murdering peasants can be dangerous.*

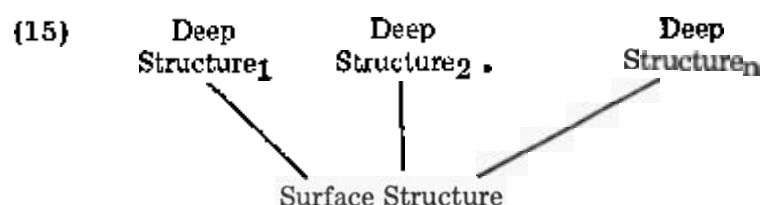
Our intuitions about this sentence are that it can be understood to mean either that peasants who murder can be dangerous or that for someone to murder peasants can be dangerous. If we represent



these two distinct meanings by the symbols *A* and *B*, then how can we account for this property of ambiguity within the system of transformational grammar that we have developed here? The answer is quite simple: consider the case of synonymy. Synonymy is the case in which the same Deep Structure maps onto more than one Surface Structure. Ambiguity is the inverse of synonymy, namely, where different Deep Structures map onto the same Surface Structures. In other words, a Surface Structure will be ambiguous if there is more than one derivation leading from distinct Deep Structures. If there are two such derivations, then the Surface Structure which results is ambiguous in two ways, that is, it is connected by derivations with two distinct Deep Structures. If there are *n* such derivations, then the resulting Surface Structure is *n* ways ambiguous. Figure (15) may help you to see the relationship of ambiguity in transformational terms (see page 208).

This last characterization of the relationship of ambiguity in transformational terms completes the sketch of the theory of transformational grammar which we want to present in this work.

Transformational grammar is the name of the portion of the field of linguistic research which we have used as a reference point in adapting linguistic models as a Meta-model for therapy. At this point in time in the development of the field of transformational



grammar, there are at least two groups of researchers who consider themselves and members of the other group to have a distinctive and competing model for the dominant paradigm in linguistics. These two groups call their models the Extended Standard Theory and the Generative Semantics models. The concepts and processes which we have selected from transformational grammar are available in both models. In other words, both groups of people will be able to identify the formally equivalent concepts and processes in their model. Models are useful for much that falls outside formal equivalence. Specifically, the names of the concepts and processes given to the experiences of having intuitions about language present different images. They suggest through mechanisms such as presuppositions, entailments, invited inferences, and the syntax of their expression different perceptions and attitudes. The majority of the names we have chosen to use here are drawn from the Extended Standard Theory. For the purposes of perceiving language while doing linguistics analysis and for formal elegance, we chose the Generative Semantics model. For the purposes of describing our experiences in therapy, in talking to people training themselves to be therapists, we have found the terminology of the Extended Standard Theory more useful; thus, it was our choice in this book. We have attempted in the Glossary to give the notational equivalences in the Generative Semantics model for the terms used here in the cases which seem important to us. We have an intuition that the Generative Semantics model will be most useful in the area of Logical Semantic relations. Some fine work is being done in that area by linguists George Lakoff, Lauri Karttunen, Georgia Green, Jerry Morgan, Larry Horn, Paul Postal, Haj Ross, Masaki Yamanashi, Dave Dowty, etc.; by logicians Hans Herzberger, Bas van Fraassen, Saul Kripke, etc.; and by people in Artificial Intelligence such as Roger Schank, Terry Winograd, etc. These kinds of images have been useful to both of us in representing and communicating our experiences in therapy.

FOOTNOTES FOR APPENDIX A

1. For a fuller presentation of the theory of transformational grammar, see Chomsky (1957), (1965); Grinder and Elgin (1973); Langacker (1973); etc.

2. For a fuller discussion, see any introductory logic text; for example, Tarsky (1943), Kripke (1972).

3. Because it is.

4. Since there is no limit to the number of times that we may choose rule of derivation (a), there is no longer sequence of lines, and, therefore, the set of lines generated is infinite. Actually, if you examine the structure of the set of rules of derivation, you'll find that the axiom expands into itself; that is, the symbol Ξ appears on both sides of the re-write arrow. The symbol, therefore, is constantly replacing itself. This property of rule system is called recursion; it guarantees that the set will generate an infinite set of lines of derivation.

5. This is actually incomplete as the verb *admit* goes into a tree structure in which the verb is followed by two *NP* nodes; we will correct this later.

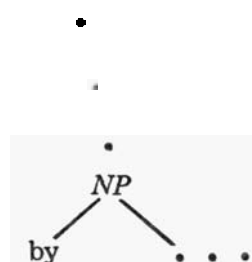
6. What is going on in the sentences listed is that the structural requirements of the verbs involved are being violated. For example, the verb *laugh* requires that it not be followed by some noun phrase. In more traditional grammatical terms, the verb *laugh* is an intransitive verb; it takes no direct object.

7. What is going on in the sentences listed is that the meaning requirements, or the selectional restrictions of the verbs, are being violated. Verbs such as *laugh* and *admit* require that their subjects be human (or, at least, animate).

8. If you are able to, phone us and charge it to the publisher.

9. See any introductory treatment of the predicate calculus; for example, in the sources listed in Footnote 6.

10. Notice that the transformation itself created the constituent structure which we could not account for by the rules of derivation for DEEP. Specifically, the sub-tree



11. The similarities and differences in different classes of rules are studied in Automata Theory, and the results of this field have been extremely important in linguistics, both in evaluating older models of language structure and in developing new models. See, for example, T. L. Booth's *Sequential Machines and Automata Theory* (John Wiley and Sons, Inc., 1967). For comments on the relationship and importance of results in this field to the field of linguistics, see Chomsky, and G. A. Miller (1958, 1963), Chomsky (1959a, 1959b, 1963).

12. Once again, we are simplifying here; for example, the PP *at ITT* in a more complete analysis would be identified as itself being derived from an entire sentence in Deep Structure.

Appendix B

SYNTACTIC ENVIRONMENTS FOR IDENTIFYING NATURAL LANGUAGE PRESUPPOSITIONS IN ENGLISH

Our purpose in presenting the material in this appendix is to indicate the scope and complexity of the natural language phenomenon of presuppositions. In addition, by listing some of the more common syntactic environments in which presuppositions occur we provide an opportunity to practice for those students who are interested in sharpening their intuitions in recognizing presuppositions. The list of syntactic environments is not exhaustive, and we will not attempt to present any of the theories which have been proposed by different linguists, logicians, semanticists, or philosophers to account for presuppositions. Rather, our objective is more practical.

At the present time, presuppositions are a major focus of study for a number of linguists, especially linguists who consider themselves Generative Semanticists. In compiling this list of syntactic environments, we have borrowed heavily from the work of Lauri Karttunen. See the Bibliography for sources.

1. *Simple Presuppositions.*

These are syntactic environments in which the existence of some entity is required for the sentence to make sense (to be either true or false).

(a) *Proper Names.*

(*George Smith* left the party early.) → (There exists someone named *George Smith*) where → means presupposes

- (b) **Pronouns.** *Her, him, they*
(I saw *him* leave.) → (There exists some male [i.e., him])
- (c) **Definite Descriptions.**
(I liked *the woman with the silver earrings.*) →
(There exists a woman with silver earrings.)
- (d) **Generic Noun Phrases.**
Noun arguments standing for a whole class. (If *wombats* have no trees to climb in, they are sad.)
(There are wombats.)
- (e) **Some Quantifiers.** *All, each, every, some, many, few, none*
(If *some of the dragons* show up, I'm leaving.)
→ (There are dragons.)

2. Complex Presuppositions.

Cases in which more than the simple existence of an element is presupposed.

- (a) **Relative Clauses.**
Complex noun arguments, with a noun followed by a phrase beginning with *who, which, or that*.
(*Several of the women who had spoken to you* left the shop.) → (Several women had spoken to you.)
- (b) **Subordinate Clauses of Time.**
Clauses identified by the cue words *before, after, during, as, since, prior, when, while* (If the judge was home *when I stopped by her house*, she didn't answer her door.) → (I stopped by the judge's house.)
- (c) **Cleft Sentence.**
Sentences beginning with *It* { ^(was) *is* } noun argument,
(It was the extra pressure which shattered the window.) → (Something shattered the window.)
- (d) **Pseudo-Cleft Sentences.**
Identified by the form, *What* [Sentence] *is* [sentence] (What Sharon hopes to do is to become well liked.) → (Sharon hopes to do something.)
- (e) **Stressed Sentences.**
Voice stress (If Margaret has talked to **THE POLICE**, we're finished.) → (Margaret has talked to someone.)

- (f) **Complex Adjectives.** *New, old, former, present, previous*
(If Fredo wears his new ring, I'll be blown away.)
→ (Fredo had/has an old ring.)
- (g) **Ordinal Numerals.** *First, second, third, fourth, another*
(If you can find a third clue in this letter, I'll make you a mosquito pie.) → (There are two clues already found.)
- (h) **Comparatives.** *-er, more, less*
(If you know better riders than Sue does, tell me who they are.) → (Sue knows [at least] one rider.) (If you know better riders than Sue is, tell me who they are.) → (Sue is a rider.)
- (i) **Comparative As.** *As x as . . .*
(If her daughter is *as funny as* her husband is, we'll all enjoy ourselves.) → (Her husband is funny.)
- (j) **Repetitive Cue Words.** *Too, also, either, again, back*
(If she tells me that *again*, I'll kiss her.) → (She has told me that before.)
- (k) **Repetitive Verbs and Adverbs.**
Verbs and adverbs beginning with *re-*, e.g., *repeatedly, return, restore, retell, replace, renew*, (If he returns before I leave, I want to talk to him.) → (He has been here before.)
- (l) **Qualifiers.** *Only, even, except, just*
(*Only* Amy saw the bank robbers.) → (Amy saw the bank robbers.)
- (m) **Change-of-Place Verbs.** *Come, go, leave, arrive, depart, enter*
(If Sam has *left* home, he is lost.) → (Sam has been at home.)
- (n) **Change-of-Time Verbs and Adverbs.** *Begin, end, stop, start, continue, proceed, already, yet, still, anymore*
(My bet is that Harry will *continue* to smile.) → (Harry has been smiling.)
- (o) **Change-of-State Verbs.** *Change, transform, turn into, become*
(If Mae *turns into* a hippie, I'll be surprised.) → (Mae is not now a hippie.)
- (p) **Factive Verbs and Adjectives.** *Odd, unaware, know, realize, regret*
(It is *odd* that she called Maxine at midnight.) → (She called Maxine at midnight.)

- (q) **Commentary Adjectives and Adverbs.** *Lucky, fortunately, far out, out of sight, groovy, bitchin, . . . innocently, happily, necessarily*
 (It's *far out* that you understand your dog's feelings.) → (You understand your dog's feelings.)
- (r) **Counterfactual Conditional Clauses.**
 Verbs having subjunctive tense. (*If you had listened to me and your father, you wouldn't be in the wonderful position you're in now.*) → (You didn't listen to me and your father.)
- (s) **Contrary-to-Expectation *Should*.**
(If you should [happen to] decide you want to talk to me, I'll be hanging out in the city dump.)
 → (I don't expect you want to talk to me.)
- (t) **Selectional Restrictions.**
 (If my professor gets *pregnant*, I'll be disappointed.) → (My professor is a woman.)
- (u) **Questions.**
 (Who ate the tapes?) → (Someone ate the tapes.) (I want to know who ate the tapes.) → (Someone ate the tapes.)
- (v) **Negative Questions.**
 (*Didn't* you want to talk to me?) → (I thought that you wanted to talk to me.)
- (w) **Rhetorical Questions.**
 (Who cares whether you show up or not?) → (Nobody cares whether you show up or not.)
- (x) **Spurious *Not*.**
 (I wonder if you're *not* being a little unfair.) → (I think that you're being unfair.)

Glossary

Ambiguity: The name of the experience that people have with sentences that mean more than one thing, e.g., *Murdering peasants can be dangerous*. This sentence is understood by native speakers of English in two ways: (1) where the peasants mentioned are doing the murdering, and (2) where the peasants mentioned are being murdered. In the transformational model of language, a Surface Structure is said to be ambiguous if it can be derived from more than one Deep Structure.

Analogical: An adjective which describes any process which is continuous in nature. Two of the best known forms of analogical communication are body expression and voice tone.

Completeness: A logical semantic property of the full linguistic representation, the Deep Structure. Surface Structures are complete if they represent every portion of the Deep Structure.

Deep Structure: The full linguistic representation from which the Surface Structures of the language are derived.

Deletion: One of the three universals of human modeling; the process by which selected portions of the world are excluded from the representation created by the person modeling. Within language systems, deletion is a transformational process in which portions of the Deep Structure are removed and, therefore, do not appear in the Surface Structure representation.

Digital: An adjective which describes any process which is discrete in nature. The best known digital communication system is language.

Distortion: One of the three universals of human modeling; the process by which the relationships which hold among the parts of the model are represented differently from the relationships which they are supposed to represent. One of the most common examples of distortion in modeling is the representation of a process by an event. Within language systems, this is called *nominalization*.

Enrichment: The process of increasing the number of distinctions in a model. In therapy, the process by which a person comes to have more choices in his behavior.

Explicit: Presented in a step-by-step manner; not relying on interpretation.

Extensional: Definition by a listing of each specific member of the category being defined.

Formal: Used in two senses in this book: (1) explicit; (2) independent of content.

Generalization: One of the three universals of human modeling; the process by which a specific experience comes to represent the entire category of which it is a member.

Impoverishment: The process of limiting the number of distinctions in a model. In therapy, the process by which a person comes to have a small number of choices or no choice in his behavior.

Intensional: Definitional by a characteristic(s) of the members of the category being defined rather than by listing the specific members.

Intuition: Consistent judgments made by people (typically, without an explanation of how these judgments are made). Within language systems, the ability of native speakers of a language to make consistent judgments about the sentences of their language; for example, their ability to decide which sequences of words in their language are well-formed sentences. A classic example of human rule-governed behavior.

Meta-model: A representation of a representation of something. For example, language is a representation of the world of experience; transformational grammar is a representation of language and, therefore, a Meta-model.

Model/Modeling: A representation of something/the process of representing something; a map, for example. A process which involves the three processes of Generalization, Distortion, and Deletion.

Nominalization: The linguistic representation of a process by an event.

- Presupposition:** A basic underlying assumption which is necessary for a representation to make sense. Within language systems, a sentence which must be true for some other sentence to make sense.
- Reference Structure:** The sum total of experiences in a person's life history. Also, the fullest representation from which other representations within some system are derived; for example, the Deep Structure serves as the Reference Structure for Surface Structure.
- Representation:** An image of something which is different from the thing itself; a map, a model.
- Rule-Governed Behavior:** Behavior which is systematic and can be represented explicitly by a set of rules. In the case of human rule-governed behavior, no awareness of the rules is necessary.
- Semantics:** The study of meaning.
- Synonymy:** The name of the experience which people have with sentences of distinct form which have the same meaning; e.g., *The cat chased the rat* and *The rat was chased by the cat*. In the transformational model of language, two or more sentences are said to be synonymous if they are derived from the same Deep Structure.
- Syntax:** The study of the order and patterning of elements of a system. Within language, the study of the order and patterning of words and phrases.
- Surface Structure:** The sentences, derived from Deep Structure, which native speakers of the language speak and write.
- Well-Formed:** Meeting some set of conditions about form; e.g., well-formed in English, well-formed in therapy.

Bibliography

In this bibliography, our purpose is to provide references which will allow you to pursue any interests of which you have become aware in reading our book. We have divided the references into three sections:

Section I.

Transformational Grammar

Section II.

Therapy

Section III.

Modeling/Formal Systems/Epistemology

In each of these sections, we identify a small number of works which we have found particularly useful in developing our own models. The references given are not exhaustive, nor are they the only places where the ideas they contain can be found. We hope you enjoy your reading. If you know of other reference works which you have found particularly clear and useful in your experience in these areas, we would each appreciate hearing from you about them. Finally, if you wish to pursue some idea or line of thought or experience set off by our book and the bibliography is inadequate for your purposes, write to us and we will each try to suggest references for you.

META-MODELS

c/o Science and Behavior Books, Inc.

P.O. Box 11457

Palo Alto, CA 94306

I. Transformational Grammar

A. Basic References

- Bach, E. *Syntactic Theory*. New York: Holt, Rinehart and Winston, Inc., 1974. A carefully presented overview of syntax as done by transformationalists.
- Chomsky, N. *Syntactic Structures*. The Hague: Mouton, 1957. The book which established the transformational model in linguistics; the style Chomsky uses is difficult for many readers. The portions of the book most connected with the Meta-model are the Preface; Chapters 2, 3, 5, 6, 8; and the Summary.
- Chomsky, N. *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press, 1965. This is one of the most accessible descriptions of the linguistic model from which we have borrowed heavily. Again, some readers find the author's style difficult. We especially recommend Chapters 1 and 2.
- Chomsky, N. *Language and Mind*. New York: Harcourt Brace Jovanovich, Inc., 1968. Four lectures which Chomsky gave as a visiting professor at Berkeley; less technical than his other two works we list.
- Grinder, J., and Elgin, S. *A Guide to Transformational Grammar*. New York: Holt, Rinehart and Winston, 1973. A very comprehensive overview of the entire field of transformational grammar; includes summaries of, and commentaries on, Chomsky's *Syntactic Structures* and *Aspects*. See especially Chapters 1, 2, 4, 5, 6, 7, 8, 10, and 13.
- Jacobs, R., and Rosenbaum, P. *English Transformational Grammar*. Waltham, Mass.: Ginn/Blaisdell, 1968. A very readable work as an introduction to the field; not particularly comprehensive.
- Langacker, R. *Language and Its Structure*. New York: Harcourt Brace Jovanovich, Inc., 1967. A readable introduction which treats language both by the transformational model and more generally.
- Lyons, J. *Introduction to Theoretical Linguistics*. Cambridge, England: Cambridge University Press. A scholarly work which presents an overview of language in general; includes a section on the transformational model.

B. Other Useful Transformational Work

- Bever, T. G. "The Cognitive Basis of Linguistic Structure."

- In J. Hayes (ed.), *Cognition and the Developments of Language*. New York: John Wiley and Sons, 1970. An excellent account of how language as a representational system might be connected to general modeling abilities of human beings — especially the way that children develop these abilities.
- Fillmore, C. "The Case for Case." In E. Bach and R. Harms (eds.), *Universals in Linguistic Theory*. New York: Holt, Rinehart and Winston, 1968. A readable account of a somewhat different version of the transformational model — useful suggestions about what a complete representation of reference structure might be.
- Greene, G. "How to Get People to Do Things With Words." In *Papers from the 8th Regional Meeting of the Chicago Linguistic Society*. Chicago, Ill.: University of Chicago, 1970. An excellent example of the Generative Semantics approach which we feel will contribute much to an enlarged Meta-model for therapy.
- Grinder, J. *On Deletion Phenomena in English*. The Hague: Mouton, 1974. Very technical; useful for discussion of different types of deletion. See Chapters 1, 2, and 3.
- Gruber, J. "Studies in Lexical Relations." Unpublished doctoral dissertation, MIT, 1965. Excellent suggestion for a complete representation of reference structures.
- Horn, L. "A Presuppositional Analysis of *Only* and *Even*." In *Papers from the 5th Regional Meeting of the Chicago Linguistic Society*. Chicago, Ill.: University of Chicago, 1969. Another fine example of the Generative Semantics type of research which we feel will contribute to an enlarged Meta-model for therapy.
- Karttunen, L. "Remarks on Presuppositions." At the Texas Conference on Performances, Conversational Implicature and Presuppositions, mimeograph, March 1973. Karttunen has a series of incisive papers on presuppositional phenomena in English. We suggest you write to him directly at the University of Texas for copies.
- Katz, J. *Semantic Theory*. New York: Harper and Row, 1972. A most up-to-date account of the kind of semantic theory most compatible with non-Generative Semantics transformational grammar.
- Lakoff, G. *Linguistics and Natural Logic*. Ann Arbor, Mich.: University of Michigan, 1970. A valuable compendium of some of the more recent work in Generative Semantics.

- tive Semantics by its most prolific spokesperson. G. Lakoff is presently at the University of California, Berkeley.
- McCawley, J. "Lexical Insertion in a Transformational Grammar." In *Papers from the 4th Regional Meeting of the Chicago Linguistic Society*. Chicago, Ill.: University of Chicago, 1968. One of the initial articles establishing Generative Semantics; good suggestions about the representation of reference structures.
- Postal, P. "On the Derivation of Pseudo-Adjectives." Paper delivered to the 44th Annual Meeting of the LSA, 1969.
- Postal, P. "On the Surface Verb *Remind*." In *Linguistic Inquiry*, 1; 1:37-120. Postal's work is highly theoretical; the first reference has excellent examples of the patterns of derivation as Deep Structure Predicates are mapped into Surface Structure Adjectives. The second reference is very useful in making suggestions about the representation of reference structures.
- Ross, J. R. "On Declarative Sentences." In R. Jacobs and P. Rosenbaum, *Readings in English Transformational Grammar*. Waltham, Mass.: Ginn/Blaisdell, 1970. This is the linguistic basis for the section in Chapter 4 called *The Last Performative* and an excellent example of linguistic analysis.
- Sapir, E. *The Selected Writing of Edward Sapir*. D. Mandelbaum (ed.). University of California Press, Berkeley, 1963. One of the classical linguists who had a fine sensitivity for modeling.
- Searle, J. *Speech Acts*. Cambridge, England: Cambridge University Press, 1969. A modern work in pragmatics with the transformational model as a basis. Readable.
- Whorf, B. "Grammatical Categories." In J. E. Carroll (ed.), *Language, Thought and Reality*. New York: John Wiley and Sons, 1956. Another classical linguist who addressed the issue of the way language shapes perception.

II. Therapy

- Jackson, D. D. *Communication, Family and Marriage*. Palo Alto: Science and Behavior Books, 1968. An excellent anthology containing the papers of the MRI/Bateson research group.
- Jackson, D. D. *Therapy, Communication and Change*. Palo

Alto: Science and Behavior Books, 1968. An excellent anthology containing the papers of the MRI/Bateson research group.

Haley, J. *Advanced Techniques of Hypnosis and Therapy: Selected Papers of Milton H. Erickson, M.D.* New York: Grune and Stratton, 1967. An incredible collection of papers describing the powerful techniques of Milton Erickson.

Haley, J. *Uncommon Therapy*. New York: Grune and Stratton, 1968. A valuable statement of Erickson's powerful work with an interesting commentary by Jay Haley.

Perls, F. *The Gestalt Approach: Eyewitness to Therapy*. Palo Alto: Science and Behavior Books, 1973. A clear presentation of Gestalt therapy theoretical foundations.

Polster, I. and M. *Gestalt Therapy Integrated*. New York: Bruner/Mazel, 1973. A useful presentation of some of the techniques of Gestalt therapy.

Satir, V. *Conjoint Family Therapy*. Palo Alto: Science and Behavior Books, 1964. A basic and most useful text on family therapy.

Satir, V. *Peoplemaking*. Palo Alto: Science and Behavior Books, 1972. An excellent and highly readable introduction to communications and therapy.

Watzlawick, P.; Beavin, J.; and Jackson, D. *Pragmatics of Human Communications*. New York: W. Norton, 1967. A highly readable presentation of Bateson's ideas (e.g., meta-communication).

Watzlawick, P.; Weakland, J.; and Fisch, R. *Change*. New York: W. Norton, 1974. An interesting attempt to integrate mathematical models with patterns of human change.

III. Modeling/Formal Systems/Epistemology

Ashby, W. R. *An Introduction to Cybernetics*. Chapman and Hall, Ltd., and University Paperbacks, 1956. An excellent introduction to modelings and representational systems; requires some mathematical background; worth working through carefully.

Bateson, G. *Steps to an Ecology of Mind*. New York: Ballantine Books, 1972. We recommend this book highly; it is a collection of Bateson's work. Very entertaining; simultaneously irrelevant and profound.

- Boyd, D. *Introduction to Systems Analysis*, (in press) 1975. A highly readable, clear presentation of modeling; emphasizes process.
- Carnap, R. *The Logical Syntax of Language*. Totowa, New Jersey: Littlefield, Adams and Company, 1959. A formal, sophisticated approach to linguistic analysis. A highly technical piece of work; difficult to read.
- Copi, I. *Introduction to Logic*. New York: Macmillan, 1961. An excellent introductory text to logical systems.
- Herzberger, H. "The Logical Consistency of Language." *Harvard Educational Review*, 35:469-480; 1965. An example of a clear philosophical analysis of one of the formal properties of the human representational system of language.
- Hume, D. *Enquiry Concerning Human Understanding*. Oxford, England: Oxford University Press. A classical essay on epistemology, the process of human modeling.
- Korzybski, A. *Science and Sanity*. Lakeville, Connecticut: The International Non-Aristotelian Library Publishing Company, 4th Edition, 1933. The basic reference work for general semantics. Korzybski understood and discussed clearly the map/territory, intentional/extensional distinctions, . . . in human modeling. Read the Prefaces, Part I, and Part II.
- Miller, G. A.; Galanter, E.; and Pribram, K. *Plans and the Structure of Behavior*. New York: Holt, Rinehart and Winston, Inc., 1960. One of the clearest presentations of a theoretical basis for human behavior; suggestions for a representational system for reference structures; easy and enjoyable reading.
- Newell, A.; and Simon, H. A. *Human Problem Solving*. Englewood Cliffs, New Jersey: Prentice-Hall, 1971. An exciting excursion into the neurological basis for human modeling. A clear presentation.
- Russell, B. *Introduction to Mathematical Philosophy*. London, England: George Allen and Unwin, Ltd., 2nd Edition, 1921. A readable, clear presentation of some of the more important concepts of modern logic, including theory of logical types.
- Schank, R.; and Colby, K. *Computer Models of Thought and Language*. San Francisco: W. H. Freeman and Company. 1973. A good, representative collection of

modeling as done in computer simulations.

- Tarski, A. *Introduction to Logic*. New York: Oxford University Press, 1941. An excellent introduction to logical systems, a very readable style, no background required.
- Vaihinger, H. *The Philosophy of "As If."* London, England: Routledge, Kegan and Paul, Ltd., 1924. An excellent source for discussions of human modeling. F. Perls claimed Vaihinger supplied the philosophical foundations for his Gestalt therapy.
- Watzlawick, P.; Beavin, J.; and Jackson, D. *Pragmatics of Human Communication*. New York: W. W. Norton and Company, 1967. A very readable, clear presentation of some of the basic ideas of communication with connections to systems analysis.

**THE STRUCTURE
OF
MAGIC
II**

By
JOHN GRINDER
and
RICHARD BANDLER

Science and Behavior Books, Inc.
Palo Alto, California 94306

© Copyright 1976 by Science and Behavior Books, Inc. Printed in the United States of America. All rights reserved. This book or parts thereof may not be reproduced in any form without written permission of the Publisher.

Library of Congress Card Number 75-12452
ISBN 08314-0049-8

Typography by Penguin ~ Santa Clara, California

20
7/80.5
022
1.2

To
Leslie Cameron
one of the world's most creative
family therapists
and to
Steve Gilligan
one of the world's most effective
hypnotists
with
our deepest respect

Table Of Contents

PART I

Representational Systems -- Other Maps For The Same Territory	1
--	---

PART II

Incongruity	27
-------------------	----

PART III

Fuzzy Functions	97
-----------------------	----

PART IV

Family Therapy -- The Delicate Flower	123
---	-----

PART V

Formal Notation	163
-----------------------	-----

Epilogue	195
----------------	-----

Bibliography	197
--------------------	-----

PART I

Representational Systems - Other Maps For The Same Territory

INTRODUCTION

In Volume One of *The Structure of Magic* we began the process of making the magical skills of potent psychotherapists available to other practitioners in a learnable and explicit form. We presented to you the intuitions these psychotherapeutic wizards have about language in a step-by-step form so that you could train yourself to use your own intuitions, thereby increasing your skill. In this second volume, we intend to present more of the intuitions these wizards have about language, and to extend our work to include the intuitions and systematic behavior of these wizards relative to other ways a human being can both represent and communicate his world. While you read this volume, we would like you to keep in mind several aspects of *The Structure of Magic I*.

Human beings live in a "real world." We do not, however, operate directly or immediately upon that world, but, rather, we operate within that world using a map or a series of maps of that world to guide our behavior within it. These maps, or representational systems, necessarily differ from the territory that they model by the three universal processes of human modeling: *Generalization*, *Deletion*, and *Distortion*. When people come to us in therapy expressing pain and dissatisfaction, the limitations which they experience are, typically, in their *representation* of the world and not in the world itself.

The most thoroughly studied and best understood of the representational systems of human modeling maps is that of human language. The most explicit and complete model of natural language is transformational grammar. Transformational grammar is, therefore, a Meta-model — a representation of the structure of human language — itself a representation of the world of experience.

Human language systems are, themselves, derived representations of a more complete model — the sum total of the experience the particular human being has had in his life. Transformational linguists have developed a number of concepts and mechanisms to describe how the way that people speak — their Surface Structures — is actually derived from their full linguistic representation — the Deep Structures. The transformational Meta-models describe these concepts and mechanisms explicitly — they are specific cases of the general modeling processes of Generalization, Distortion and Deletion.

In adapting the concepts and mechanisms of the transformational model of the human representational system of language for the purposes of therapy, we developed a formal Meta-model for

therapy. This formal Meta-model is:

- (a) *Explicit* — that is, it describes the process of therapy in a step-by-step manner, guaranteeing that the Meta-model is learnable; this results in an explicit strategy for therapy.
- (b) *Independent of content* — dealing with the form of the process and, therefore, having universal applicability.

The Meta-model relies only upon the intuitions which every native speaker has of his language. The overall implication of the Meta-model for therapy is the assumption of *well-formed in therapy*. Well-formed in therapy is a set of conditions which the Surface Structures the client uses in therapy must meet in order to be acceptable. Using this appropriate grammar for therapy, we, as therapists, can assist our clients in expanding the portions of their representations which impoverish and limit them. This results in enriching their lives in such a way that they experience more options in their behavior, more opportunities to experience the joys and richness that life has to offer. When integrated with the people-helper skills which you, as a therapist, already have available to you, this process of growth and change is profoundly accelerated. This language of growth, then, is truly an essential part of *The Structure of Magic*.

THE MAP IS NOT THE TERRITORY

One of the important conclusions we established in *Magic I* is that the map necessarily differs from the territory it is representing, and that each map will differ from every other map in some way. The map or model that we have been referring to so far is a simplification of a more complex process. In fact, the map we have been referring to is actually a series of maps which result when we model our experiences by using what we call *representational systems*.

INPUT CHANNELS

There are three major *input channels* by which we, as human beings, receive information about the world around us — *vision*, *audition*, and *kinesthetics* (body sensations). (The remaining two

most commonly accepted sensory input channels — smell and taste — are, apparently, little utilized as ways of gaining information about the world.)¹ Each of these three sensory input channels provides us with an ongoing stream of information which we use to organize our experience. Within each of these input channels, there are a number of specialized receptors which carry specific kinds of information. For example, neurophysiologists have distinguished chromatic (color) receptors within the eye — the cones located in the center or fovea of the eye — from the chromatic (non-color) receptors — the rods located in the periphery of the eye. Again, in the kinesthetic input channel, specialized receptors for pressure, temperature, pain and deep senses (proprioceptors) have been shown to exist. The number of distinctions in each of the input channels is not limited by the number of specialized receptors in each of these channels. Combinations or recurring patterns of stimulation of one or more of these specialized receptors in each of the sensory channels provide information of a more complex nature. For example, the common experience of wetness can be broken down into a combination of several of the kinesthetically different, specialized receptors within the major receptors. Furthermore, the input channels may combine to provide information of an even more complex nature. For example, we receive the experience of texture through a combination of visual, kinesthetic and (in some cases) auditory stimulations.

For our purposes at this point, we need only point out that information received through one of the input channels may be stored or represented in a map or model which is different from that channel. Perhaps the most frequently occurring example of this is the ability that each of us has to represent visual information, say, in the form of *natural language* — that is, words, phrases, and sentences of our language. Probably as frequent, but not usually consciously recognized, is our ability to make pictures or images out of the information we receive through the auditory channel. As I sit here typing this sentence, I hear the crackling and hissing sound of logs burning in the fireplace behind me. Using this auditory information as input, I create the image of the logs burning. Thus, I create a visual representation from auditory input. If, at this point, you, the reader, were to pause and allow yourself to become aware of the sounds around you without shifting the focus of your eyes, you would find yourself able to create visual images for many of the sounds you detected. This ability to create representations of input from one input channel based upon information coming from another channel will be the topic of discussion later in this volume.

REPRESENTATIONAL SYSTEMS

Each of us, as a human being, has available a number of different ways of representing our experience of the world. Following are some examples of the representational systems each of us can use to represent our experiences.

We have five recognized senses for making contact with the world — we *see*, we *hear*, we *feel*, we *taste* and we *smell*. In addition to these sensory systems, we have a language system which we use to represent our experience. We may store our experience directly in the representational system most closely associated with that sensory channel. We may choose to close our eyes and create a visual image of a red square shifting to green and then to blue, or a spiral wheel of silver and black slowly revolving counter-clockwise, or the image of some person we know well. Or, we may choose to close our eyes (or not) and to create a kinaesthetic representation (a body sensation, a feeling), placing our hands against a wall and pushing as hard as we can, feeling the tightening of the muscles in our arms and shoulders, becoming aware of the texture of the floor beneath our feet. Or, we may choose to become aware of the prickling sensation of the heat of the flames of a fire burning, or of sensing the pressure of several light blankets covering our sighing bodies as we sink softly into our beds. Or we may choose to close our eyes (or not) and create an auditory (sound) representation — the patter of tinkling raindrops, the crack of distant thunder and its following roll through the once-silent hills, the squeal of singing tires on a quiet country road, or the blast of a taxi horn through the deafening roars of a noisy city. Or we may close our eyes and create a gustatory (taste) representation of the sour flavor of a lemon, or the sweetness of honey, or the saltiness of a stale potato chip. Or we may choose to close our eyes (or not) and create an olfactory (smell) representation of a fragrant rose, or rancid milk, or the pungent aroma of cheap perfume.

Some of you may have noticed that, while reading through the descriptions of the above paragraph, you actually experienced seeing a particular color or movement; feeling hardness, warmth, or roughness; hearing a specific sound; experiencing certain tastes or smells. You may have experienced all or only some of these sensations. Some of them were more detailed and immediate for you than others. For some of the descriptions you may have had no experience at all. These differences in your experiences are exactly what we are describing. Those of you who had a sharp, clear *picture* of some experience have a rich, highly developed,

visual representational system. Those of you who were able to develop a strong *feeling* of weight, temperature, or texture have a refined, highly developed kinesthetic representational system. And so on with the other possible ways associated with our five senses that we, as humans, have of representing our experiences.

Notice that the description in the last paragraph is missing something. Specifically, each of the descriptions in the paragraph before it about visual, kinesthetic, auditory, gustatory and olfactory experiences was not represented in those specific sensory systems, but rather in an altogether different system — a language system — the *digital* representational system. We described with words, phrases and sentences the experiences in the different representational systems. We selected these words carefully — for example, if we want to describe something in a visual representational system, we select words such as:

black . . . clear . . . spiral . . . image

If we want to describe something in an auditory system, we select words such as:

tinkling . . . silent . . . squeal . . . blast

This sentence is an example of the way that we represent our experience in the language. This ability which we have to represent our experiences in each of our different representational systems with words — that is, in the digital system — identifies one of the most useful characteristics of language representational systems — their universality. That is to say, by using our language representational systems, we are able to present our experience of any of the other representational systems. Since this is true, we refer to our language system as the *digital* system. We can use it to create a map of our world. When we use the sentence:

He showed me some vivid images.

we are creating a *language* map of our *visual* map of some experience which we have had. We may choose to create a language representation by combining different representational systems. When we use the sentence:

She reeled backwards, tripping over the screaming animal writhing with pain from bitter smoke choking the sunlight out.

we are using a language representation which presupposes a series of maps of our experience, at least one from each of these five representational systems.

For example:

<i>reel</i>	presupposes	visual and kinesthetic maps;
<i>backwards</i>	presupposes	visual and kinesthetic maps;
<i>tripping</i>	presupposes	visual and kinesthetic maps;
<i>screaming</i>	presupposes	an auditory map;
<i>writhing</i>	presupposes	kinesthetic and visual maps;
<i>pain</i>	presupposes	a kinesthetic map;
<i>bitter</i>	presupposes	gustatory and olfactory maps.

In addition to serving as a way of creating maps of the five representational systems, language also permits us to use it to create a model or a map of itself. For example, the previous sentence is a representation in a language system of one of the characteristics of that same representational system (language) — just like this one is. Language representational systems are reflexive, Meta representational systems. That is, we may create a language model of language itself as well as using it to create maps of the other five representational systems.

At this point, you may have noticed that it is easier for you to create an experience which is more vivid in one of these representational systems than in others. For instance, you may be able to close your eyes and see very clearly your closest friend but find it difficult to fully experience the smell of a rose. Or you may have found it easy to experience hearing a taxi horn, but found it very difficult to picture in your mind your closest friend. To some degree, each of us has, potentially, the ability to create maps in each of the five representational systems. However, we tend to use one or more of these representational systems as a map more often than the others. We also tend to have more distinctions available in this same representational system to code our experience, which is to say that we more highly value one or more of these representational systems.² For instance, those of you who have a highly valued visual representational system will have been able to close your eyes and vividly "see" a red square which became green and then blue. Also, you probably were able to make a very rich, clear picture of your closest friend. It is likely that you assume that other people who read this book will have this same experience. This is not true in all cases. The representational systems that are highly valued and highly developed in each of us will differ, either slightly or dramatically. Many people can make only vague pic-

tures and some, no pictures at all. Some people must try for an extended period of time before they are capable of making a vivid image, and some can create a vivid image almost instantly. This wide variation in the capability to create a visual representation is also true of all the other representational systems.

Thus, each person's map or model of the world will differ both from the world and from the maps and models created by other people. Furthermore, each person will have a most highly valued representational system which will differ from the most highly valued representational system of some other person. From this fact — namely, that person *X* has a most highly valued representational system that differs from that of person *Y* — we can predict that each will have a dramatically different experience when faced with the "same" real world experience.

For example, when a musician listens to a piece of music, he has a more complex experience — he will be able to detect, represent and enjoy patterns of sound which will not be experienced by a person whose most highly developed system is visual (either consciously or behaviorally). A painter will be able to make distinctions in his experience of a sunset which are not available to a person whose most highly developed representational system is kinesthetic. A connoisseur of fine wines will detect subtle differences in the bouquet and flavor of distinct wines which cannot be detected by people whose most highly developed representational systems are not taste and smell used together.

IDENTIFYING THE MOST HIGHLY VALUED REPRESENTATIONAL SYSTEM

In order to identify which of the representational systems is the client's most highly valued one, the therapist needs only to pay attention to the predicates which the client uses to describe his experience. In describing his experience, the client makes choices (usually unconsciously) about which words best represent his experience. Among those words are a special set called *predicates*. Predicates are words used to describe the portions of a person's experience which correspond to the processes and relationships in that experience. Predicates appear as verbs, adjectives and adverbs in the sentences which the client uses to describe his experience. For example, in the following sentence, examples of each of these categories of predicates occur:

She saw the purple pajamas clearly.

The predicates in this sentence are:

verb: *saw*
 adjective: *purple*
 adverb: *clearly*

EXERCISES

We will now present three exercises which will allow each of you to:

- A. Sharpen your ability to identify predicates;
- B. Determine the representational system or systems implied by each; and,
- C. Become conscious of the predicates used by several specific persons.

EXERCISE A

Predicates

Identify the predicates in each of the sentences below.

He felt badly about the way she held the crawling child.

verbs — *felt, held*
 adjective — *crawling*
 adverb — *badly*

The dazzling woman watched the silver car streak past the glittering display.

verbs — *watched, streak*
 adjectives — *dazzling, silver, glittering*

He called out loudly as he heard the squeal of the tires of the car in the quiet streets.

verbs — *called, heard*
 adjective — *quiet*
 adverb — *loudly*

The man touched the damp floor of the musty building.

verb — *touched*
 adjectives — *damp, musty*

EXERCISE B

Representational Systems by Predicates

After you have identified the predicates in the above sentences, return to them and determine which representational

system or systems each of them implies. Notice that some of them are ambiguous with respect to representational systems — for example, the predicate *light* may imply either a kinesthetic representational system or a visual one, depending upon its use. Or, the predicate *tighten* in a sentence such as:

She tightened her body.

may imply a visual or a kinesthetic representation, as I can verify the experience described in the sentence either by touch or by watching the muscle contractions of the person's body. One way to assist yourself when you are uncertain which representational system is involved is to ask yourself what you would have to do to verify the description given by the predicate and its sentence.

We would like to mention at this time that, in our training seminars, the common reaction which we receive to identifying highly valued representational systems by identifying predicates is one of disbelief. We would like you to realize that very little of natural language communication is really metaphorical. Most people, in describing their experiences, even in casual conversation, are quite literal. Comments such as "I see what you're saying" are most often communicated by people who organize their world primarily with pictures. These are people whose most highly valued representational system is visual. And they are literally "making pictures" out of what they hear. Our students first go through a stage of not believing this; secondly, they begin to listen to people in this new way and become amazed at what they can learn about themselves and those around them; thirdly, they learn the value of this knowledge.

We hope you will begin to listen to yourself and the people around you. Specifically, we ask you to do the following exercise to develop these new skills.

EXERCISE C

Identifying Predicates of a Specific Person

Choose one person each day and allow yourself to become conscious of this person's predicates; specifically, identify the representational system to which the predicates you hear belong. After allowing yourself to hear and to identify the person's representational system, ask him directly how he is organizing his

experience at this point in time.

If the person's representational system is visual, ask the question:

Do you make pictures in your head?

Do you have visual images in your head as you are talking and listening to me?

Can you see what I am saying?

If the person's representational system is kinesthetic, ask the questions:

Do you feel what you are saying?

Are you in touch with what I am saying?

If the person's representational system is auditory, ask the questions:

Do you hear voices in your head?

Do you hear what I am saying inside your head?

Try these exercises. We assure you that you can learn a great deal about yourself and the human beings around you. We urge you to ask any questions which will help you to understand the nature of how people organize their experiences in these different modes.

OUTPUT CHANNELS

Humans not only represent their experiences by different representational systems, they also base their communication on their representational systems. Communication occurs in a number of forms such as natural language, body posture, body movement, or in voice qualities, etc. We call them *output channels*. We will return to a discussion of these communication forms later in this book.

META — SO WHAT

SPEAKING THE CLIENT'S LANGUAGE

So far, we have described to you the various ways in which people organize their experiences by creating most highly valued representational systems such as visual, kinesthetic, auditory and natural language representational systems. This information about the way your clients organize their worlds, once understood, can be valuable to you in a number of ways. First, a therapist's ability to understand more about how his clients experience and represent the world will enable him to better create experiences which they may use to change their lives. For example, in Chapter 6 of *Magic I*, we described a number of ways to assist the therapist in knowing when a particular technique is appropriate. For example, when the client has catastrophic fears of some future event for which he has no reference structure, a guided fantasy or spontaneous dream sequence could provide this reference structure. You might note at this point that fantasies will be more effective with visuals than with auditory people.

Next, consider how you, as a therapist, would decide to assist a client in an enactment — a replay of a past experience. If the client primarily organizes his experience visually (with pictures), then one way of helping to insure that he will have a way of representing the experience that the enactment creates is to have him choose other people to play the people in his past experience so that the client may actually see the enactment. If the client organizes his experience primarily kinesthetically (with body sensations), then having him actively play the people involved in his past experience will better assist him in setting the feeling (of all of the people) of the enactment.

As we pointed out in *Magic I*, one way in which people impoverish their world — limit themselves, take choices away from themselves — is by deleting a portion of their experience. When a person leaves out an entire representational system, his model and his experience are reduced. By identifying the client's representational system(s), the therapist knows what parts of the world, including the therapist, are available to the client. For example, if the client has some limitation in his model which is causing him pain, and the coping pattern which is blocking him from changing requires that he be able to represent his experience visually, then the therapist knows which kind of an experience to design to assist the client in changing. Assisting a client in recovering an old, or

developing a new way of organizing his experience, whether being in touch, being clear sighted, or hearing acutely, is a powerful and moving experience for the client as well as for the therapist.

TRUST

A second, and probably the most important, result of comprehending your client's representational system is trust. Most psychotherapies place a high value on the client's trusting the therapist, but this is very rarely taught or explicitly understood. Your client will trust you when he believes that first, you understand him and, second, that you can help him to get more out of life. The important question, then, is, by what process does the client create this belief? This is closely connected to asking by what representational system clients organize their experiences. Suppose that we have a client who has a kinesthetic representational system. First, we listen to his description of his experience, then we check out our understanding of what he says (his model of the world) and phrase our questions — in fact, structure all of our communication with him — with kinesthetic predicates. Since this particular client organizes his experience kinesthetically, if we communicate with predicates that are kinesthetic, it will be easier for him both to understand our communication and to know (in this case, *feel*) that we understand him. This process of shifting predicates to allow our clients to understand our communication with greater ease is the basis and the beginning of trust. A client such as the one described above would *feel* that the therapist understood him, and would *feel* that, since the therapist was capable of understanding him, he was capable of helping him.

EXERCISE

Matching Predicates

Choose one person each day and determine by listening carefully to the predicates which he uses what is his most highly valued representational system. Then, using the translation table given below, adjust your own language responses to match his by using the response appropriate for his representational system. Use the table as follows: in the leftmost column is the meaning which you actually wish to communicate to this person; listed in the

adjacent columns are the equivalents in the three representational systems.

Meaning	Kinesthetic	Visual	Auditory
I (don't) understand you.	What you are saying feels (doesn't feel) right to me.	I see (don't see) what you are saying.	I hear (don't hear) you clearly.
I want to communicate something to you.	I want you to be in touch with something.	I want to show you something (a picture of something).	I want you to listen carefully to what I say to you.
Describe more of your present experience to me.	Put me in touch with what you are feeling at this point in time.	Show me a clear picture of what you see at this point in time.	Tell me in more detail what you are saying at this point in time.
I like my experience of you and me at this point in time.	This feels really good to me. I feel really good about what we are doing.	This looks really bright and clear to me.	This sounds really good to me.
Do you understand what I am saying?	Does what I am putting you in touch with feel right to you?	Do you see what I am showing you?	Does what I am saying to you sound right to you?

By consciously selecting your predicates to match those of the person with whom you want to communicate, you will succeed in accomplishing clearer and more direct communications.

Once you can hear and understand the idea of representational systems, you then can make this piece of knowledge the basis of your knowing how to structure the experiences which you have with your clients. In this way, you can help them to begin to cope in new ways, which will make their lives better, and to fulfill their hopes and dreams to make their lives a more positive growth experience.

META-TACTICS

I. MATCHING OR NOT MATCHING PREDICATES

When you speak and when you ask questions of your clients, there is more going on than just an exchange of words. We devoted the whole first volume of *The Structure of Magic* to teaching how to ask questions based on the form of your clients' Surface Structure communications. The representational system which is presupposed by your clients' predicates is what we would call a *Meta-form*. If you want your client to understand and trust you, you have the choice of matching predicates. When you are seeking information from your client, phrasing questions with the appropriate presupposed representational system will enable the client to respond with greater ease and clarity. For example, when we are asking for information from a visual, we can phrase questions in the following ways:

How do you see the situation?
What do you see stopping you?

Or, when using the Meta-model with a kinesthetic, we will ask:

How do you feel about this situation?
What do you feel stops you?

Switching your predicates in this way will enable your clients to provide you with more information. We have, in past years (during in-service training seminars), noticed therapists who asked questions of their clients with no knowledge of representational systems used. Typically, they use only predicates of *their own* most highly valued representational systems. This is an example:

Client (visual): My husband just doesn't see me as a valuable person.

Therapist (kinesthetic): How do you feel about that?

Client (visual): What?

Therapist (kinesthetic): How do you feel about your husband's not feeling that you're a person?

Client (visual): That's a hard question. I just don't know.

This session went around and around until the therapist came out and said to the authors,

I feel frustrated; this woman is just giving me a hard time. She's resisting everything I do.

We have heard and seen many long, valuable hours wasted by therapists in this form of miscommunication with their clients. The therapist in the above transcript was really trying to help, and the client was truly trying to cooperate, but with neither of them having a sensitivity to representational systems. Communication between people under these conditions is usually haphazard and tedious. The result is often name-calling, when a person attempts to communicate with someone who uses different predicates.

Typically, kinesthetics complain that auditory and visual people are insensitive. Visuals complain that auditories don't pay attention to them because they don't make eye contact during the conversation. Auditory people complain that kinesthetics don't listen, etc. The outcome is usually that one group comes to consider the other deliberately bad or mischievous or pathological. However, we return to the basic premise of *Magic I*:

In coming to understand how people continue to cause themselves pain and dissatisfaction, it is important to realize that they are not bad, crazy or sick. They are, in fact, making the best choice that they are aware of; that is, the best choice available in their model of the world. In other words, human beings' behavior, no matter how bizarre it may seem, will make sense when it is viewed in the context of the choices generated by their models.

If a person's model is visually based, his inability to answer a question which presupposes a kinesthetic representation is not a form of resistance but, rather, an indicator of the limits of his model. His inability to answer such questions then becomes an asset to the therapist, indicating the kind of experience which will help the client expand his model. Since this particular client's model of the world was primarily visual, the lack of kinesthetic and auditory representational systems could be the source of her dissatisfaction with her husband. In fact, this turned out to be true. The authors took the therapist back into a session and proceeded to elicit the following information.

The woman knew her husband didn't see her as valuable.

Therapist: How do you know he doesn't see you as valuable?

Client: I dress up for him and he doesn't notice. (The client is assuming her husband also has a visual model

of the world, as she does.)

Therapist: How do you know he doesn't notice?

Client: He just paws me and doesn't even look. (He responds kinesthetically and doesn't stand back far enough to see.)

The therapist could now begin the process of teaching this woman that her map is not the territory in two ways: first, she can learn that her husband experiences the world differently from her and that her mind reading (see *Magic I*, Chapter 4) is not her husband's reality. He may, in fact, have noticed her and is responding to her according to his model of the world (i.e., kinesthetically). Second, the therapist may begin the process of developing in this woman a kinesthetic representational system which will expand her map of the world in many new ways.

One of the ways to accomplish this is by deliberately matching predicates instead of haphazardly using unmatched predicates. The therapist may ask the woman in the above transcript:

How do you feel as you see your husband not noticing you?

The therapist recognizes as he asks this question that the client may not be able to answer it. If the client fails to respond, the therapist may then begin instructing her in developing a kinesthetic representational system.

Therapist: Close your eyes and now make a picture of your husband. Can you see him? (Client nods.) Good; now describe what you see.

Client: He is just sitting in a chair, ignoring me.

Therapist: As you look at this image, become aware of any body sensations in your stomach or tightness in your back or arms. What do you feel as you look?

Client: I'm not sure.

Therapist: Well, describe it as best you can.

Client: I guess my back is a little stiff, and . . .

Time spent in this way will allow your clients, like this woman, to develop representational systems for their maps. This, of necessity, will increase their models of the world in a way that allows them new choices. For too long, different approaches to psychotherapy have pushed *right* answers. Some therapies have criticized auditory representation as being analytical and have said

that they need to be more in touch. Our experience has been that we need all our potential will offer — kinesthetic, visual and auditory. The techniques and forms of all the psychotherapies offer a vast resource to accomplish this goal. Many therapies offer techniques which put people more in touch. Many offer techniques which enable people to clearly see what goes on in their lives, and still others help people to hear.

This kind of methodical use of all of the approaches to therapy can only result in your being effective with a larger number of your clients in a more consistent way.

II. SWITCHING REPRESENTATIONAL SYSTEMS

As we repeatedly pointed out in *Magic I*, when people come to us in therapy with pain, feeling that they are stuck, that they don't have enough choices, we find that their world is rich and varied enough for them to get what they want, but that the way which they use to represent the world to themselves is *not* rich and varied enough for them to obtain it. In other words, the way that each of us represents our experience will either cause us pain or allow us an exciting, living and growing process in our lives. More specifically, if we choose (consciously or not) to represent certain kinds of experience in one or another of our representational systems, we will succeed either in causing ourselves pain or in giving ourselves new choices. The following are examples of this process. Notice that, in each case, the Meta-Tactic of switching representational systems allows the client to overcome the pain or the block to further growth and change.

George, a young man in his late 20's, volunteered to work in a group setting (a Therapist Training Group). He was asked to come to the center of the group, sit down, and state on what he wanted to work. He began a rather rambling account of the events of his day, and then, wincing in pain, interrupted his story to complain about a severe headache which had been troubling him for some hours. He stated that he was unable to concentrate on his story because of the pain from his headache. The therapist decided to deal directly with the physical (kinesthetic) representation by using Meta-Tactic II. Having listened carefully to George's choice of predicates while he was making his complaints, the therapist recognized, from statements such as the following, that George's most highly valued representational system was visual.

*I don't see what my headache has to . . .
I try to watch out for things that . . .
I'm not clear right now. If I could only focus on what . . .*

The therapist then placed an empty chair in front of the chair in which George was sitting, and said:

Therapist: George, look at the chair in front of you; see that, at this point in time, it is empty. Now, allow your eyes to close, maintaining a clear, focused image in your mind's eye of the empty chair in front of you. Now paint me a picture of your headache with words as vivid and colorful as possible. I want you to see the exact way that your muscles are interlaced, straining and causing you this pain. Do you have a clear picture?

George: Yes, I see it clearly. (George goes on to describe the headache in visual terms, with the therapist asking questions [with visual predicates] to assist him in picturing it.)

Therapist: Now, George, breathe deeply and rhythmically. (Here the therapist moves to George and verbally and kinesthetically [by touch] assists him in developing a deep and rhythmic breathing pattern.) Now, George, I want you to see clearly as you breathe out, with each breath, breathing out, to breathe out all of the pain in your headache. I want you to see the headache slowly dissolving and flowing from your head, through your nasal passages, now through your nose and flowing out of your nostrils with each deep breath out, breathing out, breathing this cloud of flowing, swirling pain into the empty chair in front of you, see it there, make a focused image of it in the chair as you breathe it out deeply. Signal me by nodding when you focus the cloud of pain in the chair in front of you in your mind's eye.

George signaled, by nodding, that he had accomplished this. The therapist then assisted him in creating a face and body from this swirling cloud of pain in the chair in front of him. The face and body belonged to someone with whom George had some unexpressed, unfinished business. After George had expressed himself to this person, the therapist leaned forward and asked him how he felt at that particular point in time. George smiled, and, with a surprised look on his face, replied:

Why, I feel fine, completely focused — my headache is completely gone!!

This particular process, of working with a young man who had a severe headache, required only a few minutes. The process is simply an example of the effective use of Meta-Tactic II. What we have noticed is that, if people represent certain kinds of experiences in their kinesthetic representational systems, they succeed in causing themselves pain. As in this case, if the therapist is able to determine the client's most highly valued representational system other than kinesthetic, then the therapist will be able to assist the client in re-mapping (or re-coding or re-representing) the experience which is causing him pain from the kinesthetic system into another highly valued representational system. In other words, the therapist assists the client in switching an experience from the representational system which is causing pain into one which will not result in pain, and will occur in a form with which the client can better cope. The generalization, then, from this case and others very like it is that, when a client is experiencing pain (equivalent to a message that he has represented some experience kinesthetically in a way which is causing him pain), the therapist may choose to deal with that pain directly by:

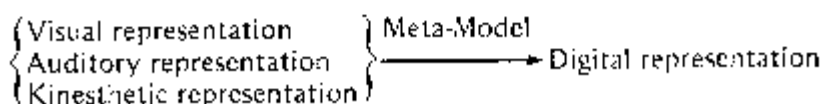
- (a) Identifying the person's most highly valued representational system (other than kinesthetic);
- (b) Creating an experience whereby the client maps *from* the kinesthetic representation *into* his most highly valued system.

Thus,



Notice that the Meta-model itself is understood to be the mapping function which carries an experience from any representational system into a digital (words, phrases and sentences) representation.

Thus,



Susan, a woman in her late 30's, asked to work one evening in the context of a Therapist Training Group which we were conducting. She was asked to come to the center of the group and state on what she wished to work. She said that she had been troubled by vivid images in her mind. She said that she had tried to get rid of these images but that they continued to haunt her, making her unable to do many of the things which she wanted to do. By listening carefully to the woman's choice of predicates, the therapist was able to identify the kinesthetic as the client's most highly valued representational system. Susan was then asked to describe the images which she had been having in as much detail, as vividly, as possible. Once she had completed her description, the therapist had her go through the entire sequence again, and this time he had Susan act out each of the parts of her visual images kinesthetically — that is, she became the parts of her visual fantasy and experienced them directly in her body. The entire process took about 20 minutes, and, at the end of the enactment, Susan stated that the visual images which had been persecuting her were gone and that she felt a tremendous increase in her strength.

This second episode again demonstrates the power of using Meta-Tactic II. In this case, a woman whose primary representational system was kinesthetic was experiencing difficulty in coping with a series of visual images. By assisting her in mapping her experiences in her visual representational system into her most highly valued representational system (kinesthetic), the experiences were brought into a form with which she was able to cope, and she could then use them as a source of strength for herself. The generalization here is that, when a client is having difficulty coping with some experience in a representational system other than her most highly valued one, then one excellent choice on the part of the therapist is to assist her in re-mapping that experience into her most highly valued system. A person's most highly valued system is the one in which he has the maximum number of distinctions, and usually is the one in which he will be able to cope most effectively.

Thus,

Representational System X \longrightarrow Representational System Y

where Y is the client's most highly valued representational system.

III. ADDING REPRESENTATIONAL SYSTEMS

The third of the Meta-Tactics available to therapists in their use of representational systems is that of simply adding to the client's reference structure another representational system. By adding an entirely new representational system, the client's model of the world is dramatically extended and many new choices become available to him. Consider the change in the experience of a person who has been organizing his experience wholly in terms of body sensations (kinesthetically) when he is suddenly able also to represent his experience visually. This change literally allows him a new perspective on life, a new way of having choices about his life. Meta-Tactic III differs from Meta-Tactic II in that, rather than map an experience from one representational system into another representational system, in this case we have the person retain his experience in the present representational system and simply *add* another entire representation of this same experience.

Mary Lou, a woman in her middle 40's, was working in a Therapist Training Group. As Mary Lou was expressing her difficulties, the therapist noticed that, each time she expressed some comment critical of her own behavior, Mary Lou's voice quality (tonality) changed. She spoke, literally, with a different voice. The therapist then asked Mary Lou to repeat a number of the critical remarks and, as she did so, to be aware of her voice. When she finished repeating the critical remarks, the therapist leaned forward and asked her whose voice she had used. She replied at once that it was her father's voice. At this point, the therapist asked her to close her eyes and to hear that same voice inside her head. She was able to do this easily. Next, the therapist instructed her that, as she listened to her father's voice, she would see her father's mouth moving, his lips forming the words. As she accomplished this, she was then instructed to see the remainder of her father's face.

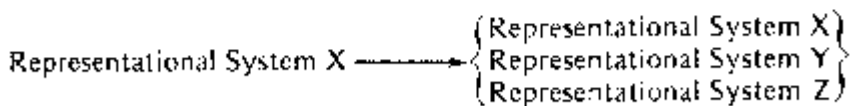
The therapist continued to work with Mary Lou, using her father's voice to lead her in constructing a full visual representation which matched the voice she continued to hear inside her head. Once the visual and auditory representations were coordinated, the therapist used the material as a basis for an enactment in which Mary Lou played both herself and her father. Thus, in this final phase, all three representational systems were brought into play — auditory, visual and kinesthetic. The enactment technique, based upon initially using an auditory representation and then adding the other representational systems (visual and kines-

thetic) to it — that is, Meta-Tactic III — enabled Mary Lou to confront and overcome some severe blocks to her further growth.

This experience with Mary Lou shows the use of Meta-Tactic III. The therapist notices a sudden shift in a client's behavior. Making use of the representational system in which this sudden shift occurs as a basis from which to build a more complete reference structure (See *Magic I*, Chapter 6), the therapist finds a point of overlap between the representational system in which the shift took place and the representational system which the therapist chooses to add. In this case, since the initial representational system was auditory (specifically, the voice of another person), the therapist had the client form a visual image of the mouth which was creating that voice. Once a portion of the new representational system is tied to the initial representational system, the therapist can work with the client to fully develop the new representational system. The consequence of this Meta-Tactic is to expand dramatically the client's representation of the experience which is causing him difficulty. This expanded representation allows the client an expanded model of the world and, from this, more choices in coping in his life. The generalization, then, for Meta-Tactic III can be represented as:

- (a) Selecting an experience which is registered in representational system X with which the client is having difficulty coping;
- (b) Finding a point of overlap between representational system X and representational system Y pertaining to that experience;
- (c) Fully developing the experience initially represented in X in the new representational system Y;
- (d) Repeating step (b).

Symbolically:



SUMMARY OF PART I

The statement by Korzybski that "the map is not the territory" is true in two major ways. First, we, as humans, create models of our world which we use as a guide for our behavior. Second, we have a number of different maps available to represent our experiences — kinesthetic, visual, auditory, natural language, etc.³ These maps of our experience do not necessarily represent *only* information from the direct input channels of the senses to the associated representational systems. For example, I can describe a picture in natural language and another person can hear my description and make pictures of this description. We, as humans, usually have a most highly valued representational system, and very often we will neglect to use the additional representational systems available to us.

A most highly valued representational system can be identified by listening to the natural language predicates used by a person in describing his experience. Trust results when the therapist joins his clients in their representational systems and then switches his predicates to theirs; this is, in essence, speaking the clients' language. (Trust has more components than just switching predicates — these will be discussed later.)

Once you, as a therapist, understand how your client organizes his experience, which representational system is used and which is the client's most highly valued one, then you can proceed in therapy in a way which will be strategically more beneficial in expanding your client's model of the world in a way which will allow him more choices, greater freedom in living, and a richer life overall.

FOOTNOTES FOR PART I

1. We talk here about major input channels. Our experience leads us to believe that we all are constantly receiving information through at least the five commonly identified input channels — vision, hearing, touch, smell, and taste. We distinguish the three channels of vision, hearing and touch as the major channels, as these are the ones which provide information which, typically, enters our consciousness. One strong piece of evidence that we are also receiving information through the other two channels comes from the activation of survival responses — for example, the smell of smoke enters consciousness almost immediately and the person smelling it will begin to search for its source, disregarding his previous activity. Furthermore, in our work in both therapy and hypnosis, we have noticed that the experience of

certain tastes and smells allows the person experiencing them to return to associated childhood memories immediately. The neural set of pathways carrying olfactory information is the only set of pathways of the five senses which does not pass through the thalamus en route to the cerebral cortex. We are also convinced that people receive information through processes other than those associated with the five commonly accepted senses.

2. By most highly valued representational system we mean the representational system the person typically uses to bring information into consciousness — that is, the one he typically uses to represent the world and his experience to himself. As we shall present in detail in Part II of this volume, a person may have more than one most highly valued representational system, alternating them. This is common in people who are incongruent in their communication — the polarity game. Again, no special one of the representational systems available is better than the others, although some may be more efficient for certain tasks. In our work, the general, overall strategy we use is to assist people in having available to them choices about how they organize their experiences.

3. Others could exist. Also, we use smell and taste for recovering old, especially childhood, memories and for certain survival responses; e.g., the *smell of fire*.

PART II

Incongruity

THE TASK OF THE PEOPLE-HELPERS

Two human beings sit facing one another. One is called a therapist and the other, a client. This second person, the client, is unhappy, dissatisfied with his present life; feels stuck, blocked; experiences pain in his life. The therapist is faced with the task of assisting the client to change in a way which will allow him to grow, allow him more choices, more satisfaction, and less pain in his life. What, exactly, is the task that the therapist, this people-helper, will accomplish when he assists the client in changing?

Our understanding of the task of a people-helper is:

All therapies are confronted with the problem of responding adequately to such people. Responding adequately in this context means to us assisting in changing the clients' experience in some way which enriches it. Rarely do therapies accomplish this by changing the world. Their approach, then, is typically to change the clients' experience of the world. People do not operate directly on the world, but operate necessarily on the world through their perception or model of the world. Therapies, then, characteristically operate to change the client's model of the world and, consequently, the client's behavior and experience. . . . The overall strategy that the therapist has adopted is that specified explicitly by the Meta-Model — to challenge and expand the impoverished portions of the client's model. Characteristically this takes the form of either recovering (enactment) or creating (guided fantasy, therapeutic double bind, . . .) a reference structure which contradicts the limiting generalizations in the client's model.

(*Magic I*, Chapter 6)

In other words, the therapist will work to create an experience with the active, creative participation of the client. This experience will be directed at the way in which the client has organized his perception or model of the world which is blocking him from changing. This experience will lie outside the limits of the client's model. The process of creating and living this experience will provide the client with a new model and a new set of choices for his life.

MULTIPLE MESSAGES

There are a number of ways which a therapist may choose in going about creating this experience. In this section of the book, we will present a series of choices which a therapist has available when dealing with one particular category of behavior in his clients. Here we focus on a phenomenon called *incongruity*.

In Part I of this volume, *Representational Systems*, we detailed the different maps we as human beings use to organize our experience. Since each of us has the means of organizing our experience in different representational systems, the question arises as to whether these representational systems not only have different *types of information*, but also have different *models of the world* for the same person. In the past few decades, psychotherapy has begun to pay attention not only to the communication of the client with words, but also his communication by body language. The notion of multiple messages has begun to be the basis of much work in this area.

Let's return to these two humans (the therapist and the client) and watch and listen for a moment.

The client and the therapist have been working together for about twenty minutes. The client has been discussing his relationship with his wife. The therapist leans forward and asks the client what his feelings are toward his wife at this point in time. The man immediately stiffens his body, cuts his breathing dramatically, thrusts his left hand forward with his index finger extended, drops his right hand into his lap with its palm turned upward, and says, in a harsh, shrill tone of voice at a rapid rate of speech:

I do everything I can to help her; I love her so very much.

Consider the messages that the therapist is receiving from the client at this point:

- a. Body stiff;
- b. Breathing shallow and irregular;
- c. Left hand thrust forward with extended index finger;
- d. Right hand palm open and turned up in lap;
- e. Harsh, shrill voice;
- f. Rapid rate of speech;
- g. The words: *I do everything I can to help her; I love her so very much.*

This description is one of a person who is communicating

incongruently — that is, the messages carried by his various output channels (body posture, movements, voice tempo, voice tonality, and words) do not fit together to convey a single message. For example, the client's words stating his love for his wife do not match the tonality of his voice as he says these words. Again, the client's left hand with the extended index finger does not match his right hand held palm open and turned up in his lap. The message carried by the client's words is different from the message carried by the client's tonality. The message carried by the client's left hand is different from the message carried by his right hand.

The therapist is faced at this point with a client who is presenting him with a set of messages which do not match (an incongruent communication). He is confronted with the problem of responding adequately to these multiple messages. We trust that each of you reading this description (of a client communicating incongruently) can identify situations in which you, yourself, have been confronted with a client who is presenting you with multiple, incongruent messages. Let us consider for a moment the choices which are available to the therapist (or anyone responding to a person who is communicating incompatible messages).

First, the therapist may fail to detect (consciously) the incongruities — the non-matching messages being presented by the client. Our observations of this situation are that, when a therapist fails to detect incongruities which the client is presenting, the therapist himself, initially, feels confused and uncertain. The therapist's feelings of uncertainty usually persist and he becomes more and more uncomfortable. Typically, therapists report feeling as though they were missing something. What we have observed in our Therapist Training Seminars is that, in a remarkably short period of time, the therapist, himself, will begin to respond incongruently. More specifically, the therapist will tend to match with the client the kinds of messages which he is receiving, output channel for output channel.

Using the above description as an example, the therapist who fails to detect the incongruencies described will soon find himself talking to the client about his feelings of love and devotion to his wife in a voice which is harsh, and, at the same time, he will begin to register incongruities in his body posture which match the client's incongruities. For example, his hand gestures will not match each other. Thus, this first *choice* is no choice at all; rather, it is a failure on the part of the therapist to detect the multiple messages which the client is presenting.

Secondly, the therapist may detect the client's conflicting messages and may choose to regard one or the other of these as

the valid, or true, message which *really* conveys the client's *true* feelings about his wife. Our experience with therapists who make this choice is that their acceptance of an output channel message as the *true* one is based upon the context of the message. For example, there is a general cultural rule which states that each of us may respond (consciously) only to the *words* which a person uses to describe his experience, not to the other output channels (tonality, posture, etc.). Responding to the messages carried by output channels other than verbal is, in general, impolite, or "dirty pool," as one of our acquaintances characterized it. Thus, we are taught, culturally, that the valid message in the set of simultaneous, non-matching messages a person communicating incongruently presents to us is the verbal message.¹ Many of the psychotherapies have selected (implicitly, at least) the message carried by body posture and gesture as the *real* or *true* message for the client -- the opposite of the choice given to us culturally. A therapist trained in one of these schools will select one of the messages carried by the client's body posture or gestures as the one to which he should respond. Once a therapist has decided which of these conflicting messages is the valid one, he has the choice either of deciding what the message carried by that particular output channel *really means* (by *really means* we are referring to the words the posture or gesture would have if it were translated into language), or of calling the client's attention to that message in some way, and then requesting that the client inform the therapist of the meaning of the message carried by that output channel.

The first choice on the part of the therapist we refer to as an *hallucination*. By hallucination we are not implying a value judgment that this is a bad or negative move on the part of the therapist, but simply that, when a therapist decides without checking with the client what the meaning of a non-verbal message is in words, he is assuming that the meaning of that posture or gesture in words is the same as it is in *his own* model of the world. The meaning that the posture or gesture has in the therapist's model of the world may or may not match the meaning that that posture or gesture has in the client's model of the world. As we stated in *Magic I*:

... therapist may, from long experience, have an intuition about what the missing piece is (in this case, what the meaning of the posture or gesture is). He may choose to

interpret or guess. . . . We have no quarrel with this choice. There is, however, the danger that any form of interpretation or guessing may be inaccurate. We include in our Meta-model a safeguard for the client. The client tries the interpretation or guess by the therapist by generating a sentence which includes that material and checks his intuitions to see whether it fits, makes sense, is an accurate representation of his model of the world.

The second possibility — that of selecting one of the non-verbal messages as the *valid* one and asking the client to express it in words — is a choice which we have already discussed in the first part of this book. Specifically, this move is a request by the therapist for the client to switch representational systems. Here, the therapist is instructing the client to switch from a message carried by body posture or gesture to a message carried by the language representational system.

The choice described above made by our therapist — that is, selecting the message carried by the body output system as the valid representation of the client's *true* feelings — has a strong basis in theories of communication and therapy.

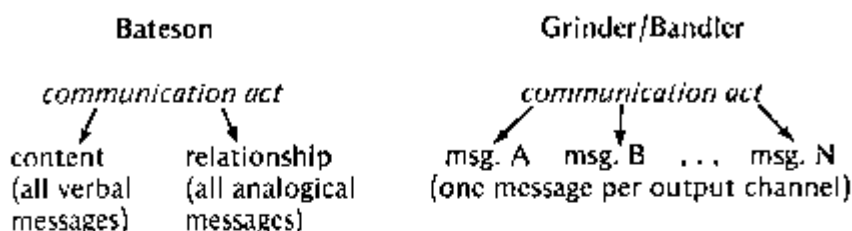
THEORY OF LOGICAL TYPES

In our understanding, the most explicit and sophisticated model of human communication and therapy is that described in the work of Gregory Bateson and his colleagues. Bateson, using his wide-ranging background and penetrating mind, developed, for example, the Double Bind Theory of Schizophrenia. In formulating this theory, Bateson borrowed a model first presented by Bertrand Russell to cope with certain paradoxes arising in meta-mathematics; this model is called the Theory of Logical Types.

CONTENT AND RELATIONSHIP

Bateson and his colleagues categorize each human communication into two parts or "levels." These are called the *content* and the *relationship* messages. More specifically, the verbal (digital) portion of the communication (or what the person says *in words*) is considered the content message of the communication, while

the non-verbal (analogical) portion of the communication is considered the relationship message. The following diagram will help you to understand the relationship between Bateson's terminology and that which we use.



Using the example previously given, we have the following classification:

	Bateson	Grinder/Bandler
<i>relationship messages</i> =	<div style="display: inline-block; vertical-align: middle;"> { body stiff breathing shallow left hand pointing right hand palm up harsh, shrill voice rapid rate of speech } </div>	<div style="display: flex; flex-direction: column; gap: 5px;"> <div>message A — body posture</div> <div>message B — body movement</div> <div>message C — gesture</div> <div>message D — gesture</div> <div>message E — tonality</div> <div>message F — tempo</div> </div>
<i>content messages</i> =	<div style="display: inline-block; vertical-align: middle;"> { the words: I do every- thing I can to help her; I love her so very much. } </div>	<div style="display: flex; flex-direction: column; gap: 5px;"> <div>message G — language representation.</div> </div>

In addition to classifying the client's communication into the two categories of content and relationship, Bateson offers the following method to determine which category of a message is the valid one:

When a boy says to a girl, "I love you," he is using words to convey that which is more convincingly conveyed by his tone of voice and his movements, and the girl, if she has any sense, will pay more attention to those accompanying signs than to the words.

(*Steps to an Ecology of Mind*, p. 412)

Or, as Bateson comments:

What is known to occur at the animal level is the simultaneous presentation of contradictory signals — postures which mention both aggression and flight, and the like. These ambiguities are, however, quite different from the

phenomenon familiar among humans where the friendliness of a man's words may be contradicted by the tension or aggressiveness of his voice or posture. The man is engaging in a sort of deceit, an altogether more complex achievement.

(Steps to an Ecology of Mind, pp. 424-25)

In both of these statements, Bateson implies that the relationship part of the communication — the portion carried by the non-verbal part — is the valid portion of the communication when there is a difference or an incongruity. In fact, in the latter quote, he uses the word *deceit* to describe the use of words by a human to convey a message which differs from the message carried by the non-verbal portion of the communication. His use of this word presupposes that the non-verbal or analogical message is the one which faithfully reflects the *true* nature of the person's feelings and intentions. This choice on the part of Bateson and therapists in general becomes more understandable when we examine the model which they are using to organize their experience in therapy — the Theory of Logical Types.

In his adaption of Russell's Theory of Logical Types to communication and therapy, Bateson chose to assign the *relationship* portion of the communication — the message carried by the non-verbal part — to a level higher than the *content* portion of the communication. In other words, the analogical, non-verbal message is considered meta to — of a higher logical type than — the verbal message. A message, call it A, will be considered meta to some other message (B) if message A is a comment on B, or if, equivalently, A contains B as one of its parts (less than the entirety of A), or, equivalently, if A includes B in its scope (A is about B). An example will help. A client says:

I feel angry about my job. (= message B)

The therapist responds by asking:

How do you feel about feeling angry?

The client responds:

I feel frightened about feeling angry about my job.
(= message A)

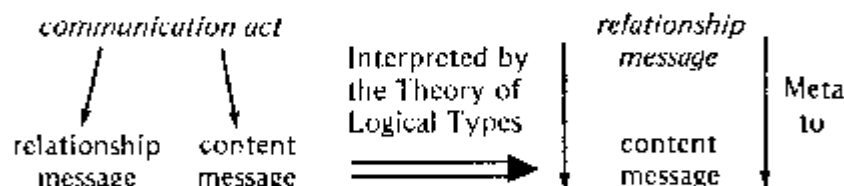
The client's statement, message A, is about the client's state-

ment, message B; therefore, message A is meta to message B. Message A is a meta-message with respect to message B.

Russell developed the Theory of Logical Types to avoid paradoxes. His theory is that, once statements (or whatever category of things was being considered) were sorted out by logical type, they were to be kept separate under pain of paradox — that is, to mix statements (or any objects) of different logical types was to invite paradox — a form of pathology to which mathematicians are particularly vulnerable. Consequently, when Bateson adapted Russell's theory, he accepted this generalization that objects (in this particular case, messages) of different logical types or different logical levels are to be kept separate.

Specifically, Bateson assigned the relationship portion or analogical part of the communication act to a meta position with respect to the content or verbal portion of the communication — the body posture/movement/tonality/tempo message was a comment on the verbal message. Thus, the analogical and the verbal portions of every communication are of different logical types. We can represent this classification visually as:

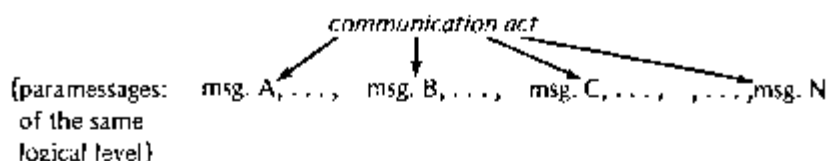
Bateson's use of Russell Theory



PARAMESSAGES

We have found the following way of organizing our experience in therapy and communication more useful in assisting clients in changing: The client presents a set of messages, as many as one per output channel. These messages we call *paramessages*. No one of these simultaneously presented messages is meta to any one of the others presented. More generally, then, no one of a set of simultaneously presented messages can be of a different logical level from any other. Visually, we represent this classification by the following diagram:

Grinder/Bandler Schema



There are three major differences between Bateson's model and this way of organizing our experience in therapy and communication. First, we distinguish one (possible) message per output channel, whereas Bateson's schema is binary, dividing the messages into a relationship (analogical) and a content (verbal) portion. Our method allows us to check for incongruity among the multiple messages. The binary split, however, allowing only a single check for congruency (analogical versus verbal), doesn't allow for the case (which we encounter very often) wherein, the various ways which a human can use to express messages analogically themselves do not match, i.e., are incongruent. The case which we mentioned previously contained several examples of this phenomenon:

the left hand with its index finger extended	<i>versus</i>	the right hand palm open and turned up on the lap
or		
the right hand palm open and turned up in the lap	<i>versus</i>	the harsh, shrill voice

Thus, we have generalized Bateson's binary schema into an *n*-ary schema (*n* is the number of output channels available to carry messages).² This generalization allows us to check for incongruency among all of the different messages which the client presents to us. Thus, Bateson's schema can be seen as a special case of ours in which all of the analogical paramessages match.

The second major way in which we have found it useful to organize our experience in communication and therapy which differs from Bateson's schema is that, in any set of simultaneously presented messages, we accept each message as an equally valid representation of that person's experience. In our model, no one of these paramessages can be said to be more valid — or truer, or more representative of the client — than any other. No one of a set of paramessages can be said to be meta to any other member of its set.³ Rather, our understanding of a set of paramessages is that each of these messages represents a portion of the client's model(s)

of the world. When the client is communicating congruently, each of the paramessages matches, fits with, is congruent with each of the others. This tells us that all of the models which the client is using to guide his behavior at that point in time are consistent (or, equivalently, that the client is using a single model of the world). When the client presents us with a set of conflicting paramessages, when the client is communicating incongruently, we know that the models of the world which he is using to guide his behavior are inconsistent. We accept each of the conflicting paramessages as a valid representation of the model which the client has for his behavior — these conflicting paramessages are indicators of the resources which the client has in coping with the world. When incongruity is seen in this way, the problem of deciding which of the conflicting messages presented to us simultaneously is the real, true or valid message disappears and such incongruencies, themselves, become the basis for growth and change.

In addition to the increased therapeutic possibilities which this way of organizing our experience gives us, we have been unable to find any specific case in our experience in which one of a set of paramessages is meta with respect to any other. For example, in the case we described previously, in what sense is the left hand with the index finger extended a comment on, or a message about, the words which the client says? Our experience has been that the words used by the client are as usefully considered a comment on, or a message about, the message conveyed by the left hand with the index finger extended as vice versa. Thus, we arrive at a classification of paramessages — messages of the same logical level. Using this organization, we avoid one difficulty which arises in Bateson's schema, that of deciding which of a set of paramessages is meta to the others. One case in which the futility of attempting to make this decision is particularly clear is that in which a client is both incongruent at a particular point in time and incongruent over a period of time and, thus, the messages are reversed. Specifically, one of the members of our Therapist Training Seminars was working on some patterns she had developed in her original family system. As with many, if not all, of us who have had two adults acting as our parents, her parents differed about how their child should be treated. And, as is the case with many, if not all, of us, the child was faced with the formidable task of integrating the conflicting messages she had received as a child from her parents. As one of the seminar participants began to work with her on these patterns, he noticed the following: When Ellen was addressing her father (fantasized), she either stood erect, feet spread apart, left hand on her hip, right arm and hand

extended with finger pointing, voice whining and with a typical statement such as,

I try as hard as I can to please you, Daddy; just tell me what you want me to do.

or, she stood slumped, with her feet together, both arms and hands extended, palms turned upward, voice loud, harsh and low, and with typical statements such as,

Why don't you ever do what I want you to do?

Extracting these patterns into a table form, we see:

Ellen at Time 1		Ellen at Time 2	
erect posture	msg. A1	slumped posture	msg. A2
feet spread	msg. B1	feet together	msg. B2
left hand on hip	msg. C1	both arms and hands extended,	msg. C2
right arm and hand extended, with index finger pointing	msg. D1	palms turned upward	
whining voice	msg. E1	voice loud and harsh	msg. E2
words: <i>I try as hard as I can to please you, daddy . . .</i>	msg. F1	words: <i>Why don't you ever do what I want you to do?</i>	msg. F2

In the Bateson schema, the therapist is faced with several difficulties. First, he must decide at Time 1 which of the messages which Ellen is presenting is the valid one. Since, in this binary schema, the relationship message is meta to the content message (words), it constitutes the real or valid message about Ellen's relationship to her father. There is a difficulty here as the messages carried by the analogical systems, themselves, do not agree; specifically:

msg. A, B, C, and D

versus

msg. E

(body postures and
gestures)

(voice quality)

Suppose, however, that, since the majority of the non-verbal messages agree, we pass over this difficulty and decide that the message carried by body posture and gestures is the true or valid representation of Ellen's relationship to her father. Now, the second difficulty arises. At Time 2, Ellen's communication has changed radically. Specifically, if you compare the messages at Time 1 and Time 2 pairwise (body posture at Time 1 with body posture at Time 2), they are absolutely reversed. Thus, when Ellen is communicating at Time 2, the therapist, using the same principles, is forced to arrive at an understanding of Ellen's relationship to her father which is in conflict with what he had decided, based upon her communication at Time 1.

Using the model which we proposed previously, no difficulties arise for this case of Ellen and her relationship to her father. At both Time 1 and Time 2, Ellen is incongruent — at both times, the set of paramessages do not fit but, rather, are arranged as follows:

Ellen at Time 1		Ellen at Time 2	
	messages A1, B1, C1, and D1 are congruent (first set)		messages A2, B2, and C2 are congruent (first set)
and		and	
	messages E1 and F1 are congruent (second set)		messages E2 and F2
and		and	
	the first set of para- messages is not congruent with the second set		the first set of para- messages is not congruent with the second set

What makes Ellen's communication particularly interesting is that the first set of messages at Time 1 is congruent with the second set of messages at Time 2, while the second set of messages at Time 1 is congruent with the first set of messages at Time 2. In other words, Ellen's analogical (discounting voice quality temporarily) messages at Time 1 fit her verbal messages at Time 2 and vice versa. Since in the paramessage system all messages are treated

as equally valid, the difficulty never arises — Ellen's case (a reasonably familiar one in our experience) is easily understood. Ellen has two models of her relationship to her father — she experiences pain and lack of choice, and her behavior is not consistent with respect to her father, as these two models are, at this point in time, inconsistent. Both are, however, equally valid expressions of her *true* feelings toward her father — both constitute resources for Ellen, parts of her which she can integrate. We will return to Ellen's case later in this section to demonstrate the strategy of integration.

We propose to continue to use the meta distinction in our model. However, for some message (A) to be labeled meta to some other message (B), two conditions must be met:

A message (A) will be labeled meta to a message (B) if and only if:

(a) Both A and B are messages in the same representational system or same output channel;

and

(b) A is a message about B (equivalently, A has B in its scope — the Bateson/Russell condition).

Notice now that, since, as we stated previously, each output channel may carry one and only one message at a time, messages which are presented simultaneously will never be meta one to the other. Condition (a) insures this, as it states that the metamessage relationship can only occur between messages expressed in the same representational or output system.⁴ Therefore, it naturally follows that paramessages (the set of messages presented simultaneously by a person) will never be meta with respect to one another.

Retaining the meta distinction is useful for us in our work. Consider, for example, the following case: A client is describing his feelings about his work experience. As he says, in a low, whining tone of voice,

I really am beginning to enjoy my job.

he clenches both of his fists, first raising and then bringing his left fist down on the arm of the chair. The therapist chooses to

metacomment on these pieces of analogical (body gesture and voice) communication. The therapist leans forward and says,

I heard you say that you are really beginning to enjoy your job, and, as you said this, I was aware of two other things: your voice didn't sound like you are enjoying your job, and you balled your hands up into fists and hit the arm of your chair with your left fist.

In terms of the model which we have developed, the therapist has succeeded in metacommenting. Specifically, he metacommented on three messages presented by the client:

Client's Messages:

The words: *I really am beginning to enjoy my job.*

The client's voice tone as translated by the therapist into the words: *Your voice didn't sound like you are enjoying your job.*

The client's body movement as translated by the therapist into the words: *You balled your hands up into fists and hit the arm of your chair with your left fist.*

Therapist's Metacomment or Metamessage:

The words: *I heard you say that you are really beginning to enjoy your job, and, as you said this, I was aware of two other things: your voice didn't sound like you are enjoying your job, and you balled your hands up into fists and hit the arm of your chair with your left fist.*

The therapist's metamessage meets both of the conditions we presented above — it is in the same representational system as the client's messages, and it is a message about the client's messages. Notice that, in order to successfully present a metamessage to the client, the therapist had to translate the client's messages (presented in output systems [voice tone and body movement] other than the one which the therapist intended to use to present the metamessage [language]) into that output system — the therapist translated the client's non-verbal behavior which he wished to comment on into words and then commented on that behavior in words. The therapist has employed the representational systems Meta-Tactic II (Switching Representational Systems) as an essential part of his metamessage.

The third way in which our model of incongruity differs from the Bateson model is that, since in the paramessage set no message

is meta with respect to any other, there are no restrictions on the integration of the parts of the person represented by these paramessages when they are incongruent. In the binary model in which all relationship (analogical) messages are meta with respect to the content (digital) messages, any attempt to integrate the parts of the person represented by these conflicting messages is automatically a violation of the Theory of Logical Types. Thus, in the context of this model, such an attempt at integration invites paradox. We will return to this point later in the section on integration. In table form, then, we can show the three major ways in which our model for incongruity differs from that developed by Bateson and his colleagues:

Grinder/Bandler	Bateson/Russell
n-ary distinctions available for congruity checks (paramessages).	Binary distinctions available for congruity checks (meta-message—message).
Accepts all output channel messages as valid representations of the client.	Distinguishes the relationship level (analogical) as meta to the content level (verbal) and, therefore, is the valid message.
Accepts no restrictions on integration of parts of the client represented by the differing paramessages.	Accepts a restriction on integration of parts of the person — any attempt to integrate parts represented by relationship and content levels is a violation of the Theory of Logical Types.

We move on now to a presentation of the strategy for using a client's incongruities as a basis for growth and change.

A GENERAL STRATEGY FOR RESPONDING TO INCONGRUITY

When a client communicates incongruently, presenting a set of paramessages which do not match, the therapist is faced with an existential decision. The therapist's actions in responding to the

incongruency of the client will have a profound effect upon the client's subsequent experience.

The therapist's task in working with a client's incongruencies is to assist the client in changing by integrating the parts of the client which are in conflict, the incongruencies which are draining his energies and blocking him from getting what he wants. Typically, when a client has parts which are in conflict, no part is successful, but each sabotages the others' efforts to achieve what they want. Within a client who has conflicting parts, there are (at least) two incompatible models or maps of the world. As these models both serve as a guide for the client's behavior and are incompatible, his behavior is, itself, inconsistent. Integration is a process by which the client creates a new model of the world which includes both of the formerly incompatible models in such a way that they are coordinated and function smoothly together, both working to assist the client in getting what he wants from life.

The general strategy for integrating conflicting parts in a client is stated in *Magic I* (Chapter 6, pp. 28-29):

Different portions of a person's reference structure can be expressed by different representational systems . . . the portion of the reference structure which one representational system is expressing does not fit with the portion of the reference structure which the other representational system is expressing — we refer to this situation as an inconsistent double message, incongruity or incongruent communication. . . . One of the most impoverishing situations which we have encountered in therapy is that in which a person maintains contradictory portions of his reference structure. Typically, these contradictory portions have the form of two contradictory generalizations which apply to the same area of behavior. Most frequently, the person whose reference structure includes these inconsistent generalizations has the experience of being immobilized, being profoundly confused, or oscillating between two inconsistent forms of behavior.

. . . the overall strategy that the therapist has adopted is that specified explicitly by the Meta-model — to challenge and expand the impoverished portions of the client's model. Characteristically, this takes the form of either recovering (enactment) or creating (guided fantasy, thera-

peutic double bind) a reference structure which contradicts and therefore challenges the limiting generalizations in the client's model. In this case, the incongruent communication itself is an indicator of the two portions of a person's inconsistent reference structure — two generalizations which can serve as contradictory reference structures for each other. The therapist's strategy here is to bring the two contradictory generalizations into contact. This can be most directly accomplished by bringing these generalizations into the same representational system.

More specifically, the strategy for working with incongruities involves three phases:

1. *Identifying* the client's incongruencies;
2. *Sorting* the client's incongruencies;
3. *Integrating* the client's incongruencies.

These three phases are, of course, a fiction, as are all models. It sometimes happens that the phases do not occur in their full form, or, frequently, they will not be sharply distinguishable, but will flow into one another. They have proven to be, as is demanded of any model, a useful way both of organizing our own experiences in therapy and in teaching others to do the same.

In short, the therapist has the task of assisting the client in learning to use his conflicting parts or incongruencies as resources — of assisting the client to become congruent.

To assist the reader in following the description of the three phases of work in incongruity, we provide here a mini-glossary.

Mini-Glossary

Congruency/Incongruency — The term *congruency* is used to describe a situation in which the person communicating has aligned all of his output channels so that each of them is representing, carrying or conveying the same or a compatible message. When all of a person's output channels (body posture and movements, voice tonality and tempo, words) are representing the same or compatible messages, the person is said to be congruent. Other people's experience of a congruent human being is usually described in terms of that person's having personal presence, knowing what he is talking about, being charismatic, dynamic, and a host of other superlatives. Two

outstanding examples which come to our minds of people who have developed this ability to be congruent are the well-known family therapist Virginia Satir and Rudolf Nureyev, one of the world's best known dancers.

The term *incongruent*, then, applies to a situation in which the person communicating is presenting a set of messages carried by his output channels which do not match, are not compatible — this person is said to be incongruent. Other people's experience of an incongruent person is confusion, saying that he doesn't know what he really wants, is inconsistent, untrustworthy, indecisive.

The terms *congruent* and *incongruent* may be applied to messages presented by a person's output channels as well as to the persons themselves. Thus, if messages carried by two output systems are incompatible, do not fit, do not match, they are incongruent; if they fit, they are congruent.

Finally, the terms *congruent/incongruent* may be applied to representations in different representational systems using the same criteria as stated above.

Metamessage/Paramessage — The term *metamessage* is applied to a message (A) with respect to some other message (B) if two conditions hold:

- Message A is meta with respect to message B if and only if:
 - (a) Both A and B are messages in the same representational system or in the same output channel
 - and
 - (b) A is a message about B (equivalently, A has B in its scope).

For example, if message B is the sentence *I feel angry*, then message A is considered meta with respect to B, when A is the sentence *I feel scared about feeling angry*.

The term *paramessage* is applied to two or more messages expressed simultaneously in different representational systems or (more usually) in different output channels. Paramessages may be either congruent or incongruent with respect to one another. For example, if a woman says the sentence *I am sad* with a voice tone which is loud and threatening, the messages represented by the words *I am sad* and the voice tonality are paramessages, in this case incongruent paramessages. Paramessages are always messages of the same logical level, expressed in different representational systems or output channels.

Consistent/Contradictory — The term *consistent* is applied to two or more messages of the same logical type (expressed in the same representational system or output channel) which are compatible — they can both be true at the same time. For example, the statements

I am hungry.
and
I want to eat.

are consistent messages.

The term *contradictory* is applied to two or more messages of the same logical type (expressed in the same representational system or output channel) which are incompatible — they cannot both be true at the same time. For example, any sentence and its negation; the sentences

I'm hungry.
and
I'm not hungry.

are such a pair.

Satir Category/Stance — Virginia Satir has identified four communication categories or stances which people adopt under stress. Each of these Satir categories are characterized by a particular body posture, set of gestures, accompanying body sensations, and syntax.

(1) *Placater*

Words — agree — (“Whatever you want is okay. I am just here to make you happy.”)

Body — placates — (“I am helpless.”)

Insides — (“I feel like a nothing; without him I am dead. I am worthless.”)

The *placater* always talks in an ingratiating way, trying to please, apologizing, never disagreeing, no matter what. He's a “yes man.” He talks as though he could do nothing for himself; he must always get someone to approve of him. You will find later that if you play this role for even five minutes, you will begin to feel nauseous and want to vomit.

A big help in doing a good placating job is to think of yourself as really worth nothing. You are lucky just to be allowed to eat. You owe everybody gratitude, and you really are responsible for everything that goes wrong. You know you could have stopped the rain if you used your brains, but you don't have any. Naturally you will agree with any criticism made about you. You are, of course, grateful for the fact that anyone even talks to you, no matter what they say or how they say it. You would not think of asking anything for yourself. After all, who are you to ask? Besides, if you can just be good enough it will come by itself.

Be the most syrupy, martyrish, bootlicking person you can be. Think of yourself as being physically down on one knee, wobbling a bit, putting out one hand in a begging fashion, and be sure to have your head up so your neck will hurt and your eyes will become strained so in no time at all you will begin to get a headache.

When you talk in this position your voice will be whiny and squeaky because you keep your body in such a lowered position that you don't have enough air to keep a rich, full voice. You will be saying "yes" to everything, no matter what you feel or think. The placating stance is the body position that matches the placating response.



(2) *Blamer*

Words — disagree — ("You never do anything right. What is the matter with you?")

Body — blames — ("I am the boss around here.")

Insides — ("I am lonely and unsuccessful.")

The *blamer* is a fault-finder, a dictator, a boss. He acts superior, and he seems to be saying, "If it weren't for you, everything would be all right." The internal feeling is one of tightness in the muscles and in the organs. Meanwhile the blood pressure is increasing. The voice is hard, tight, and often shrill and loud.

Good blaming requires you to be as loud and tyrannical as you can. Cut everything and everyone down.

As a blamer it would be helpful to think of yourself pointing your finger accusingly and to start your sentences with "You never do this or you always do that or why do you always or why do you never . . ." and so on. Don't bother about an answer. That is unimportant. The blamer is much more interested in throwing his weight around than really finding out about anything.

Whether you know it or not, when you are blaming you are breathing in little tight spurts, or holding your breath altogether, because your throat muscles are so tight. Have you ever seen a really first-rate blamer whose eyes were bulging, neck muscles and nostrils standing out, who



was getting red and whose voice sounded like someone shoveling coal? Think of yourself standing with one hand on your hip and the other arm extended with your index finger pointed straight out. Your face is screwed up, your lips curled, your nostrils flared as you yell, call names, and criticize everything under the sun.

(3) *Computer*

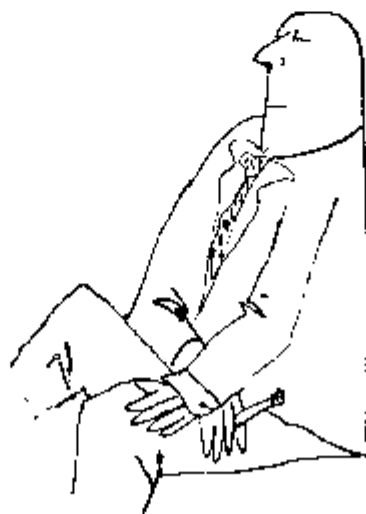
Words — ultra-reasonable — (“If one were to observe carefully, one might notice the workworn hands of someone present here.”)

Body — computes — (“I’m calm, cool, and collected.”)

Insides — (“I feel vulnerable.”)

The *computer* is very correct, very reasonable with no semblance of any feeling showing. He is calm, cool, and collected. He could be compared to an actual computer or a dictionary. The body feels dry, often cool, and dissociated. The voice is a dry monotone, and the words are likely to be abstract.

When you are a computer, use the longest words possible, even if you aren’t sure of their meanings. You will at least sound intelligent. After one paragraph no one will be listening anyway. To get yourself really in the mood for this role, imagine that your spine is a long, heavy



steel rod reaching from your buttocks to the nape of your neck, and you have a ten-inch-wide iron collar around your neck. Keep everything about yourself as motionless as possible, including your mouth. You will have to try hard to keep your hands from moving, but do it.

When you are computing, your voice will naturally go dead because you have no feeling from the cranium down. Your mind is bent on being careful not to move, and you are kept busy choosing the right words. After all, you should never make a mistake. The sad part of this role is that it seems to represent an ideal goal for many people. "Say the right words; show no feeling; don't react."

(4) *Distracter*

Words — irrelevant — (the words make no sense)

Body — angular and off somewhere else

Insides — ("Nobody cares. There is no place for me.")

Whatever the *distracter* does or says is irrelevant to what anyone else is saying or doing. He never makes a response to the point. His internal feeling is one of dizziness. The voice can be singsong, often out of tune with the words, and can go up and down without reason because it is focused nowhere.



When you play the distracting role, it will help you to think of yourself as a kind of lopsided top, constantly spinning, but never knowing where you are going, and not realizing it when you get there. You are too busy moving your mouth, your body, your arms, your legs. Make sure you are never on the point with your words. Ignore everyone's questions; maybe come back with one of your own on a different subject. Take a piece of imaginary lint off someone's garment, untie shoelaces, and so on.

Think of your body as going off in different directions at once. Put your knees together in an exaggerated, knock-kneed fashion. This will bring your buttocks out and make it easy for you to hunch your shoulders and have your arms and hands going in opposite directions.

At first this role seems like a relief, but after a few minutes of play, the terrible loneliness and purposelessness arise. If you can keep yourself moving fast enough, you won't notice it so much.

As practice for yourself, take the four physical stances I have described, hold them for just sixty seconds and see what happens to you. Since many people are unaccustomed to feeling their body reactions, you may find at first that you are so busy thinking you aren't feeling. Keep at it, and you will begin to have the internal feelings you've experienced so many times before. Then the moment you are on your own two feet and are freely relaxed and able to move, you find your internal feeling changes.

It is my hunch that these ways of communicating are learned early in childhood. As the child tries to make his way through the complicated and often threatening world in which he finds himself, he uses one or another of these means of communicating. After enough use he can no longer distinguish his response from his feeling of worth or his personality.

Use of any of these four responses forges another ring in an individual's feeling of low self-worth or low pot. Attitudes prevalent in our society also reinforce these ways of communicating — many of which are learned at our mother's knee.

"Don't impose; it's selfish to ask for things for yourself," helps to reinforce placating.

"Don't let anyone put you down; don't be a coward," helps to reinforce blaming.

"Don't be so serious. Live it up! Who cares?" helps to reinforce distracting.

(*Peoplemaking*, pp. 63-72;
Science and Behavior Books)

Finally, we would add to Satir's excellent description of each of these communication stances the syntactic correlates which we have found to accompany them:

Satir Category 1 — Placater

Use of qualifiers: *if, only, just, even*, etc. Use of subjunctive mood of verbs: *could, would*, etc. Mind reading violations.

Satir Category 2 — Blamer

Use of universal quantifiers: *all, every, any, each time*, etc. Use of negative questions: *Why don't you? How come you can't?* etc. Cause-Effect violations.

Satir Category 3 — Computer (super-reasonable)

Deletion of experiencer noun arguments — the subject of active verbs as in *I see* — *as can be seen* or the object of verbs wherein the object noun argument is the experiencer as in *disturbs me* — *X is disturbing*. Use of nouns without referential indices: *it, one, people*, etc. Use of nominalizations: *frustration, stress, tension*, etc.

Satir Category 4 — Distracter

This category, in our experience, is a rapid alternation of the first three; thus, the syntax which identifies it is a rapid alternation of the syntactic patterns of each of the three listed above. Also, the client displaying this category rarely uses pronouns in his responses which refer to parts of the therapist's sentences and questions.

PHASE 1 IDENTIFYING THE CLIENT'S INCONGRUITIES

The first step in the overall strategy for working with incongruencies is for the therapist to be able to recognize incongruencies in the client's communication. Each time a client expresses himself, he uses each of his output channels to represent to the therapist a message or set of messages. As we discussed previously, each output channel conveys one message — the set of all messages

presented simultaneously is called *paramessages*. Each of these paramessages is a valid representation of the client at that point in time. If each of the output channels carries the same message, then the client and the set of paramessages are congruent. If, however, one or more of the output channels conveys a paramessage which does not fit with the paramessage carried by another of the output channels, the client is incongruent. In order for therapists to detect incongruency in clients, therapists must have the ability to use their sensory input channels without hallucinating. Specifically, the therapist can come to recognize the paramessages being presented by the various body postures and gestures/movements of the client's body both visually and kinesthetically. The therapist can use both of his eyes and his hands and other parts of his body to watch and to touch the client's body. The therapist uses his auditory input channel to listen to the sounds which the client produces. The therapist checks both within each of his input channels and across input channels to determine whether or not the paramessages which he is receiving match. For example, within the auditory input channel, the therapist checks the words which the client utters against the voice tone, against the tempo or rate of speech which the client uses to convey his experience. If the therapist determines that the three messages carried to him in the auditory input channel match, he then checks these paramessages against the paramessages he is receiving through his visual and kinesthetic input channels to determine whether these are all congruent, one with the other.

We are not suggesting that the distinctions which we are describing here exhaust the possible distinctions which we are capable of making as human beings — for example, in the auditory input channel that language, tonality and tempo are the only, or even the most important, distinctions which a therapist can make in therapy to detect incongruencies. What we are identifying here are some of the distinctions which we have found useful for ourselves both in our work and in teaching others to become skilled therapists. Furthermore, we want to point out that experienced therapists rarely consciously check within and then among their different input channels to determine whether the client is communicating congruently. Rather, as we have come to realize in our experiences in Therapist Training Seminars, people training to become therapists initially rely primarily on a few distinctions in one or more of their input systems. During this initial period, they are very conscious of checking these distinctions. However, in a relatively short period of time, this systematic checking of a few distinctions in one or more input channels drops out of their

consciousness, but their behavior remains systematic — that is, they continue to consistently detect incongruities in the client's communication when conflicting paramessages are presented along these distinctions. In other words, while they no longer consciously check for conflicting messages from the client in these dimensions, they continue to see, hear and feel incongruities. Typically, after they have mastered these first distinctions and these drop out of consciousness, they begin to hear, see and feel new distinctions which allow them to make even more subtle judgments about the congruency of the client's communication.

We want once more to emphasize that the therapist during this phase of incongruency work with the client is not attempting to interpret or understand the meanings of the various paramessages which the client produces as he communicates, but is making a simple congruent/not congruent comparison among the paramessages which he is receiving.⁵

There is to our knowledge no way for therapists to detect incongruencies in the client's communication except for therapists to develop their abilities to see, hear and feel without hallucinating. Once a therapist has trained herself to have her input channels free to accept the paramessages presented by the client and to compare them for congruency, she is well on her way to becoming a dynamic and effective therapist. We have in the course of our Therapist Training Seminars developed a number of special techniques which people training themselves to become therapists have found useful. These are simply special cases of the general principles which we have already presented — there is no substitute for clearing and developing your input channels. We present three of these special cases.

Case I — "but"

Sometimes the therapist hears the client utter a sentence and he suspects that he heard some incongruity but is not certain. One of the most common of these cases is when the client utters sentences such as:

*I really want to change the way that I act in public.
I actually don't want to go to the party.
I truly want to go to the show with him tonight.*

In English, when a person says a sentence which is a simple statement his voice drops at the end of the sentence. Say the

following two sentences aloud and listen to the difference in the way your voice shifts at the end of the sentence.

I will leave home precisely at midnight.
and
Do you want to leave home precisely at midnight?

In saying the second sentence (the question) aloud and listening to yourself, you will have noticed that your voice rose at the end, while, when you said the first sentence, your voice dropped at the end. Now, say the first set of sentences again, this time allowing your voice to rise slightly at the end — not as dramatically as you did with the question but do not allow your voice to drop as is customary with simple statements. Listen to this first set of sentences as you say them. If you have said them with the correct intonation pattern (slight rise at the end), you will have an almost-an-incongruity experience. People whose most highly valued representational system is auditory will, in fact, hear an additional word inside their heads after the last word of each of the first set of sentences — specifically, they will hear the word *but*. This is the basis of the almost-an-incongruity experience. What has happened is that the slight rise in intonation at the end of this special class of sentences called Implied Causatives (see *Magic I*, Chapter 4, for a detailed discussion) signals the listener that the sentence is not complete — a portion of it is missing. Whenever you are acting as a therapist and have this particular experience, we suggest that you simply lean forward, look carefully at the client and say the word *but* and wait for the client to finish the sentence with the portion which he had originally omitted. Thus,

Client: I really want to change the way that I act in public.
Therapist: . . . but . . .
Client: . . . but I'm afraid that people won't pay attention to me.

This provides an excellent opportunity for you to train your input channels to notice differences in the client's communication. Typically, the client's body posture, gestures, tonality, tempo and syntax will be radically different during the period when he is saying the portion of the sentence before you, the therapist, say the word *but* and during the period when he is saying the portion of the sentence after you say the word *but*. In other words, the client will express two different parts or models of the world —

one associated with the first portion of the sentence and another associated with the last portion of the sentence.

Case II — The Meta-Question

Another very common situation which we have found useful for assisting people in learning to identify shifts or differences in the client's communication is what we have termed the meta-question. The following is an example:

Client: I feel so angry about my job.

Therapist: Yes, and how do you feel about feeling angry?

Client: Well, I feel scared about feeling angry.

This question is extensively used by Virginia Satir in her dynamic therapy — she describes this question as an excellent way to tap the client's self-esteem (the client's feelings about his feelings) — a part of the client closely connected with his ability to cope (see *Magic I*, Chapter 6, for more discussion). Again this exchange typically involves the client's shifting the paramessages in each of his output channels radically from his first statement about his feelings to his response to the therapist's meta-question about his feelings about his feelings — the next higher logical level. We will return to this example during the section on integration to demonstrate effective ways for a therapist to cope with different parts of a client which exist (at this point in the process) as different logical types — one meta to the other.

Case III — An Anatomical Basis for Incongruity

It has been known for some time that the vast majority of right-handed human beings have their language function located in their left cerebral hemisphere. This asymmetry is perhaps the most widely accepted of the differences which have been claimed to exist between the two hemispheres of the brains of human beings. One of the most fascinating reports concerning the possibility of independent action by each hemisphere individually comes from studies of people whose major connection between the cerebral hemispheres has been severed surgically. Some of the medical personnel involved are convinced that the result of such operations leaves the person operated on with two independent, only tenuously associated, consciousnesses (see Gazzaniga, Eccles in the

bibliography). Gazzaniga comments (pp. 106-07):

... other cases, where the will and intent of one hemisphere (and usually the left) could prevail over the entire motor system, antagonistic behavior between the two halves of the body was kept at a minimum. Case I, however, would sometimes find himself pulling his pants down with one hand and pulling them up with the other. Once, he grabbed his wife with his left hand and shook her violently, while with the right trying to come to his wife's aid in bringing the left belligerent hand under control.

We have become aware that bi-lateral incongruities exist in many of the communications of our clients when the words which the client is saying are congruent with the paramessages being expressed by the right side of the client's body while the left side (in a client who is right-handed) is carrying a set of paramessages which are incongruent with the verbal paramessage and the communications carried on the opposite side. For example, a fairly common incongruity is what we have come to call *the choker* — typically, the client's words and the right side of his body are carrying messages which are congruent while the client's left hand is fastened tightly on his throat, blocking much of the available passage for the flow of air. Paying close attention to the paramessages being carried by the words and the right side of the client's body and comparing them to the paramessages being conveyed by the left side will provide you with a continuing opportunity to sharpen your ability to detect incongruities.⁶

In this, the final portion of Phase I — Identifying the Client's Incongruity — we present you with a series of exercises. These exercises are designed to assist you in developing your skill in detecting incongruencies — an important skill in your growth as a people-helper.

EXERCISES

DEVELOPING YOUR ABILITY TO DETECT INCONGRUENCIES

VISUALLY

During your waking hours you are constantly being bombarded with visual information; much of this is visual information about other human beings like yourself. This exercise is designed

to assist you in sharpening your skills in identifying incongruent paramessages visually. Decide at the beginning of each day before leaving your home to set aside a 30-minute period some time during the day for you to exercise your ability to identify incongruent visual communications. Decide on a specific time and place — the place should allow you to observe people conversing with one another without your becoming involved in the conversation. Observing from a distance of between 5 and 20 feet will be satisfactory — a public place such as a cafe, a restaurant, an airport, or a park will do.

Step 1 — When you arrive at the place you have decided upon, find yourself a comfortable position, take out a pad and pencil, and take a deep breath. Select one person to observe, giving this person your full attention for the first 10 minutes. Ignore all sounds, especially any sounds which the person you're observing might be making. On your pad of paper, you will have copied the list of visual checkpoints listed at the end of this exercise. Begin by consciously and systematically considering each of the first three items on the checklist; take your time and check each in turn, comparing the paramessages being conveyed by each of these items on your checklist to see whether they are congruent with one another. If you find that you have no difficulty determining whether the first three items on your checklist are conveying congruent paramessages, increase the number of checklist items until you are using all the items on the checklist. After the first 10 minutes, select another person to observe, following the above sequence. Repeat a third time. Compare your experience in observing these three people.

Step 2 — When you have done the exercise described in Step 1 above each day for a week or when you find that you can perform that exercise with ease, try the following: Again decide on a time and place for your exercise — the same requirements as in Step 1. Again select a person to observe. This time, however, use the checkpoint list for each side of the body — that is, in the case of checking the hands of the person whom you are observing, check the paramessages conveyed by position and movements of the right hand against the paramessages presented by the position and movements of the left hand. Next check the set of paramessages carried by all of the checkpoints on one side of the person's body against the set of paramessages carried by the other side. Spend the first 15 minutes doing this. In the last 15 minutes, observe another person — this time do *not* use the checklist; rather, focus your eyes on a spot 3-4 feet to one side or the other of the person (find some object to focus on at that distance). Notice that you

are able to detect the client's movement move accurately when focusing your eyes in this way — pay particular attention to the smoothness (or lack of it) of the person's movement, whether the person completes his movements or cuts them short, whether one side of his body moves in a manner congruent with the way the other side of his body moves. Spend 5 minutes in this type of observation. For the remaining 10 minutes, simply observe the person without the use of the prepared checklist, note any portions of the person's body which are particularly expressive for your purposes of identifying incongruencies. You will find, for example, that certain portions of the body of the person you are observing move in unison as though rigidly connected together while other portions of his body move independently of one another.

Continue this exercise for a week or until you can do it with ease.

Checklist for Visual Paramessages

1. The person's hands;
2. The person's breathing;
3. The person's legs and feet;
4. The eye fixation patterns;
5. The head/neck/shoulder relationship;
6. The facial expression, especially the eyebrows, the mouth, and the cheek muscles.

AUDITORIALY

As with your visual sense, during your waking hours you are constantly being bombarded with auditory information. This exercise is designed to assist you in refining your skills in identifying incongruent paramessages auditorially. As in the instructions given for the first exercise, decide at the beginning of each day for a week before leaving home to set aside a 30-minute period in which you will exercise your new skill. Decide on a specific time and place — again, this place should allow you to sit near enough (5–10 feet, depending on noise level) that you can hear distinctly the voice of the person to whom you will be listening. Places such as those suggested for the visual exercise will serve your purposes here.

When you arrive at the place which you have selected, find yourself a comfortable position, take out a pad and pencil, and

take a deep breath. Choose one person to listen to — listen to this person with your full and complete attention. To assist you in accomplishing this, either unfocus your eyes, close them, or focus them on some non-moving, homogeneous portion of the place you're in — a blank wall, for example. Ignore all visual input; concentrate your attention on the person you have selected. On your pad of paper you will have copied the list of auditory distinctions to which you are to pay attention. Go through the first three items on your list, consciously and systematically considering each of these one by one. Then compare them pairwise to determine whether the paramessages which are being conveyed are congruent or not. If you find that you have no difficulty in making congruency judgments about these paramessages, increase the number of checklist items that you are using until you are using all of them. Use 10 minutes of your total 30 minutes in this way. Repeat the exercise with two more people. Compare the patterns of congruency and incongruency among the paramessages of the people whom you have observed.

Checklist for Auditory Paramessages

1. The tonality of the person's voice;
2. The tempo of the person's speech;
3. The words, phrases, and sentences used by the person;
4. The volume of the person's voice;
5. The intonation patterns of the person's speech.

VISUALLY AND AUDITORIALLY

Repeat the initial preparations as in the previous two exercises — decide on a place and time and allow yourself 30 minutes a day for a week for this exercise. This is designed to give you practice in comparing paramessages in different modalities for congruency. Place yourself so that you are able to both see and hear the person you have selected. Begin by checking for congruency among the first three items on your visual checklist, then check the first three items on your auditory checklist, and, finally, check the items across checklists. Increase the number of paramessages from each list until you are using both lists. Observe and listen to three people for 10 minutes each. Compare the patterns of congruency and incongruency for each of these people. Once this task has become easy for you, begin to pay particular attention to the congruency/incongruency patterns as discussed in Case III — An

Anatomical Basis for Incongruency. Specifically, notice the congruency/incongruency patterns of handedness, verbal paramessages, and the paramessages which are displayed in those postures and movements of the side of the person's body which is controlled primarily by the dominant hemisphere.

PHASE 2

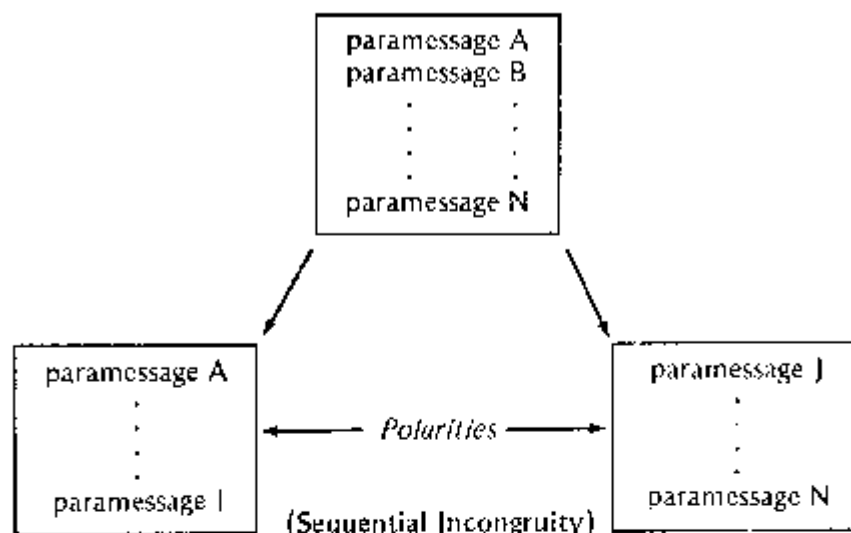
SORTING THE CLIENT'S INCONGRUITIES

When a client presents a therapist with a set of incongruent paramessages, he has, quite literally, presented the therapist with a set of choices of how to proceed to assist him in changing and growing. Each paramessage is a statement to the therapist that the client has a resource which the therapist may choose to use in the client's growth process. The therapist, by recognizing each of these paramessages as a valid representation of the client, is accepting and utilizing the client's resources in a way which avoids judgments about what is *best* for the client or about which of the conflicting paramessages is the *true* representation of the client.⁵ It is at this point — when the therapist has identified the incongruities in the client's communication — that the therapist will begin to work actively to convert the client's incongruities into identifiable, fully expressed parts. Here one of the important choices which the therapist must make is how many and which of the client's parts he will assist the client in integrating. Our experience in this task ranges from working with two parts to up to twenty parts simultaneously.

POLARITIES

The most common sorting of a client's incongruities is a sorting into two parts — we distinguish this situation with a special name. When a client's incongruent paramessages are sorted into two parts for therapeutic work, we call these two parts *polarities*. Very dramatic therapeutic work and profound and lasting change can be achieved by a therapist and clients through polarities.

Simultaneous Incongruity



We recommend the sorting of incongruities into polarities as an excellent therapeutic technique and one which will allow the therapist to make sense out of the client's behavior. We make effective polarity work a prerequisite for therapists before instructing them in working with more than two of the client's identifiable parts at one time. In our description of Phases 2 and 3, we will focus on the two-parts situation — the polarity case; the remarks we make are also applicable to work in which more than two parts are being handled simultaneously. At the end of the sections on Phases 2 and 3, we will discuss more specifically working with more than two parts at a time.

INCONGRUITIES INTO POLARITIES

The therapist is now ready to help the client to sort his incongruities into polarities. He begins by selecting one of the paramessages with which the client has presented him. Suppose we use a description given earlier in this part as an example. The messages which we identified earlier (coming from a male client) were:

- Body stiff (Paramessage A);
- Breathing shallow and irregular (Paramessage B);

Left hand with extended index finger (Paramessage C);
 Right hand palm open and turned up in lap (Paramessage D);
 Harsh, shrill voice (Paramessage E);
 Rapid rate of speech (Paramessage F);
 The words: *I do everything I can to help her; I love her so very much* (Paramessage G).

What we have here is a set of paramessages which do not match — the client is being incongruent. The therapist does not, at this point, interpret the paramessages; he simply notes that they do not *all* fit. However, some of the paramessages fit with other paramessages. For example:

Group I	Group II
Left hand with extended index finger;	Right hand palm open, turned up in lap;
Harsh, shrill voice;	The words: <i>I do everything I can to help her; I love her so very much.</i>
Rapid rate of speech;	

The paramessages in Group I fit with one another as do the paramessages in Group II. The paramessages of one group do not, however, fit with those of the other group. (The paramessages not listed in either Group I or Group II fit with either group.) The client has, of course, had long experience in expressing his *mixed feelings* about his wife and will, in most cases, be quite unaware of the incongruities in his communication. The therapist now selects one of the groups of paramessages which fit together and begins the process of assisting the client in fully expressing one of his polarities. Suppose that the therapist chooses to work with the Group II paramessages first. He arranges two empty chairs, facing one another. He directs the client to sit in one of these chairs and tells him to repeat what he has just said. As the client repeats the words which he had just said, the therapist listens and watches carefully — his task now is to teach the client to be totally congruent in his communication, using the Group II paramessages as a guide. In other words, as the client repeats what he originally said, the therapist acts as a movie director or a play director, coaching the client, providing feedback, literally molding the client's body with his hands and words, instructing him in voice tonality and rate of speech until all of the client's output channels are representing the same or congruent paramessages. He then

directs the client to move over into the opposite chair, leaving behind all the feelings and thoughts which he has just expressed. The therapist places the client's body in the posture and with the gestures which he identified as Group I paramessages. After placing him in this body posture, the therapist directs the client to say something which fits for him at that moment in time, and to say it with a rapid rate of speech and in a harsh, shrill voice. The therapist utilizes his skills in detecting incongruities to change the portions of the client's communication (the paramessages) which do not fit with the paramessages of Group I. In other words, the therapist now uses the paramessages of Group I as the guide and adjusts all of the client's other paramessages to be congruent with those. Here he is working to have the other polarity express itself fully and congruently. The therapist will usually have to have the client switch from chair to chair (that is, from polarity to polarity) a number of times before he will be able to express himself congruently in each position.

What have the therapist and the client accomplished when the client is able to express himself congruently in each polarity? One way of answering this question which we have found useful in our Therapist Training Seminars is to state that the client has changed from expressing himself *incongruently simultaneously* to expressing himself *incongruently sequentially*. The client began the session stuck and confused, incongruent in his communication, simultaneously expressing parts of himself which did not fit together. Now the client can express himself congruently at each point in time, although he is still incongruent over a *period* of time. The situation has changed from one of simultaneous incongruity to sequential incongruity, or *alternating polarities*. When this occurs, the second phase of the incongruity work is accomplished.

In the description of the therapist's actions in sorting incongruencies into polarities, we simply stated that he worked with the client to assist him in communicating congruently in each polarity, assisting him in expressing each of his polarities fully, one after the other. We will now present some explicit techniques for assisting the client in moving from simultaneous incongruities to alternating polarities. We will consider three specific problems in sorting incongruities into polarities which we have noted occurring over and over again:

- (1) How to sort incongruities into polarities — what techniques are effective in shifting from a set of incongruent paramessages to polarities;

- (2) How to assist the client in fully expressing each polarity;
- (3) How to know, specifically, when the polarities are sorted for integration.

Spatial Sorting

In the example described above, we used a technique which was made famous by the late Fritz Perls — the “empty-chair” technique. The therapist in the example used two chairs as locations which the client could associate with each of his polarities. This empty-chair technique is only one of a potentially infinite number of ways of sorting incongruencies into polarities on the basis of *spatial sorting*. Each of you can use your own imagination to create a variation on the empty-chair technique. The underlying principle is to use a distinct spatial location to assist the client in sorting the paramessages into polarities — two different patterns on a rug, two sides of a doorway, etc. Each of these would serve equally well. The most useful part of the technique is that it helps both the therapist and the client to know where each paramessage is located. Notice that spatial sorting always actively involves the client kinesthetically — that is, the client must physically move from one spatial location to another. This actual kinesthetic change (especially when used with instructions from the therapist to leave behind all of the feelings and thoughts [of one polarity] expressed in that spatial location when moving to another) is congruent with the change that the client is learning to make, allowing first one polarity and then the other to express itself without incongruent paramessages between the polarities.

Fantasy Sorting

A second useful way to organize incongruities into polarities is *fantasy sorting*. This is particularly useful with clients whose most highly valued representational system is visual. Using the above example again, the therapist, having detected the groupings of the paramessages, decides to use Group II as a guide: He instructs the client to allow his eyes to close and to make a picture of himself down on one knee with his hands extended, palms turned up. Once the client has indicated that he has a stable, clear, focused image of himself, the therapist will begin to add other paramessages congruent with those of Group II already incorporated into the image, both in the same representational system (visual) — for example, a quivering lip⁷ and in other representational systems as well. For example, the therapist may say:

As you watch your lips move, hear the words: "I do

everything I can for her; I love her so very much."

Now the therapist has the client report the entire image, checking it for incongruent paramessages. When the image is congruent, the therapist works with the client to create a second visual fantasy, this time a congruent image of the other polarity (based on the client's paramessages in Group I). The therapist will usually have to instruct the client to switch the images several times until each is congruent. With this fantasy sorting, the client has access to visual and auditory presentations of his polarities in a way that he does not have in spatial sorting.⁸

Psychodramatic Sorting

A third technique which we have found useful in sorting is one which we call *psychodramatic sorting*. Here the therapist has the client select two members of the group to play his polarities. With the assistance of the therapist, the client instructs first one and then the other person in playing his polarities. For example, the therapist has one of the group members adopt all of the paramessages in Group I while the other group member adopts all of the paramessages of Group II. The client and the therapist then work with the selected group members to make each of them a fully expressed and congruent polarity. This sorting technique gives the client an opportunity to experience his polarities visually and auditorially. During the course of instructing the group members to play the polarities properly (that is, in a way which matches the client's models), the therapist will direct the client to play first one and then the other of the polarities. This provides the opportunity for the client to experience his polarities kinesi-thetically as well as to insure that the group members are playing his polarities properly. The psychodramatic sorting technique serves as an excellent training device to assist therapists in training to detect, sort, and reproduce the paramessages presented by the client.

Representational System Sorting

A fourth and extremely powerful technique for assisting a client in sorting incongruities into polarities is that of *representational system sorting*. One of the most frequent ways which people use in maintaining inconsistent models of the world — the basis for incongruities, and, therefore, polarities — is by representing the conflicting portions of their model(s) in different representational systems. We can utilize this principle effectively in the sorting phase of incongruity work with clients. For exam-

ple, the therapist may choose to have the client sit in one of the empty chairs and, using Group II paramessages as a starting point, require that the client report all of his feelings (body sensations — kinesthetic representational system) about his wife. Here the therapist is alert to the predicates which the client uses, instructing him in the use of kinesthetic predicates to report his feelings. Once the client has described his feelings, the therapist will move him and have him report his images and visual perceptions of his experience with his wife. Here the therapist assists the client in using visual predicates in reporting. One specific way to do this would be for the therapist to assist the client in re-enacting a recent unsatisfactory experience that he had with his wife. The client reports all of the body sensations which he experienced; he then reports all of the pictures — the visual information he has of the experience. We encourage the people in our Therapist Training Seminars to use this technique in conjunction with the following one — that of *Satir Category Sorting* — and have found it amazingly potent.

Satir Category Sorting

To use a Satir Category Sorting technique, the therapist simply sorts the paramessages available into the Satir Category to which they belong:

Group I	Group II
Left hand with extended index finger;	Right hand palm open, turned up in lap;
Harsh, shrill voice ^b	the words: <i>I do everything I can to help her; I love her so very much.</i>
Rapid rate of speech;	
↓	↓
Satir Category 2	Satir Category I
(blaming)	(placating)

The use of these two sorting techniques in conjunction with one another have, in every case in our experience, resulted in a sorting of incongruities into polarities which forms the basis for a profound integration and growth step for the client involved. We have noted over and over again certain patterns in the way that representational systems and Satir category sort out. In the order of

their frequency and effectiveness, they occur in the following way:

Representational Systems Polarities

Visual	Kinesthetic
Visual	Auditory
Auditory	Kinesthetic
Kinesthetic	Kinesthetic

Satir Category Polarities

Blaming 2	Placating 1
Blaming 2	Super-reasonable 3
Super-reasonable 3	Placating 1
Placating 1	Placating 1

The interaction of these two principles provides much of the power when they are used in combination. The most useful generalizations from our experience are that the following Satir Categories consistently occur with the representational systems listed:⁹

Representational System	Satir Category
Kinesthetic	Placating 1
Visual	Blaming 2
Auditory	Super-reasonable 3

With these correspondences, therapists have an extremely powerful organizing principle in aiding them in sorting incongruities into polarities. Any polarity which displays the postures, gestures and syntax of a Satir Category 1 (placating) (Group II, for example) can be instructed by the therapist in the use of kinesthetic predicates; in the case of a polarity which shows a Satir Category 2 in posture, gestures, etc., the therapist knows to best assist the client in this sorting phase by insuring that he uses predicates which presuppose a visual representational system. In our experience, by far the most frequently occurring combination is a polarity split wherein one polarity is a Satir 1 (placating) with a kinesthetic representational system while the other polarity is a Satir 2 (blaming) with a visual representational system. There is a large amount of information, especially from neurological sources, which indicates that, while a human being has a kinesthetic representational system present in both hemispheres, the two cerebral hemispheres are specialized with respect to the other two representational systems, visual and auditory. Specifically, the language

portion of the auditory representational system is localized in the so-called dominant cerebral hemisphere while the visual representational system is localized in the non-dominant cerebral hemisphere.¹⁰ Each of the representational system polarity splits which we have found useful in our work is consistent with the generalization that incongruities can be very effectively sorted into polarities whose representational systems are located in different hemispheres. This helps us to understand the extraordinary power of the combined representational system—Satir Category sorting principle.

We have presented five general techniques which a therapist may use to help the client to sort incongruent paramessages into polarities. The first three of these — spatial sorting, fantasy sorting, and psychodramatic sorting — can easily be used in combination with the last two — representational system and Satir Category sorting. For example, in using a spatial sorting technique, the therapist can apply the representational system and Satir Category sorting principles. The therapist must be alert to watch and to listen, making sure that the spatially sorted polarities have distinct representational systems and distinct Satir Categories. In addition, the first three techniques also can be used in conjunction with one another. For example, when we presented the example of a fantasy sorting technique, we mentioned that it had the advantage of presenting the client with visual and auditory representations of his polarities in a way not available in the spatial sorting technique. However, notice that, in the spatial sorting technique with the two chairs, when the client moved from one chair to the other, the therapist routinely had the client fantasize his other polarity visually and auditorily in the other chair, thereby combining the advantages of the two techniques in a natural way. This is, in fact, a standard procedure for us in teaching people in our Therapist Training Seminars. For us, the most important piece of information with which we present you in this section is that the examples are intended as an initial *guide* for your behavior, and we intend them *only* as a guide. The principle of which they are an example is that of converting a client's simultaneous incongruities into polarities, each congruent in its expression. We encourage you to create new, exciting and original ways of helping clients with this second step — changing their incongruities into resources in their continuing growth as alive human beings.

EXPRESSING POLARITIES

We turn now to the question of specific ways of assisting the client in fully expressing each of his polarities. As mentioned in the example, one excellent way for the therapist to work to accomplish this is for him to act as a movie or play director. In this way, he uses his ability to detect incongruities and to instruct the client in learning to express himself congruently. In doing this, the therapist demands a wholly congruent presentation by the client of each of the polarities. Often the therapist will, himself, demonstrate the congruency of presentation of the polarity which he wants the client to achieve, thus presenting himself as a model for the client. We have discovered a number of other ways of doing this in addition to the movie/play-director technique.

One way of assisting the client in fully expressing each of his polarities is to use the Meta-model techniques detailed in *Magic I*. In this technique, challenging the form of the client's language representation to require that the client fill in any deletion (portions of the sentences which have been left out) and specify verbs (give descriptions of processes which allow both the client himself and the therapist to connect the language representation with the experience), and then using the other Meta-model distinctions allow the therapist a systematic way of completing each of the client's polarities.

In our experience, one of the difficulties in aiding clients in fully expressing each set of paramessages as a congruent polarity is that frequently the client is able to express one of the polarities fully (the more fully expressed polarity) but has great difficulty in fully developing the other polarity (the less strongly expressed polarity). Here we can offer a maneuver which, in each case in our experience, has been effective in assisting the client in fully expressing the weaker polarity. We call this *playing polarity*. We distinguish two versions of the maneuver of playing polarity. The first occurs when the client himself is deliberately instructed by the therapist to continue to play the more fully expressed polarity; in fact, to play this polarity in as exaggerated a form as the ingenuity of the therapist can assist the client in creating. This move on the part of the therapist will inevitably have as its consequence several positive results. First, the therapist is fully accepting and utilizing the client's behavior — he literally tells the client to do what he is, in fact, already doing. Notice that this leaves the client in the position of having two choices:

- (a) Accept the therapist's directions to do in an exaggerated

- form what he is already doing;
- (b) Resist the therapist's directions to do in an exaggerated form what he is already doing.

If the client takes choice (a), he is accepting the therapist's directions as legitimate. Here the issue is often characterized as control — a topic dealt with extensively by Haley (see *Strategies of Psychotherapy*). Typically, when the technique of playing polarity is first presented in our Therapist Training Seminars, the participants are concerned with what at first appears to them to be a manipulative technique. Rather than the issue being one of control, we understand this maneuver to be a full utilization of the limits of the client's model of the world in a way which results in allowing the client to come to express and to accept parts of himself which he had previously suppressed. To claim that the issue is one of control is to accept a model of the world in which one human being has the power to control another human being through manipulation. We discussed this extensively in *Magic I* as a case of semantic ill-formedness (see, especially, Chapters 3 and 4). Here we wish simply to point out that characterizing this maneuver as controlling the behavior of the client does not respect the capacity of the client to learn to respond and fails to give him credit for his vast potential to integrate the many parts of himself. One outcome of the client's accepting the therapist's direction to play his more fully expressed polarity in an exaggerated form is that the client will soon flip polarities. In other words, the outcome for a client who is playing his more fully expressed polarity in an exaggerated form is the emergence of the opposite polarity.¹¹ This general tactic of playing polarity has different names in different forms of psychotherapy. For example, in Gestalt therapy, this is called *making the rounds* (*Gestalt Therapy Now*, J. Fagen [ed.]). The therapist instructs the client in playing his more fully developed polarity with each member of the group until the client flips polarity. In the context of Brief therapy (see, for example, the cases listed in *Change*, Watzlawick, P.; Weakland, J.; and Fisch, R.), this technique is often assigned to the client in the form of homework. Milton Erickson frequently uses this technique as a first step in his work. For example, in working with a client who is obese and states that he wants to lose weight, Erickson, typically, will instruct the client to gain weight. As Erickson points out, this maneuver presupposes that the client has control over his weight; thus his gaining weight is equivalent to his accepting responsibility in an area of his behavior he had previously considered outside of his control (see *Advanced Techniques*

of *Hypnosis and Therapy*, J. Haley [ed.]).

If the client chooses to reject the therapist's directions [take option (b)], then the typical result is that the client will respond by flipping polarities. Thus, whether the client chooses (a) or (b), the less fully expressed polarity will emerge and the process of growth and change is well underway.

The second variation of playing polarity is for the therapist, himself, to play polarity. Again, the object of this move is to assist the client in fully expressing the weaker of two polarities as a step in preparing to integrate them. Again, the same polarity principle applies. Since the therapist wishes to assist the client in developing the *less* fully expressed polarity, the therapist plays the *more* fully expressed polarity. For example, the therapist adopts the body posture, gestures, tonality, rate of speech, characteristic syntax, appropriate representational system predicates, etc. — all of the output systems present in the client's more fully expressed polarity. The critical portion of this maneuver is that the therapist must be more congruent and forceful in presenting the client with his own polarity than the client is in presenting that polarity. In our experience, the result is immediate and dramatic. The client responds by expressing the formerly weaker polarity. The therapist continues to play the first polarity in an exaggerated form until the client is expressing the opposite polarity with equal intensity. Rarely is the client aware (consciously) of this maneuver on the part of the therapist. Furthermore, even in a case in which the client is perfectly aware that the therapist is playing polarity, he will (prior to integration) respond with the opposite polarity if the therapist continues to express the client's stronger polarity.

Now we consider the process by which the therapist knows that the client has succeeded in sorting his polarities in a way which will allow a significant integration. Since the entire purpose of Phase 2 of incongruity work is to change simultaneous incongruities into sequential incongruities, the therapist uses all of his input channels — he uses his body, touching the client, checking for muscle patterns; his eyes, watching carefully all of the paramessages presented by the client's body postures and movements; his ears, listening intently to the tonality, tempo, and representational system predicates — to determine that the client is congruent in his communication as he expresses first one and then the other polarity. Again, there is, to our knowledge, no substitute for a therapist's having a clear set of eyes and ears and a body which he uses to check for congruency in the client. In our Therapist Training Seminars, we have found it useful to instruct therapists in training to make two very specific checks. A client's

incongruities will be considered to be adequately sorted for the purposes of beginning integration when all of the following conditions are present:

- (1) Each of the polarities has a consistent representational system which is different from that of the other polarity;
- (2) Each of the polarities has a consistent Satir Category which is different from that of the other polarity;
- (3) The representational system and Satir Category of each polarity matches the correspondences listed:

Representational System	Satir Category
visual	2
kinesthetic	1
auditory	3

When all of these conditions are satisfied, the therapist then moves to the integration of the polarities — Phase 3 of incongruity work.

INCONGRUITIES INTO PARTS (>2)

We are aware of only one technique which has been developed by any therapeutic wizards to sort more than two parts from the incongruencies presented by a client. This is Virginia Satir's *Parts Party*. We both use this in our work and find it an excellent and effective technique.

In a Satir Parts Party, the psychodramatic technique is utilized fully. Using a projective technique (e.g., the names of a number of well-known people, fictional or real, by whom the client feels particularly attracted or repelled, then assigning each of the famous names an adjective which best describes them to the client), the therapist assists the client in selecting and instructing group members to play each of the parts identified. The group members then interact in the context of a party — each of them behaving one-dimensionally. For example, if, in a client's party, some group member has accepted the responsibility for playing a part characterized by the adjective *angry*, then that person (after the client has instructed him in the specifics of how he expresses anger) will present an angry message with every output channel, with every paramessage, in every contact with the other parts. The client is usually placed in a position in which he can see and hear all of the action of the parts. Typically, the client sees and hears

acts by his parts which previously had only occurred in his fantasies as well as behavior which he has been aware of in coping with others in his public experience. Usually, after the client has identified (owned) all of his parts, some crisis occurs in the interaction of the parts, mobilizing them. In this crisis, some of the parts transform into other related abilities or resources and all of the parts learn to cooperate with each other. The final portion of the Parts Party consists of the client's accepting each of his parts as a resource — the integration phase.

In assisting the client in identifying with a projective technique the parts or resources which he has, we have found it useful to have the client select an equal number of male and female well-known personages. Often we ask for about half of the number with which we want to work. Once this has happened and the client has assigned adjectives to the people selected, we ask the client to give us an adjective which is the polar opposite for each of the adjectives already chosen, one by one — in effect, an adjective which describes the part of him which is maximally incongruent in his model of the world with the part being described. Using this approach, we identify and simultaneously balance so-called *good* and *bad* parts with respect to the client's model of the world. This corresponds to Phase 1 of the polarity work we have described so far. The portion of the Parts Party in which the client, with the therapist's help, instructs each of the people selected to play the parts is most closely associated with Phase 2 of the polarity work we have been describing. Here, typically, we ask the client to instruct the person playing some particular part, *anger*, for example, by being angry at this point in time. Using guided fantasy or enactment techniques (see *Magic I*, Chapter 6 for a description) we assist the client in literally showing the person who will play the angry part the exact way in which to play it. As the client shows the person how to be angry by being angry, we use our skills in detecting incongruent paramessages to assist the client in being maximally congruent in his expression of anger. Here again the techniques described previously in assisting the client in becoming maximally congruent apply — for example, acting as a movie or play director, checking for consistent representational system predicates, etc. Once the client has expressed his anger part congruently, we ask the person who will play that part to copy all of the paramessages — the body posture, the movements, the tonality. Now we make the client the movie or play director. His task is to mold the person who will play his anger part into the body posture, movements, tonality, etc., which most congruently represent, for him, his anger part.

Once all of the first set of adjectives have been assigned to people and the people have been instructed by the client specifically how to play these parts, we ask the client for the adjective which is the polar opposite of each of these, as mentioned above. Again, we ask the client to assign this new part to some group member. Here we have found it useful, as the client begins to instruct the people who will play each of the polar opposites, for the person who will play the original adjective to come forward and begin to interact with the client. The outcome of this (whether the client is aware of the maneuver or not) is that the client quickly becomes maximally congruent in the expression of the polar opposite, thus providing an excellent model for the person who will play that adjective. Again, the therapist may choose to play the polar adjective himself rather than have the person assigned the adjective come forward and do it. Once the party begins, the client, with the therapist's help, works to make the players maximally congruent in their presentations of the parts they have been assigned.

The same principles which we have presented previously for polarity work apply in the parts party. The strategy for the therapist is to assist the client in sorting his incongruencies into a number of parts. Some of these parts have the polar opposite relationship and, therefore, the therapist makes use of explicit ways of determining whether the polarities are well sorted (e.g., two polar opposites do not share representational systems). The overall task for the therapist in this work is to sort the client's conflicting and simultaneously incongruently expressed models of the world into parts, each of which is congruent. This prepares the stage for Phase 3, Integration, in which the client will be able to use these incongruencies as resources to assist him in coping with the world and in his continuing growth. By this process the therapist helps the client to transform the conflicting parts of himself — parts which previously had been the source of pain and dissatisfaction, parts which had by their antagonism to each other prevented him from getting the things he wanted for himself — into resources which he may now use to create a full, rich, coordinated, and exciting life for himself, the transformation of pain into a basis for growth.

PHASE 3

INTEGRATING THE CLIENT'S INCONGRUITIES

Once the therapist has assisted the client in sorting his incon-

gruities into polarities, the integration phase (Phase 3) begins. Here the overall strategy is for the therapist to help the client to coordinate his polarities so that these polarities become resources for the client rather than the basis of pain and dissatisfaction. Another way of stating this overall strategy is that the therapist works with the client to assist him in achieving *meta-position* with respect to his polarities (or parts, in the case in which more than two of the client's parts are being worked with). A person has achieved meta-position with respect to his polarities (parts) when he has choices in his behavior (whether consciously or not) about whether he will behave in a way which is characteristic of one polarity (part) or the other in a smooth, coordinated fashion, when neither polarity (part) interrupts the other, and the client expresses both polarities appropriately and congruently. We divide the integration phase of incongruency work into two portions — *contact* and *integration*.

CONTACT BETWEEN THE POLARITIES

So far, in the incongruity work the therapist and the client have worked to transform a set of simultaneously presented incongruent paramessages into a series of sequentially presented congruent polarities (parts). These polarities are now sharply distinguished — they have distinct Satir categories and distinct representational systems. In other words, the client has changed from a confused, self-interrupting, tortured, incongruent human being into one who can express himself forcefully and congruently at each point in time. Since these polarities, each congruent, are organized in different representational systems, they have no systematic way of making contact. The therapist has many choices about the way that he helps the client's polarities to make contact. We will now describe some of these choices. However, we first want to remind you that these are only a guide to assist you in your work; we encourage you to develop other methods which you will find useful. The more choices you have as a therapist, the more effective and creative you will be as a people-helper. Secondly, these choices are not mutually exclusive; we encourage you to find combinations of these choices which will make your work more powerful.

Choosing the Representational System for Contact

At this point in therapy, the client's polarities do not have a representational system in common — they, quite literally, have no

way of making contact. Here the therapist's fundamental choices are whether to work to give one of the polarities the representational system which the other has, to give each of the polarities the other's representational system, or to introduce a representational system new to *both* of the polarities in which they can make contact. Naturally, the therapist may choose to do all of these so that the outcome is that each of the polarities has all three representational systems, and thus they make contact in all of them.

No matter which of the options the therapist takes at this point in therapy, he will be particularly aware of his use and the client's use of predicates. If, for example, the therapist has decided to begin the contact phase by assisting a visual Satir 2 polarity in developing an ability to represent his experience kinesthetically — to get in touch with his feelings — he will deliberately shift the predicates which he is using from ones such as *see, watch, clear*, — which presuppose a visual representational system — to ones such as *feel, touch, sensitive*, which presuppose a kinesthetic representational system. Furthermore, the therapist will listen carefully to the client's responses to him to determine whether the client shifts to the matching predicates. We present now two examples of a therapist making a choice about representational systems and beginning the process of putting the polarities into contact.

EXAMPLE 1

The therapist has sorted the client's incongruencies into two polarities, using the Perls-type, empty-chair technique. One of the client's polarities is a blaming, visual polarity and the other a placating, kinesthetic one. The client, a woman named Beatrice, is in the visual, blaming polarity chair, congruently expressing her anger.

Therapist: . . . Yes, and tell her exactly what you see as you look over there at her, sitting there crying.

Beatrice: Yeah, I know . . . I watch you . . . you always sit around crying and feeling sorry for yourself. Your eyes are so filled with tears that you can't even see what you're doing.

Therapist: Now, Beatrice, switch to the other chair!

Beatrice: (Moving over to the other chair, her body posture, gestures, tonality shifting to a set of paramessages which are congruently placating) oh . . . (crying quietly) . . . oh, I

feel so bad . . . my stomach hurts and I just want to be left alone (continuing to cry).

Therapist: (Noting that Beatrice is expressing each of her polarities congruently and that they are sorted so that there is no overlap between representational systems and Satir categories, the therapist decides to use the representational system which neither of the polarities has to assist them in making contact — the auditory system.) Beatrice, did you hear what she (therapist indicating the visual, blaming polarity chair, now empty) said to you?

Beatrice: What? . . . what she said. (looking at the other chair) Yes, I think so. . . .

Therapist: Tell me, what did she say?

Beatrice: . . . oh . . . I'm not sure; I guess I didn't hear her.

Therapist: OK, now, Beatrice, ask her what she said to you. Call her by name.

Beatrice: Beatrice, what did you say to me?

Therapist: Move! (Beatrice moves to the other chair, again her body and other output channels shifting to the blaming polarity.) Now, Beatrice, respond!

Beatrice: Respond? . . . respond to what?

Therapist: Did you hear what she said to you?

Beatrice: . . . Well, no, but she always . . .

Therapist: (Interrupting Beatrice) Ask her what she said!

Beatrice: Well, what did . . . (interrupting herself) oh, I remember.

Therapist: What?

Beatrice: She asked me what I had said to her.

Therapist: Now, respond to her.

Beatrice: All you ever do is sit around and cry and feel sorry for yourself.

Therapist: Beatrice, switch chairs (Beatrice moves). Now did you hear what she said?

Beatrice: Yes, she said that all I ever do is sit around feeling sorry for myself.

Therapist: Yes; now respond.

The therapist continues to work with Beatrice, checking to insure each time that she moves that she accurately heard what the other polarity has said before attempting to respond. In this way, the two polarities begin to make contact with one another, to make their needs known, and to learn to communicate and cooperate with one another so they are truly resources for Beatrice rather than a source of pain and dissatisfaction.

EXAMPLE 2

Mark, a young man in his mid-twenties, a member of one of our Therapist Training Groups, has worked with one of the therapists to sort his incongruencies into a placating, kinesthetic polarity and a blaming, visual polarity. The therapist has decided to work to give each of the polarities the representational system that the other has in order to allow them to make contact.

Mark: (In the kinesthetic, placating position) I just want to feel good, I just want to relax. . . .

Therapist: Mark, take a deep breath, sit back and loosen the muscles in your chest and neck, and as you do this, look carefully across in front of you and see what you see sitting in the chair opposite you. (Mark adjusts his body and looks up.) Yes, and what do you see?

Mark: . . . Well, it's hard for me to see. I . . . oh, OK, yes, I see a guy standing there pointing his finger at me and he's yelling at me. . . .

Therapist: Yes, and how does his face look to you as you watch him doing this?

Mark: He looks angry . . . ah . . . tight . . . you know . . . he looks like he's really unhappy about something.

Therapist: Now, Mark, switch.

Mark: (Moving to visual, blaming chair, shifting his body appropriately) He (pointing to the first chair) really pisses me off . . . he never . . .

Therapist: (Interrupting Mark) Mark, as you sit there, looking at him, how do you feel, in your body?

Mark: . . . What? . . . feel, in my body?

Therapist: Yes Mark, what are you aware of at this point in time, in your body?

Mark: . . . Well, I really don't know. . . . I'm not sure what I feel . . .

Therapist: Yes; now allow your eyes to close and become aware of your body. (Mark responds) Now, Mark, tell me what you are aware of in your body.

Mark: Wow! I'm so tight in my shoulders . . . my stomach feels twisted up . . . my eyes feel hot (and he begins to cry slowly).

The therapist continues to work with Mark, systematically switching predicates and checking to make sure that Mark also shifts predicates, so that Mark now has the ability to see and to

feel in both positions. In this way, Mark's polarities begin to make contact, an essential step en route to Mark's achieving meta-position with respect to his polarities.

Fully Expressed Polarities During Contact

Once the therapist has established a representational system in which the client's polarities can make contact, he will work to insure that each polarity expresses itself fully to the other. The most comprehensive way to assist each of the client's polarities to express itself fully verbally is the Meta-model techniques — the subject of *Magic I*. In other words, the therapist checks the client's verbal expressions for the well-formed-in-therapy conditions — all of the statements made by each polarity must contain no deletions, no nominalizations, no unspecified verbs; all nouns must have referential indices, etc. There are two special adjustments to standard Meta-model challenges which we have found useful in the context of polarity work.

First, in standard Meta-model challenges, when a polarity has made a statement which includes a modal operator of necessity or possibility (see *Magic I*, Chapters 3 and 4) as the following sentences do:

Client: I can't accept help.

Client: It's impossible for me to ask for things for myself.

the therapist may challenge by asking:

Therapist: What stops you from accepting help?

Therapist: What stops you from asking for things for yourself?

In the context of polarity work, we suggest that you adjust these challenges to:

How does he (indicating the other polarity) *stop you from accepting help?*

How does he (indicating the other polarity) *stop you from asking for things for yourself?*

Here, the therapist's challenge/question presupposes that the opposite polarity is the thing/person which stops the polarity from getting what it wants. This assists the client in focusing on the process by which the two polarities interrupt and defeat each other, thus serving as the basis for the client's incongruities, pain and dissatisfaction.

The second adjustment to standard Meta-model challenge/questioning in polarity work is to incorporate the appropriate representational system predicates into the Meta-model challenges. For example, using the same sentences as above:

Client: I can't accept help.

Client: It's impossible for me to ask for things for myself.

the therapist, when working with a visual polarity, may respond by challenging with:

Therapist: What do you see stopping you from accepting help?

Therapist: What do you see stopping you from asking for things for yourself?

By adjusting the Meta-model challenge/questions to include the predicates which match the representational system predicates that the client's polarity uses, the therapist assists the polarity in understanding and responding fully.¹²

Naturally, the therapist may use these two adjustments together — that is, each presupposes that the other polarity is the thing/person which is stopping the first polarity from getting what it wants — and incorporate the appropriate representational system predicates into the Meta-model challenges. For example, using the same client's statements as before:

Client: I can't accept help.

Client: It's impossible for me to ask for things for myself.

the therapist may choose to respond with:

Therapist: How do you see him stopping you from accepting help?

Therapist: How do you see him stopping you from asking for things for yourself?

In addition to Meta-model challenges/questioning, we have developed a set of polarity questions which we have found very useful in assisting polarities in making contact. This set of polarity questions is designed to make sure that each polarity expresses its own needs directly in a form specific enough that both the therapist and the other polarity come to understand what that polarity really wants.

Polarity Questions

What, specifically, do you want for yourself? (you see-hear-feel)

How, specifically, does he (indicating the other polarity) stop you from getting what you want for yourself?

Is there any way that you hear-see-feel that he (the other polarity) can be of any use to you?

What would happen if he (the other polarity) were to go away completely? How would this be of use to you?

Do you see-hear-feel what he (the other polarity) wants?

What would happen if you allowed him (the other polarity) to have what he wants?

Do you see-feel-hear that there is any way that you both (i.e., both polarities) could get what you want?

By asking each polarity this special set of polarity questions, in combination with the standard Meta-model challenges, the therapist insures full expression of each polarity. As a polarity responds to each of these questions, the response will be a set of paramessages which the therapist then checks for congruity. Furthermore, the therapist checks the verbal paramessages against the well-formed-in-therapy conditions.

If the therapist has decided to use the auditory representational system as the one in which the two polarities will make contact, then we suggest that, rather than ask the Meta-model questions and Polarity questions of the polarity, the therapist instruct the one polarity to tell the other polarity what is missing, what he wants.

For example, in place of the following exchanges:

(1) *Client*: I want things for myself.

Therapist: What things, specifically?

(2) *Client*: I can't accept help.

Therapist: How do you see-feel-hear that he (the other polarity) stops you from accepting help?

(3) *Client*: It's impossible for me to ask for things for myself.

Therapist: How do you see-hear-feel he (the other polarity) stops you from asking for things for yourself?

the therapist directs the polarity to talk, not to the therapist, but directly to the other polarity as in the following:

(1) *Client*: I want something for myself.

Therapist: Tell him what, specifically, you want for yourself.

(2) *Client*: I can't accept help.

Therapist: Tell him how, specifically, you see-hear-feel that he stops you from accepting help.

(3) *Client*: It's impossible for me to ask for things for myself.

Therapist: Tell him how you hear-see-feel that he, specifically, stops you from asking for things for yourself.

In example (1) above, the therapist is developing the client's auditory representational system for the purpose of making contact. It is appropriate in cases such as this to direct the client to answer these polarity questions by instructing him to tell the other polarity the answer. Again, as in example 1, the therapist will check to make sure that the polarity which is to respond has actually heard the question or statement before responding.

Most commonly, in our experience, the systematic application of these contact techniques — the choice of representational system(s), Meta-model challenges/questions (adjusted for polarity work), and the polarity questions — results in the polarities' fully expressing themselves and making an agreement or contract. In our Therapist Training Seminars, we have developed a set of techniques which are useful in making sure that the agreement or contact between polarities is solid enough to lead to full integration of those previously conflicting parts.

Checking for a Solid Contact

Once a client's polarities have each fully expressed itself and they have made contact, the therapist's task is to assist the polarities in reaching an agreement which will allow them to work smoothly with each other, thereby becoming resources for the client. Very often, the polarities once put in touch with one another, will reach a solid contact which will serve as the basis for their coordinated action. When this doesn't occur spontaneously, the therapist may intervene by:

- (1) Determining, specifically, where the two polarities come into conflict;
- (2) Having them each decide how they can best make use of each other's skills in these areas of behavior in which they had previously been in conflict;

- (3) Setting up cues by which each of the polarities can signal the other for assistance under these stress situations.

The systematic use, by the therapist himself, of the contact techniques previously presented will allow him rapidly to find out in what areas of behavior the polarities conflict and also how they can best come to coordinate their efforts. Here, since each of the polarities has some skills which the other does not have (for example, when the polarities are sorted visual/kinesthetic, one polarity can be given the task of paying attention to what can be seen in the stress situation and the other polarity what can be felt), it is largely a matter of assigning each of the polarities tasks consistent with their special skills.

The third step in checking for a solid contact — that of establishing cues — signals between the polarities — requires more comment. When under stress, one of the polarities begins to behave in a way which will bring the two polarities into conflict: it is very useful that the polarities have signals by which one can inform the other that this is happening. Such signals allow the polarities to coordinate their skills in a non-conflicting way. For example, a therapist working with a visual-blaming/kinesthetic-placating polarity sort has the following as a choice in establishing cues:

Therapist: (Talking to Margot's kinesthetic polarity) And what are you aware of at this point in time, Margot?

Margot: Wow; I'm so excited. I understand now how we (the two polarities) can work together. When I start to feel tight and I don't understand what's happening, she (the other polarity) can help me out by looking around and seeing exactly what is going on, so I don't become paralyzed.

Therapist: Yes; now, switch over, Margot. (Margot moves to the other chair.) Now, Margot, what are you aware of?

Margot: I'm really clear about how this will work; I can really see how useful she (the other polarity) can be to me. I hate being numb — having no feeling — so when I see that starting to happen, she can help me not to become numb.

Therapist: (Beginning to set up cue signals) OK; now, the only thing I don't understand yet is how, specifically, you can let her know you need her help?

Margot: . . . What? I don't understand.

Therapist: When you notice that you are beginning to feel numb, how will you let her know you need her help?

Margot: Well, I'm not sure . . .

Therapist: Margot, what's the very first thing that you're aware of when you start to go numb?

Margot: (her breathing reverses) I . . . I stop breathing . . . , sort of . . . like right now — I'm beginning to go numb.

Therapist: All right — now, how about using that very thing as a signal to your other part to help you not to go numb.

Margot: Yes, I think I understand; when I start to reverse my breathing, I'll take a really deep breath and ask my other part for help. . . .

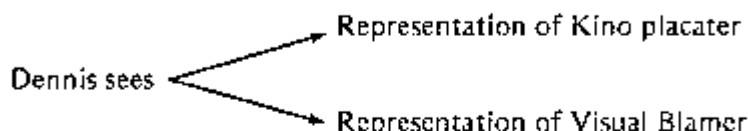
ACHIEVING META-POSITION

The last and most important area of working with incongruity is that of assisting the client in achieving meta-position with respect to his polarities. This means that, as a therapist, in order to make your work thorough and lasting, you will be required to do a little more than just put polarities into contact with one another. In order for the client to recode his polarities and sorted paramessages in such a way as to allow permanent change and therefore, true meta-position, sustained contact and integration may be required, although not always.

Once the polarities have a well-formed sort, maximal separation, and then contact in the same representational system, you, as a therapist, are prepared for integration. To achieve integration and, therefore, meta-position, your client's two or more sets of representations which have been put into contact in the same representational system must now be given the impetus to reorganize themselves into a new, single representation which will include all of the paramessages of both and will be itself greater than the sum of the two. For example: If a client has two polarities (A and B), where A implied not B and B implied not A, they are a mutually exclusive representation for the same territory. Meta-position would not be a representation of A plus B but rather a set of plus or minus (AB) equaling some representation (X) that had all the potentials of A and B as well as Not A and Not B and the rich choices that result from many combinations within and between the polarities.

Consider the following example of Dennis, who presented the therapist with a highly incongruent communication about his interaction with others in the world, simply stating that he wishes others to like him. The polarities which were sorted out of this communication were a kinesthetic-placating part which felt he must do what others expected of him or he wasn't a good person and no one would like him, along with a visual blaming part which saw other people pushing him around, being cruel to him and

undeserving of his kindness. These two representations were conflicting maps for the same territory and the result was a deadlock in his behavior, kind words with a grating tonality. His polarities were put into contact in his visual representational system (fantasy, mind's eyes) by having him create two images of himself, standing side by side, one the part which Dennis felt must placate others, the other the part of Dennis which saw how people abused him. He was told to watch these two argue and report on their interaction, both visually as well as auditorily. The result was that Dennis was simultaneously representing both his polarities, visual and auditory, from the perspective of an observer.



Although simultaneous representation had been achieved in the same representational system, along with contact, meta-position had not yet been fully achieved. Dennis was asked to comment on the assets of both polarities and then asked if he would try something which might be new to him. His response was affirmative. He was then told:

Dennis, now, as you continue to sit there with your eyes closed, I would like you to gently reach up with both hands, grasping these two images, one in each hand. That's right (Dennis reaches up). Now, slowly push these two together, together into one image, watching closely, seeing how both change into one. (Dennis pushes them together slowly, gasping as his hands approach each other.) Now, what do you see?

Dennis: It's me, but different.

Therapist: How?

Dennis: I look strong, but not mean.

Therapist: Anything else?

Dennis: Yes; he can be gentle and care about people and . . . yes, he's not weak and mushy either.

Therapist: You see a picture of yourself having all of those qualities at the same time?

Dennis: Yes (sighing).

Therapist: Do you like what you see?

Dennis: Yes.

Therapist: Would you like to make that a part of yourself, and

have those abilities as your resources?

Dennis: Sure.

Therapist: Good. Then, continuing to hold this image of yourself gently and watching it carefully, slowly pull the image into yourself. That's right. (Dennis pulls his hands slowly toward his body.) Now, let this come inside, become a part of you, a resource all the way inside of you. (Dennis places his hands against his body, breathing deeply. As he does, his face flushes with color and he sighs loudly.)

Therapist: How do you feel as this becomes a part of you?

Dennis: All tingly in my chest.

Therapist: Let it spread all through your body as this becomes truly a part of you.

Through this process, Dennis achieves meta-position, recoding his polarities visually into a single representation. The therapist tested his work by playing Dennis' polarities but Dennis was no longer incongruent in this way; he only laughed where before he flew into anger. His softened facial muscles and laughter were sure signs of achieving meta-position and integration of this set of polarities.

Recoding of polarities can be accomplished in any representational system by representing the polarities simultaneously and then arranging for a single representation. Even in the case of the Parts Party described earlier, the paramessages which are represented by different people are, at the end of the Parts Party, unified into a single group. Then a short ritual is performed which results in simultaneous repression kinesthetically by having the client stand in the middle of a circle of the people who are playing his parts and each part lays a hand on the client, stating the ability he represents, until the client has hands from each part touching him simultaneously and has stated his acceptance congruently.

So, the resulting strategy for integration of polarities is first, contact in the same representational system and then, secondly, recoding into a single representation. Thus meta-position and integration are achieved.

META-TACTICS FOR INCONGRUITY

When a human being is incongruent in his behavior, he is signaling that he has more than one model of his world. This is an important piece of information for the therapist. The immediate acceptance and use of the client's incongruity as a basis for growth and change in the ways desired by the client are powerful therapeutic tools. Since incongruent paramessages are signals of the presence in the client of conflicting models of the world, the

overall task of the therapist is to assist the client in creating a new model of the world in which the two formerly conflicting models will operate in a coordinated, smooth way, allowing the client all of the choices available in both of the previous models. In other words, the therapist works to assist the client in achieving meta-position — that is, in creating a map of the world for his behavior which includes both of the models previously in conflict. In this way, the client comes to have the choice he desires in that area of his behavior.

The process of assisting the client in achieving meta-position can be broken down into three phases to assist you in organizing your experience:

- (1) Identifying incongruity (conflicting paramessages);
- (2) Sorting the paramessages;
- (3) Integration of the sorted paramessages.

Another way of representing the process of a therapist's assisting the client in achieving meta-position is in terms of the changes in the client's communication behavior over time. Again, we have found it useful in our Therapist Training Seminars to distinguish three phases of this process:

- (1) The client's communication is incongruent ~ he is attempting to present paramessages from more than one non-compatible model of the world *simultaneously*;
- (2) The client's communication is congruent at each point in time and incongruent over time — here he attempts to present paramessages from more than one non-compatible model of the world *sequentially*;
- (3) The client's communication is congruent *both simultaneously and sequentially*. He has achieved meta-position, and has a unified, coordinated map for his behavior.

The process of achieving meta-position is, then, the overall strategy for working with clients' incongruities, thereby transforming the source of their pain and paralysis into a resource for growth, energy and vitality. Accepting this breakdown of the process of achieving meta-position into the three phases, we will present the Meta-Tactics for working with incongruity by phase.

META-TACTICS FOR PHASE 1

In Phase 1, the therapist's task is to *identify* incongruity in the client's communication. The Meta-Tactics for Phase 1, then, are:

Meta-Tactic 1 for Phase 1 (Incongruity):**Compare Paramessages**

Here the therapist makes use of all of his input channels, distinguishing what he sees, from what he hears, from what he feels. By first distinguishing the information reaching him through each of his input channels, the therapist accomplishes several things. He is able to avoid becoming incongruent in his own communication in response to the client's incongruity. He avoids becoming depressed, burdened, weighed down (common results of see-feeling and hear-feeling incongruent communication), leaving him free to act creatively. Furthermore, by making these distinctions, he has the basis for comparing the paramessages the client is presenting to check for incongruity in the communication.

Meta-Tactic 2 for Phase 1 (Incongruity):**But**

Often the client will make statements to the therapist in which he claims to want something for himself. Statements which have the general form:

$$I \left\{ \begin{array}{l} \text{want} \\ \text{need} \\ \text{would like to} \end{array} \right\} \left\{ \begin{array}{l} \text{(have)} \\ \text{(do)} \end{array} \right\} X.$$

The therapist may accelerate the process of identifying the incongruencies in the client when he hears statements of this form by leaning forward and saying:

... *but* ...

The client will continue the statement he originally started, filling in the second half of the sentence (the part which follows the word *but*). The verbal material he provides can be used by the therapist in ways which we presented in detail in *Magic I*. The important piece in this context is that, as he completes the sentence, the client's paramessages will shift radically compared with the paramessages which he presented in the first part of the sentence, thus providing the therapist with a set of conflicting paramessages from which change can begin.

Meta-Tactic 3 for Phase 1 (Incongruity):**Meta-Question**

The use of this tactic typically occurs when the client has just expressed some powerful feeling he has about some portion of his experience. For example:

I'm really angry about the way she ignores what I say!

At this point the therapist leans forward and says:

... and how do you feel about feeling angry about that?

The client's response to this question provides verbal material subject to the Meta-model well-formed-in-therapy conditions. More important for the purposes of the present discussion, the set of paramessages which the client displays when responding to this question can be compared for incongruities with the set he presented when making the original statement.

Meta-Tactic 4 for Phase 1 (Incongruity):**Left-Right Paramessage Check**

One abundant source for recognizing incongruity in a client's communication comes from the fact that the two cerebral hemispheres in human brains control the two (opposite) sides of the person's body. The therapist will find that, by visually checking the client's face (e.g., eye size and location on the side of the face, lip form, muscle tones, etc.), hand position and movements, he will discover differences in the paramessages being expressed. The therapist may check auditorily for tone versus syntax in the client's speech. Again, these differences provide the therapist with ways of identifying incongruity.

The four Meta-Tactics for Phase 1 are not intended to present all of the techniques available to each of you as a therapist in your people-helping work; rather, we hope that they will provide you with a take-off point from which you may generate your own modes of working quickly and effectively with the people who come to you for assistance in gaining new choices and energy in their lives.

META-TACTICS FOR PHASE 2

In Phase 2, the therapist's task is to sort the conflicting paramessages which the client has presented to him into fully

expressed, congruent parts or polarities. In other words, the simultaneously expressed conflicting models which he identified in the client's communication must be converted into two (or n, in the case of parts) fully represented parts expressed congruently simultaneously and incongruent sequentially.

**Meta-Tactic 1 for Phase 2 (Incongruity):
Movie/Play Director**

Here the therapist uses all of his input channels to represent the paramessages the client is presenting — he works as a movie or play director to get the most convincing "performance" from the client: the performance in which all of the client's output channels are expressing the same or consistent paramessages.

**Meta-Tactic 2 for Phase 2 (Incongruity):
Spatial Sorting**

Having identified the polarities which are the expression of the client's inconsistent models of the world, the therapist locates one of the polarities in one chair and the other in another chair. This assists both the client and the therapist in separating the behavior appropriate for the differing parts of the client.

**Meta-Tactic 3 for Phase 2 (Incongruity):
Fantasy Sorting**

Typically, the therapist makes use of the technique of Guided Fantasy (see *Magic I*, Chapter 6) to assist the client in fully expressing his polarities. By having the client describe the fantasized visual representation of each of his polarities in turn, the therapist has the opportunity to check the described characteristics of the image as well as the paramessages which the client is presenting as he describes his fantasy.

**Meta-Tactic 4 for Phase 2 (Incongruity):
Psychodramatic Sorting**

After the therapist has identified the polarities with which he intends to work, he selects two members of the group to play these polarities; that is, each of these group members adopts all of the paramessages which are congruent for the polarity which he is representing. Usually, the therapist will have the client act as the movie/play director, instructing each of the group members on how to play his part most convincingly (congruently).

Meta-Tactic 5 for Phase 2 (Incongruity): Representational System Sorting

The therapist listens for predicates which identify different representational systems as the client sequentially expresses each of the polarities. By systematically changing his own predicates as the client expresses each of his polarities, the therapist can accelerate the separation of the polarities into distinct representational systems — one of the conditions for a well-formed sort prior to beginning the integration phase.

Meta-Tactic 6 for Phase 2 (Incongruity): Satir Category Sorting

The therapist checks to insure that the Satir category of each of the client's polarities is distinct. Non-overlapping of the Satir categories is another of the characteristics of a well-formed sort prior to integration.

Again, in presenting these Meta-Tactics for Phase 2, we have not attempted to list all of the techniques which we have found useful and effective in assisting our clients to break impasses in their behavior. We encourage you to develop ones in addition to those we have presented.

There is one other way of using the Meta-Tactic principles for this phase which has been of great value to us in our work. If you consider the outcome of each of the first four Meta-Tactics for this phase, they sort the client into two separate, congruent polarities. The final two Meta-Tactics can be considered conditions on the two polarities sorted by the first four Tactics and must be considered in relation to each other (e.g., blaming and visual, and not blaming and kinesthetic). Together, these identify the two conditions which are sufficient to allow the client to achieve meta-position through integration. Specifically, the therapist knows that Phase 2 is complete whenever these two conditions are present in the client's communication — that is, when each of the client's polarities are:

- (1) Congruently expressed sequentially;
- (2) The representational system/Satir category sort meets the well-formedness conditions:

Representational System	Satir Category
visual	blaming 2
kinesthetic	placating 1
auditory	super-reasonable 3

META-TACTICS FOR PHASE 3

In Phase 3 the therapist works to assist the client in converting sequentially incongruent polarities into a single, unified model which allows the client all of the choices he desires in that area of his behavior. It is in this phase that the client achieves meta-position for himself.

Meta-Tactic 1 for Phase 3 (Incongruity):

Contact

Here the therapist works to bring the two fully expressed, congruent and well-sorted polarities into contact with one another. First, since one of the conditions for a well-formed sort in Phase 2 was that the polarities have distinct representational systems, the therapist will select a representational system(s) in which the client can have his polarities make contact.

Secondly, for the client's polarities to make contact, they must be represented simultaneously. Here the choice of sorting which the therapist made in Phase 2 will have an effect. If he had selected a psychodramatic sort, then the contact can take place in either the auditory or visual representational systems, for example. If he had chosen not to use other people (a spatial sort, for example), the auditory representational system, since it is sequential, would not be a good choice, while the visual (fantasized, internal visual images) would. This second condition — simultaneity — is relative to the unit of measurement of time involved. No doubt, at some future date neurological research will become available to specify what the optimum time is in terms of refractory periods. In Perls' polarity work, he sometimes assisted a client in integrating by having him move rapidly from chair to chair — that is, rapidly alternating polarities. The limiting case of this technique is, of course, a simultaneous representation.

Meta-Tactic 2 for Phase 3 (Incongruity):

Re-coding

Once the client's polarities have made contact by a simultaneous, same representational system(s) typical of his polarities, the therapist works to assist him in re-coding the two distinct representations into one. Here, the special set of polarity questions, integration of fantasized visual representations, are useful. The specific ways of re-coding which the therapist may have the client employ are as varied as his ability to be creative will produce. The formal characteristic which they share is the creation by the client through this experience of a single, unified map for his behavior,

allowing him the choices he desires from each of the formerly conflicting polarities.

We hope that the partial list of Meta-Tactics to be employed in transforming the client's incongruities from a source of pain, dissatisfaction and paralysis into the basis of growth, energy and change will encourage each of you, as you work in your capacity as a people-helper, to develop additional satisfying Meta-Tactics which are congruent with your own special styles, skills and resources.

FOOTNOTES FOR PART II

1. Perhaps you can identify this pattern from childhood experiences in which the frustrated parent screams at the child to lower his voice - the message here is:

Do what I say, not what I do!

2. The number of output channels and, therefore, messages carried by output channels will vary from client to client. Theoretically, the number of muscle groups which can be independently controlled by the client will determine the number of messages which it is possible for that person to communicate simultaneously. In our experience, it is not necessary for the therapist to attempt to check each of these; rather, we have developed specific ways of checking for match or mismatch among certain groups of these output channels, making use, for example, of the neurological organization common to all humans such as cerebral control of the contralateral side of the body. These principles will be presented later in this part of the book.

3. This seems to us to be more in the spirit of Russell's work. In order for an item to be meta to some other item - for example, the set of all sets is meta to the set of all chairs as it includes the latter as a member but not vice versa - it is necessary for the meta item to include the item it is meta to in its domain. But for a set of simultaneously generated paramessages, no one of them includes any of the others in any sense of *include* that we have found enlightening in organizing our experience in therapy. Russell's statements regarding the Theory of Logical Types can be found in Volume I, Introduction, Chapters 11, 12 and 20; and Volume II, Prefatory Statement of *Principia Mathematica*, and in the American Journal of Mathematics, Volume XXX, 1908, pp. 222-262.

4. Logically, since a representational system may and, in fact, does contain more than one message at a time, it is possible that a message and one of its metamessages may be represented simultaneously. However, since we,

as therapists, can only come to know what messages are represented in a person's representational system through that person's output channels which are limited to one message at a time, this, apparently, has no consequences for communication and therapy.

5. By fully accepting all of the client's behavior, the therapist avoids the phenomenon of "resistance" in his clients and makes full use of the client's skills in assisting in the process of change for that client. We recommend to you the excellent work of Milton H. Erickson, M.D., for examples of utilization of all of the client's behavior (*Advanced Techniques of Hypnosis and Therapy* by J. Haley [ed.], Grune and Stratton, 1967; *Patterns of the Hypnotic Techniques of Milton H. Erickson, M.D.* by R. Bandler and J. Grinder, Meta-Publications, 1975).

6. We present a more detailed and refined model for identifying and utilizing behavior in clients based on the cerebral asymmetries in *Patterns of the Hypnotic Techniques of Milton H. Erickson, M.D.*, by R. Bandler and J. Grinder, Meta-Publications, 1975. This is one of the areas of direct cross-over between psychotherapy and hypnosis.

7. By carefully observing the client as he creates the image, the therapist will have an excellent source of suggestions to the client of what to incorporate into his image — so if the client is biting his lip as he forms this image and biting his lip is a paramessage which is congruent with the paramessages already in the image, then the therapist need only suggest the paramessage of biting his lip as a way in assisting the client in constructing a congruent, fantasized polarity.

8. Notice that, in the example given, the client does not have the accompanying kinesthetic presentations of his polarities. We have noticed that, when creating visual and auditory fantasies, clients often change their body postures and gestures to match those described in the fantasized representation of themselves. Our decision has been to discourage this; we will describe the basis for this decision in Part III, Fuzzy Functions.

9. Satir Category 4 — irrelevant — is usually a rapid sequence of the other Satir categories with the person communicating incongruently both simultaneously and sequentially. Thus, the Satir Category 4 is not useful as a principle for sorting incongruities into polarities as it is itself incongruent.

10. We especially recommend to you the collection of articles, edited by Dimond and Beaumont, in *Hemispheric Functions in the Human Brain*, 1974, John Wiley and Sons, N.Y.

11. We use the term *opposite polarity* to identify the set of paramessages which constitute the client's models of the world which is maximally conflicting with the original polarity. Which set of paramessages constitutes the polar opposite for any particular polarity will differ with each person, for each model of the world. The ways in which polarities flip are an important indicator of the way a client models the world. We will return to this question in a later work.

12. Generalize to all Meta-model challenges.

PART III

Fuzzy Functions

We would like to focus your attention in this section on what we consider to be one of the most important aspects of the Meta-model presented in *Magic I*: semantic well-formedness. Two major forms that semantic well-formedness has as expressed in *Magic I* are:

Cause-effect

George forced Mary to weigh forty pounds.

You make me angry.

She makes me feel depressed.

Mind-reading

I know what you're thinking.

She doesn't like me.

Everyone hates me.

He thinks I'm ugly.

To refresh your memory, we will briefly review these forms.

Cause-Effect semantic ill-formedness is the case in which the referential index of responsibility is placed outside the speaker.

You make me angry.

The speaker, *X*, has no choice about being angry because *Y* forced him to be. Thus, a statement such as:

Y Causative verb X feel some emotion

is said to be semantically ill-formed. Sentences of this type, in fact, identify situations wherein one person does some act and a second person *responds* by feeling a certain way. The point here is that, although the two events occur one after another, there is no necessary connection between the act of the first person and the response of the other. Therefore, sentences of this type identify a model in which the client assigns responsibility for his emotions to people or forces outside his control. The act itself does not cause the emotion; rather, the emotion is a response generated from a model in which the client takes no responsibility for experiences which he could control.

The therapist's task at this point is to challenge the model in some way which will assist the client in taking responsibility for his responses.

We intend in the following pages to more thoroughly explore this phenomenon by examining the experiences which, typically, are the basis for this form of representation.

Mind Reading is any case in which one person, *X*, claims to know the thoughts and emotions of another person, *Y*.

I know she is unhappy.

is an example of this.

The Meta-model challenge for both of these types of semantic ill-formedness can best be summed up by the process question *how*. In Chapter 3 of *Magic I* we described the therapeutic task of dealing with semantic ill-formedness cause-effect as follows:

Client's statement

- (a) My husband makes me mad.
- (b) My husband is unhappy.

The task of helping a client to represent semantically ill-formed representations has two very important dimensions. First, understanding how semantically ill-formed representations are created, and, second, learning to assist the clients in changing the process by which they create semantically ill-formed representations.

SEMANTIC ILL-FORMEDNESS AND FUZZY FUNCTIONS: CAUSE-EFFECT

Numerous child psychologists have made the point that children fail to differentiate themselves from the world around them. They have developed no mechanism either to delete incoming stimuli or even to tell the difference between stimuli originating in the outside world and those originating in their own bodies. The sensory stimuli from each of the input channels in the new infant is represented kinesthetically. For example, if you make a loud noise near a child, the child will cry, not only as a result of the noise, but also by representing the noise as a body sensation. (The child, as well as many adults, will flinch.) The child's major process of representation, then, is to take information from all of his input channels and represent these sensory informations as body sensations. The child *sees* you smile and *feels* good, the child *sees* you sneer and *feels* bad. A stranger smiles and places his huge face in front of a baby; the baby feels frightened and cries.

Thus, we define a fuzzy function as any modeling involving a representational system and either an input channel or an output channel in which the input or output channel involved is in a

different modality from the representational system with which it is being used. In traditional psychophysics, this term, *fuzzy function*, is most closely translated by the term *synesthesia*. As we will state throughout this section, fuzzy functions are not bad, crazy or evil, and the outcome of what we consider effective therapy is not the elimination of these functions, but rather the realization that these functions can be the basis for much creative activity on the part of humans as well as being the basis for much suffering and pain. The effective therapeutic outcome, in our experience, is for the client to have a choice as to whether he operates with *fuzzy* functions or with *unfuzzy* functions.

There are two major things to be learned from this as a therapist. First, that many of the so-called imprint experiences which occur in young children are the result of parents and other people failing to respect these see-feel, hear-feel, and feel-feel processes in a young child which may result, although not intended by the adult, in frightening and traumatic experiences for children. The second thing we can learn from this is that we are wired for see-feel, hear-feel representations as children. These circuits do not dissolve as we become adults. Many adults are using these processes of representation when they *see* blood and *feel* sick; they *hear* a yelling, blaming voice and *feel* scared. These processes are particularly common in times of stress. Stress, by its very definition, is a body sensation resulting from some set of events, originating either inside or outside the organism. We are not proposing that this form of representation is bad, wrong, or not useful. We are, rather, pointing out a very frequently occurring part of everyone's stress experiences. When a client says a semantically ill-formed statement such as:

My father makes me feel angry.

we respond by asking how, specifically, he does this. Our client's response will almost inevitably be a description of something he saw or heard (or both) which originated with the father. The client who says semantically ill-formed statements of this Cause-Effect form are either see-feeling, hear-feeling, or both. So, when the above client describes the representation of his experience as:

When my father looks at me this way, (making a face) I feel angry.

he is, in fact, describing the experience of see-feeling. Thus, when we say in the above quote from *Magic I* that the client's response

is generated from his model of the world, that the resulting emotion felt is a response based on that client's model, and that in a Cause-Effect representation, the referential index of responsibility is being placed upon the world, we are, in fact, describing the result of uncontrolled see-feel and hear-feel circuits. When we say that these clients are taking no responsibility for emotions which they could control, we are not suggesting that everyone should always be reasonable and rational, but, rather, that human beings can have choices about when and where they use the processes of see-feel and hear-feel.²

SEMANTIC ILL-FORMEDNESS AND FUZZY FUNCTIONS: MIND-READING

Mind Reading is frequently the result of reversing the process of Cause Effect semantic ill-formedness. In Cause-Effect semantic ill-formedness, the client takes in information through visual and auditory channels and represents that information as a body sensation — a kinesthetic representation. What we have found in the case of Mind Reading is that the client takes body sensations — his kinesthetic representation — and distorts the information arriving visually and auditorially from outside him in such a way that it conforms to his body sensations. For example, a client is depressed and feels worthless in his ongoing relationship with the person he cares about. This other person, totally unaware of the feelings of the first person, arrives home very tired from a day's work. She walks into the room where the client is, waves faintly and groans. The client, using the feelings of depression and worthlessness, interprets the faint wave and groan as a response to his friend's catching sight of him, sitting in the room, turns to the therapist and says:

You see, I told you that she thinks that I'm worthless. You heard her groan.

What has happened here is that the client is reading his friend's mind — he is interpreting (or in more classical psychological terms, projecting) certain analogical communications by his friend (faint wave and a groan) as visual and auditory information that his friend thinks that he is worthless, because that is what he is feeling. The client, then, distorts the visual and auditory information which he receives to make it consistent with his feelings. The way in which each of us distorts the information which we receive

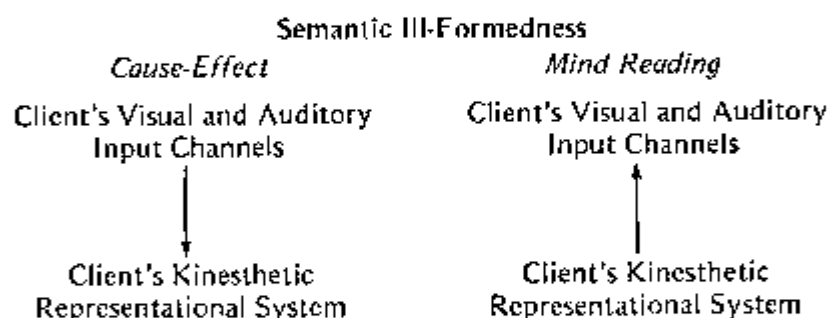
visually and auditorially is not random; rather, it is distorted in such a way as to make it maximally consistent with the way that we feel about ourselves at that point in time. In other words, we are exercising our feel-see and feel-hear circuits.³

MINI – SO WHAT!

The human beings who come to us, as therapists, seeking our help with pain in their lives, may be at the mercy of see-feel, hear-feel, or other fuzzy-function circuits. Semantic ill-formedness is the result of these fuzzy functions.

Cause-Effect = see-hear or hear-feel
 Mind-Reading = feel-see or feel-hear

Or, representing these two processes visually, we have:



Notice that the result of uncontrolled fuzzy functions associated with Cause-Effect semantic ill-formedness is that, first, the client, literally, has no choice over the way that he feels, and, secondly, he loses touch with (literally) his own ongoing kinesthetic experience as the information which he is receiving visually and auditorially is the basis for his feelings, not what he is presently experiencing kinesthetically. On the other hand, the result of uncontrolled fuzzy functions associated with Mind Reading is that the client distorts his input channels — sets up forward feedback or feed-forward as discussed in *Magic I* — in such a way that he becomes trapped in self-fulfilling prophecies which make change very difficult and rob him of the ability to directly experience the world and his friends.

Many of the therapists we have trained in recognizing this phenomenon have doubted this even more than the identification

of representational systems by natural language predicates. We turn now to the work of Paul Bach-y-Rita to show you that, not only do these fuzzy-function circuits exist, but that they can be a great asset as well as the basis of semantically ill-formed representations.

Bach-y-Rita's work is in the area of sensory substitution. He and his co-workers have developed a machine which translates visual input into kinesthetic sensations for the purpose of making it possible for the blind to have some of the resources of the sighted. Blind people trained in use of this machine (the TVSS) can secure information available to the sighted with skill and proficiency. Bach-y-Rita's project has also created another machine which translates auditory input into kinesthetic sensations. He describes, not only the success of his project, but also its neurological foundations in his book, *Brain Mechanism in Sensory Substitution* (1965). He states the following findings from his own work and that of others.

Indeed, visual responses have been reported to appear earlier in the somesthetic cortex (kinesthetic) than in the specific visual cortex (Kreindler, Crighel, Stoica, and Sotirescu, 1963). Similarly, responses to stimulation of the skin can be recorded from widely varying regions of the cortex, including "specific" somatosensory cortex, associations areas, and even the visual cortex (Murata, Cramer, and Bach-y-Rita, 1965).

In a study of the cat's primary visual cortical cells, Murata, et al., (1965) demonstrated that even these cells were polysensory, with approximately 37% of them responding to auditory and 46% to skin stimulation, compared to the 70% responding to the visual stimulus we employed. Most of the units responding to visual and auditory stimuli also responded to the skin stimulation. . . . These results demonstrated that the visual cortex (the cortex considered most highly specialized of the sensory projection areas) receives input from other sensory modalities as well as visual input, and this suggests an associative or integrating role of at least some cells in this area.

Bach-y-Rita not only demonstrates the existence of cross-over wiring, but finds ways of utilizing these circuits for both the blind and the deaf. The relevance of these circuits to psychotherapy may not yet be evident to the reader, so let us return to the discussion of semantic ill-formedness.

When a therapist uses guided fantasy techniques, that is, when he asks clients to close their eyes and make pictures in their minds of what the therapist describes, the therapist is, in fact, asking the client to use a fuzzy function, viz., to take words (auditory) as input and create visual representations. When a primarily visual client utters the response,

I see what you are saying.

very often they are, literally, making a picture of the therapist's words. As we mentioned in Part I, this is something you can check simply by asking your clients and friends about it when they say such things. These also are fuzzy functions. The term *fuzzy function* was assigned to this type of activity, not because it is a bad activity — in fact, it may be a fantastic resource, as shown by Bach-y-Rita and by the use of guided fantasy in therapy — rather, the phrase, *Fuzzy Function*, was assigned to this particular modeling because so many people lack both a consciousness of this phenomenon and the resulting control over the use of these ways of creating representations. So very often, we have heard people criticize each other for not having the same fuzzy function as they have. For example, when the authors were lecturing at a college, just prior to the beginning of the class, we walked into a heated argument in which one student was criticizing her boyfriend for not being a feeling person. She described him as being insensitive, for not feeling bad when dissecting a dead cat in his biology class (he was not see-feeling). He, in return, described her as being just as insensitive for not feeling sympathy when he told her how he felt about her accusation (she was not hear-feeling). This interpersonal conflict became the focus of our lecture-demonstration until both parties came to understand that neither of their maps was *the right way* of representing reality but each was, in fact, composed of the very differences which we can come to accept and appreciate in other human beings. Also, each of these two students learned something new of the choices which were available to them in the way they represent their world. We helped this woman to learn to see-see as well as see-feel, so she had the choice of taking and passing the biology course as well as many other tasks which would otherwise be painful if she permitted herself only the choice of see-feeling. Many of the people in our Therapist Training Seminars have come to appreciate the skills and choices available to them when they *learn* to use all of their input channels and representational systems in many ways. For instance, many therapists feel great pain as they listen to the problems and trials

of their clients. This is not, in itself, a liability; in fact, it can be an asset. However, some of the therapists who have come to us for training have described a feeling of being overwhelmed with the pain of their clients to the extent that they could not really help them. When see-feel and hear-feel circuits go unchecked, and when a client or a therapist finds himself without other choices, the results can be devastating. We believe these may even result in what is commonly called psychosomatic diseases.

We plan in the future to investigate which distinctions of each sensory system (for example, for sight, color, shape, intensity, etc.) can be mapped into which representational system and what the resulting outcomes are, both behavioristically and psychically. We believe that certain combinations of fuzzy functions, if rigidly used, will result in specific psychosomatic diseases. For now, we will return to the application for therapy.

The importance of understanding and working with fuzzy functions cannot be over-emphasized. When therapists first come into contact with this way of describing human behavior, their reaction is often one of, "Well, what does it get me. How can I use it?" There are a number of ways to respond to this question. The first is to understand that people who come for therapy are not (as we said in *Magic I*) bad, sick, crazy, or evil, but are making the best choices available in their model of the world. Take, for example, Martha. She is a young woman about 28 years old who had been convicted of child beating. She had not only been subjected to the ridicule of the courts, her parents, and friends, but, more importantly, ridicule of herself by herself. She had been "treated by several clinicians," and "counseled by her clerical leader." Yet, she still did not trust herself or even like herself. She showed up one evening at a seminar conducted by the authors; she was uninvited and embarrassed, but mostly sorely in need of help. When we inquired about her presence, she apologized and said she would leave. Both authors asked almost simultaneously what she wanted. She immediately began to cry and started to tell her tale. She told of a young marriage and an early divorce, a young child, a boy, whom, though she loved him dearly, she had beaten until she had turned herself over to the authorities, only to lose her son and be "rightfully punished." As she put it,

I feel I'm at the end of my rope. I see there is no way for me to feel differently. I just lose control and I can't stop myself. I can't see any way I could feel differently. Sometimes, when I would see my son, I would feel so proud, but when he would do the smallest thing wrong, I felt so

mad I'd begin to scold him and something in the way he looked at me — I just don't know — I'd get madder and madder until I hit him, and then. . . . I just don't know what happened. I'd lose control and hit him more and more — it was like I'd go crazy.

The authors immediately recognized some patterns which were familiar to us, even though we had never before worked with a woman who beat her child. We heard an unusual use of predicates.

I can't see any way I could feel differently.

This is one of the most direct examples of see-feel predicates we had encountered. She also made statements such as:

My son looked warm.

The judge appeared to be a cold man.

I can't see how to grasp my problems.

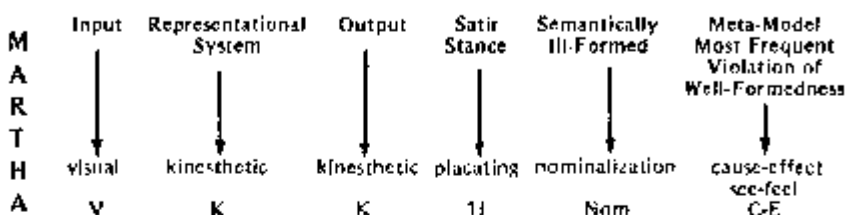
Clearly, this has been hard on me.

All of the above statements are cross-over predicates which presuppose visual input represented kinesthetically. This woman was a see-feeler. We began, at this point, to explore her model of the world, using the Meta-model. We were watching and listening to discover how this woman's see-feeling fuzzy function could result in child-beating when so many other people's did not. The process by which this occurred unfolded as we elicited a full representation or model of her experience. The important parameters of which we became aware (in terms of the information thus far presented in this volume and in Volume 1) were as follows.

This woman's primary input channel was visual; in fact, she had very great difficulty communicating as she did not hear many of our questions and would ask us to repeat them many times. She could easily understand our questions only if they were phrased in kinesthetic predicates; her primary representational system was kinesthetic. She spent most of her time *placating*, and used many *nominalizations* in her language communication. Her primary output channel for communication appeared also to be *kinesthetic*; she communicated by gesture smoothly, nearly always responding to us by using different facial expressions, smiling or frowning when we asked how she felt about something. Her verbal responses were said with a grating tone, and she responded with words only when we would prod her for verbal answers. When we asked her to describe again how she came to beat her son, she

described his actions as being much the same as hers (although he was not present to verify this).

So the question of how this young woman suddenly turned into a child beater was still unanswered. Yet, we did know information which could be represented in the following manner:



Visual input is represented as body sensations — nominalized see-feeling which is expressed as placating kinesthetically. We then began to understand the process by which this woman became violent. If you think back to the section on playing polarities, you'll remember that playing a polarity elicits the unplayed polarity, which for this woman was blaming and was still expressed kinesthetically (generally, the polarity of placating is blaming). Furthermore, blaming kinesthetically in its most exaggerated form is violence. One of the authors played the polarity which Martha was playing; he began more congruently than she, matching her voice tone, which she seemed not to notice. He then copied her placating posture, asking in her own tone for her not to be so hard on herself. She did not seem to hear the author's tonality, but, looking intently at him, she first would squint, then clench her fists, moving her arms up and down, then squinting until she burst into rage, screaming incoherently and swinging her fists as she approached the author.

To digress for a moment, let's consider the result of this intervention. Martha at certain moments changed some aspects of how she was representing her world in some way that made it possible for her to commit acts of violence. While she was screaming and approaching us, we noticed that her input channel remained visual and her representational system remained kinesthetic. Furthermore, the nominalizations had dropped out of her speech, and color filled her cheeks as she began, for the first time in our experience of her, to breathe deeply. Cause-Effect semantic ill-formedness was still present, but she was no longer placating. Rather, she was blaming furiously and her major output channel was kinesthetic.

MAR-THA	Input Channel	Representational System	Output Channel	Satir Category	Semantic Formedness	III- Meta-Model Violation
	Visual	Kino	Kino	Blaming	De-Nom	Cause-Effect
	V	K	K	2	Nom.	C.E.

The result of this process of representation was violence. Let us consider how this works: Visual information for Martha was usually taken in and represented as body feelings which in a nominalization were non-movement. (Nominalization is the process by which a verb of natural language is turned into an event or thing, "thingified.") The nominalization of a kinesthetic representation is movement which is frozen into body posture. Thus, when Martha's polarity was played by one of the authors, she saw-felt her own polarity. This served to denominalize her in the following way: A direct biofeedback loop — she felt what she was doing with her own body as the therapist was, at this point, presenting a mirror image, so when she saw-felt him, she felt what was going on in her own body also. Furthermore, the therapist played her dominant polarity more congruently so she responded by communicating the paramessages associated with the less forcefully expressed polarity — blaming. The result was a denominalization kinesthetically — blaming communicated kinesthetically, better known as outright violence. Consider now for a moment, if you will, a woman like Martha who rigidly see-feels — she scolds her son in a grating voice of which she is, for the most part, unaware. He, being a child, hear-feels and placates which she see-feels just as one of the authors did. She then responds by denominalizing and exploding into kinesthetic blaming; she hits her son, who becomes more placative upon being attacked by an adult. This only exaggerates Martha's see-feel circuit into an escalating sequence for which she has no controlling resources.

At the risk of seeming too clinical about Martha, we would like to diverge even further from her story for a moment, in order to prepare you to understand what follows. There are two points we wish you to understand before we continue. *First is the theory of pattern disruption.* We have found it most useful in our work to assist our clients in breaking escalating patterns, especially patterns of kinesthetic expression of anger. Many psychotherapists recognize the danger of this type of unchecked escalation and have clients drugged or strapped down to break the mounting pattern of violence. We find this response quite unsatisfactory; drugs and straps do not break the pattern of see-feeling or hear-feeling in a

way that will leave the client new choices about how to represent her world and to communicate in the future, nor do drugs and straps make any attempt to integrate both of the valuable parts of human beings. They serve only to suppress the polarity in the same way Martha had been doing all of her life. As see-feeling continues, she will, at some time in the future, explode and the cycle will continue. Nor does drugging and incarceration respect the amazing abilities of human beings to learn new ways of coping and of representing their world. But, most of all, approaches of this nature do not make use of all of the dynamic life that is being represented in an explosion of this nature in a way that will utilize it and make it a source of an integrative experience. We do not intent to harshly scold therapists who use such techniques. We realize that every therapist does the best he can to help people with the tools and skills he has available. We understand that psychotherapy is a very young field and that all of us have much to learn about the vast potential of human beings to learn and to grow, to reorganize the processes by which they represent and communicate their experience. We have much to learn about the ability people have to change in new ways, given the appropriate resources. We are certain that some psychotherapists who have recognized this dilemma have played the polarity of traditional psychotherapy and let their client explode into exhaustion in the belief that the feelings which were being expressed by anger could be discharged permanently. Unfortunately, this does not, in our experience, break the see-feel, hear-feel circuits, nor does this type of activity serve to integrate or re-educate clients in new ways of representing or communicating their experience. Although it may have more value for the client than drugs whose effects are unknown, the basic pattern is unchanged. So, what other choices are available to therapists in these situations?

We suggest that therapists try another alternative — to interrupt the explosion of anger in a way which will enable the client to use the dynamic life force being discharged and, thereby, to integrate the paramessages being expressed, using this energy to break the see-feel—hear-feel circuit in a way that offers clients new choices which are lasting and which enable them to organize their experience differently. This, of course, is easier to say than to do, although it is not as difficult as it, at first, may seem. Consider the problem in the following steps:

First, the case being discussed is that of a see-feeler; her explosion is one which resulted by the therapist's playing polarities. If a therapist wishes to interrupt this escalating pattern, he may do a number of things. He may play the reverse polarity. This

will demand all of the congruity the therapist has to present himself as more blaming than the client. The therapist can also require that the client close her eyes, thereby shutting off the see-feel circuit. The problem with this maneuver is that the client may make a visual image in her head which then gets translated into a kinesthetic representation. This may be overcome by a constant demand by the therapist on the client to breathe. He may, in some congruent fashion, demand that she switch representational systems, and shift all that she feels into a pictorial representation. In the following visual representation, we show what has occurred as the therapist played polarity.

Input Channel	Representational System	Output Channel	Satir Category	Semantic III-Formedness	Meta-Model Violation	Result
POLARITY ONE						
V	K	K	1	Cause-Effect	Nom	Incongruent Unstable System
POLARITY TWO						
V	K	K	2	Cause-Effect	ϕ	Congruent Violence

If you check the two representations above, you will notice that not only are both of these choices and maps of the world rather unsatisfactory for representing Martha's experience, but they are, furthermore, not well sorted and separated polarities according to the criteria of Part II of this book. In order for Martha to begin the process of integration, she must have more choices about how she represents her experience. At this point, she has no choices other than to represent her experience of the world as feelings. Therapeutic goal number one here should be to create an experience which will allow Martha to utilize another of her representational systems. Goal number two should be to have that representational system feed into an output channel which is safe for her to use to denominalize herself.

As Martha came screaming and swinging her fists, both authors, simultaneously, firmly and congruently interrupted this explosion as it reached a peak of frenzy by demanding in a

blaming way that she stop and close her eyes, and allow all that she felt to evolve itself into a picture in her mind's eye. She paused, as if startled; the demand was made even stronger and more congruently. Her eyes closed and she began to squint.

Therapist: What do you see now?

Martha: (Yelling) Nothing (her voice beginning to trail off).
God damn it. . . .

Therapist: Look harder till you see!

Martha: I can't. I can't (whining, but her fists still closed).

Therapist: (The therapist told her to breathe deeply and she did so to let the tension in her body come out as a picture. His voice changing to softness, he continued to coax her until her facial expression changed slightly.) Now, what do you see?

Martha: Yes, I can't tell what it is . . . it's foggy. . . .

Therapist: Take a breath, let the image become clear, look closer, let it come.

Martha: (Beginning to sob) Shit . . . oh, shit. (She begins to clench her fists as if to return to a frenzy.)

Therapist: No, don't interfere this time, just let it come and look. You have been running for too long and you have had too much pain, so this time bear it for awhile and you will learn (softly).

Martha: (Crying now) My baby, my baby, he . . . (sobbing).

Therapist: Tell me what you see, describe your image as clearly as you can.

Martha: He looks so scared, and so hurt . . . (breaking into tears, but beginning to clench her fists).

Therapist: No, just look, and see, and describe just this once. You have carried this for too, too long. Just see what you see, and describe it to me.

Martha began at this point to describe her son as frightened and hurt. She sobbed and sobbed.

This is only the beginning, and too often, in our experience, therapists stop at a point such as this and let all of these energies be exhausted. Again we moved to help Martha more. Martha now has reversed her process — she is taking kinesthetic representations and making visual representations for them. The see-feel cycle is at least temporarily interrupted.



Martha had begun the process of change. We then proceeded to try to sort the appropriate input channels into the associated representational system. During this time, we had Martha watch the image of her baby and placed her body in the position from which she had previously placated, asking her to watch the image closely as we moved her body. The image changed; she was frightened at first and we reassured her. She described seeing herself; she said she looked mean and angry in her picture. She described herself as having a fierce-looking face and intense eyes.

Therapist: As you look at this part of yourself, watch her closely, and tell her how you feel as you see her; be sure to keep a clear picture, and watch her expression as you tell her this.

This request has the presupposition that the client will express her kinesthetic sensation verbally while at the same time maintaining a visual representation.

Martha: Please don't make me . . .

Therapist: (Interrupting) Tell her what you feel as you see her in your mind's eye.

Martha: I feel afraid.

Therapist: Tell her how, specifically.

Martha: You . . .

Therapist: Tell her how you feel afraid in your body.

Martha: I feel tense in my back and shaky in my stomach. I'm afraid of you . . . of what you make me do.

Therapist: Watch her face! What do you see? . . . How does she look?

Martha: She looks disgusted.

Therapist: How, specifically?

Martha: She is scowling, and shaking her head back and forth. (Martha is shaking her head no.)

Therapist: Describe what you see — do not do it. (The therapist stops Martha from moving her head.) Is she still shaking her head?

Martha: Yes.

Therapist: As you watch and listen to her, what does she say?

Martha: I don't hear anyth . . .

Therapist: Listen more closely. There, do you hear? What does she say as you watch her lips and her mouth move?

Martha: Twisting her head as if to hear, she smiles a little smirk.

Therapist: What did she say to you?

Martha: (Chuckling) She said I'm a dumb bell, and to stop whining, and to defend myself.

Therapist: How is that funny?

Martha: Well, it's me but the words are the same things my mother always told me (her chuckling turns to a soft sobbing). I swore I'd never be like her. Damn it, damn it (still soft and mumbling).

Therapist: Now, Martha, watch her closely, and tell how you're not like her. Watch her closely, and listen as you do this. Say *Martha*.

Martha: Martha, I'm not like you. I . . . I . . . I'm — mmmm — nice to people, and kind of soft, warm to them — I don't hurt them.

Therapist: What does she say as you watch her? Listen closely.

Martha: . . . She, she says I'm too weak, too easily pushed around.

Therapist: How does she look as she says this to you?

Martha: She doesn't look mad now; she looks concerned, sort of worried about me.

Therapist: Tell her about your worries for her, and watch and listen.

Martha: You a . . . a . . . I . . . I am worried about you. You hurt people by coming out so suddenly and so meanly . . . then you end up being lonely. Even I fight to keep you away.

Therapist: Now, listen ever so carefully, and watch her, as you listen.

Martha: (Smiling, with concerned expression) She looks . . . sort of brave, if you know what I mean. She says she can take . . . take it.

Therapist: How do you feel about her now, as you look at her?

Martha: Well, it's the first time I ever . . . well . . . kind of liked her at all, you know.

Therapist: Martha, watch her, and as you do, ask her what, specifically, she wants.

Martha: (Interrupting) What *do* you want? She wants me to let her help me stand up so . . . well . . . so she doesn't need to

burst out. She wants me to see that I don't always need to be so wishy-washy.

Therapist: Would you like that? (Martha nods yes.) Tell her.

Martha: I feel I need you, not all at one time though but I do need to be braver and stronger. I do.

Therapist: Tell her what you want for yourself; watch her and tell her what you want for yourself.

Martha: I want your . . . well . . . good things, but I also want to be soft and not hurt anybody . . . physically and not lose total control, you know . . .

Therapist: What's her reply? Listen — watch her.

Martha: She agrees we could do it. She's smiling and . . .

Therapist: Martha, as you see her smiling, strong and brave, and not needing to take control over you, knowing that you can have both her toughness and your own tenderness when either is appropriate, let your hands come up slowly, grasping the picture before you, ever so slowly, watching her face. (Martha's eyes are still closed. She raises her hands and grasps the air a foot in front of her.) Now, slowly seeing her and feeling yourself pull her closer to you slowly . . . so slowly . . . until you feel her enter and become part of yourself, seeing what you see and feeling what you feel. That's right. (Martha pulls her hands slowly until they touch her chest. As she did, she took a deep breath, and then another, relaxing her body and smiling.) What do you feel as you let this become part of you?

Martha: (Smiling) It's kind of weird . . .

Therapist: What is?

Martha: I feel a tingling in my chest . . . feel good . . . but . . .

Therapist: Just let this spread and spread and fill your whole body. As it does so, what do you see?

Martha: Bobby (her son). I miss him . . .

Therapist: How do you feel?

Martha: Still tingling, but it is all over my body now.

Therapist: Now, Martha, let your eyes open, slowly feeling your body, and seeing what you see as you feel yourself . . . slowly, that's it . . . tell what you see.

Martha: I see people — they look bright. . . . I mean the colors are so bright and I see you (speaking to one of the authors).

Therapist: And how do you feel as you look at me?

Martha: Still tingling. It feels good. I'm so relaxed but yet so — so, well, awake, kind of. I feel good.

Therapist: Martha, too often therapy looks good but is not

effective. May we test you?

Martha: What? No, I heard you. How?

Therapist: That spoils it; will you trust me?

Martha: Yes (tilting her head in confusion, but still glowing and smiling and breathing deeply).

Therapist: (The therapist began at this point to play the same polarity that elicited such a violent response, placating Martha and asking her to please [in a grating voice] not be so hard on herself.)

Martha: Martha laughed uproariously and, forcing a grin, looked at the therapist and jokingly said, "You're disgusting; you need help."

Although neither of the therapists has seen Martha again and there are still many parts of her which could use therapeutic assistance, this is an example of the power humans have to change. She called us twice on the phone; once, two months later to tell us she was alive and well in the Midwest. She was happy and endeavoring to begin a new life. A second call came six months later from a joyous Martha who had with her once again her son; she expressed gratitude for the two hours we gave her and promised to buy a copy of this book. We are not suggesting that one therapeutic session is ever all that a client needs, but, rather, that a great deal can happen in a short time when we, as therapists, respect our client's ability to grow and change when given the resources to do so. Most important, we wish you to realize the necessity of giving clients choices about how they represent the world, especially when they have rigid fuzzy-function patterns.

Let us return now to Martha and see what can be learned from this session. In the last change that we discussed, Martha was representing the world by the following process:

Input Channel	Representational System	Output Channel	Satir Category	Semantic Ill-Formedness	Meta-Model Violation
K	V	A	1	M.R.	φ

As the therapist placed Martha's body in a placating posture she had previously used, the only possibility for change was the content of her visual representation ~ she became herself instead of her son.

Input Channel	Representational System	Output Channel	Satir Stance	Semantic Ill-Formedness	Meta-Model Violation
K	V	A	1	M.R.	ϕ

The above is a process of representation which is safe to denominalize. The therapist then assists the client to denominalizing, putting movements, action, and process into the visual representation, at the same time working to simultaneously build a kinesthetic representational system, sorting Martha's incongruency until she had two congruent models of the world.

	Input Channel	Representational System	Output Channel	Satir Stance	Semantic Ill-Formedness	Meta-Model Violation
1.	K	K	A external	1	M.R.	Del
2.	A	V	A internal	2	C.E.	Del

These polarities were then integrated in both the visual and kinesthetic representational systems simultaneously, the results being:

Input Channel	Representational System	Output Channel	Satir Stance	Semantic Ill-Formedness	Meta-Model Violation
K	K	K			
V	V	V			

Although many aspects of Martha's life will still contain ill-formed representations, she has a new reference structure of see-seeing and feel-feeling at the same time. This will greatly affect her ability to cope every time she chooses to use this new learning. What more can be expected from a few hours and a chance meeting?

The preceding case of Martha is not an exceptional one in our work. We have found fuzzy functions to be the process behind many painful and inadequate coping systems in our clients. Cases of sadism, for example, have been identified as see-feel circuits in which visual input of another's pain was represented as kinesthetic pleasure. We have had clients whose asthma was the result of see-feel, hear-feel representation of other's aggression toward them stored in their own bodies (especially their neck and throat). The value of working with fuzzy functions is that we are able to give our clients choices about where and when they use these fuzzy functions directly — this has great potential for therapy in and by

itself. There is, however, even more to be gained from an understanding of these processes. Very often in therapy, just when something begins to happen, a client will seem to lose the ability to hear or see, or both. He might become agitated in some way which interrupts his progress and growth and the development of new choices. We have found in our own work that very often we can reverse these interruptions simply by paying attention to the shifts which our clients make in their body postures. Fuzzy functions, we have found, are associated with distinctive body postures. These postures may be different for each person with whom we work, but are, in each case, quite noticeable. In times of stress, some clients lift their chin up, others push their chin out in front of them, others scrunch their shoulders together, and some squint their eyes. These are typical. They all share similar outcomes — they all serve to identify a fuzzy function. We have found that rearranging our clients' postures back to a more relaxed one and then asking them to breathe very often is all that is needed to continue a therapeutic session on a course which is accomplishing something. Sometimes a maneuver such as this will set off powerful reactions. If a client is see-feeling a strong emotion and tries to cut that emotion off by lifting and stiffening his neck, and we move his neck back, he will come into contact with feelings which have been the source of great coping difficulties.

Some rather interesting research has been done in this area. Gerald Schuchman and Ernest J. Burgi in 1971 reported that jaw position has a profound effect on hearing. By shifting the position of the jaw bone, differences in sensitivity to pure tone could be increased. Also, sensitivity for threshold sensitivity increased on the average of 15db. What this means to the psychotherapist is simply that, by shifting a client's jaw position, you will increase his ability to hear. Also, by paying close attention to our clients' jaw position, we can learn when they are hearing and when they are not.

Altshuler and Comalli have reported findings in the area of body tilt and ability to localize sound. Many studies of this nature have been done. What we as therapists can learn is not just to read these journals but also to pay attention to our own experience in a new way. Try a little exercise, if you will:

Have someone speak to you about anything. As they do so in a fashion that does not require you to reply, try shifting your own jaw bone to different positions and listen to the effect on your own ability to hear. We have all had the experience of fading out of a conversation, but have you ever paid attention to any posture

changes you use to accomplish this? This will be an opportunity to learn, not only about yourself, but about how your clients also use posture to affect their hearing. Next, try all kinds of combinations of moving your head from left to right and tilting your body, pulling your shoulders together, and any other combination that comes to mind. You might try a posture of one of your clients who does seem to hear you too well and see if changing to his posture affects your own hearing.

The changes you notice in your own ability to hear will be exaggerated in your clients in times of stress or when discussing emotionally charged issues. Helping them to keep breathing and maintaining a posture which allows them to hear will be a big asset. Virginia Satir said to a client one time, "It is easy to feel down when you keep looking down." We suggest that you try it for an hour and experience the truth of her words. There are many body tuning techniques which we use in our work. These will be detailed more precisely in a later volume. Most of these you can find by exploration if you are willing to simply explore with yourself. People who squint complain of great difficulty in seeing, or often state:

I can't see what you're saying to them.

People who have great difficulty with visual imagery can be assisted in learning these techniques by paying close attention to eye-scanning patterns — as a cursory review of recent Rapid Eye Movement (REM) research will show.

Body tuning can be an amazing asset in therapy when used to assist clients in using their senses to the utmost potential while dealing with stressful portions of their model of the world. We intend to do much more work in this area in the coming year. For now, we would like to mention this briefly so those of you who wish to explore this area will have the opportunity.

SUMMARY OF PART III

Fuzzy functions are the processes for representing the world which are the basis of semantic ill-formedness, when our clients do not have choices about what they see-feel or hear-feel, feel-hear, etc. Since semantic ill-formedness is the source of much of the pain we see and hear in therapy, we would like briefly to review the possibilities of fuzzy functions and their outcomes.

Input	Representation	Type of Semantic Ill-Formedness
Visual V \longrightarrow K	to Kinesthetic	\neq Cause-effect / You make me sad = C.E.
Auditory A \longrightarrow K	to Kinesthetic	\neq Cause-effect / You make me sad = C.E.
Kinesthetic K \longrightarrow V	to Visual	\neq Mind reading / I can see when he's scared. \neq MR
Kinesthetic K \longrightarrow A	to Auditory	\neq MR / I know what he's thinking. = MR
Visual V \longrightarrow A	to Auditory	\neq MR = MR
Auditory A \longrightarrow V	to Visual	\neq MR \neq MR
All the Mind-reading functions		= Lost Performative / He knows it's wrong. She's crazy not to see it.

FOOTNOTES FOR PART III

1. In Volume I of *Magic*, we identified three types of semantic ill-formedness:

Cause-Effect Mind-Reading Lost Performative

This third type, Lost Performative, is exemplified by utterances such as:

*All smokers are crazy.
It is true that money implies happiness.
Good girls don't hit boys.*

Lost Performative is the case in which the speaker assumes that his model of the world is the world or, minimally, assumes that his model of the world should be everyone's model. This is essentially a violation of the map-territory distinction. As mentioned in the analysis in *Magic I*, this phenomenon is a special case of deletion — in which the performative which carries the map-territory distinction has been deleted. We would also mention that, if the reader finds it more satisfying, it is possible to consider the Lost Performative semantic ill-formedness a special case of Mind Reading, in which the speaker generalizes his model of the world, not only to the person to whom he is speaking, as in:

You must be bored, listening to me describe my problems.

but to the entire world as in:

It's boring to listen to people describe their problems.

2. Here we are listing and discussing only the two most common fuzzy functions which are initiated by stimuli external to the person experiencing the phenomenon. We have, however, encountered the other logical possibilities, namely:

- (a) When the client takes information arriving in the visual channel and represents it auditorially. For example, the client is watching a second person who waves his hand in a gesture which is similar to a gesture which commonly means *go away*, while simultaneously uttering some noise, not words. The client in this case subsequently claimed that she heard the man yell the words, *Go away!* This is an example of the fuzzy function see-hear.
- (b) When the client takes information arriving in the auditory channel and represents it visually. For example, the client hears a second person who yells the words, *get out of my way*, at the same time that he throws his jacket down on the chair between them. The client in this case later claimed that he had thrown his jacket at her. This is an example of the fuzzy function hear-see.

3. Again, here we are listing and discussing only the two most common fuzzy functions associated with the semantic ill-formedness Mind Reading. We have also encountered the other logical possibilities, namely:

- (a) When the client takes information which is stored visually and distorts his auditory input to match the visually stored material — for example, people who have an *image* of themselves as worthless will tend to *hear* complementary remarks from others as sarcastic or

ironic; thus, see-hearing.

- (b) When the client takes information which is stored auditorially and distorts his visual input to make it match. For example, someone whom the client knows has consistently been sarcastic toward her in the past. They are both standing in a group and the client is speaking, describing a recent experience. As she tells a portion of her experience which is amusing — indeed, some of the people in the group laugh — she notices that this other person is smiling. She will interpret this information received visually to be consistent with her auditorially stored information — in this case, that he is smiling sarcastically at her present behavior, not that he is enjoying the story which she is telling; thus, hear-seeing.

PART IV

Family Therapy - The Delicate Flower



If you did nothing more when you have a family together than to make it possible for them to really look at each other, really touch each other, and listen to each other, you would have already swung the pendulum in the direction of a new start.

Virginia Satir, p. 61 of Chapter IV, Intervention for Congruence, in *Helping Families to Change*. Edited by Tiffany, et al. The High Plains Comprehensive Community Mental Health Center, Hays, Kansas.

A flower is a marvelous piece of life; although we can plant a seed and assist the growth process, we humans as yet cannot create a live flower. We can crossbreed, transplant, cultivate, and graft flowers, but we cannot create one from scratch unless it has no life in it, unless it is made only of paper or plastic. Another characteristic of flowers and plants is that they grow best in their native environment, and, although they will grow in another environment, it takes much more support from those cultivating their growth for a flower to have the same heartiness and chance of reaching its full potential. But sometimes, even in a flower's native environment, although it may exist for its full life cycle, it is scraggly and bears few blooms. Sometimes these wild flowers even become so constricted that they choke each other and become sick and die. Flowers achieve their greatest growth and fullest beauty and bear the sweetest fruit when they are nurtured with appropriate resources in their native habitat and given adequate room to grow. We believe this process we described for flowers is also true for people in many ways. The following chapter on family therapy represents this belief. Family therapy is probably the most difficult form of therapy in which to become proficient, but it is also probably the most rewarding and enriching approach to therapy if it is performed with loving skill.

OVERALL STRATEGY FOR ASSISTING FAMILIES TO CHANGE

The techniques which are essential for family therapy are not, in themselves, different from those of individual therapy. They are, however, organized in a different fashion. This means that, while Meta-model questions, representational systems, and polarities remain the key principles, they are organized and used in a different way. These principles are reorganized around the concept

of a family as a system. To accept the family as the system unit for therapy is to use an overall strategy to work with the family as if it were one living organism, each member being an essential part and resource and, therefore, crucial to the satisfactory behavior of the organism as a whole. Consequently, behavior of all the parts or members of the family organism will affect all the members in the same way — conflicting or not conflicting parts of one human being's model of the world will have an effect on his behavior and ability to cope. What all this implies for family therapy is that, in the same way that conflicting paramessages produce incongruity, stifling inability to cope, and painful hopelessness in one human being, so, too, conflicting models of the world in the family organism held can produce chaos, paralyzing rules, and, thus, prevent family members from being connected with each other in a way which is nourishing to all of the members of the family.

What, then, are the specific differences between family and individual therapy? Therapy for an individual has been described, basically, in the two volumes of *Magic* as a process using the Meta-model distinctions, representational systems, incongruity questions with a client to identify the portion of his model of the world which is impoverished in some way which prevents him from coping, having choices, and getting what he wants from life. Once this is done, the client's behavior will make sense, given the premises from which he has constructed his representations. The therapist then has many choices about how to proceed. In *Magic I* we said that no person is bad, sick or crazy, no matter how bizarre his behavior might at first appear. Similarly, in family therapy we see no member as the cause of the problems in coping, nor do we label any member or any part of any member as bad, sick or crazy. We begin with the premise that the system (family organism as a whole) has some portion of its shared model of the world impoverished in a way that prevents the processes going on in that system from being nourishing.

One of the most dramatic ways in which therapy will differ in these two contexts is that the patterns of behavior which at first appear quite bizarre to the therapist in the context of individual therapy will make much more sense when that individual is seen and heard in the context of family therapy. The family, itself, is one of the most important contexts to which the individual must adapt himself, and, thus, the patterns which strike the therapist as peculiar when seen and heard without the other family members being present will be more understandable in the context of the family's patterns. In other words, the therapist has immediately available before him the individual's most important context — the

one which more than any other context has contributed to his generalizations about life — his model of the world. This, of course, has a profound effect on the therapist's choice of therapeutic techniques. Take the technique of enactment, for example. One of the values of an enactment technique is that it allows the therapist to see and to hear for himself the way in which the client models his experience. By having the client re-live an experience from the past and then comparing the *client's* ability to make sense out of it with the *therapist's* ability to make sense out of it, the therapist has an excellent example of the kind of modeling processes which the client typically employs in constructing his model of his experience. By using an enactment technique in individual therapy, the therapist has the opportunity to identify the specific ways in which the client uses the three universals of human modeling to cope or to fail to cope. The therapist using this technique might, for example, discover that the client systematically fails to hear what the other people in the enactment are presenting auditorially — what they are saying to him. In the context of family therapy, however, there is no need for the therapist to rely on a re-creation of some scene from the past as the communication process unfolding before him is the real thing — the process which forms the basis for the client's modeling. By carefully attending to the communication process — the presence or absence of incongruity in the communications among family members, or the systematic avoidance or deletion of certain types of messages — and by questioning the family members about what they are most aware of, the therapist can identify the deletions, distortions, and generalizations which are preventing the family members from achieving together the experiences which they want.

The second way in which family therapy is dramatically different from individual therapy is that, in individual therapy, the individual, no matter how incongruent or split he may be, no matter how many parts he may be expressing, no matter how conflicting these different parts are, occupies the same body. In family therapy, a number of individuals who occupy different bodies are involved; consequently, there is the possibility that the therapist's interventions may change the family system in some way which will lead to the family members' deciding to dissolve the family as an organism. For the remainder of this discussion, we make the assumption that the breaking up of a family is the least acceptable outcome for the family therapist. There is no parallel in individual therapy.

The assumption that the breaking up of the family is the least

acceptable outcome in family therapy places certain constraints on the therapist. First of all, we recommend that the therapist determine as one of the very first items of business with the family exactly what goal they have for themselves. This will allow the therapist to decide whether he is willing to attempt to work with the family toward those goals within the constraints of family therapy. The therapist may, for example, decide that he is unwilling to accept the constraints of family therapy but offer to work with individual members in individual therapy.¹

Now, given the assumption that the breaking up of the family system is the least acceptable outcome, how, specifically, does the therapist behave differently in the context of family therapy when compared to individual therapy? In our experience, in every family or couple we have encountered, we have identified the particular form of semantic ill-formedness called Cause-Effect semantic ill-formedness — the situation in which one member of the family is represented as causing another family member to experience some feeling or emotion. For example, statements such as:

... My husband makes me feel wonderful whenever he looks at me that way.

or

... She disappoints me greatly when she doesn't listen to me.

In each case, the speaker of these sentences is accepting a representation of his experience in which his feelings are determined or caused by the actions of another. The linguistic representation of Cause-Effect semantic ill-formedness translates, when mapped into the world of the speaker's experience, into specific hear-feel and see-feel circuits — the subject of Part III of this volume. Thus, one of the most common ways in which people maintain couple and family relationships is in maintaining a set of positive highly valued fuzzy functions. Since the constraint in family therapy is to maintain the family as an organism, for the therapist to challenge the Cause-Effect semantic ill-formedness or the fuzzy functions which are its basis is to attack the very foundations of the family system. This is the major way in which family and individual therapy differ. In individual therapy, there is a positive value in challenging any and all expressions of Cause-Effect semantic ill-formedness, while, in family therapy, the therapist must make conscious decisions about the outcome of challenging Cause-Effect semantic ill-formedness in terms of maintaining the family struc-

ture. The sensitivity which the therapist shows in selecting the particular Cause-Effect relations with which he will deal explicitly is much of the art of fast, effective family therapy. Later in this part of the book we will present general guidelines for the way the therapist can make effective decisions about which forms of Cause-Effect semantic ill-formedness he may usefully challenge.

Within the differences peculiar to family therapy, the therapist employs a familiar three-step process to assist the family in the process of change and growth: (1) Identification of both what the family wants for itself as a unit and what its present resources are; (2) The evolving of the family system from its present state to the desired state; and (3) The integration of the new choices and patterns of interaction created by the family and therapist in the work sessions. These three steps parallel the three steps in incongruity work called Identifying Incongruities, Sorting Incongruities into Polarities, and Integrating Incongruities. As we more fully develop the principles of family therapy, the parallels will become even more obvious.

IDENTIFICATION OF PRESENT STATE AND DESIRED STATE FOR THE FAMILY

As in any form of therapy, the therapist, himself, serves as a model for communication. In beginning therapy with a family, we have found it particularly useful to be very direct about what the goals of the therapy will be. Specifically, we have found it useful to ask each of the family members directly to state what he wants from the therapeutic session. This may be accomplished by asking any of the following questions:

What are your hopes for yourself and your family in therapy?

How, specifically, would you like you and your family to change?

What do you want for yourself and your family?

If you could change yourself and your family in any way you want, what changes would you make?

How would you and your family be different if you all changed in the very best of ways from this experience?

The answer which the therapist receives to such questions will, of course, be in the form of a Surface Structure of English — a Surface Structure which is subject to all the well-formed-in-

therapy conditions. In addition, as each of the family members reply, he will unconsciously select predicates which will reveal to the attentive therapist what his representational systems are. The Meta-model distinctions apply here and provide the therapist with a way of effectively beginning the process of communicating clearly with each of the family members while simultaneously clarifying both for himself and the family members the agreed-upon goals of the therapeutic work. The outcome of this process is some mutually agreed upon set of therapeutic goals. This identifies the state of living which the family wishes to achieve for itself.

At the same time that the therapist is working with the family to clarify the therapeutic goals, he is watching and listening to the various family members express themselves: their hopes, fears, and needs as they perceive them. We have found it very useful as a natural and integral part of the process to ask different family members to report their experiences of this ongoing process. By requesting this behavior and attending closely to the response of the family members, we learn a great deal about the modeling principles which they use to construct the model for their experience. We quote several brief excerpts from beginning family therapy sessions by way of example:

Therapist: And you, Betty, as the wife and mother in this family, what are your hopes for yourself and your family? What changes would you like to make?

Betty: Well, I see so much resentment and bitterness in the family . . . I never have a chance to relax; just look at my husband, sitting there ignoring me just like he always does.

Therapist: How do you know that Jim, your husband, is ignoring you, Betty?

Betty: What do you mean, "How do I know he's ignoring me?" — anyone can clearly see that he is. . . . He hasn't looked at me once the whole time I've been talking. I don't even . . .

Notice that in these few lines the therapist can already identify a number of important patterns. Betty uses primarily visual predicates (*see, look, see, clearly, looked*), universal quantifiers (*never, always, anyone, not once, whole time*) and visual input as the basis of mind reading (complex equivalence: *He's ignoring me = He hasn't looked at me once*). Betty's use of both visual predicates and universal quantifiers (syntactic correlate of Satir Category 2 — blaming) fits a common pattern which we discussed in Part II of this volume — specifically, the congruence of a blamer and the use

of visual predicates.

Therapist: Hold it, Betty (interrupting). Jim, I'm curious about something. Were you ignoring Betty just now?

Jim: No, I heard what she said.

Therapist: Tell me, Jim, what was your experience when you heard her say what she said?

Jim: Well, she tells me a lot that I'm not much good, so I'm kinda used to it, you know. . . . I just . . .

Therapist: Wait a minute, Jim, what did you hear Betty actually say?

Jim: Well, I . . . uh, well, I don't exactly remember the words that she used, but she sounded real mad — you know, I've heard her sound that way lots of times before, I get the message . . .

The attentive therapist can extract another pattern from the few additional lines. Note that Jim uses a large number of auditory predicates (*heard, said, tells, words, sounded, sound*) yet he is unable to recall the words — apparently, he is responding to the tonality of Betty's communication. Furthermore, his communication verifies that the exchange — Betty's blame — is a pattern which he knows well. Notice that he also uses complex equivalence (*She sounded real mad = She tells me that I'm not much good*) as the basis for mind reading. One of the recurrent patterns which distinguishes families which are relatively open to change and growth from those which are relatively closed is the degree to which the family members use feedback as opposed to calibration (see Bateson, p. 9 in Jackson, Vol. 2) in their communication with one another. In other words, if each time Jim hears an angry tone of voice from Betty, he "knows" that she is telling him that he is not much good, or if each time that Betty sees Jim not looking at her when she is speaking she "knows" that he is ignoring her, each of these family members is relatively calibrated to each other's communications — they have no well-developed channels for getting or asking for feedback. That is, rather than asking Jim whether he is paying attention and whether he wants to respond to her (asking for feedback), Betty makes the mind-reading assumption that, since he is not looking at her, he is ignoring her. Typically, even after Jim states that he was paying attention to her, Betty will deny it — she is calibrated on the partial analogue communication from Jim — whether he is looking at her, a calibration that not even his further claim will affect. Betty and Jim have a set of habits which constitute calibrated communica-

tion and thus allows little room for change.

Joan: I want to answer but feel afraid, I . . .

Therapist: Afraid of what?

Joan: Well, I . . . I don't know whether I ought to talk about this . . . Mom always . . .

Joyce: (Interrupting) Of course, dear; please express yourself freely (spoken with a harsh, shrill voice, left arm extended with finger pointing at her daughter, Joan).

Joan: I think I'll just wait . . . I don't feel comfortable right now.

Therapist: Max (turning to the father), what did you experience just now during the exchange between your daughter and your wife?

Max: Yeah, well, I just don't understand what you want from us, Joan; you start to say something, your mother encourages you and then you stop — you always frustrate us that way.

Here, in this exchange, the therapist, by asking the father/husband to present his experience of the communication between his wife and his daughter, learns that for him (Max) the communication which his wife presented (analogue blaming with verbally incongruent message) to his daughter is represented only by the verbal portion. In fact, he blames Joan, the daughter (*you always frustrate us that way*), for responding to the analogue portions of the messages with which her mother presented her. The use of the plural pronouns (*us, us*) shows the therapist the way the father perceives and represents the alignment of people in the family system.

These types of examples could be numerous — the point, however, is simply that, during this initial stage of family therapy, the therapist is acting to both come to understand the state that the family wants to achieve and the state in which they presently are living. The larger patterns of communication among family members can be usefully organized along the following dimensions:

- a. The representational system of each family member;
- b. The Satir category of each family member;
- c. The recurrent patterns of communication incongruity of each family member;
- d. The primary input channel for getting information for each family member;

- e. The primary output channels for expressing themselves for each family member;
- f. The kind and extent of semantic ill-formedness for each family member.

As we have discussed in detail in the previous sections, these pieces of information will yield enough information to allow the therapist a coherent understanding of the present state of each of the family members. We turn now to the way in which these patterns fit together to make up the family system.

Basic to any discussion of the description of the family as a system is an understanding of the process by which people first come together to form couples and families. We call this the Pairing Principle.

THE PAIRING PRINCIPLE

What we have noticed time and time again is that the distribution of representational systems and Satir categories in family systems and in polarities is the same. Specifically, in Part II of this volume, we pointed out that the most frequent and effective incongruity-into-polarity sorting was a sorting which resulted in two polarities: one, a visual/Satir category 2 and the other, a kinesthetic/Satir category 1. Parallely, in the context of couples and family systems work, the most frequent distribution of representational systems and Satir categories is one in which one of the parenting family members is a visual/Satir category 2 and the other, a kinesthetic/Satir category 1. For the moment, we restrict ourselves to a discussion of the minimum family system -- the couple. This particular pattern of distribution of representational systems and Satir categories makes sense to us. Specifically, consider the Meta-tactic for incongruity work of playing polarity. A therapist wishes to elicit the weaker of two polarities to assist the client in fully expressing that polarity as a step on the way to integration. We designate the two polarities by the symbols P_1 and P_2 . Suppose, now, that the polarity symbolized by P_1 is the stronger of the two polarities. In order to elicit the weaker of the two polarities, P_2 , the therapist plays, not the weaker one, but P_1 , the stronger of the two -- the one that the client is presently displaying. When the therapist plays P_1 more forcefully than the client, the result is that the client flips polarities, playing P_2 . In fact, as we mentioned in that section, if the therapist fails to observe polarity principle and attempts to convince the client,

offer advice, in such a way that the client perceives the therapist as playing the weaker polarity, the client is locked into playing the opposite polarity, and, typically, never takes responsibility for the other polarity, never expresses it fully and is, therefore, unable to integrate it.

Consider now the polarity principle in the context of pairing and the formations of stable couple relations. Off goes some hypothetical male; let's call him Sam. Sam has the standard, frequently occurring incongruity of having two models of the world which conflict in some areas of his behavior but not so much that he is immobilized — one of these models is kinesthetic and placating (Satir 1) — call it S_1 — and the other is visual and blaming (Satir 2) — call it S_2 . Sam's most highly developed polarity is S_1 . One day, Sam runs into (being a kinesthetic) a woman named Louise. Louise also has the most frequent polarity split — one polarity, the stronger, is visual and blaming — call it L_1 — while her other polarity is kinesthetic and placating, call it L_2 . When these two well-meaning people come into contact, we have the following situation:

Louise	Sam
L_1 (visual/blaming)	S_1 (kinesthetic/placating)
L_2 (kinesthetic/placating)	S_2 (visual/blaming)

Specifically, when these two people make contact, they perceive one another's most dominant polarity as follows:

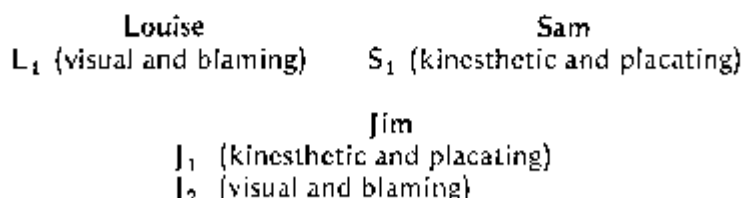
Louise	Sam
L_1 (visual/blaming)	S_1 (kinesthetic/placating)

By the polarity principle, we can predict the outcome of this encounter — that is, each of the people is perceived by the other as playing his partner's weaker polarity:

$$\begin{array}{l}
 L_1 = S_2 \\
 \text{and} \\
 L_2 = S_1
 \end{array}$$

Translating this visual representation into words, we observe that, since each of the people is playing the other's weaker polarity, we have the situation in which the therapist fails to take the polarity principle into account, inadvertently playing the client's weaker polarity. The client thereby gets stuck in the dominant polarity, fails to fully express his weaker polarity fully

and therefore does not integrate. In fact, the client comes to depend upon the therapist to continue to play his weaker polarity.² In the context of a couple relationship, the result is a highly stable system — each member of the system depending upon the other to continue to play his less fully expressed polarity. We are not suggesting that the polarity principle is the *only* principle by which individuals come together and form lasting relationships, simply that this principle accounts for much of our experience in couple and family work. Let's carry the hypothetical example a bit further. Suppose, all other things being equal, that Louise and Sam find each other attractive, and they decide to have a traditional family. They have a child; we'll call him Jim. As Jim grows up, he sees and hears his parents and, as with most children, adopts them as models for his own growth. Jim, however, is faced with a problem. His parents conflict in certain ways — they have models for their own behavior which are inconsistent with one another: one being visual and blaming and the other being kinesthetic and placating. Watching and listening to his parents handle stress and cope with life's demands provides Jim with many choices about his own model of the world (albeit, unconsciously) — unfortunately inconsistent with one another. How, then, will young Jim solve this problem? We can hardly expect him to accept the models displayed by both of his parents and integrate them — his parents with the presumed advantages of age and education failed to accomplish this for themselves. The most likely outcome is that Jim will "identify" more strongly with one of his parents than with the other and adopt that parent's model of the world as his dominant or more fully expressed polarity. Of course, Jim, being the loving son that he is, will want to indicate in some way that he also loves and respects his other parent. He may show this, of course, by adopting his other parent's model of the world as a less fully expressed conflicting polarity.



Now all we need do is to construct another family with a daughter named Marie, whose parents have the same polarity game going in which Marie selects as follows:

Marie

M₁ (visual and blaming)M₂ (kinesthetic and placating)

and we have the proper basis for a new cycle of polarity pairing.

There are other possible outcomes to these patterns. For example, if the original couple, Louise and Sam, each have polarities which are relatively balanced — that is, nearly equally well expressed, then they will likely engage in what Satir has called the Yo-Yo game. When Louise, for example, is expressing her polarity L₁ (visual and blaming), Sam expresses his primary S₁ (kinesthetic and placating). Suppose, now, that Louise flips strongly over to her secondary polarity L₂ (kinesthetic and placating). We then have the following situation:

Louise

L₂ (kinesthetic and placating)

Sam

S₂ (kinesthetic and placating)

By the polarity principle, Louise has just performed a maneuver which in the context of therapy is a Meta-tactic — namely, she is playing Sam's polarity. If she is congruent enough in her flip, then it follows, by the polarity principle, that Sam will flip to his secondary polarity, stabilizing the system. We then have:

Louise

L₂ (kinesthetic and placating)

Sam

S₂ (visual and blaming)

In our experience this Yo-Yo pattern will vary from family to family so that a single, complete cycle (in this case, both Louise and Sam return to their primary polarities) can take from 30 seconds, to months, to even years. Satir has termed this type of polarity flip one of the possible movements in a family stress "ballet." People caught in such movements rarely have any consciousness of the regularity of their behavior.

Consider, now, the outcome of this type of experience on young Jim — assuming, of course, that Louise and Sam stabilize the ballet sufficiently to have children. In this case, young Jim's experience is somewhat more bewildering, and the choice he must make to love and respect each of his parents is less clear. One particularly unfortunate choice for young Jim would be to mix his polarities so that he is maximally incongruent at all times.

Louise

Sam

L₁ (visual and blaming)S₁ (kinesthetic and placating)L₂ (kinesthetic and placating)S₂ (visual and blaming)

Jim

J₁ (visual and placating)J₂ (kinesthetic and blaming)

Notice, in particular, Jim's minor polarity — J₂ (Kinesthetic and blaming) — the reader will recognize this combination as a portion of the description of Martha, the woman who found herself an uncontrollable child-beater, in the last part of this volume. Furthermore, since Jim is consistently incongruent in his communication, others will respond to him in a similar fashion, and he is likely to find the world a really peculiar experience.

Another frequent response which children make to the task that confronts Jim is to decide that one input channel carries the *true* information about the world and the people in it. Jim might, for example, decide that, when he is faced with the task of determining how to respond to one of his parents who is in a transition from one polarity to another and, therefore, expressing both polarities at once (say, visual and blaming analogically with body movements and gestures, and kinesthetically and placating verbally), he will accept and respond only to messages which he (Jim) receives visually. He, thereby, begins the process of shutting down one of his primary input channels — one of the ways in which he can contact the world and other people — an irreparable loss. Bateson and his colleagues (1972) have dealt with a special case of the kind of choice with which young Jim in our example is faced — the case in which the child makes the best choice in his model at the point in time when he must make a choice to continue to survive — schizophrenia. Apparently, schizophrenia is likely as a choice for children and young adults who are consistently confronted with maximally incongruent communication — the kind, for example, with which Jim's children would be confronted if Jim made this last selection and found a mate who exhibited the same ill-formed polarities.

It follows from the above discussion that the family members — especially the parenting members — will display the same

tendencies for non-overlapping representational systems and non-overlapping Satir categories which we discussed in detail in Part II – Incongruency. Both experienced and beginning therapists will find this a powerful organizing principle in their work with family systems. Thus, one of the higher level patterns which the information listed previously will consistently take is that of maximal separation of representational systems and Satir categories.

A second higher level pattern which we have detected again and again in family systems work is the kind of relationship which occurs between the acceptable output channels or modes of expression for family members and the input channels or modes of getting information which they typically use. One way of understanding how this works comes from a consideration of the kinds of experiences that families expect to get from each other in the family system. In the initial stages of family therapy, when asking the family members what it is that each of them hopes for or wants from the therapy, the responses are usually a number of nominalizations; for example, recognition, affection, warmth, love, support, freedom, encouragement, etc. Each of these nominalizations is subject to the Meta-model challenges. The resulting de-nominalizations usually involve a mismatch of input/output channels among the family members who are dissatisfied with what they are receiving at present. We excerpt a section from the early part of a family therapy session:

Therapist: Well, George (a ten-year-old boy), I've heard from all of the family members except you – tell me, what do you want?

George: I want respect.

Matt: (The father in the family) (Smiling broadly) Yes, that I believe.

George: (Explosively) SEE!! That's just what I'm talking about – I don't get any respect from anyone in this family.

Therapist: Wait, George; you sound real angry to me. Can you tell me what just happened with you?

George: I . . . I . . . oh, never mind; you wouldn't understand anyway.

Therapist: Perhaps not, but try me – did the way you just responded have something to do with something your father did?

George: Yeah, I ask for respect and HE (pointing at his father, Matt) just laughs right out loud, making fun of me.

Matt: That's not true, I didn't . . .

Therapist: Be quiet for a moment, Matt. (Turning to George)

George, tell exactly what happened with you just then.

George: I asked for respect and my father started making fun of me — just the opposite.

Therapist: George, tell me something — how, specifically, would you know that your father was respecting you?

George: He wouldn't laugh at me — he would watch me when I say things and be serious about it.

Therapist: George, I want to tell you something I noticed and something that I can see right now. Look at your father's face.

George: Yeah, so what?

Therapist: Well, does he look serious to you — does he look like he's taking you seriously right now — like he, maybe, respects you for what you're saying and doing right now?

George: Yeah, you know, he does look like he is.

Therapist: Ask him, George.

George: What? . . . ask him . . . Dad, do you respect me? Are you taking me seriously?

Matt: Yes, son . . . (softly) . . . I'm taking you seriously right now. I respect what you're doing.

George: (Crying softly) I really believe that you do, Dad.

Therapist: I have a hunch right now that Matt has more to say, George; will you take him (indicating Matt) seriously and listen to him?

George: Sure . . .

Matt: Yeah . . . I guess I do have something to say. A minute or so ago when you first said that you wanted respect, George, I smiled and said, "Yes, that I believe" but I guess you only saw the smile and didn't hear what I said (crying quietly), and then, when you became so angry, I suddenly remembered how I never believed my father respected me, and I'm grateful (turning to the therapist) that you helped me straighten this out with George.

Therapist: That's right — a message that's not received the way you intended it is no message at all. Matt, is there some other way that you can show George that you care for him besides telling him that you respect him?

Matt: Huh . . . some other way besides telling him . . . I don't know . . .

Therapist: I have another hunch — that, maybe, there's a rule in this family, maybe a rule that you, Matt, learned in your father's family, that the men in the family don't touch one another to show their affection and love. Do you catch

what I mean, Matt?

Matt: ... Wow ... I guess ... I really connected on that one ...

Therapist: Well, maybe it's time for you to try to connect in a new way with your son.

Matt: (Moving slowly and awkwardly at first, then more smoothly, quickly crosses over to George and holds him close.)

In the transcript, we read of the therapist's working first with a family member, George, who receives and acknowledges only part of his father's communication — the smile — and is unaware of the rest — the phrase *Yes, that I believe*. Apparently, at that moment in time, George has only his visual input system operating. The therapist assists George in de-nominalizing the nominalization *respect* by specifying how he would know that his father respected him. Consistent with what just occurred, George specifies the process as one in which he (George) would get visual input (*he would watch me when I ...*). The therapist now moves to expand the possible ways for George to get that feedback — and does this by making George an active participant in the process of communication by having him ask his father for a verbal reply. This opens up a new output channel as well as a new input channel for George (auditory-verbal). Finally, the therapist goes after one of the rules which limits some of the family members' ability to communicate which he has noticed in the family. Consequently, Matt and George learn a new way of expressing themselves, thereby opening up new input and output channels in which they can make contact.

One very useful way that we have found of organizing our experience in family therapy is to consider rules as limitations imposed by the family system members upon themselves and upon each other. If one family member states that she needs more attention than she is getting from some other specific family member, then, typically, a de-nominalization of *attention* will reveal that the input channels which she is using to detect attention are not capable of detecting the messages in the output system which the other family member is using to try to communicate that attention. For example, the second family member may be giving the first family member his *attention* by listening intently to the first member's speech but, at the same time, failing to make eye contact. The first family member doesn't consider herself to be receiving *attention* unless she has full eye contact with the person to whom she is talking. The channels do not

overlap, and the family members end up in pain.

When considered this way, many family rules are restrictions on the input and output channels which may be used to express certain categories of messages. This is a particularly limiting type of deletion — the removal of an entire channel as a means of expression or as a means of making contact. We have usually found that at the base of these channel restrictions are certain fuzzy functions — for example, referring back to Matt and George, it is commonly a *negative* see-feel experience for many males to see males making close physical contact. Another common fuzzy function which occurs in many families is the hear-feel circuits of auditorially expressing anger by yelling or shouting. Many people are amazed to find that they can shout and yell, expressing their anger in this physically non-destructive way, without any of their family members dying or refusing to ever speak to them again.

During this first phase of family therapy, the therapist is alert to identify two things:

- (1) The goals (the desired state) that the family wants to achieve;
- (2) The present state of the family.

The therapist can precisely determine the first of these by the use of the Meta-model. Simultaneously unfolding before his ears and eyes is a prime example of the family system in process as the family attempts to determine what its goals will be. Here all the skills which make therapy such a demanding and rewarding experience must be used by the therapist to understand the present capabilities and resources as well as the blocks to achieving the desired state in that family system. The therapist's refined ability to detect patterns of congruity and incongruity, to identify representational systems, his understanding of the function of both positive and negative Cause-Effect semantic ill-formedness (and the fuzzy functions which are the neurological basis) are all necessary for an adequate assessment of the family system and the steps necessary for change. Especially important are the higher level patterns of the polarity principle as the primary pairing principle and the translation of rules into restrictions on input and output channels of expressing certain classes of messages in the family system.³

In coming to understand these patterns of family interaction, the therapist makes a comparison between the present state of the system and the desired state. Here a clear understanding of the difference and which family rules, representational systems restric-

tion following from the pairing principle, and especially which Cause-Effect semantic ill-formedness (fuzzy function circuits) must be changed in order to help the family to change to achieve the desired state will allow the therapist to act decisively to accelerate the process of change.

EVOLVING THE SYSTEM

Once the patterns of family interaction (rules) have been identified and compared with desired family reference structure (wants), the family therapist then is ready to begin the second phase of a family therapy session, i.e., evolving the system so the rules will not interfere with the needs of the individual members. Closed systems are created by people who are making the best choices in their model of the world, people who are using the processes of human modeling in the best way they know how. But, unfortunately, they are mistaking the map for the territory, and the result is representations which result in rules about how each member of the family system should act (output channels), think (representational systems) and of what they should be aware (input channels). The gap between the wants and needs of the family members and the family patterns and rules is the result of the modeling processes of the family members. For family therapy to be effective, some change in the way family members model (create representations), as well as the rules themselves, must take place. The necessary ingredients for this change have already been presented in *Magic I* and the preceding parts of *Magic II*. However, in Family therapy they must be used in a delicate and special way or the family system will not survive as a system. No one member of the family can be left behind with the old set of rules, and no one member can be outside the rules. The result of alienating a family member in either of two ways will result in a split in the system (divorce, separation, open hostility, or worse). The family therapist must tread this tightrope with the utmost care. However, some simple principles will be provided to make this an easier task. The overall strategy of evolving a family system is to use the three processes of human modeling in such a way that the limits of the family system are expanded.

- (1) Again restoring deleted material will be a necessary step. Meta-modeling questioning will serve to provide fuller linguistic communications, and, therefore, representations to listening members. Also, adding new input and output

channels will be an important step. New representational systems will also be important for they are what allow people to communicate in a way which others will understand.

- (2) Removal of distortions will constitute a large part of evolving the system, using the Meta-model to denominalize linguistically. Relabeling, translating from one representational system to another, and accessing of memories will also play an important role.
- (3) Breaking generalizations by Meta-model techniques, comparing models of family members, and especially challenging mind-reading semantic ill-formedness will be necessary steps.
- (4) Meta-position moves will also be an effective part of evolving family systems. They can be used to both educate members in more effective forms of communication and at the same time to change patterns of see-feel and hear-feel which result in rigid rules.

If a family therapist can evolve a family system so that feedback is not calibrated, then new patterns of behavior will emerge from all family members as they create richer representations of the shared world in which they live. This will, however, require that members of the family learn that the map is not the territory, at least in some areas of their lives. This is rarely accomplished just by telling anyone, and the focus of the therapist's work is to provide experiences for family members to learn that this point is an undeniable reality, as well as a pleasant one. The pain and hopelessness of those who seek family therapy is evidenced by their presence. They want more than they have, and they do not believe that they have the resources to get it. The truly skilled therapist will have to do more than just provide a solution to the immediate problem. He will have to make the discovery of that solution a pleasant experience, providing patterns of coping that can generalize to other areas of the family's life, at the same time making it possible for every member of the family to be respectable to every other member. Creation of new, negative fuzzy functions will not be nearly as beneficial as making it fun and rewarding to learn new ways of coping. The ideal outcome of family therapy is to create an open system which will be generative in creating new patterns of coping based upon sensory feedback.

Now, let's consider a family interview, piece by piece, and give some meaning to the principles we are presenting here. This is the

first time that this family has been interviewed by this therapist. There are four members:

Samuel A.	Husband-father	41	A teacher in high school
Jill A.	Wife-mother	38	Bank Teller
Holly A.	Sister-daughter	16	
Thomas A.	Brother-son	15	

This family "volunteered" to be interviewed as a training demonstration with one of the authors. They had been seen previously two times by another therapist who described them to the author as an impossible group, uncooperative, whom he didn't believe really wanted to be helped until he challenged them to volunteer for the demonstration. When they accepted, he was surprised; he then warned both authors that they might be a bad choice for a demonstration because they were likely to be uncooperative. We chose this transcript for its unique quality of showing just how easily good intentions can be misinterpreted. No other information was given to the therapist before this session at the therapist's request. The family came in: Mother and then father, holding both the children's hands. They sat in the four chairs provided:

	Son	Father	
Mother			Daughter

The therapist then entered. Introductions were made by the commentator.

Therapist: I am very grateful you could come and be here with me today. I would also like to thank you for being open enough to let those watching share this experience with us so that they might have some new learnings. I also hope that this time can make it possible for all of you (addressing the family) to learn some new things too. I would like to begin by finding out just what those might be. Let me start with you, Samuel. What would you like to come out of this time we have together? What do you hope can happen today?

Samuel: Ummm well, I don't know what will happen.

Therapist: I believe you're right; I don't know either. But what do you *hope* could happen?

Samuel: Oh . . . We first went to Dr. P. because of Holly. She kinda got into some trouble and it was recommended that

we go to him. We know that she is upset and acting out and her mother is very upset.

Therapist: Let me interrupt you, Samuel. I hear you saying that Holly has done something, and I don't know just what that is. And I also hear you saying, Jill, there has been some pain with this. I would like to know two things: specifically, what trouble did Holly get into, and, second, and most important, just exactly what you want for yourself today.

Samuel: She's been in trouble at school, talking back to teachers and she . . .

Jill: (Interrupting) She's been going through some rebellious stage, and she doesn't *see* how serious this is. She's acting up in every way to *show* everyone how independent she can be, and she just doesn't *see* what she's doing to us and . . .

Therapist: Hold it a minute, Jill. I want to hear about this from you, but first I would like to finish with Samuel. Is that all right with you?

Jill: I guess so.

Samuel: Thanks (sarcastically). I . . . I believe I would like things to *settle down*. Yes, I would like Jill and Holly to *let go of each other's throats*. They hicker, hicker, hicker, and it just keeps getting worse!

Jill: Well, if you . . .

Therapist: Jill . . .

Jill: OK, I'll wait.

Holly: I'll bet you will.

Jill: Now you'll . . .

Therapist: Hold it. We have been here only a few minutes and already I see and hear that you have some pain with each other. I would very much like to see, Jill and Holly, if we can't find a way to make things better for both of you. But, first, I need to know some things from each of you. Would you be willing to let each member of the family speak, no matter what they say, so that each of you can have a turn without being interrupted? (They all nod affirmatively.) Thank you. Samuel?

Samuel: That's really the *crust* of it. I just get so *irritated* when they start that crap. I would like it to stop.

Therapist: Samuel, is there anything else you would really like for you, some hope you have?

Samuel: Yes. I would like the fighting to stop; I would also like more *affection* from my wife. She's . . . well, she

doesn't act much like she used to anymore.

Therapist: Jill, what do you hope can happen here; what changes do you hope for?

Jill: I hope that somehow things can be *cleared up* with Holly before she really makes a big mistake.

Therapist: What things do you see as needing to be cleared up, Jill?

Jill: Holly's behavior.

Therapist: What behavior, specifically?

Jill: She . . . Well, two things. She needs to *show* some respect and *show* some sense of responsibility.

Therapist: Jill, could you say just how you would like to see Holly show some respect to you?

Jill: She disobeys me, stays out too late, and is never at home to help clean the house and do things like that. We both work and she should help me with the house; you know, *show* some responsibility. Her room *looks* like a pigsty and . . .

Therapist: Jill, have you ever seen a pigsty?

Jill: Well, no, but you know what I mean.

Therapist: I would like to hear, because I have a difficult time imagining her room covered with mud and corn cobs (all laughing).

Jill, I hear and see that you have a lot of concern about Holly and that maybe you also need some help from her. I would like to find a way for you to have those things. Let's see what happens. Let me check now with Holly.

The therapist continued in this fashion around the room to both Holly and Thomas. Holly wanted freedom from her mother. She called her a nag, a worry-wart, and a tyrant. She also wanted to "see her mother get off daddy's back." Thomas claimed he wanted nothing and just came because his mother dragged him, but would like the "yelling to stop." He said, "I feel sometimes like it's open warfare at home, everybody pounding on everyone else." When the therapist asked him what he wanted just for himself he said, "Quiet."

In the above transcript there is enough information provided, even with the deletion of part of the transcript, to begin to notice some patterns in this family's behavior which will help to make positive change from this experience. First is most highly valued representational systems. Samuel is primarily kinesthetic-placating; Jill, visual-blaming; Holly, visual-blaming; Thomas, kinesthetic-

placating. The result is a stable but rigid family system. Even in the first few minutes of this session, the family members have begun to respond quickly with what could be mistaken as bad behavior. They could be termed uncooperative, but that would be inaccurate. Quite the contrary, they responded in a way which provided just the information necessary for family therapy to be useful and effective. The therapist has elicited a great deal of information by matching his predicates to those of his clients, asking Jill questions phrased with visual predicates such as *show clearly*, etc. This session lasted some two and one-half hours and constitutes some hundred and sixty pages of written material. For that reason, only portions of it will be presented. These portions are supplied to demonstrate various aspects of how family systems are evolved. In the first twenty-five minutes the following patterns were revealed.

Samuel "*felt*" uncared for by Jill; he longed for affection, and also desired to have his family be more *in touch* with each other's needs. He also felt his wife didn't respect his wishes; she kept her job in spite of his requests that she quit and stay home with the family and take care of the house. And he felt that she shouldn't go out with the girls to bars without him. Jill "*saw*" things quite differently. She thought her husband was too jealous and couldn't "*see how silly that is*." She also wanted him to be stricter with Holly. She said he "*just doesn't look at what is happening right in front of him*." She also said, "*Clearly, Holly has got to shape up*" and that "*Holly should be more like her brother*." Holly thought that her father should stand up to Jill. "*He just lets her push everyone around; I watch that and, well, not me*." "*I show her she can't get away with that, not with me*." Thomas "*felt sick when they fight all the time*." He just wanted to run away and hide.

Let us now examine the reference structures desired by the family and see what kind of evolving will be necessary for this family to find some new choices which are more satisfying.

In order for the members of this family to achieve their desired aims, certain changes will be necessary. If Jill and Holly are to find any connections with each other, and if Jill is to have her "*image*" of Holly clarified and vice versa, they will have to learn two facets of their map's not being the territory. First, that the incongruency of their communication prevents their desired outcomes, e.g., Jill's messages of being concerned about Holly are communicated in a blaming way, a way that sounds critical, not concerned. Jill's words do not match her tone of voice and body gestures. Incongruent communication is the normal way of exchanging messages in this family. Even when Samuel said he

desired more affection from his wife, his tones and words were not matching; they conveyed other messages which were interpreted by Jill as criticisms about her behavior. Communication by members of this family seemed to be, in itself, a risk. Any comment was sure to be a criticism of some other family member. They were all calibrated to receive bad messages, and, thus, every message was construed to be a bad one. All members of this family system believed in their mind-reading abilities; every misinterpretation was then turned into a hear-feel. Family members would have to learn both to communicate their own messages and to receive messages from other members. Secondly, actions of the family members were construed to have specific meanings (see-feels) which, if the members were to have more communication with each other, would have to be changed. Mistaking the actions of Jill, Holly would immediately move to protect herself. Holly also has mistaken the map for the territory and has calibrated her sight. During the session, Jill reached for Holly's hand in what appeared to the therapist to be an attempt to become more connected and an attempt by Jill to develop some kinesthetic input. Holly pulled back and accused her mother of trying to hold her to make her look like a little child.

The rules go something like this:

Don't listen, it will just hurt anyway.

Don't bother to say anything nice because no one will hear.

Don't ask because you shouldn't be selfish, and you won't get anything anyway.

Don't touch if anybody else is watching; they'll see-feel, especially Mother.

Be strong, not yourself, or you'll get hurt.

These rules were not developed by people who were trying to create pain for each other but by people who were doing the best they could with their particular patterns of incongruent communication and fuzzy functions. The following excerpts are from the part of the interview which dealt with evolving the system. They have been added to demonstrate the pattern of using all of the techniques presented in *Magic I* and so far in *Magic II* for the purpose of evolving a system.

Therapist: What, exactly, do you want for Holly? Jill, what would you like changed in your relationship with her?

Jill: (Critical tone) I just want her to be happy and to show

her how to not make the same mistakes that I did. I want her to see I am really trying.

Therapist: As you say that Jill, I can believe that you really do want more for Holly, but your tone of voice is harsh as you say these things about wanting to help her and be closer, and I'm wondering if Holly doesn't hear your message as something like: "You're not doing anything right; you never do. You don't see how much I'm doing for you" (exaggerated, blaming tone and comical gestures). Is that what it's like when you hear your mother speak like this?

Holly: Yes, she always claims to know what's right for everybody.

Therapist: It must be a terrible task to keep tabs on billions of people in this world. Does she really claim to know what's best for everybody or just you?

Holly: Well, lots of people.

Therapist: Jill, did you know that Holly didn't understand your message as one of trying to help, and took it rather as more criticism?

Jill: Sort of . . .

Therapist: Would you like to find a new way to communicate your desire to help her, and to ask for help from her?

Jill: Yes, I would.

Therapist: Holly, as you hear your mother say that she would like to find a new way with you, I wonder if you also would like to find something new with her?

Holly: I think she just wants to find some way of telling me to do things that will make me do them.

Therapist: You believe that to be true?

Holly: Yes.

Therapist: Would you like to find out if it's true?

Holly: Yes.

Therapist: Then, would you ask her? I think people in this family spend a lot of time guessing what other people mean, and I also think that they guess wrong a lot of the time. Let's find out. Ask her now.

There are two interesting patterns in the following section. First, in the comment on Jill's incongruity, the therapist is trying to demonstrate to Jill that her messages are not received at all like she intends them to be. This opens up the possibility of discovering better ways of communicating, at the same time demonstrating what those ways are; in this case, auditory feedback instead of

calibration. Secondly, the therapist is making a direct challenge on mind-reading semantic ill-formedness, first demonstrating that it has happened, and then offering a new alternative, asking. This is also the first step in developing a new representational system which can be shared by both Jill and Holly.

Holly: Do you just want to find a way to make me do things?

Jill: No, I just don't want to be locked out; I worry so about you.

Therapist: What did you hear, Holly?

Holly: She still thinks I can't take care of myself.

Therapist: Jill, did you say, or do you think, that Holly can't take care of herself?

Jill: No, I didn't say that. I . . . I . . . think she can, but . . .

Therapist: But what?

Jill: Well, she is only 16.

Therapist: Only 16?

This is a good example of how the process of comparing models can take place. The next step made by the therapist continues this theme, by having these two visual women use their most highly valued representational system to compare their models even further.

Therapist: Jill and Holly, I would like you to try something to see if maybe we can't clear up some of this a little. Would you both come here? Now, close your eyes and just make a picture of your mother, and, Jill, make a picture of Holly. Look at it closely, and, without opening your eyes, what do you see, Jill?

Jill: My little girl, dressed pretty and . . .

Holly: You always see me as a little girl.

Therapist: Just close your eyes, Holly; wait and see what happens. Holly, what do you see?

Holly: Mother, pointing her finger, looking disgusted and angry again.

Therapist: Now, while you keep your eyes closed, I would like to tell you what I see, and what I hear. I see Holly, sixteen years old growing into an adult. And I hear, Jill — you still have Holly saddled with some picture you have about how she used to be. I also see Jill as a mother who is trying to find a way to be connected with her daughter, and, Holly, you have saddled her with a picture of some controlling monster. I think you don't know each other. Would you

like to open your eyes and really meet each other, maybe for the first time in years?

Jill: (Beginning to sob) Yes, yes I would.

Therapist: Holly, I see you looking surprised. Holly, maybe this is a new you.

Holly: I don't believe that we'll . . . (starts to sob a little).

Therapist: What don't you believe?

Holly: That she . . .

Therapist: Ask her.

Holly: Could you really see me as a person, as . . .

Jill: Yes, but it's scary.

Therapist: Could you say what's scary, Jill?

Jill: You're growing up and I'm afraid I'll lose you.

Therapist: You can't lose her until you have her; do you really have her yet?

Jill: No, but I want to.

Once these two had learned that their models of each other were outmoded, they could begin to find new ways to communicate with each other. They have begun to learn that mind reading sets limits and puts walls between them. They continued, with the help of the therapist, to make a new contract about how they would interact, learning check-out communication.

This next excerpt is from about twenty minutes later when the therapist changed the focus from Jill and Holly to Jill and Samuel. Asking Jill if, now that she had some new connections with Holly, she would like to find some new ways with Samuel.

Jill: (Looking at Samuel, now responding to the therapist's question) I want you to not watch over me, not always ask where I've been and who I saw, and not try and make me quit work.

Samuel: I don't anymore; you've bitched and bitched and I just don't . . .

Jill: Oh, come on; you give those looks, and coy questions . . .

Samuel: Shit; you imagine . . .

Therapist: Wait a minute, you're slipping off. What, exactly, do you want from Jill?

Samuel: I would like her to be more affectionate, and . . .

Therapist: Easy now, slow down. More affectionate, how?

Samuel: I want her to kiss me and, you know, but she always says not here, not in front of the kids, not now . . .

Therapist: Jill, do you have some clear idea what Samuel is

talking about?

Jill: I think so; he wants to paw me and I believe that privately that sorta thing is OK but not in front of the kids.

Therapist: What do you think would happen if your children saw Samuel and you being affectionate?

Jill: Well . . . (pause) . . . it would make them uncomfortable.

Therapist: How do you know that?

Jill: I see them when he does it; I see their faces.

Therapist: You're guessing again; would you like to find out if that's true?

Jill: I don't know.

Therapist: If you don't know, guess.

Jill: Holly, does it?

Holly: No, it bothers me when I see you push him away; I think you don't love him.

Jill: Oh . . .

Thomas: Yeah, I always thought you didn't like dad; sometimes it felt creepy when you . . .

Therapist: Ummmm guess you were wrong on that one too, Jill. Is there anything else that stops you from being more affectionate with Samuel?

Jill: (Sighs) Yes, I guess there is; I feel cowed by him.

Therapist: How?

Jill: He prys into my life, and . . .

Samuel: I thought we were married.

Therapist: Samuel, does being married mean that you don't have any privacy or have your private activities?

Samuel: No, she has lots of them, but when I try to get involved in any way, she says I'm invading her space.

Therapist: Jill, what I hear Samuel saying, correct me if I'm wrong, Samuel, is that he sees you doing a lot of things without him and he doesn't see you doing things with him. This sort of looks like you don't want him or need him. And any time he shows an interest you see him as prying.

Jill: No, I see him asking about where I've been, what did I do, who did I see . . .

Therapist: Hold it, Jill; were you deliberately trying to pry into Holly's affairs?

Jill: Ah, no, not deliberately, I mean.

Therapist: Is it possible that maybe this is another example of the same thing, only this time you're the one who feels invaded?

Jill: I guess it's possible.

Therapist: Do you think it's more than possible?

Jill: Yes.

Therapist: Samuel, are you trying to invade Jill's space or are you asking for some attention?

Samuel: I want some attention.

Therapist: Jill, do you know anything about wanting attention and not getting it? Do you know how desperately you can try and how your messages can be misunderstood? Isn't that just what happened with Holly?

Jill: I guess it is.

Therapist: Would you two pull your chairs over here, facing each other. That's right.

In the preceding excerpt there are some interesting patterns. (1) The way the therapist translates from one representational system to another, taking Samuel's kinesthetic predicates and communicating his message to Jill in visual predicates. This assists these two people in sharing information that otherwise could not be shared. At the same time it directly challenges mind reading. (2) The way the therapist re-labels the problem between Jill and Samuel to show them it has the same formal characteristics as the problem between Jill and Holly. Since Jill has this experience, she can switch the referential indices of Samuel's experience to her own, thus making a connection that would not otherwise be possible. (3) The therapist is also presenting himself as a model of how the same message can be communicated congruently, with the outcome being the desired reference structure. This puts Samuel in a meta-position with respect to his own communication, first by his attempt's being misinterpreted and then, next, by hearing and seeing both his polarities' being communicated congruently, with the result being understanding. This offers him a new choice about how to convey his messages, at the same time offering Jill a new choice about how she receives them.

Therapist: I would like to spend a few minutes now trying to see if it is possible for me to teach you to make some meaning between you. What I want to do is to teach you about really hearing each other and really seeing each other as you are. Jill, would you begin now? Just take each other's hands, and, looking each other in the eyes, Jill would you ask for what you want for yourself in a way which you believe that Samuel can really hear? Samuel, just listen.

Jill: Please let me have my own space without being bitter or making snide remarks or giving those looks.

Therapist: Samuel, what I hear from Jill is that she wants space, which she already has but in a new way, in a way that she feels is really all right with you. She wants you to grasp that she feels bad inside when she gets non-verbal or verbal messages that you don't approve of her and what she does. Do you understand that?

Samuel: I think so, but she hasn't left anything for me. She (Samuel points to Jill), you haven't left anything for me; I feel pushed away all of the time.

Therapist: Jill, can you see how it is for Samuel to see you enjoying doing things by yourself, without him, and not to see you do things with him that he values?

Samuel: I also don't want to feel that it's wrong for me to be interested in what you do.

Therapist: Do you know about being interested in another person and having that person, Jill, think that you're invading her space?

Jill: I do.

Therapist: I guess what you're saying, Samuel, is that you want Jill to approve of what you do, is that right?

Samuel: What?

Therapist: I said, it sounds to me like you want Jill to approve of your interest in her, to approve of your affection, to approve of your company, in the same way that you, Jill, want Samuel to approve of your taking time for yourself and working. And, in the same way, you, Jill, want Holly to approve of your interest in her. Is this what's really going on here?

Samuel: I never looked at it that way.

Therapist: Well, maybe this is a new way of understanding things for you. How about you, Jill?

Jill: I think you're right.

Therapist: Would you take each other's hands for a moment and let your eyes close. Now, I would like you to think back to when you first decided this guy was for you, Jill, and when you, Samuel, first decided that Jill was the girl for you. Now, without saying a word, let your eyes open and see if you see that person still here in front of you. Some years have passed; you both learned some new things. What do you see, Jill?

Jill: I feel like I haven't looked at him for a long time.

Therapist: Jill, promise me that you won't forget to look in this way, and, if you should, that you'll just sit down like you are now, even if you're in the middle of a fight, and

look in this way. Will you do that?

Jill: I'll try.

Samuel: May I remind you?

Jill: I wish you would.

The preceding transcript offers some other valuable patterns for evolving a family system. (1) The therapist re-labeled the unfulfilled needs of the family members as really being the same. This is very easy when you consider that they are the result of the same set of rules and the same system. (2) The result of this was that Samuel "saw" things differently; he is building a new representational system. Also, memories connected with feeling were accessed to help Jill recover the kinesthetic representations she felt for Samuel at another point in their life. These two have begun to build bridges between them. They are beginning to share representational systems. The most unused representational system is auditory and offers a vast resource for developing connections. Also, new input channels are being developed; auditory input in the past has been almost totally ignored by this family. Now it becomes a valid way of receiving and validating information. Since no member of a family system should be left out, the therapist now moved to build some new bridges for Thomas, who has watched and listened in amazement to the preceding two hours.

Therapist: I haven't forgotten you, Thomas, or is it Tom?

Tom: Tom. I've never seen them like this.

Therapist: Like what, Tom?

Tom: So nice to each other; will it last?

Therapist: Would you like to find out? Ask someone here.

Tom: Mom, is this gonna last?

Jill: Not all the time dear, but a lot of the time. We have to learn lots more before it will be like this all of the time. Do you understand that?

Tom: Sure; nobody can be good all of the time; it's too hard.

Therapist: Is there anyone you would like to feel closer to?

Tom: Everyone, I guess.

Therapist: Good, because I noticed something about this family. There is very little touching going on here. You all must get skin hungry. Everyone needs some hugs and that kind of thing. Would you let me show you one more thing which I believe you all could share? It's a simple thing Virginia Satir, who was my teacher, uses with families she sees, to help them to get used to touching each other more often. Would you be willing?

This session closed with a family huddle, and a request that the family practice this huddle at least once a day. As a review of their new learning, they concluded the session with each member telling the others what he had learned. The family then departed, saying their good-byes to the therapist. After they had left, a small piece of paper was found on Holly's chair. On it was written, "Thank you again. II."

META-TACTIC FOR EVOLVING A FAMILY SYSTEM

The last section provided you with an example of how a family system is evolved. We will now present a series of tactics to accomplish this task. However, we do remind you that the overall strategy should remain constant when employing these tactics. That is, evolving a family system implies that, after comparing the relationship between input/output channels and the resulting fuzzy functions, the family rules are compared with the reference structure desired by the family members. The evolution of the system will require first, changing those areas of the family members' models which are impoverished in some way which prohibits the evolving of the desired reference structure. The family members must learn that their map is not the territory, and that the changes are more acceptable than the rules which prevented them. This can be accomplished in the following ways:

COMPARING MODELS

1. *The use of Meta-model questions* to elicit a full representation of each member's model of the world. This allows auditory input to be maximal for each member, at the same time providing the information necessary to produce change.

2. *Meta-comments on incongruency in communication.* I hear you say that you are communicating *caring* but you *sound angry* and *look angry*. These comments allow a member to understand how his messages are misconstrued by the others and also allow the other members to better understand how they misconstrued the messages in the first place.

3. *Challenging mind reading* is a most essential part of evolving a family system. It allows clients to develop auditory feedback, at the same time giving them an experience in just how much their map is not the territory.

PERMUTATIONS OF REPRESENTATIONS

1. *Switching representational systems* gives a member a chance to describe his experience which would normally be unacceptable, using auditory output in an acceptable way.

2. *Re-labeling* has two parts. First, the re-labeling of any behavior which has a negative see-feel or a negative hear-feel by describing the polarity function, and in this way making the unacceptable acceptable.

Therapist: How, specifically, does she make you angry?

Husband: She's always nagging at me to stay home with her.

Therapist: You don't realize that her nagging shows just how much she really cares for you. She wouldn't nag if it weren't important. She is really giving a caring message about just how important you are to her. Isn't that right, W?

Wife: Well, yes.

Therapist: So, when she nags you, you have a choice: to respond in your old way or to appreciate just how much she really cares, and then you could take her nagging as a love message.

The second form of re-labeling is equating, as shown in the transcript about Jill, Holly, Samuel, and Thomas. Jill learned that her requests deserved approval, just as did Samuel's.

3. *Referential index shift* occurs when the negative experiences of one family member are understood by another, by "imagining yourself with (the same problem)."

4. *Accessing memories* is a technique used to recover positive fuzzy functions and to restore them to the family system.

5. *Translating from one representational system to another* allows clients to better understand each other's representations, at the same time giving them a model to develop new ways of communicating auditorially.

META-POSITION MOVES

1. *Meta-questions* such as,

How do you feel about feeling X?

allow the members to express both polarities and allow the listening members greater access to information formerly not received since it was never expressed auditorially.

Husband: I feel angry about that.

Therapist: And how do you feel about feeling angry at your wife?

Husband: I don't like it.

Therapist: Did you know, W, that M did not like getting angry at you?

2. *Sculpturing* is the technique of placing family members in physical positions in relationship to one another which represent the formal characteristics of their communication (see Satir, 1973).

3. *The therapist as a model* provides a necessary reference structure for members to experience effective and congruent communication which will result in the nominalization of the desired reference structure.

4. *The addition of any new representational system* or input or output channel is a most desired activity. This is most easily accomplished by creating tasks which require their use.

All of the above tactics provide a vehicle for evolving a family system. Additional reading is suggested in the Bibliography of *Magic I*.

INTEGRATION OF NEW CHOICES AND PATTERNS – CONSOLIDATION OF META-POSITION

The goal in family therapy is to assist the family system in evolving from the state in which they are first encountered in therapy to the state which they have identified as being desirable. In evolving a family system in the second phase of family system therapy, the therapist is careful to move only as quickly as all members of the family are able to respond. From a system point of view and from the point of view of having a maximally

beneficial effect in working with the family, the therapist's objective is to assist the family in evolving to the identified desirable state, while simultaneously changing the coping patterns so that other disturbances, not identified initially by the family members but which might subsequently arise, can be dealt with in a creative way by the family itself. In system terms, this is known as *morphogenesis*. The type of system which is characteristically morphogenetic is the open system — a system which is responsive to its environment and readily adapts itself to disturbances in an acceptable and creative manner.

While an open system is the most desirable outcome of family therapy, this is a difficult goal to achieve. Furthermore, family therapy is conducted in the real world with real time constraints on both the family and the therapist. Consistent with the principle of operating with the family as an organism, the therapist must employ a set of techniques which will assist the family between sessions in consolidating the advances made during the therapy sessions, or the family will achieve only limited goals which fall short of the ideal of a completely open system whose members have a maximum amount of choice. Thus, for example, at the end of each family therapy session, the family will return to its home and cope as best it can until the next scheduled session. In order to insure the maintenance of the family as an intact unit between sessions, the therapist may use one of the following techniques. Common to each of these techniques is the fact that it is designed to assist the family members in being aware of the new choices and new coping patterns which they have evolved with the therapist during their session. There are two general categories of these techniques:

1. *Homework assignments* — exercises given to members of the family for them to perform to give them practice in their new choices and skills;
2. *Signals* which will constitute an effective interception of old and destructive patterns should these reassert themselves.

Homework is essentially designed to give family members practice in using their new choices and skills. These are most often connected, in our experience, with the exercise of new input and output channels. For example, in a family in which, traditionally, family members accepted a rule which identified touching among family members as a negative see-feel, a useful exercise of their new choices and patterns would be scheduled massage in which all

family members participate. As another example, in a family in which verbal communication was traditionally non-existent, during a specified period of time each family member would talk about some part of his recent experiences or current interests. Homework, to be maximally effective, should use precisely the new patterns learned in the therapy session and should provide a scheduled occasion for family members to exercise exactly the new choices most recently developed in the therapeutic context. Here, the family itself will be the best judge of how to incorporate these new dimensions into the ongoing flow of their life as a family. Allowing the responsibility of creating these homework assignments to rest with the family itself insures that the family will, in fact, carry out the homework assignment and that it will be appropriate in the non-therapeutic context. In addition, the process of developing exercises and deciding on how to use them is an excellent experience in which family members come to appreciate their own skills and those of the other family members.

The second category of techniques to assist the family in consolidating meta-position is that of intercept *signals*. Typically, in a family who has come to therapy for assistance in changing its unsatisfactory patterns of interaction, the patterns the family members have developed which they are attempting to change are initially so strong that a lapse into an old pattern by a single member of the family is sufficient to draw in the other family members — and the gains made by the family are temporarily undermined. To prevent this from occurring, family therapists develop a set of cues or signals which will allow family members to detect and signal other family members that an old and unsatisfactory pattern of interaction is beginning. All of the considerations presented in Part II on incongruity work, in the section on polarity signals, are valid here. For example, we favor kinesthetic cues; these seem to work particularly well when the patterns to be counteracted are patterns which involve the fuzzy functions which are the basis of Cause-Effect semantic ill-formedness. Since the typical fuzzy function involved here is a see-feel or a hear-feel, kinesthetic cues are easily detected. In fact, often in our work with changing fuzzy functions, we give a graded series of signals in which the initial signal is kinesthetic and the subsequent cues move out to the associated representational system. For example, with a see-feel circuit, the initial cue might be a reversal of breathing; the final cue, the actual visual input. In this way, the family members learn as a matter of course to see-see — a valuable learning in and of itself.

Another effective signal, especially in families with small

children who as yet are less skilled in verbalizations than other family members, is sculpturing. Sculpturing is a form of meta-commenting without requiring verbal skill, as it makes use of body postures by the person initiating the signal and the visual input channels by the person receiving the signal.

As with the homework exercises, the family should be involved maximally in the planning and rehearsal of intercept signals. With these cues, it is particularly important to consider the most dependable input and output channels available to all family members.

FOOTNOTES FOR PART IV

1. In our experience, the breaking up of a family system may, in some circumstances, be the most beneficial outcome for the family members in terms of their ability to change and grow - thus, the most acceptable outcome rather than the least acceptable. One case of this which will be clear to the reader is that of the family system with an identified patient schizophrenic who is struggling to free himself from the patterns of family interaction in which he is trapped.

2. This seems to us to be the basic pattern of the traditional psychotherapeutic phenomenon of transference, negative transference and counter transference.

3. R. D. Laing (see pp. 104-124, *The Politics of the Family and Other Essays*, Vintage Books, 1972) has an interesting discussion of rules and meta-rules. As far as we can determine, his meta-rules are the basis for a person's actually blocking an entire input or output channel. For example, the person begins with a rule, say,

Do not notice (visually) incongruity.

Then, after some period of time, his behavior becomes congruent with the meta-rule,

Do not notice that you do not notice (visually) incongruity.

PART V

Formal Notation

In *The Structure of Magic I*, we presented an explicit verbal model for therapy. This model is designed to teach the therapist how to hear and respond to the form of the client's surface structures. The content may vary infinitely; the form which the client uses allows the therapist to respond in a systematic pattern that assists the client in changing. Specifically, by responding to the form of the client's surface structures, the therapist quickly comes to understand the client's model of the world, its impoverishing limitations and the modeling processes which the client typically uses to construct his models. Listening to and responding to the client in terms of the Meta-model distinctions allow the therapist to identify the techniques he will use to assist the client in changing.

The Meta-model which we presented in *Magic I* has a number of useful distinctions. As we stated in that volume, these distinctions themselves fall into natural groupings or meta-patterns of the Meta-model distinctions. We have found it useful in organizing our experience both in therapy and in our Therapist Training Seminars to divide the Meta-model distinctions into three classes:

- (a) Gathering information;
- (b) Identifying the limits of the client's model;
- (c) Specifying the techniques to be used for change.

FUNCTIONS

Formally, functions are rules of association or rules which specify a connection between a member or members of one group (called the domain) and those of another (called the range). To use a commonplace function as an example, consider the mother function. The mother function can be understood as the rule of association which, given any human being, specifies who that individual's mother is. Notice what is involved here: two sets of humans: *Set I*, the set of all human beings, and *Set II*, the set of all mothers, and a rule of association, f , which specifies which person has which mother. Using the standard functional notations, we have:

$$(a) \quad f(\text{Set I}) \longrightarrow (\text{Set II})$$

or

$$(b) \quad f(\text{Set I}, \text{Set II})$$

In words, the visual representations above may be translated as:

- (a) The function f associates (maps) members of Set I with (onto or into) members of Set II.
- (b) The function f specifies ordered pairs whose first member is from Set I and whose second member is from Set II.

Notice that the two sets whose connection is specified by the function may have members in common — in this example, all the members of Set II are also members of Set I, but all of the male members of Set I are not members of Set II.

Functional notation is simply a way of representing visually the regularities in our experience. If we know that, when we encounter some situation which has occurred repeatedly in our experience and that each time in the past when we have done such and such an act, the situation has changed to some new situation, then we typically develop a rule of association or a *function* to express this regularity and communicate it to others:

ACT (situation 1) \longrightarrow (situation 2)

or

ACT (situation 1, situation 2)

All that is required is that we be able to identify the sets involved and the way in which members of one of the sets are linked with members of the other set. One way, then, of representing the process of change in therapy which occurs at the highest level of patterning is:

Therapist (Client state_i) \longrightarrow (Client state_j)

We have already employed the notion of function earlier in our work — the Meta-model, for example. To reformulate it in the visual notation presented here requires that we be explicit about the sets which are being mapped. We proceed by example. The client says,

I'm scared.

This Surface Structure is the outcome of a linguistic process called a derivation. One of the principal research domains of transformational linguistics is derivations — the relationship between full linguistic representations — the set of Deep Structures — and expressed linguistic representations — the set of Surface Struc-

tures. Using our functional notation,

transformational syntax (Deep Structure) \longrightarrow (Surface Structures)

or

transformational syntax (Deep Structures, Surface Structures)

In the specific case of the Surface Structure *I'm scared*, there is a Deep Structure with which it is associated, namely,

SCARE [someone/thing, me]

If we let the symbol *d* represent the linguistic process of deletion, we may represent the entire process through which the client has gone by:

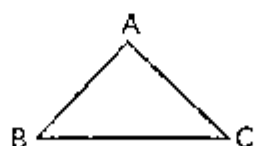
d (SCARE [someone/thing, me]) \longrightarrow (I'm scared)

or

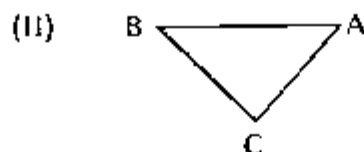
d (SCARE [someone/thing, me], I'm scared)

As we mentioned previously, functional notation is a way of visually representing regularities in our experience, requiring only that we be able to identify explicitly the sets involved and the rule of correspondence or function which links members of one set with those of the other. The notation, being formal, is independent of content — in fact, sets of functions may, themselves, constitute the sets which are being associated by the same rules of correspondence. When considering the relationship between sets of functions, there is one special relationship which has been distinguished by mathematicians. These are called inverse functions. Again, we proceed by example.

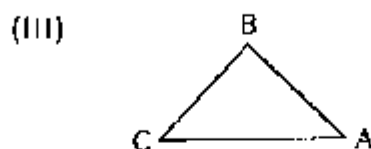
(I)



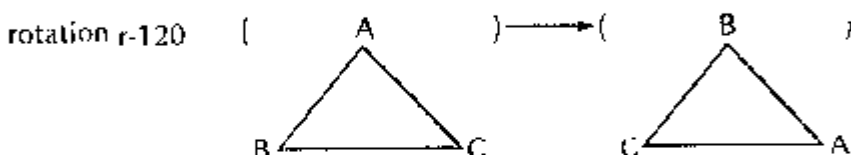
Now consider all the ways in which you could turn (rotate) this triangle in two dimensions. You could, for example, rotate it as follows:



Suppose we now consider a rotation of the original triangle by moving it 120° to the right. The result would be:



Or, using a related notation,



Or, again, using the functional notation we presented previously,

$$R_{r-120} \quad (I) \longrightarrow (III)$$

Now return to the original triangle (I) and consider the result of a rotation of 240° to the left. You will notice that the outcome of R_{l-240} is identical to R_{r-120} . Thus, R_{l-240} and R_{r-120} are inverse functions.

Or, symbolically, if R_{l-240} is f , then R_{r-120} is f^{-1} .

In these examples, we see that the effect of some functions can be reversed by other functions. When this occurs, the second is said to be the inverse of the first. This same patterning occurs in the therapeutic context.

Now, let us return to a consideration of the use of the Meta-model by the therapist. Using the same example of the Surface Structure,

I'm scared.

the Meta-model challenge by the therapist to Surface Structures such as *I'm scared*, when presented by the client, is:

Scared of whom/what?

Notice that the therapist takes as input the Surface Structure which contains the deletion and demands the deleted part. Another way of representing this process is by stating that the Meta-model challenge is a demand on the part of the therapist for the client to perform the inverse operation; in symbols, then:

$$d^{-1} \text{ (I'm scared)} \longrightarrow \{\text{SCARE [someone/thing, me]}\}$$

and then report the result to the therapist.

GATHERING INFORMATION

In order to act effectively in assisting the client, the therapist must come to an understanding of the client's model and the modeling processes which the client uses to organize his experience. The first set of questions or challenges from the Meta-model based on the form of the client's Surface Structures involves the Meta-model distinctions:

Deletion;
Lack of referential index;
Unspecified verbs;
Nominalizations.

The formal characteristic which links each of these distinctions and its corresponding Meta-model challenges is that the challenge is the inverse of the Meta-model distinction which has been violated.

Parallel to the deletion example, when the therapist detects a Surface Structure representation which includes a noun phrase without a referential index — that is, the client's modeling performance in going from Reference Structure to Deep Structure results in the loss of a referential index — the Meta-model challenge is to demand the inverse modeling process. Thus, the exchange:

Client: People scare me.
Therapist: Who, specifically, scares you?

or, in symbolic form: *Client* {*r*} *Therapist* [*Client* {*r*⁻¹}]

The remaining two distinctions and their associated Meta-model challenges are also inverses and have a parallel symbolic representation:

Unspecified Verbs:

Client: My father scares me. Client (v)

Therapist: How, specifically, does he scare you?

Therapist [$\text{Client } (v^{-1})$]

and

Nominalizations:

Client: I want respect. Client (n)

Therapist: Whom do you want to respect you?

Therapist [$\text{Client } (n^{-1})$]

Thus, in the first phase of therapeutic work — gathering information — the formal generalization is that the therapist's response is to demand that the client perform the inverse linguistic modeling operation. Letting the Greek Symbol \propto represent the class of the four Meta-model distinctions specified by the symbols:

d , r , v , and n

then the generalization is:

Client: \propto

Therapist [$\text{Client } (\propto^{-1})$]

Within this group, there are two other relations which we wish to point out. First, the r and v processes and their associated Meta-model challenges r^{-1} and v^{-1} are identical processes except for the domain (the set of things to which they apply) over which they are defined. The process r maps (associates with) nouns with referential indices into nouns without referential indices, while the process v maps verbs which are relatively specified into less specified verbs. The processes r^{-1} and v^{-1} are the inverse mappings:

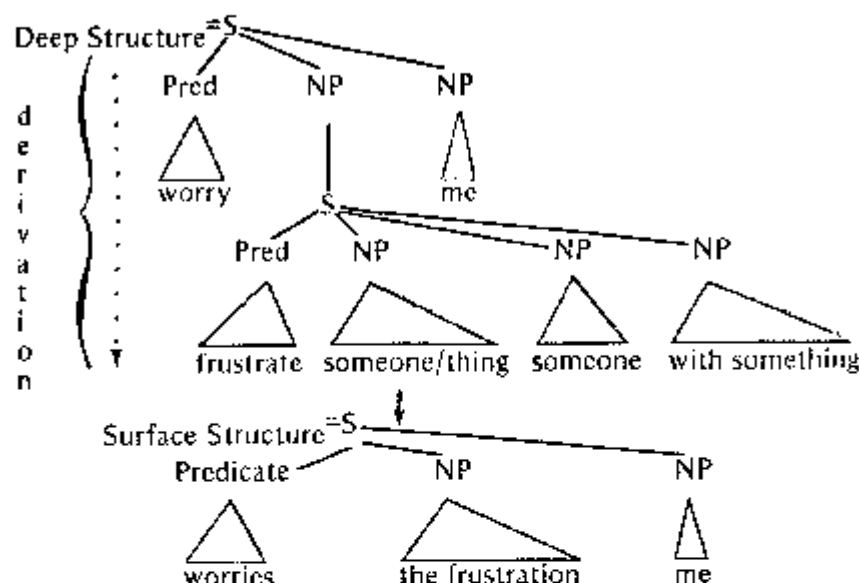
r^{-1} (noun phrase without referential index) \rightarrow (noun phrase with referential index)

v^{-1} (verb relatively unspecified) \longrightarrow (verb relatively more specified)

Thus, the domain of the functions r and r^{-1} is noun phrases and the domain of the v and v^{-1} is verbs.

Secondly, the first three distinctions are involved in producing the fourth — in other words, n and n^{-1} are complex functions

which factor into the first three processes, plus a category shift. In the course of the nominalization process, the linguistic representation shifts from that of a predicate to a noun representation, from a process representation to an event representation. Thus, the client goes from a Deep Structure representation:



that is, the Surface Structure representation:

The frustration worries me. Client (n)

The therapist responds with the Meta-model challenge:

Whose frustrating whom worries you? Therapist [Client (n^{-1})]

One pattern of learning which we have noticed again and again in our training seminars is that people learning the Meta-model have a tendency to become caught in a cycle; they often describe their experience "as going around and around and getting nowhere." This cycle occurs when the therapist remains in these first-level patterns in the processes d, r, v, n and the inverse patterns; d^{-1} , r^{-1} , v^{-1} , and n^{-1} . The reader will notice that this is a common pattern at other levels of structure. In polarity work, for example, if the therapist plays the opposite polarity — the inverse at that level of patterning — then the client will continue to be stuck in the dominant polarity or the polarity which is the inverse of the one the therapist is playing.

In order to break this vicious cycle, the therapist refines his ability to hear and challenges the distinctions which are characteristic of the next phase.

IDENTIFYING THE LIMITS OF THE CLIENT'S MODEL(S)

In the second phase of therapy, the most useful Meta-model distinctions are those which identify the limits of the model which the client is using to organize his ongoing experience. Specifically, these include:

- modal operators
- semantic ill-formedness
 - Cause-Effect
 - Mind-reading
 - Lost Performative

When the client uses Surface Structures which include a modal operator of possibility or necessity, he is, literally, identifying the limits of his model. His communication is a direct language representation of the portion of his model which has inadequate choices, or, more often, no choice at all. Notice that the Meta-model challenges to modal operators are requests for the client to fill in a larger level deletion while presupposing the semantically ill-formed modeling process of Cause-Effect. For example:

Client: I can't leave home.

Therapist: What would happen if you left home?

or

Therapist: What stops you from leaving home?

In the first therapist's Meta-model response, the client's statement is accepted as a Cause of something, and the client is requested to specify what the Effect would be of doing what is claimed to be impossible. In the second case, the client's statement is accepted as an Effect and the client is requested to specify what the Cause of this supposed impossibility is. In both cases, the client's statement is accepted by the therapist as a portion of a semantically ill-formed Cause-Effect relationship (as either *X* or *Y* in the following form):

X causes *Y*

and the client is requested to supply the material which has been deleted in the mapping from Reference Structure to Deep Structure. Thus, the *d* and *d*⁻¹ patterns occur at this next level of patterning. In the first phase, the *d* and *d*⁻¹ processes were those which occurred between the Deep Structure and the Surface

Structure; here, in phase 2, the d and d^{-1} processes are operating between the Reference Structure and the Deep Structure.

The client's response to the Meta-model challenges to modal operators will be one of the forms of semantic ill-formedness. Minimally, since the therapist's challenge presupposes a semantically ill-formed Cause-Effect relation, the client's response will be ill formed in that specific way. In addition, the client may respond with the other forms of semantic ill-formedness:

Mind Reading

I know that my father would feel bad if I left home.

Lost Performative

It would be wrong to leave home.

The Meta-model challenge to Mind Reading is the v^{-1} challenge at this level of structure:

Therapist: How, specifically, do you know that your father . . . ?

The Meta-model challenge to the lost performative is the d^{-1} challenge at the first level of patterning — a deletion inverse which applies between Deep and Surface Structure (as, in fact, the linguistic representation of performative deletion is a Deep Structure to Surface Structure process). If the client responds with a Cause-Effect statement such as:

My father's feeling bad stops me from leaving home.

then, the usual Meta-model challenge v^{-1} applies, requesting that the client specify the process by which this claimed causal connection occurs.

More important for understanding the overall strategy, however, is the fact that the two major forms of semantic ill-formedness, Cause-Effect and Mind-Reading, are the linguistic representations of fuzzy functions over which the client is, at present, exercising no control. Thus, the emergence of modal operators and the successful applications of the d^{-1} , r^{-1} , v^{-1} and n^{-1} processes at level 1 (between Deep Structure and Surface Structure) and at level 2 (between Reference Structure and Deep Structure) signal the therapist that it is time to move into the third phase — that of selecting the technique for assisting the client in changing.

SELECTING THE TECHNIQUE FOR CHANGE

Here the therapist is ready to select a technique for assisting the client in changing. In the first two phases, he has identified the portions of the client's model which are impoverished and then the limits of the client's model. In challenging these limits, the therapist receives from the client the identification of the major semantically ill-formed modeling process involved in the client's organization of this portion of his model. The selection and implementation of an effective technique for change will be the therapist's major task in this phase. In order to make a good selection, the therapist can construct and evaluate what we call the *instantaneous description* of the client. By an instantaneous description, we mean a representation of the client which gives the minimal amount of information sufficient to allow the therapist to select and implement an effective technique for change. In our experience, we have evolved a six-tuple — a vector which has six positions for information. Each of these six positions or variables has various possible values called the range of the variable. The complete vector consists of the instantaneous description of the client and includes information sufficient for the selection and employment of a change technique. We represent the vector as:

$$\langle I, R, O, S, F, M \rangle$$

where:

- I** is a variable covering the input channel which the client is using for this problem;
- R** is a variable covering the client's Most Highly Valued Representational System for this problem;
- O** is a variable covering the Output Channel which the client is using for this problem;
- S** is a variable covering the client's Satir Category under stress for this problem;
- F** is a variable covering the type of Semantic Ill-Formedness which the client is using for this problem;
- M** is the most frequently occurring violation of the Meta-model distinctions for this problem.

We now list the six variables and their associated ranges:

- I** = { V (visual), K (kinesthetic), A (auditory), D (digital) }
- R** = { V (visual), K (kinesthetic), A (auditory), D (digital) }

- O** = { V (visual), K (kinesthetic), A (auditory), D (digital) }
S = { 1 (placating), 2 (blaming), 3 (super-reasonable), }
 4 (irrelevant)
F = { CE (cause-effect), MR (mind reading), }
 LP (lost performative)
M = { d (deletion), v (unspecified verb), r (lack of)
 referential index), n (nominalization) }

For example, consider the following:

Michael is telling his therapist about his inability to cope with assignments at college. He begins by stating in a whining tone of voice that he "feels crushed by the amount of work." And school is destroying his sense of confidence. "I tried complaining to my professors about the inadequacy of the educational system, but they only patronize me. And I feel even worse when I'm trying to explain to them and their expression of being sorry for me — I just get sick to my stomach."

As Michael presented his story, his body was gesturing by pointing his finger as if scolding a child and his hand was pounding on the arm of the chair.

An instantaneous description of Michael could be taken by the following process:

Primary			
I = V	Input	Visual	He saw amount of work and expression of sorrow.
R = K	Representational system	Kinesthetic	Felt crushed, feel even worse, sick to stomach.
S = 2	Satir category	Blaming	Pointing finger, harsh tone, complaining to professors. Referential index of responsibility.
F = CE	Semantic ill-formedness	Cause-Effect	Work makes him feel crushed. Professors make him feel sick. School is destroying his self-confidence.
M = N	Meta-model violation	Nominalization	School, sense of confidence. Inadequacy of educational system. Expression of sorrow.
O = D	Output channel	Digital	Complains as he talks.

So the resulting primary equation or instantaneous description would be represented as:

$$\text{Michael} \rightarrow (V, K, D, 2, CE, n)$$

when the general form of the vector is

$$(I, R, O, S, F, M)$$

Now the question arises of how this representation can be a useful skill and tool for the therapist. Better stated, what set of conditions would permit a therapist to formulate a strategy for effective therapy devoid of content? This brings us to the concept of *Next-Step Function*. A next-step function would be the appropriate strategy for therapy, or the set of conditions which would indicate the needed technique for some well-formed outcome in therapy. Once again, the notion of well-formedness becomes an invaluable tool.

As you will recall, we stated in Parts II and III that well-formed sorting of polarities is required for integration to take place and for growth and coping to occur. Also, you will remember that, in the section on fuzzy functions, ill-formed equations resulted in a lack of choice and thus inadequate coping. Michael's equation (instantaneous description) from above is not well formed. Visual information is being represented kinesthetically — a fuzzy function which is causing him pain and blocking him from getting the things he wants from life. In order to construct a strategy for therapy based on his description, we must first map out the well-formedness constraints.

WELL-FORMEDNESS CONSTRAINTS FOR THERAPY

The following section will present the formal constraints for well-formed therapy; however, it is not our intention in this volume to be either exhaustive or complex. We understand that most therapists do not have an extensive background in advanced logic or group theory, so the following will remain at a low level of complexity representing only the most necessary, essential patterns for effective therapy. Although this will result in only the simplest formal notational system for therapy, we believe it best serves the purpose of providing serious clinicians with a viable tool at a level they will be able both to understand and to utilize as a tool for simultaneous diagnosis and treatment of the clients whom

they are assisting to have more choices about their lives.

To build a viable formal notational system for therapy, we must, of course, as we did in the section on Fuzzy Functions, be able to notate incongruities and polarities. So we can add now to our system *double entries*, one representing each set of parame-

instantaneous description A (I, R, O, S, F, M)
 instantaneous description B (I, R, O, S, F, M)

This will allow us to build two levels of constraints for well-formed therapy. First, the relationship between the members of one set, and, second, the relationship between sets of instantaneous descriptions. What follows are two sets of necessary well-formedness conditions for a well-formed instantaneous description in therapy. Once these have been established, we can proceed to construct the rules of derivation that will transform ill-formed descriptions into well-formed descriptions. This will not only give us explicit strategies for therapy but also a viable way of knowing when we have accomplished the task of therapy and when change has occurred. The therapist who uses this tool will at last be freed from the nagging question of knowing when he is finished, or if he has accomplished anything, which, in our experience, is the plight of most of the therapists we meet.

1. An instantaneous description will be well formed when:

$$(I_i, R_j, \dots, \dots, \dots, \dots)$$

where $i = j$

(that is, when the system the person uses to represent his experience is the one most naturally associated with the input channel through which he received the information, e.g., as input and as representational system)

and will be considered ill-formed when:

$$(I_i, R_j, \dots, \dots, \dots, \dots)$$

where $i \neq j$

Essentially, this condition states that fuzzy functions will not be considered well formed. Specifically, for example, any description

in which visual information is simultaneously represented kinesi-thetically is not a well-formed description.

The simultaneous descriptions in the left-hand column are ill formed while those in the right-hand column are well formed.

$\{V, K, \rightarrow, \rightarrow, \rightarrow, \rightarrow\}$	$\{V, V, \rightarrow, \rightarrow, \rightarrow, \rightarrow\}$
$\{A, K, \rightarrow, \rightarrow, \rightarrow, \rightarrow\}$	$\{A, A, \rightarrow, \rightarrow, \rightarrow, \rightarrow\}$
$\{A, V, \rightarrow, \rightarrow, \rightarrow, \rightarrow\}$	$\{K, K, \rightarrow, \rightarrow, \rightarrow, \rightarrow\}$
$\{K, A, \rightarrow, \rightarrow, \rightarrow, \rightarrow\}$	$\{D, D, \rightarrow, \rightarrow, \rightarrow, \rightarrow\}$

2. An instantaneous description will be well formed when:

$$\{ \rightarrow, R_i, \rightarrow, S_j, \rightarrow, \rightarrow \}$$

where i and j have the following paired values:

i	j
K	1
V	2
A	3

All other paired values will be considered ill formed in therapy.

3. An instantaneous description will be well formed when:

$$\{ \rightarrow, \rightarrow, O_i, S_j, \rightarrow, \rightarrow \}$$

where paired values of i and j are not one of the following:

i	j
K	2
K	3

Note that all other relationships are not necessarily well formed — they can be ill formed in relation to values of other variables in the six-tuple vector. For example, the paired values for the S and O variables given by the instantaneous description,

$$\{ \rightarrow, \rightarrow, K, 1, \rightarrow, \rightarrow \}$$

are well formed by our well-formedness condition 3. However, when the value of the M parameter is n , the instantaneous descrip-

tion is ill formed. In other words, while the pair K 1 is well formed for the parameters O and S, the triplet,

$$(-, -, K, 1, -, n)$$

is ill formed. We are aware that the three well-formedness conditions presented above are not exhaustive for the well-formedness conditions for six tuples. We offer them as an example of the way in which a full model of the set of well-formed, instantaneous descriptions can be developed.

WELL-FORMEDNESS CONDITIONS FOR PAIRS OF INSTANTANEOUS DESCRIPTIONS

We present two examples of the translation of techniques presented in this volume into the formal notation to show the way in which the six-tuple can be used to assist you, as a therapist, in organizing your experiences in your work. Sets of simultaneous descriptions are of value in working with incongruities in a single individual and in the context of family therapy. In the first case — that of individual therapy — the six-tuple provides a way of defining the notions of congruity and incongruity. We define a function, Q , over the set of values occurring in the parameter O such that,

$$Q(O_i) = \text{meaning of the message carried by the output channel } O_i$$

Given the function Q and an instantaneous description, incongruity can be defined as the case in which there is more than one entry for the value of the O parameter, such that,

$$Q(O_i) \neq Q(O_j)$$

(where \neq means *is not consistent with*)

for the same individual. In other words, given a six-tuple representation for the same individual,

$$\{ \text{---}, \text{---}, \left\{ \begin{matrix} O_i \\ O_j \end{matrix} \right\}, \text{---}, \text{---}, \text{---} \}$$

where $Q(O_i) \neq Q(O_j)$

or, equivalently,

$$\{ _, _, O_i, _, _, _ \}_{c^1}$$

and

$$\{ _, _, O_j, _, _, _ \}_{c^1}$$

where $Q(O_i) \neq Q(O_j)$

the individual identified as c^1 is incongruent. If O_i and O_j are presented at the same time, then the six-tuple representations above identify a simultaneous incongruity — the case discussed in detail in the first portion of Part II. The client is presenting more than one message, and they do not match or fit together. If the above six-tuple representations are of the same client at two different points in a therapeutic session, then they represent sequential incongruity. For example, in the second phase of incongruity work, the client will have a set of instantaneous descriptions which meet the condition given below:

$$Q(O_i) \neq Q(O_j) \\ \text{for all } i \text{ and } j$$

Congruency, in the language of the six-tuple, is the condition which occurs when:

$$Q(O_i) = Q(O_j) = \dots = Q(O_k) = \dots = Q(O_n)$$

for the same client at the same point in time.

We can generalize this process to other parameters and present a formal description of the point at which the therapist can know that Phase II of the incongruity work is finished and he may move with confidence to Phase III, integration.

A pair (set) of instantaneous descriptions will be well-formed with respect to the completion of Phase II of incongruity work when each six-tuple meets the well-formedness conditions specified above and,

$$\{ _, R_i, O_j, S_k, _, _ \}_{c^1}$$

$$\{ _, R_i', O_j', S_k', _, _ \}_{c^1}$$

where

$$R_i \neq R_i'$$

and

$$Q(O_j) \neq Q(O_j')$$

and

$$S_k \neq S_k' \\ \text{for all } i, j \text{ and } k$$

This well-formedness condition shows that Phase II of incongruency work is complete when there is a maximal separation of the representational systems, output messages, and Satir categories.

As a second example, we present the technique of playing polarity. Suppose the therapist notices that the client is presenting incongruent messages — that is, suppose the client presents the therapist with the instantaneous description,

$$(_, v, \begin{Bmatrix} O_i \\ O_k \end{Bmatrix}, 2, _, _)$$

$$\text{where } Q(O_i) \neq Q(O_k)$$

Suppose, further, that the therapist determines that $Q(O_i)$ is consistent with V as a value for the representational system variable, and that $Q(O_k)$ would be consistent with K and 1 as the values for the R and S variables. The therapist now decides to play polarity as described in Part II of this volume. Essentially, in the formal notation we are developing here, the therapist arranges his own instantaneous description to be more forceful than the instantaneous description presented by the client. In this particular case, he has two choices:

$$(_, K, O_k, 1, _, _)$$

or

$$(_, V, O_i, 2, _, _)$$

Since the client is already presenting the therapist with an instantaneous description which is closer to the second instantaneous description presented above, the therapist is interested in learning about the specific ways in which the client will present the less dominant polarity. Therefore, the therapist chooses to play the client's more dominant polarity, insuring that the client will flip polarities. Thus, the therapist arranges himself to present the client with the experience of:

$$(_, V, O_i, 2, _, _)$$

The client, responding to the shift in the therapist, will then

change to the less dominant polarity, based on the $Q(O_k)$ message. The therapist then has an understanding of the client's two polarities with which to work with him to make the changes he wants and needs for himself.

As a second example, consider the usefulness of the six-tuple approach to family therapy. One of the important checks which the therapist will make in the context of working with a family is to insure that the family members are able to exchange messages of appreciation (feedback) for one another. In the terminology we are developing here, the therapist is working to insure that the family members have a set of instantaneous descriptions which will have overlaps between the input and output channels of the family members sufficient to allow them to send and receive those messages of appreciation (feedback). Thus, one way that the therapist can use the six-tuple approach is to evaluate the well-formedness of the entire family system. For example, the following set of instantaneous descriptions identifies a family system in which communication between members 2 and 4 is not possible — an ill-formed set of instantaneous descriptions with respect to family communication possibilities:

$$\begin{aligned} & (V, V, D, -, -, -)_{c^1} \\ & (K, K, D, -, -, -)_{c^2} \\ & (A, K, K, -, -, -)_{c^3} \\ & (V, K, D, -, -, -)_{c^4} \end{aligned}$$

Notice that, in this family system, the family member c^3 is the pivot member with respect to communication. Each of the other family members has a digital (D) output system as primary (language) and, furthermore, since family member c^3 has kinesthetic (K) as his primary output system, he can communicate with family member c^2 kinesthetically (touching, for example) and with both family members c^1 and c^4 by body movements (a K output system for c^3), since both of them have the ability to see those body messages. (They both have a visual input system as primary.)

NEXT-STATE FUNCTIONS

As we mentioned in the beginning of this part, the most general representation for the process of change which occurs in therapy using functional notation is:

therapist (client state; $\}$ —————→(client state; $\}$)

While this representation is accurate, it is of no value to us as practitioners of the art of therapy and change as it is too general to be of value in organizing and guiding our behavior in the therapeutic context. As we have continuously emphasized with concepts such as models of the world and the dangers which accompany the Lost Performative, the value of any representation (mathematical, verbal, etc.) must be relativized to its use. The question which we have found of value in our work is not whether the models we have constructed are true or accurate but, rather, whether they are useful in our work of assisting clients to gain more choices in the areas of their behavior in which they desire more options, and, simultaneously, of course, will result in a gain of more choices for us as effective, dynamic therapists.

Furthermore, as we stated previously, to employ the functional notation in a way that is useful requires that we are able to identify:

- (1) The sets of experiences being associated (the domain and range);
- (2) The regularities in the way these sets are associated (the function, rule of correspondence or rule of association connecting the sets).

One of the most useful concepts which we have adopted in our work comes from an area of mathematics known as Automata Theory, the theory of abstract machines. This branch of mathematics is closely connected with modern linguistic theory. Noam Chomsky, for example, the founder of modern transformational linguistics, developed several of the proofs basic to the field of automata theory. The concept which we wish to introduce is implicit in what we have already presented in this part — the notion called the *next-state function*. Essentially, the next-state function is another way of describing a function. Stated simply, given a certain state of the world and an action, some other state of the world will result. As with the functional notation which we have already introduced, the next-state function notation requires only that we be able to identify:

- (a) A set of variables which adequately describe for the purposes for which we wish to use the model the initial state of the world (or the portion of the world we are interested in modeling) — the domain of the function —

and a set of variables which adequately describe the set of possible resultant states of the world — the range of the function.

- (b) A set of variables which adequately describe the set of acts which we are interested in understanding and of which we are building a model — the function or rule of association connecting the sets.

The six-tuple which we have developed in our work is a first approximation to a set of variables which will serve as the basis for an adequate description of a formal model for therapeutic change. Fortunately, this same set of variables serves as an adequate descriptive vocabulary for both the domain and the range of the next-state functions which we have found effective in our therapeutic work and in our work of constructing explicit models of the powerful therapeutic maneuvers of well-known therapists such as Virginia Satir and Milton H. Erickson (see *Patterns of the Hypnotic Techniques of Milton H. Erickson, M. D.*, Bandler and Grinder, Meta Productions, 1975). As we specified when we introduced the notion of instantaneous description, each of the six variables has a small number of possible values. Since the number of possible values is small, the six-tuple has worked as a highly efficient and powerful model, both in our own therapy and in our teaching in our Therapist Training Seminars. It has allowed people training to be therapists to organize their experience in the complex environment of ongoing face-to-face therapy with clients in such a way as to allow them to assist their clients in rapid, lasting, and satisfying change. Now, using the functional notation we have offered, we can refine the maximally general representation of change in therapy given previously to:

$$f \{I, R, O, S, I-F, M\}_c \longrightarrow \{I, R, O, S, I-F, M\}_c$$

where the variables of the six-tuples listed have
the full possible range of values specified previously,

and

f is the next-state function

and

the subscript c identifies the six-tuple as the client's instantaneous description

The model which we have presented, then, makes the claim that the art of therapeutic change involves human changes which can be described adequately with the vocabulary of the six-tuple.

The set of six-tuples which may occur in the range of the function f are a proper subset of the set of all logically possible combinations of the values of the variables of the six-tuple. In other words, the outcome of the therapeutic encounter is restricted to certain vectors or instantaneous descriptions of the client. This is one way of capturing the belief that, in therapy, not every change is considered a successful outcome; rather, only certain kinds of change. The specific way in which we have developed restrictions on the set of all possible instantaneous descriptions to identify those which are acceptable outcomes (or next-states) for therapy is the use of well-formedness conditions of the six-tuple. For example, the following instantaneous description of a client after therapy is not acceptable or well formed in our model:

(_, _, K, 2, _, _)

In other words, a client whose instantaneous description identifies him as a blamer with a kinesthetic output system is not a well-formed outcome for therapy in our model. Thus, the model we present, specifically, the range of the function, can be further specified:

$f(I, R, O, S, I-F, M) \longrightarrow (Y)$

where Y is the set of acceptable six-tuples as specified by the well-formedness conditions for instantaneous descriptions

Next, consider the domain of the function. In traditional medical and psychotherapeutic models, the domain of the therapeutic function is the set of syndromes, the patterns of symptoms, or the basis of diagnosis. If diagnosis has any value in therapy, it is only so in that it identifies commonly occurring instantaneous descriptions of clients seeking therapeutic assistance *and at the same time* specifies a set of appropriate and effective maneuvers or interventions on the part of the therapist or doctor. It is with both of these criteria in mind that we constructed the present model. At present, we have not restricted the domain of the function in any way — there are no logical possibilities in the set of all six-tuples of which we are aware which could not occur. As we indicated in various parts of this volume, there are frequently occurring, ill-formed six-tuples. For example, one of the most common ill-formed combinations is:

$$\{I_i, R_j, _, _, C-E, _ \}$$

where $i \neq j$ (that is, where the client whose six-tuple this is has a fuzzy function — he represents his experience from one input channel in a non-associated representational system)

The Meta-Tactic which we indicated is that of assisting the client in breaking the fuzzy function to give him the choice of:

$$\{I_i, R_j, _, _, _, _ \}$$

where $i = j$

or the fuzzy function represented above.

Notice that, with this last discussion, we have begun the process of specifying the set of therapeutic functions — the class represented in our notation by the symbol f . The complete specification of f would be a formalization of the set of effective therapeutic maneuvers or interventions for acceptable therapeutic change. Employing the concept of next-state function,

f is the set of all functions such that

$$f(X) \longrightarrow (Y)$$

where X is the set of all possible six-tuples and Y is the set of well-formed six-tuples.

In words, f is any therapeutic intervention, any action on the part of the therapist, which results in a next-state, instantaneous description which meets the well-formedness conditions for six-tuples. The Meta-model challenges we have developed in Volume I of the *Magic* series are an explicit and adequate set of therapeutic interventions at the *verbal* level. These challenges specify for the set of all possible *verbal* productions by the client (the client's Surface Structures) the appropriate *verbal* intervention by the therapist. These *verbal* interventions are purely formal — independent of content. At the level of structure of the six-tuple, the Meta-Tactics which we have developed function in the same capacity as the Meta-model challenges do at the verbal level of structure. Consider, for example, the set of Meta-Tactics for working with the client who displays incongruity in his communication. Suppose that the client has an instantaneous description such as:

$$\{ _, K, _ 2, _, _ \}_c$$

The therapist's task is to sort this simultaneous incongruity into a sequential incongruity ~ in other words to convert the above six-tuple into a pair of six-tuples, each of which is well formed,

$$f(_, K, _, 2, _, _)_c \longrightarrow \left\{ \begin{array}{l} (_, V, _, 2, _, _) \\ (_, K, _, 1, _, _) \end{array} \right\}$$

In the terms stated in the portion of the book on incongruity work, the therapist must sort the paramessages into two congruent polarities. We listed there a number of Meta-Tactics for achieving a well-formed sort. Take the Meta-Tactic 1 — movie/play director. Here the therapist uses verbal instructions and kinesthetic instructions (molding the client's body into a more congruent posture). In this case, the value of f is the set of verbal and kinesthetic inputs from the therapist to the client. Another way in which the therapist can maneuver is to use the technique of playing polarities (presented in the incongruity chapter). Faced with the six-tuple above, the therapist might choose to arrange all his output channels in a way which is more forceful than one of the polarities partially displayed by the client in the six-tuple above. For example, the therapist may choose to present the client with the following six-tuple:

$$(_, V, _, 2, _, _)_t \text{ where } t = \text{therapist}$$

The result of the therapist's playing polarity in this specific way will be for the client to flip to the other polarity represented partially in the original six-tuple:

$$(_, K, _, 1, _, _)_c$$

In the next state function notation which we have presented, then, this entire portion of the therapeutic encounter in which the therapist identifies and sorts the client's incongruent paramessages can be represented as:

$$(_, V, _, 2, _, _)_t [(_, K, _, 2, _, _)_c] \longrightarrow (_, K, _, 1, _, _)_c$$

This translation of one of the therapist's techniques into the formal notation demonstrates one important feature — namely, that an adequate vocabulary for describing the set of therapeutic intervention, the set f , will include the same vocabulary which serves as the vocabulary for the domain and range of the set of functions f .

A complete formalization of therapy would identify for each member of the set of logically possible six-tuples (that is, the domain of the function), a set of maneuvers or interventions (the set f) and the specific outcome or client's next-state (restricted to the set of well-formed-in-therapy six-tuples) which are the result of the operation of each of the members of f specified as appropriate for the initial state the client presented. The complete formalization of therapeutic change is the research domain for the ongoing activity of people-helpers. The actual experience of working with the process of change in the context of people in therapy must lead into this area if the resulting formalized model is to be useful. Our purpose in this portion of *Magic II* has been to establish a notational system with a vocabulary adequate to assist therapists in organizing and communicating their experience in a way which will immediately allow them to improve their skills as people-helpers and, ultimately, to develop a full, formal model of change adequate to meet the needs of the people who come to us for help. In the following section, we present an example of effective therapeutic change in which the therapist employs several of the Meta-Tactics which we presented previously with parallel formalization of the therapeutic encounter, using the formal notational system we have presented here. We hope that this will serve as a guide and a first step in establishing the complete formal model for therapeutic change.

ILLUSTRATION OF A FORMAL NOTATION AS A TOOL FOR THERAPY

The following is a formal representation of a portion of a complete therapeutic session for the purpose of assisting you in adapting this system in your own work, whether clinical, research or theoretical. The purpose here is to demonstrate how this formal notation can serve as a diagnostic tool at the same time that it provides a strategy for the clinician to guide his behavior in therapy, assisting the clinician from whatever school of therapy in developing an effective plan to assist his clients in changing in a way which results in the desired choices for the client.

Tom has been referred by his probation officer for therapy. He is a "juvenile delinquent" who is serving time in an institution for beating up his sister and generally anyone else he gets the chance to. Strangely enough, he is quite remorseful over his actions, but he continues to steal and fight and then apologizes. He was

presented to the authors as one of those "you can't do it" cases by friends who are clinicians and seem very much to enjoy testing the authors at every chance. However, this also appeared to us to be an excellent opportunity to demonstrate to our friends the value of formal notation (something they scoffed at) and, at the same time, help Tom, if we could. We consulted Tom to find out if he was willing to participate in our demonstration. He agreed and even seemed quite genuine in his desire to overcome his "problems." The session began with Tom telling the authors what he believed he needed to change about himself. We wrote an instantaneous description on the blackboard as he spoke.

1. $(V, K, D, 2, CE, _)_C$

After identifying the ill-formed description, one of the authors commented to the watching clinicians about the R and S variables with values K and 2, respectively, and the variables I and R with values V and K, respectively, describing choices of applying the inverse function of Meta-model questions or the development of new representational systems. Then the other choice, the next-step function tactic called playing polarity, was done by that author adopting part of Tom's description and applying it as a next-step function with Tom.

2. $(_, _, D_V, 2, _, _)_I [(V, K, D, 2, CE, _)_C]$

where D_V identifies the language output of the therapist using visual predicates

The result was a change in his description to:

3. $(V, K, D, 1, MR, V)_C$

Now having two instantaneous descriptions, the authors explained how choices could be based on the two descriptions, either building new representational systems directly or applying Meta-model inverse functions. A double bind could be constructed. Many choices were available, but the most obvious was to sort the sets of vectors into polarities, using any of the techniques for that purpose provided in this volume. We chose to use spatial sorting of polarities, as kinesthetic was his most highly valued representational system and would be the easiest technique to use with him. Two chairs were placed facing each other, in Gestalt fashion, using spatial locations and the sorting principles of Satir category and representational system predicates as gauges of a well-formed sort of paramessages and maximal separation.

The resulting sort was two sequentially expressed polarities:

(V, V, D_i, 2, CE, —)

and

(V, K, D_j, 1, MR, —)

where $Q(D_i) \neq Q(D_j)$

Having sorted the polarities into a well-formed split, the authors explained the number of choices available to him to move into the third phase of polarity work, integration. Both polarities must now be mapped into the same representational system; this, of course, can be done in a number of ways and in a number of systems. A next-state function that must be applied to achieve this mapping, however, has the same formal characteristics, no matter what technique is employed. The formal notation of this function itself suggests a number of approaches; for example, since:

(—, V, —, —, —, —)

and

(—, K, —, —, —, —)

we might select the unused representational system for Phase 3. At this time, the authors paused to review the process which had occurred and to give the observers some strategies to decide what the best technique was for mapping polarities into contact and the client into meta-position. Basically, we reasoned that, since Tom's most highly valued representational system is kinesthetic (K) and his ability to access visually is poorly developed as a representational system, mapping into V would be difficult. Mapping into K would be easy; however, the choice of another representational system would develop a new way of representing his experience for Tom. We understand that, unless an input channel is totally closed, the information arriving through that channel is represented in the associated representational system — even though it may have no relationship to the polarities and coping with which we are working directly. Since the most well-formed function in therapy is the one which results in a congruent, instantaneous description or vector, we proposed to try what might be called complex integration (integration which does more than just solve one ill-formed coping pattern — one which opens many channels to growth and potential for the client). Our strategy for this is a simple one: to map Tom's polarities simultaneously into K through D and A, resulting in simultaneous representation — that

is, meta-position. Simultaneous representation in K can be quite uncomfortable, as you may have noticed if you have ever watched and listened in therapy to a couple argue, when you were, yourself, either see-feeling or hear-feeling. For the purpose of a dramatic demonstration (the authors being showmen at heart and realizing that dramatic demonstrations motivate clinicians to undergo the struggle of learning new techniques and ways of approaching therapy), we chose for each of the authors to play one of Tom's polarities as if we were that part of him. And to do it simultaneously and more forcefully than he could. We explained calmly to him as follows:

Therapist: Tom, you understand that there are two parts of yourself, one in that chair who gets angry and yells. He wants you to stand up for yourself and not get pushed around. He sees things happen he doesn't like and tells you you should beat up people, and not be a sissy, is that right?

Tom: Yes.

Therapist: And you have another part, over there, who is afraid sometimes and feels it is wrong to hurt people, or to say mean things to them and hurt their feelings. He tells you to apologize and to be a good guy so people will like you, is that right?

Tom: Yes. I have both of them, and they fight with each other just like what I have been doing in these two chairs, only in my head until I blow up. Then I do the wrong thing and get in trouble again. And all along I know better and everybody tells me I know better, but I just sort of lose control of this one (points to chair of blaming polarity) and whamo! Then that one (points to placating chair) comes along and tells me to apologize, calls me names (notice predicate shift), and everybody thinks I'm crazy.

Therapist: You're not crazy and I think we can get you through this if you will stick it out through something that might be a little unusual and maybe a little scary. John is going to play the part of you which gets angry, that one over there, and I'm going to play the part of you which tells you to apologize and be a good boy, that one over there. Will you play with us and promise to stay with it to the end?

Tom: Sure, if you think it will help

Therapist: Good.

Both the authors immediately and abruptly, taking Tom by surprise, began to argue with each other, just as Tom had done when his polarities were first spatially and then maximally sorted into a well-formed pair of vectors.

$$\left\{ \begin{array}{l} (\text{---}, \text{---}, D_v, 2, \text{CE}, v) \text{ John} \\ (\text{---}, \text{---}, D_k, 1, \text{MR}, v) \text{ Richard} \end{array} \right\} \longrightarrow \text{Tom}$$

The authors exaggerated this process, each demanding simultaneously that Tom listen to him, accede to his demands, and ignore the other author.

Essentially, this put Tom in the meta-position of receiving both of his own polarities simultaneously in each of his input and associated representational systems.

$$\left\{ \begin{array}{l} Q(O_i) \text{ John} \\ Q(O_j) \text{ Richard} \end{array} \right\} \longrightarrow \text{as input to Tom}$$

where $i \neq j$

Contact and meta-position have now been achieved, the resulting message response — output channel — was pure auditory: a scream and a digital “shut up.” Final recoding and integration were the next step.

The authors now persistently demanded that Tom take control of them as his parts, or they would resume the simultaneous playing of his two polarities, demanding that he listen to each and mediate from a position of control between the two, recognizing the resources of each verbally, and then himself building a viable structure in which each part would have freedom to be expressed, acknowledging the need to use both for balance.

Tom thereby recoded his parts from the *source* of his troubles to *resources* to cope with the task of living. After verbally recoding each part, integration was achieved in his kinesthetic system, having him take from each author the defined abilities, one in each hand, and delicately weaving them together and spreading them throughout his whole self (body, eyes, etc.). Recoding, of course, does not really occur outside in the client's hands, but the kinesthetic act is accompanied by neurologically

constructing a new map for the territory where previously there had been two conflicting maps. The resulting vectors were a set of instantaneous directions; Tom's choices:

$\{V, V, D_v, 2, CE, _ \}_c$

$\{K, K, K, 1, MR, _ \}_c$

$\{A, D, D, _, _, _ \}_c$

Although this is not a totally well-formed, instantaneous description, the changes in Tom were substantial for one session, and these changes were apparent to those around him. This session served as an adequate example of how a formal notation system helps both to clarify what happens in the process of therapy and to serve as a guide for clinicians to design their own techniques and strategies for assisting their clients in the process of change.

Epilogue

In the two volumes of *The Structure of Magic*, we have tried in the best way we know how to show some of the many patterns that therapists of every school have in common. We never had the intention of starting a new school of therapy; we wished, rather, to start a new way of *talking* about therapy so that the similarities of different schools approaching the task of helping people to change could be understood. We wished to demonstrate, not that any particular approach to therapy is any more potent than any other approach, but that all forms of therapy assist their clients in changing. So the question is no longer which approach is the best; it is how such seemingly different approaches all can work.

The answer we presented in these first two volumes is basically a simple one. All the techniques of every form of therapy are techniques which affect the processes of representation, the creation and organization of a client's model of the world. To the degree that techniques induce change in a client's modeling of the world is the degree to which they will be effective in assisting a client to change. As a client's model of the world changes, his perceptions change and so, too, does his behavior. The processes by which a person's model of the world becomes impoverished are the same processes by which it can be enriched — the processes of Deletion, Distortion, and Generalization. All forms of therapy, all the techniques of the different forms of therapy — in fact, all learning — can be understood in terms of the processes of representation.

We have always found it uncanny that the techniques of

therapy mirror so precisely the disorders of the mind found in the chronic wards of mental hospitals. Techniques of age regression; techniques of disassociation, such as the sorting techniques presented in Part II of this volume; the Gestalt techniques; the projective techniques of art therapy . . . the list goes on and on, permutations of every form of therapy. We, as therapists, in essence use the formal patterns present in psychotic and schizophrenic behavior to assist our clients in growing and changing in ways which enrich their lives. This suggests that Ronald Laing is right when he describes schizophrenia as a natural process of change. The therapist's role is more that of a guide using the natural processes already at work in people all of the time. We have found in our experience that the behavior of schizophrenics and psychotics is highly repetitious — it is as if they are stuck in one pattern which they follow over and over again. We have often thought that they are living, perhaps, in a repetitive dream which must be dreamt again and again, seeking the resolution to some incomplete pattern.

We have also thought that these "mentally ill" people are simply an exaggerated example of the way most human beings live their lives, that perhaps they have been locked up — hidden from view — because they are a symbol of the repetitious, dried up, colorless lives which many "normal" human beings live. In some sense, this was the purpose of the human potential movement — to make psychology available to everyone, so that all of us could live happier and more creative lives. Fritz Perls once said, ". . . . Man lives in a state of low grade vitality. Though generally he does not suffer deeply, he also knows little of true creative living."

With this thought in mind, we ask you to think of *The Structure of Magic* as we do: we understand it to be not only a book for changing personality but, also, to be the first book on creative and generative personality.

Finally, we would like to remind the readers of the two volumes of *The Structure of Magic* that it is only a way of talking about it.

Bibliography

- Altshuler and Comalli, in the *Journal of Auditory Research*, Washington, D.C.
- Bach-y-Rita, P. *Brain Mechanisms in Sensory Substitution*. New York: Academic Press, 1972.
- Bandler, R., and Grinder, J. *Patterns of the Hypnotic Techniques of Milton H. Erickson, M.D.* Cupertino, Calif.: Meta Publications, 1975.
- Bandler, R., and Grinder, J. *The Structure of Magic I*. Palo Alto: Science and Behavior Books, 1975.
- Bateson, G. *Steps to an Ecology of Mind*. New York: Ballantine Books, 1972.
- Chomsky, N. *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press, 1965.
- Chomsky, N. *Syntactic Structures*. The Hague: Mouton, 1957.
- Dimond, S., and Beaumont, K. *Hemispheric Functions in the Human Brain*. New York: John Wiley & Sons, 1974.
- Fagen, J. (ed.). *Gestalt Therapy Now*. Palo Alto: Science and Behavior Books, 1970.
- Gazzaniga, M. *The Bisected Brain*. New York: Appleton, Century, & Croft, 1974.
- Haley, J. (ed.). *Advanced Techniques of Hypnosis and Therapy: Selected Papers of Milton H. Erickson, M.D.* New York: Grune and Stratton, 1967.
- Haley, J. *Strategies of Psychotherapy*. New York: Grune and Stratton, 1963.

1. Jackson, D. D. *Therapy, Communication and Change*. Palo Alto: Science and Behavior Books, 1968.
2. Korzybski, A. *Science and Sanity*. Lakeville, Connecticut: The International Non-Aristotelian Library Publishing Company, 4th Edition, 1933.
3. Laing, R. D. *The Politics of the Family and Other Essays*. London: Vintage Books, 1972.
4. Perls, F. *The Gestalt Approach: Eyewitness to Therapy*. Palo Alto: Science and Behavior Books, 1973.
5. Russell, B. *Introduction to Mathematical Philosophy*. London: George Allen and Unwin, Ltd., 2nd Edition, 1921.
6. Russell, B. *Principia Mathematica*. London: Cambridge University Press, 1910.
7. Satir, V. *Conjoint Family Therapy*. Palo Alto: Science and Behavior Books, 1964.
8. Satir, V. *Helping Families to Change*. Hays, Kansas: The High Plains Comprehensive Community Mental Health Center, 1972.
9. Satir, V. *Peoplemaking*. Palo Alto: Science and Behavior Books, 1972.
10. Schuchman, G., and Burgi, E. J., in the *Journal of Auditory Research*, Washington, D.C.
11. Watzlawick, P.; Weakland, J.; and Fisch, R. *Change*. New York: W. Norton, 1974.