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From the inside out and other metaphors: an integrated approach to training in multicentric systems thinking as derived from a family therapy training program.

Bernice S. Duhl
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FROM THE INSIDE OUT AND OTHER METAPHORS
An Integrated Approach to Training in Multicentric Systems
Thinking as Derived from a Family Therapy Training Program

A Dissertation Presented
By
Bernice S. Duhl

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of
DOCTOR OF EDUCATION
May 1982
Education
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FROM THE INSIDE OUT AND OTHER METAPHORS

An Integrated Approach to Training in Multicentric Systems
Thinking as Derived from a Family Therapy Training Program

A Dissertation Presented

By

Bernice S. Duhi

Approved as to style and content by:

John W. Wideman, Ed.D., Chairperson
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Theodore Slovin, Ph.D., Member

Mario Fantini, Dean
School of Education
To my families, past and present, extended and over-extended, who offered me the contexts to experience and learn what family and human systems are all about;

To Fred, husband, father, mentor, dreamer, innovator, who moves possibilities into new realities, creating contexts for exploring the unknown;

To all the trainees and faculty at BFI over the years, who entered into, shaped and were shaped by whatever it is we call a 'training program';

To the people at the School of Education at the University of Massachusetts, who reaffirmed for me that my life need not be irrelevant to my education;

To Jack, friend, evoker, resonator, guide, who ignites creative sparks, shields them with curiosity and acceptance, and fuels them with belief and wonderment,

This book is dedicated.
ABSTRACT
FROM THE INSIDE OUT AND OTHER METAPHORS
AN INTEGRATED APPROACH TO TRAINING IN MULTICENTRIC SYSTEMS
THINKING AS DERIVED FROM A FAMILY THERAPY TRAINING PROGRAM
May 1982
Bernice S. Duhl, B.A., Brandeis University
M.A., University of Massachusetts, Ed.D., University of Massachusetts
Directed by: Professor John W. Wideman

The aim of this work is to impart to readers an experiential and
cognitive model of training in human systems thinking, from the
'inside out'. Although derived from the training program in Family
Therapy at the Boston Family Institute, this work focuses not on
therapy but on the multilevel issues involved in creating a climate, a
context and processes for drawing forth generic systems thinking from
the person of each trainee.

The experiential and cognitive processes developed are explored
as reflexively coherent. That is, the way in which trainees are taught
is felt to be congruent with both the content and processes they are
learning, and with what they will be expected to do after training.

The humanistic General System Theory of Ludwig von Bertalanffy is
the conceptual base underpinning this view of generic systems
thinking, within which the seven levels of living system: cell, organ,
organism, group, organization, society, international entities, are
deemed as of importance and reciprocally influencing each other.
Living systems are defined as those in which component parts are
co-evolving in dynamic interaction, exchanging matter, energy, information, over time.

The focus of the program is on the person of the trainee, and is based on the trainee as a total living system, capable of information processing and most important of all, capable of symbolic meaning and pattern-making. Each trainee's personal world view can be examined, and integrated with his/her epistemology.

Generic issues concerning the thinking about training, values underlying any such a program, the ownership and use of information are explicated. The predominant metaphors of family-as-system and family-as-theatre, are examined in depth, through Family Sculpture and analogic exercises, employing both sides of the brain.

The author explores the creative process, by which many important discoveries in training for integrated and multicentric thinking occurred, not necessarily by plan, but through switching the focus and attending to 'what else was happening'.
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PROLOGUE

WHAT THIS BOOK IS AND IS NOT ABOUT

Family Therapy and Human Systems Thinking

Family therapy has become an established 'field' within the larger arena of mental health over the past two decades or so. Particularly within the past 10-15 years, the central idea that has caught the imagination of many, many people is that individual behavior does not exist in a vacuum, nor is it created only in the inner mind of the individual. Rather, individual human behavior exists in relationships of dynamic interaction with others. Thus, if one person in a family has a 'problem', all in the family are seen as involved in and with the existence of that problem in some way. It follows from that, that one then works with the whole family, carrying a 'map' in one's head about the inter-connectedness of each one's part in that process, or one perhaps works with an individual, still within that 'map'. One does not work with isolated persons then, but with persons conceptualized as in 'relationships'.

Since this idea caught hold, more and more training programs have developed to teach ways of working with whole families, with couples - ways of conceptualizing and working with relationships.

This book will not do that. This is not a book on marital and family therapy. Although the material in this book derives from the training program in family therapy developed at the Boston Family Institute since 1969, the emphasis here will not be on treating families, but on drawing forth and developing the 'map' of human
systems thinking in context over time, in the mind, and in the behaviors of each trainee. We believe it is necessary for trainees to have such a map in order to understand and to work holistically and realistically with individuals, families and all other human systems.

Families themselves do not exist in a vacuum. They are members of interlocking networks of extended families and friends, each of whom lives in neighborhoods, within larger communities, comprising states, nations and so on. If there is a Great Depression at the national level and father loses his job, that indeed affects what happens inside a family and inside the individuals in that family. Thus individuals exist in the context of families, in larger contexts, in a total ecosystem, over time. These multiple coexisting contexts influence how and what we each learn to learn, think, image, and enact. Trainees are individuals existing in families in larger contexts over time, who bring into a program their previously learned maps.

This, then, is a book for trainers, for teachers, for educators, for students of human systems, who may or may not be family therapists nor ever plan to be one. This is a book for those who would like to come along on the exploration of ways of developing and drawing forth the maps of human systems thinking in each trainee. The material for the exploration is culled from the twelve plus exciting years of experience that the author has had helping to develop and 'grow' systems thinkers at the Boston Family Institute.

No prior technical knowledge of human systems or family therapy is assumed necessary on the part of the reader. However, much of the
material in the book is meant to be explored with other people, and it is hoped that the reader will have some context in which to do that.

Those who were pioneers in the field of family therapy went through a variety of experiences and ways of working with individual people before they arrived at a human systems perspective and methodology. When they 'bumped into' the awareness of individuals-in-context, they became explorers, eagerly charting unknown territory. Their way of thinking and of conceptualizing human systems came out of their interactions with previously known, observed and formulated material about individuals in conjunction with these new puzzling questions about individuals-in-context. Many of these early explorers felt grounded in their own professional experiences with individuals as their search for answers to questions of human inter-relatedness slowly and steadily replaced earlier linear and singular individual models with human systems models.

From very isolated and sparse beginnings then, training programs and courses in family therapy have mushroomed and multiplied to over 300 Institutes in the United States alone, and countless numbers of courses and programs in colleges and universities today.1 The growing edge involves questions relating less to how to work with families as a human system, and more to how to train trainees in generic inclusive human systems thinking.

1 Personal communication, James Framo, Ph.D., pioneer family therapist and information resource person in this field.
At two major family therapy conferences during 1979, this author engaged in discussions and presentations with well-established practitioners and trainers, including some of the 'pioneers', as all struggled with difficult questions on training. They covered a broad range of issues and expressed a variety of assumptive sets:

- How can you train in such a way that theories and techniques are drawn forth from, and become part of the trainees' way of seeing the world?

- How do you teach a personalized style?

- How much of the trainee's personal life is it necessary to go into, in order for him/her to be an effective systems therapist?

- How do you train people to think in metaphors and gestalts, or analogically, rather than linearly/digitally? How can you train people to recognize and tap into the analogues between their own life positions, roles, situations, and those of the people they treat?

- How do you train for continued curiosity rather than pat formulas?

- How do you train for the responsible use of influence?

- How do you guide trainees to find ways of empathizing and caring that also allow for wide ranges of flexibility in interactions with clients?

- How can you train for an integrative model of therapy without it being seen as and feeling like an eclectic lump?
- And so on.

Many of these questions are not singularly related to training people in family or marital therapy, but have been around a long time in the helping professions in general. These questions are generic questions, of great importance. In terms of a specific helping and educational profession, they can be grouped around - how do you 'ground' people in their own lives, in becoming caring, competent, centered yet continually curious human systems thinkers and actors, in ways that enable them to help others become the same? And that is what this book explores.

**Pioneers as Searchers, as Question Askers**

The pioneers had been excited by their quest. They were self-selected and self-motivated in pursuing solutions to riddles. Trainees today enter a 'field' from a completely different base. Many entering it see it not as a personal quest with challenging questions and puzzles, but as a route to gainful employment, to provide services to those in need. They expect to learn answers, and quick how-to's.

It is quite possible that the pioneers, in amassing, elaborating and organizing a large body of information and material on family systems, were so absorbed in what they were finding 'out there' that they paid little attention to how they each were integrating this material inside themselves, or in their own style or way of thinking. They took their own integrative style and processes as a given base.
For many trainees today, it is not a 'given base' to think integratively in human systems. Trainers who have a point of view and a treatment technology now to pass on, are bumping into blocks, in not being able to have their body of material transmitted and incorporated, integrated and used as they would like. One leader in the field commented at a meeting, that he didn't understand how some of his trainees, after four years of medical school and other clinical experiences, and after working with his team in their training program for six months to a year, "just could not think systems". What he was expressing was that the way in which trainees think is key to whether or not they will be capable of working with, intervening in, carrying out any technology, in family or other human systems.

This very question: "How do people think and learn?" has been kept up-front and conscious by the trainers at the Boston Family Institute since its inception in 1969. And, from the beginning, two other key questions were present: "How do you train sensitive, competent and creative therapists?", and "What are families and human systems and how do they 'work'?"

We realize we have gathered quite a lot of information and perhaps a few answers to those questions on training raised by ourselves and other trainers. We feel we have been "growing systems

thinkers" who think, live, breathe a systems metaphor, and who do not lose touch with each person in the larger system. And that is what this book is about.

This book, however, is not a book of answers. It is meant to be a dialogic sharing, in which the thinking behind, about and of training is coupled with the involvement of you, the reader. Any other way negates the way we train.

Let us begin.

---

4 This is a phrase used for early family therapy conference title, Institute for Juvenile Research, Chicago, Ill., May 1972, and by Larry Constantine, BFI graduate, in his Family Process article on our method of training, 1976.
CHAPTER I
INTRODUCTION TO PART ONE

When I walked into the room, the chalkboard said, "SILENCE! DO NOT TALK." So the group of some fourteen adults sat and looked around, uncomfortably, smiling awkwardly. Some stared at the floor, others examined the peeling pale green paint, the steel-meshed windows. Eyes searched out the inanimate, moving upwards to investigate the four-sided balcony with slatted railing in this mammoth two-story room in an old Boston State Hospital building. Stark bare light bulbs hung in the center of the room, casting soft shadows under the balcony. Eyes scanned each other fleetingly, and shifted away. One woman rummaged in her pocketbook for something. Anything so as to pass the time in nervous silence, wondering what this was about and trying to look casual.

If we had been younger, the chances are we would have giggled and whispered and hidden behind our hands. I knew two of the fourteen people. They were a couple - friends through children who were friends. He was a business man, she was a homemaker. They were each interested in family and human systems and had just joined the Boston Family Institute course as I did, during its initial seminars. It was September 1969. The leaders had had a first Spring semester. Now they were going to start with a new group of trainees, while the first group 'waited'. After three months, both groups would be joined together - to continue a two-year, part-time course.
So there we were - no names, no talking - no exchanges of the usual social and verbal information. We were left without our usual tools of establishing our places vis-a-vis each other. Without such tools, we were amorphous. We were left to deal with information and communication with our first and earliest pre-verbal skills, and we were uncomfortable using or interpreting this language, directly, in conscious awareness.

I was reminded of sitting in doctors' offices, waiting rooms, the subway, airports, and all those similar places where you are supposed to pretend that you are the only person in the room, or else that you and 'they' are invisible. The chalkboard only said: "Silence, do not talk". It did not say, "Do not notice each other. Do not communicate". Yet we acted as if it did.

The leaders of the seminar arrived. I knew them. One said something like: "We want you to meet each other without words. We are going to divide you into two groups and those halves into two smaller groups and give you each Instructions as to what to do. After you receive your Instructions, you will mill about - using no words - carrying out those instructions. When we say 'switch' - you are to switch to the second instruction we have given you. Then we'll talk about this. Remember - no talking".

At this point, the leaders arbitrarily divided the group down the middle and then again, in quarters. Each leader spoke to each of two sub-groups, telling them what to do and in what order. Each small group knew only its own two instructions. Mine was to first be a 'positive responder', who, when the signal was given, was to become a
'negative responder'. These ways of being were to be carried out completely without words, solely with movement, facial expressions and gestures with each other. No matter what others did, one was to stick to one's instruction, one's role, and not speak.

We began to move: awkwardly, avoiding, then tentatively towards each other. Some people looked 'pleasant'. Others looked 'mean'. All of a sudden, someone pushed me hard, looking quite angry. Automatically, I felt like pushing back. My instructions, however, were to be a 'positive responder'. I smiled and tried to take the person's hand. She shook loose abruptly, turning quickly towards another person whom she purposely bumped into. There was so much going on. I smiled somewhat rigidly, and nodded nicely no matter who did what with me. I noticed a woman slumped down by a pole. I saw others smiling, bumping, moving abruptly. One felt the sense of awkward tension, of restrained energy, in the room. My muscles were tight.

The command 'switch' came from the leaders and I became just as fixed as a 'negative responder'. I was aware for the first few minutes that it was a relief not to be nice, to shrug others off and to turn away, to give a push back when pushed. My own tension and held back energy felt released. This situation however was awkward. We didn't know each other. We didn't know who we were pushing or avoiding. We were just 'roles'. We were grown-ups and strangers, not children. We were enacting these behaviors in awareness, and we 'knew better'. It was both fun and freeing, and equally uncomfortable and tense.

The leaders said "stop" and asked us to come sit down and debrief what had happened. They asked each person to mention his/her first
name as each spoke and began by asking us, "What did you learn?" "What did you find out?"


What did I Learn? A Review a Decade Later

Thus began for the author in 1969 a whole new venture and adventure into the reflexive land of learning/teaching/learning/therapy/learning, that continues to this day. For that first question "What did you learn?" which opened practically every debriefing session, also threw the door open to individual exploration. It was then and still is a radical question.

Such a question led to trainees asking themselves, "What did I learn?" One has to pass the experience and the resulting information evoked through the filter of the self, that personal screen of meaning, in order to come up with any answer to that question. And trainers must also have a way of thinking about answers, that admits to and allows for a wide range of possibilities.

Though that may not seem startling to the reader, it was very

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1 For a thorough examination and discussion of this exercise, and its implications, please refer to Chapter IX.
startling to the author. For by the time we have each reached adult life in this culture, and have gone through our customary schools and universities, we are quite well educated in being told what we have studied and learned, or should have learned. We are not accustomed to reaching inward for our answers. Rather, we have become habituated to accepting information, ideas and techniques as pre-packaged commodities, compiled by 'the experts', either the ones who originally explored and discovered the concepts, or those who compiled what is being taught. Indeed, especially in those human service programs and training seminars which lead to or towards a profession dealing with people, we become skilled followers and users of other explorers' discoveries, often denying our own perceptions and our own sense of coherence, of how people 'fit' with each other.

What did I really learn, indeed, in that total training context from such exercises and questions?

I learned that the primary locus for knowing about the world and for the integration of that knowing, was based in my own experience, a discovery that I had truly suspected for a long time, but that most of my life contexts and schooling had not guided or encouraged.

I learned that there were many levels of answers to match the many levels of questions I had. Over time I became aware that all levels of answers were relevant, depending upon which level one focused on. I found out that the contextual answers I discovered within myself were important for me to pay attention to and important to discuss with others. I discovered again that the mind is timeless and analogic, hoarding events and thoughts and awarenesses long ago
perceived, and flashing them as if they were current.

I learned that happenings in my own life were illustrations of observations discussed in larger theories.

I learned over time that "What did you learn and find out?" covered a wide range of data and meant, translated: What did I experience? What did I or others do? How am I feeling and thinking about these experiences, these events and my perception of them right now? How am I sensing, perceiving the world? What are my sensations, thoughts, ideas, images of what just happened? What does it remind me of? What core images, what screens-of-the-past, do I bring to bear on this material, this scene, this situation, this theory, this idea, this action, this family? What associations does this stir up? What information from other sources - from books, from other fields, places, theorists, courses, therapists, films, television, seems to connect with and inform my reactions and thoughts? How does what I am thinking and feeling fit with what others think and feel? What larger maps about human responses and interactions can we draw upon to make sense of all the data? What data do those larger maps ignore or leave out as well as include?

I learned to use everything I had.

I learned that every exercise created an opportunity for a far-ranging search, along many avenues simultaneously. I realized that whatever I found out during an exercise could become data, just as whatever others answered became data. There were no right answers, there were only personal, individual answers, from different people, representing different contexts, backgrounds and images. Responses
were 'diversities of instances' (Bruner, 1973), all parts and pieces of answers to larger, wider ranging and open sets of generic questions. I felt all answers to the same questions could be organized somehow in some connected and coherent scheme. Where did they fit? How did they fit?

These questions about 'fit', old and familiar to the author as very private and personal questions, were now being elevated to another overt level for legitimate, open search and research: How do people fit together? How do things fit together? How do ideas fit together, and how do they all interrelate? What are the dynamics of relationships - the "betweeness" of people? Very private curiosities now open for public inspection and discussion.

Was there really a way to make coherent, living sense of personal answers and larger maps that were inclusive of life as experienced, life as observed and reported, and life as conceptualized? Here was the rare opportunity to connect events, responses, ideas, to make hypotheses, and even theories.

The first evening's exercises in 1969 had set the tone for what to expect in this new learning context: adventure, involvement, and the search for personal relevance of one's experience with more formal concepts about human systems. They also highlighted that a new framework for thinking about training in this new paradigm of systems thinking, was being developed.

The new way of learning was as exciting as the new concepts being learned! As trainees, we could not predict in advance the specific content or processes a seminar might include. We expected that
learning about families, other living systems, and family therapy was not going to be passive, removed, and left only to one's cerebral imagination. Rather, learning about family interactions in context gave evidence of being alive, active and different, involving all of one's self. Like children playing charades and pantomime, we would be calling upon parts of ourselves not usually acknowledged in adult life. It was strange to play, and to have fun in the process of discovery and learning about human systems. Yet it seemed to make sense to be active, in exploring family and other living systems, since people do live their lives interacting in real time and space.

Ideas about interacting are not the same as the interactions themselves, nor the experience of being an interactor.

These first exercises, and the myriad others that followed in the training program, stimulated me both as a trainee and later as a trainer, to think about how learning and change takes place, in adults. Over time, I began to observe and think about the processes by which data are evoked: the design of exercises, the climate or ambience necessary and elicited, the content, and processes, and particularly, what aspects of trainees' capacities, information and skills were called upon in any particular situation.

I realized over time, as I participated in and debriefed many exercises as a trainee, that the thoughts, images, perceptions, and feelings evoked in experiential metaphors, were analogic and isomorphic to other realities experienced. I began to think about and pay attention to the range of possibilities inherent in each exercise. I became aware of the rich mix that action and analogue seemed to
create, calling forth learnings never approached in other settings.

My exposure to such learning from the inside out began a continuing journey for me, a search for bridges integrating experience with theory, integrating epistemics (one's private theory (MacLean, 1975)) with epistemology (formal and public theories), and integrating systems concepts across ordinary and different human contexts. So few of the written theories that we read in 1969-71 seemed to have any way of connecting with daily life. The original team of BFI trainers themselves were in the midst of searching for comprehensive connecting maps, for none existed.

Their overview issues in training people to become systems therapists were both simple and complex: a matter of finding ways of integrating one's sense of being a human system with being an actor in larger human systems, while learning to be a facilitator and intervener in still other human systems called families. What an intricate tangle!

The context of the training program then became a laboratory, in which all participants, trainers and trainees alike, searched for paths through this intriguing maze of learning and of changing. Issues in training seemed to be analogous to those in therapy. Therapy too is an 'exercise' in how different people learn and change. Integrations about learning and changing in training and therapy then would need to fit in some larger metamap, some huge umbrella, inclusive of basic frames of reference about how people process information, about context, and about patterns. Such a larger map seemed possible to find within General Systems Theory, yet we had no way in the beginning of
being specific and of tying it all together.

The Importance of Generic Questions

Beginnings in themselves are interesting. New starting moments are 'system precursors, system formers' (Gray, 1978) wherein random possibilities can become organized by the larger contexts, the events themselves and by the people involved. The system formers in 1969 were questions, curiosity, personal exploration and discovery.

While one could predict that discoveries would take place in a program where so much was uncharted territory, no one could predict the way in which those discoveries would take place, nor what those discoveries would be.

This book in itself is an attempt to pull together and weave an account of some of the discoveries I have found exciting over the years. They are all related to the evolvement of an integrated, yet open systems way of training in analogic, generic and open systems thinking and therapy that allows for daily life phenomena and one's epistememics, to grow into, and fit with, formal theories and epistemologies of living systems.

While content and specific emphases within the program may have changed over the years as it evolved, what has remained constant is the manner of training through 'structured spontaneity',2 (Duhl and

2 Sal Minuchin, M.D., well-known family therapist, visited the BFI program in 1974 and bestowed that label on our approach to training. We later used that phrase in the title of a paper on training.
Duhi, 1979) the manner of goal-directed training through analogic exercises which allows for the exploration of inner and outer contextual components at all levels of human systems.

A beginning is just that—a beginning. Yet, if the questions asked in the beginning of a training program concerning human systems are generic ones, if they relate to the "how" of adult learning, as well as to the "what" of process and content, and if they are asked continually, the training program always stays open to new answers and to seemingly subsidiary information being raised to focal attention (Polanyi, 1958). Such an approach to human systems also stays open to the focus that among the key issues in training are those concerned with the integration in the trainee of his/her life experiences, his/her ways of thinking and being, with theoretical constructs concerning specific processes, and arenas of application. We are concerned with exploring the coherent relationship between one's epistemic world view and one's epistemology. That is, we are interested in exploring the implicit maps that each trainee brings which seem to bear upon the way in which trainees interpret and act within more formal theoretical maps. How one looks at one's own family and life contexts seems to be part of how one looks at all families and life contexts, and a part of the aesthetic preference we each have for certain theories.

Thus, the generic questions: How do people, children and adults, learn? How do you train competent and creative systems thinkers and therapists? How do family and other living systems work? How do people change? What did you learn? What did you find out? have been
continually asked, as other generic questions have been added over time.

All the 'answers' gleaned over the years, establish a broad 'database' of knowledge generalized into constructs and conceptualizations, woven into and with other theory. Yet, in order to integrate them, each person must explore and answer these particular questions for him/herself. The learnings then are grounded not just in one's own experience, but in the evocation of new thought about those experiences in each person, and the fresh generalizations made by each group with the trainers. Integration is a process, requiring activity on the part of the integrator.

Although there have been times when particular questions of "what did you learn/find out?" have been in jeopardy of being overcome by "Here's what you learned, or should have learned", or "Here's what you're supposed to know", the original questions have been kept alive. The program has been kept an open systems one, evolving and allowing for the coming together of experience and thought in a coherent, organismic and integrated fashion. Theory-as-espoused continually grows closer to theory-in-action (Argyris and Schoen, 1974), as theory-in-action is tried, debriefed, analyzed, feeding data into the metamap of our theory-as-espoused.

The reflexive coherence (Wideman, 1970) resulting expresses and reinforces our belief that trainees must be empowered, aided and reinforced, like Taoist students, to draw their thinking from themselves, within a connected and empathic metamap. We believe it is important that each trainee learn to trust that all of his/her
personal experience and knowledge are rich resources for and in understanding human systems and human systems theories. We insist that trainees must explore aspects of original questions so that they are in charge of the answers, the theories they adopt.

After all, it is *us* they are describing in those theories!

My experience as a student at BFI thus became for me one in which my mind 'turned on', in new, different and exciting ways, opening the path for the continuing integration that is ongoing to this day.

As a student, then trainer/co-experimenter/conceptualizer, my own education at BFI became a platform experience against which to bounce new thoughts, ideas, feelings and "I wonder if's..." about training in systems thinking. I was personally excited by the possibility of aiding in creating a climate for a collaborative and open search for innovative and integrated learning, in which trainees could indeed include their own experiences, information, and world view as resources for finding answers to their questions about people and families. It is unusual but validating, when what you know from life itself is deemed worthy data in seminars concerned with overviews of the human condition.

When one has had the stimulating and fortuitous experience of having been a trainee in a program 1) which started out with many questions and no set answers, and 2) which subsequently chose all faculty from among former trainees, one tends to insist on that opportunity for invention and discovery remaining open and available, for one's self as well as for others. One tends to be delighted with the magic and power of 'aha's' found during an integrative treasure
hunt!

Thus, the search for 'the patterns which connect', for 'new information, the difference which makes a difference' (Bateson, 1979) in training and therapy, has been ongoing, with new discoveries always folded back into the program, in feedback, feedthrough and feedforward fashion (Richards, 1968). Such a process is akin to kneading clay, as I used to do for many years while creating pottery and sculpture.

As author, I feel that I have helped shape BFI as one of several sculptors on a large and constantly changing joint project. As anyone who has ever sculpted with clay knows, the forming, the shaping, the detailing of nuances, is never accomplished in one move or plan. The sculptor has an image and creates it in time and space, adding on bits or bunches, and sometimes delicately carving away small lumps or masses until, in her interaction with the clay, the sculptor achieves her image.

My helping to shape the BFI program has been for the last ten years particularly, akin to shaping a moving sculpture, fulfilling a mind's eye image of form and movement. As in the development of such a sculptural creation, always present have been the questions: "What are the relationships of the parts? Are they balanced? Do we lose parts for the whole? Is the whole overshadowed by the prominence of any single part? What are the creative accidents we didn't expect? How do we fit these new effects in? How do we change our mind's eye image to allow for what else has happened?"

For me, then, there has always been an organic aesthetic image of the evolving processes of and in training, more akin to creating and
projecting a dancing hologram, a multidimensional image projected and moving in space, defying linear description (Pribram, 1971).

As such, this book is perhaps an attempt at the impossible — to describe that hologram and one's own experience of it at the same time. Like a hologram, ideas about events occurring in training conjure up images whose edges are not sharp, and which cannot be boxed and contained. Any linear description, then, is, as Bateson says, a punctuation of experience (1972, p. 288-292). I would also call such descriptions: choices, simplifications, bracketings around ongoing phenomena, but never the whole image. Like holograms, processes and ideas about a reflexively coherent (Wideman, 1970) approach to training are projected in space and over time, and exist in the minds of those involved with them.

As the only former trainee, then trainer, continuously involved with the BFI method of training since 1969, I have felt it is time to try the impossible: to examine, explore and integrate in yet another way twelve years of the BFI program. I shall attempt to pull together the themes, threads and anchorlines that run through this way of training, to see where we are and to punctuate it.

While this particular hologram has had many shapers, this work will not be an historical account of each one's contribution, nor will it be a full account of the total ongoing program itself. The images drawn are those of generic approaches to training, colored by my

3 There have been several earlier attempts to describe our training program. See Duhl, B., and Duhl, F., 1974b; Duhl, B., 1978; Duhl, F., and Duhl, B., 1979.
lenses, and painted with my brushes. They are approaches which catch my imagination as the exciting ones on which to focus in this volume. Like the 'laws of nature' uncovered, this book explores the thinking and processes which, when pulled together, seem to create new 'patterns which connect'.

This book then examines experiments done in a learning laboratory. While drawing from many diverse fields, as we do in our training, this book will, in turn, I hope, stimulate the reader's excitement in 'the having of wonderful ideas' (Duckworth, 1972); with the possibility that the reader can name, locate, and organize those ideas into useful frameworks for understanding, thinking and acting in human systems, including those that one inhabits.

Let us now investigate this open systems model of training for thinking and acting in open, living systems. Let us examine ways of training from the inside out for a sense of integration not only of concepts, but of one's experiences integrated with one's epistemology. Let us look at each trainee as a human system, thinking, acting, imaging, sensing, and feeling, with and about other human systems. In this process, we will explore the supra- and substructures supporting the evolution of integration and multicentricity in trainees as I see and understand it.

An Outline of Part I Contents:

Chapter II will acquaint the reader with the General Systems framework for thinking, derived from General Systems Theory, that underscores our view of human systems and of the families, individuals
and other systems with whom we work, in their dance of 'fit' with each other. Chapter II will also clarify what it is we are talking about in training for multicentric integration.

Chapter III explores the contexts in which such training programs in systems therapy began in the United States. The interconnection of many of the explorers involved and their ideas, are presented in narrative fashion. The wider lens then narrows down to focus on the beginning of the Boston Family Institute and the particular explorers involved there.

Chapter IV explores and elaborates the values held by those training at BFI, and makes the point that all educational and training programs are grounded in a value base, in a context, whether fully acknowledged or not.

Chapter V outlines the paradigm we have adopted since 1973 to guide us in our planning and thinking as well as in designing curricula and analogic or metaphoric exercises. Here we explore and elucidate the various types of outcome guidelines. This chapter further explores our assumptions about learning and about adult learning in particular, and begins to indicate what trainers will have to keep in mind and be prepared to do if they should want to play with training in this manner.

Chapter VI tells an analogic tale of training in a non-human system.

Chapter VII discusses metaphor and analogue and synesthetic learning, and the modalities we have explored and discovered by which to train organismically in ways radiating out to all levels of human
systems. Here we begin to present some examples of types of analogues and metaphors at work, and conceptualizations about the processes involved.

An Outline of Part II. Contents

Chapter VIII introduces the concepts of family-as-system and family-as-theatre that were operant at BFI since its inception. These two thrusts allow us to look at family from the outside in (system) via analogic exercises, and from the inside out (theatre) via personal metaphor creation. Different processes of mind are involved in each of these experiential learning modes.

Chapter IX then develops the concept of family-as-system and explores analogue designing by first returning to the exercises at the beginning of this book and analyzing them. The processes involved in designing and participating in analogic exercises are explored as we look at different types of situations.

Chapter X then rounds out our basic approach to generic training in systems thinking with a full discussion of metaphor creation and family-as-theatre. The connection between theatre, people, spatial metaphor, training and systems thinking is developed. An in-depth exploration of sculpture and spatialization - the medium by which we can express any relational concept, or human condition, is fully explicated.

A brief Epilogue concludes this work, with some thoughts about the impact of this type of training on trainees and trainers. The results of a project researching the Impact of BFI's training methods,
undertaken a number of years ago, are mentioned, along with comments about generic education and creativity.

It is my greatest wish that this book will be enjoyable to read, and that the reader will find much to play with. For we have found that not only are play and humor integral aspects of learning wholly and organismically, but without play and humor life and learning are tedious and dull. Play involves us in ways that leave our defenses at rest and our minds open to new information and ideas.

Designed Play is basic to the BFI way of training. The book will be sprinkled with many such designs, some explored in depth, others hardly at all.

It is my hope that the reader will enter this book and these ideas in a playful and explorative manner, prepared to suspend judgment for awhile and to experiment with some new images and thoughts as they are conjured up while reading. With the idea of the reader entering into the book, I have also sprinkled some exercises for the reader to engage in, should that be a way to 'play' for some.

For those who 'read' first and play later, so be it. One suggestion would be to ignore the exercises, as participatory reading, and ponder on the designing of the exercises themselves. For that, too, is an attempt to engage you, the reader, in your own discovery processes.

Those who 'learn by doing', might want to try our associative reading and listening exercise:
**Exercise: Associative Reading and Listening**

Have you ever kept track, while reading a book, of where your mind goes, of what you experience as you read? You might want to write that down in a notebook or journal, with a key or page reference to locate the stimulus.

What is printed in this book or paper will stay there. One can always turn to the same page and find the same messages. What passes through your body/mind is your information. Each association while reading and listening is often evanescent information, glimpsed but not grasped, and not easily retrieved. Such a separate notebook or journal is often the place to keep track of your "having of wonderful ideas" (Duckworth, 1972).

At this point, for those interested, let me suggest that you jot down your associative ideas as they are stimulated as you read.

Your notes are then available to trace patterns in oneself, in one's way of thinking, being, training, living, to record one's 'aha's' en route to weaving them into your 'patterns which connect' (Bateson, 1979).

In addition, such associative tracking in reading is similar to associative tracking as a therapist, counselor, educator. "Where does my mind go while I'm listening to them?"

Those who lean towards a 'right' brain approach to this topic of generic systems thinking might want to start with Chapters VI-X first,
and then come back to explore history, definitions and the frameworks for program design in earlier chapters. Indeed, one will find oneself quite free to skip around the book, if that is a preferred style.

For it is my hope that each chapter will be experienced and imagined as a fragment of a holographic plate. Such fragments, or bits, according to Karl Pribram's definition, when "transilluminated by a coherent light source", reflect the whole (1971). It is my wish that I succeed in being a 'coherent light source', and that I am able to illuminate the bits in such a way that the reader will find him/herself stirring with new thoughts and images which he or she will want try out in his/her own setting.

The writing of this book has been for me a new platform experience, pushing new 'I wonder if's' into the foreground of my thinking. I hope it does the same for you.
CHAPTER II

TRAINING FOR INTEGRATION IN MULTICENTRIC HUMAN SYSTEMS THINKING

Exercise: Training in What?

I am supposing that the language used in the title may sound strange, even confabulated, to many readers. And yet, I feel sure that each reader has already stirred in his/her mind many of the ideas I am attempting to integrate here.

Thus I will take the liberty of introducing my subject as I often do at Training-for-Trainers workshops, by inviting each reader to pause and reflect on the title of this chapter, to 'brainstorm' with yourself what comes to mind and to jot down whatever ideas, images, words this phrasing stirs in you. It is my hope that your thinking, writing, then reading what I have written might resemble aspects of the active component present in our workshops and seminars. Such activity creates more of a dialogue, which I have grown to prefer and trust.

What's Our Definition?

When a book announces that its contents will be devoted to exploring 'training for integration in multicentric human systems thinking', some furrowed brows and quizzical expressions can well be expected. Whatever it is that is being referred to in this grouping of words does not conjure up everyday images. And the reader cannot
be sure if what he or she conjures up matches anything the author might have in mind.

Let me see then, if I can clarify ideas and images by presenting some definitions and descriptions, which will bring us to a more common understanding at the beginning.

From Ground-Zero

What are systems? Dictionary definitions for systems cluster around familiar concepts, like "an assemblage or combination of things or parts, forming a complex or unitary whole...any assembly or set of correlated members...an ordered and comprehensive assemblage" (Random House, 1967). These definitions do not inform us greatly, nor do they bring us to any advanced level of thinking. One might well ask then, do we mean to train people to think about assemblages of parts? - and the answer, of course, is 'no'.

However, if we ask "What are living systems?" of which human systems are one form, we are in a different metaphor, for which we find not a dictionary definition of several succinct phrases, but volumes. The most recent one on this subject by psychiatrist James G. Miller, Living Systems, is a not inconsiderable 1051 pages of micro-definitions (1978).

Briefly, living systems were defined by Ludwig von Bertalanffy, the original conceptualizer in this arena, as "a complex of components in dynamic interaction" (1967, 1968). The key words here are 'dynamic interaction', meaning that active components inform, impact on, or exchange with each other. That has quite a different feeling to it
than "an assemblage which forms a whole." Implicit in this too brief
definition of living systems is a suggestion of reciprocity of impact.
And that begins to hint of something even more interesting.

The umbrella that these formulations group under was called by
von Bertalanffy, a biologist, General Systems Theory, and later by
Miller, General Systems Behavior Theory. Both relate to living
systems. Miller is particularly concerned with the behavior of each of
the seven levels of living systems, which he differentiates in
hierarchical ordering: cell, organ, organism, group, organization,
society, supra-national system (1971).

Ideas are getting a little more complex now. Here we have at
least seven levels of system, all containing component parts which
impact on, inform or exchange with, each other. Let us examine more
what some of these concepts are and mean, before referring back to
training.

Miller, elaborating some of von Bertalanffy's original premises,
expands this definition in describing living systems as:
- Existing in time space;
- Made of matter and energy;
- Exchanging matter and energy;
- Organized by information; and
- Exchanging information (1971).

That implies that living systems are growing, evolving, changing over
time, eventually dying. They are open systems - exchanging energy,
matter and information. That exchange of energy, matter and
information is the dynamic interaction of component parts. And
Importantly, such systems are susceptible to \textit{change over time}.

It is this type of change over time that differentiates living from non-living systems: living systems contain the capacity for the self-organization of progressive differentiations. They co-evolve. In other words, there are mechanisms which trigger, receive and organize new information (messages) in living systems which cause them to change form, stages, and processes, in some recognizable progressions in what we call a 'life-cycle'.

'Information' here means: biological messages, such as those carried by DNA; physiological messages, such as nerve impulses; as well as verbal and paraverbal messages or data imparted by human beings to one another.

Open systems, according to von Bertalanffy, also contain the capacity for self-generated activity. Again, that could mean DNA in action, or someone's 'aha!' or new idea.

In comparing the levels of systems from organ to human organism, or evolutionarily, from animals to human beings, man and mankind are markedly differentiated from all other living systems by von Bertalanffy. This differentiation is based on the human capacity for symbolic activity - the ability to create symbols - to image, hear or feel 'something' and represent it in a mode that is not the thing itself. Ideas, images, words stand for and are symbolic representations of, yet are not experiences or things. And, human beings manifest that amazing capacity to create meaning, to create and transmit connections about the self and world, to one another through those symbols.
If one thinks about thinking, one becomes aware and conscious, or knowing, of one's own symbolic activity. What we are doing right now — my writing and your reading is based on this capacity for symbolic activity. Von Bertalanffy is passionately adamant, particularly in his *Robots, Men and Minds. Psychology in the Modern World* (1967), that this capacity which distinguishes human beings from other life forms and systems, this capacity which is the stuff of being human, not be reduced by human beings to seeing themselves or others like themselves, as robotic. He appeals to man, who can create ideas, not to create the idea that man is a machine, and dispensable.

Miller, cooler and analytic in style, states that human beings contain the capacity for symbolization, including the ability to create conceptual relationships of meaning, which he calls 'conceptual systems' (1971). Man thus has the ability to 'think' and to create symbols to represent that thinking, imaging, sensing, hearing, feeling. He also has the capacity to create those symbols outside himself — to string symbols of letters, words, hieroglyphics, metaphors, images, together in interrelated patterns creating written or spoken meanings.

Miller furthermore differentiates conceptual systems from living systems. Living systems are concrete, existing in time-space, made of matter, energy and information, whereas conceptual systems exist in the 'minds' of human beings and nowhere else, and are composed of information and ideas, also symbolic.

Now we are speaking of sets of ideas about living systems, and of human beings as the creators, retainers and users of these sets of
ideas. This gets more intriguing.

Von Bertalanffy also drew on his extensive background in biology and the physical sciences, and proposed that almost without exception, the same structures and processes (relationships) are manifest at each system level, from cell to universe, in some isomorphic (similar) form, and involve energy, matter and information exchange (1967, 1968).

In other words, the same types of processes could be found operating in some analogic or corresponding form in a society-at-large as in a small group or cell. This is where living systems definitions and conceptual systems begin to be intertwined. In order to translate the isomorphic or analogic forms at different levels of living systems, one has to be able to 'see' and recognize configurations or patterns of relationships. One has to be able to look at form, derive function and make the active perceptual leap which compares and connects.

How does one begin to look for and to recognize these patterns, these analogues? For 'analogue' refers to associative and comparative images, patterns and metaphors. Even if one does find analogues, how does one make sense of them and utilize those conceptions, given that a cell is not a person and a person is not a society? These are the types of generic questions that are addressed in our training for integration in human systems thinking. Now let us continue.

At every system level, according to von Bertalanffy, there is "Immanent activity" (1967), which means thoughts and processes indwelling (Polanyi, 1958), or inherent within the organism, having no
effect outside of it. One can solve an entire problem entirely within one's mind, without any external representation of that activity. Additionally, activities can start inside an organism which are not necessarily in response to an outside event. For instance, one's heart has its own idiosyncratic beat and rhythm. One can think about a frightening dream and increase one's heart beat, devoid of any immediate 'outside' stimulus. This 'immanent activity' forms the basis of the 'functional autonomy' (Laszlo, 1972) of each organism at each system level, and is at the root of creativity, play, exploration and feedforward ideas and images. The 'decider' in each person is a functionally autonomous entity.

That raises some more questions. How then can one put together 'dynamic interaction' which implies reciprocal impacting, and 'functional autonomy' which implies acting alone? These are the wave/particle questions of the life sciences; the separate/connected questions that apply to all levels of living entities.

Von Bertalanffy expands on these issues when he states that organisms are directed by internal phenomena, though they are influenced, affected and impacted upon by external forces. Context is always implied. For example, he states, "the developing embryo is not directed by outside forces" (1967). Yet we know that poor nutrition or measles can affect its development.

One's racing heart and one's sense of self-protection are directed from inside, yet can be influenced from outside: another person's startling entry into the room can evoke a loud scream and self-protective behavior, or not, depending on each individual's
tolerance for abrupt behavior. In addition, the same scream response could be evoked by a non-human stimulus from the ecosystem, such as by an abruptly and loudly slammed door. Thus, each system is conceptualized as functioning autonomously within a level that can be influenced by sub- and supra-systems, or by internal and external contexts or events in an ecological fashion.

And, every living system, though open, has equilibrating processes, which tend to keep it in balance, as it evolves from germination through death and disintegration.

Such 'balance' is maintained by feedback, feedthrough and feedforward processes at each level of system, which become pattern influences. Without the self-regulating processes of a living system, it would soon not be a well functioning system.

For instance, all the systems in the human body are in a delicate 'checks and balance' relationship. Too much hormone from the pituitary gland and one grows to glanthood. Too little and one does not grow enough to be normal size, and is called a dwarf. Without certain other hormones, food cannot be digested. These types of checks and balances are said to be isomorphically represented at every level of living systems.

Thus, constant evolving change and dynamic homeostatic balance are the earmarks of open, co-evolving living systems.

Like Russian nesting dolls, each system level is conceptualized also as existing simultaneously and as subsumed within successive levels of system, in hierarchical order. Unlike the wooden, nested dolls, however, each level of living system is but a "hypothetical
'whole'" (Grinker, 1967) - a convenient metaphor, for each level of a living system is at the same time linked to, part of and formative of the next 'larger' or higher level of a living system. After all, individuals in families are also members of classrooms, neighborhoods, businesses and the society. And each living system always exists in context (time-space) with other living systems at the same level as well as those of supra- and sub-levels, and with non-living systems. The totality is often referred to as the ecosystem (Auerswald, 1969).

Larger living system units are conceptualized as functioning differently together than each of their parts separately. For example, lung cells separately cannot create a sac nor perform the expansion/contraction function of breathing. A person acts differently by him/herself than when with other people, especially family members. So which 'units' we draw a boundary around, declaring them 'system' is often arbitrary, or an agreed-upon convention. Boundaries, like cell membranes, or that metaphorical boundary around a family, are implied at each level.

These then are some of the broader descriptions, some of the 'agreed-upon' conventions (though scarcely all!) of living systems. Yet as we stop and think about these statements - these are conceptualizations, ideas, theories, metaphors, constructs, hypotheses, conventions - whatever symbolic word we choose to assign here - for ordering our understanding of the world we inhabit and observe. The human mind strives to create order (organize and be organized by, information), weaving data into ideas and theories. Theories are mind-made.
These theories, ideas, constructs, form a conceptual system, an epistemology (Bateson, in Ruesch & Bateson, 1968), a formal way of seeing the world and everything in it, a world view, a formal and public organization of knowledge.

We now have a conceptual system of ideas about living systems! However, a symbolic conceptual system is not the thing itself. As Bateson attributes Korzybski as saying (Ruesch & Bateson, 1968), "the map is not the territory!" A conceptual system about a human being is not the same as a human being, nor is it the same as the experience of being a human being.

We are now talking about ways of thinking, about a particular way of conceptualizing the world, called human systems thinking, and about people who think in this particular way, called systems thinkers. We are also talking about the way human beings in this world think, talk and write about and experience themselves and others as functionally autonomous and dynamically interconnected with others.

**What Is Systems Thinking? And What Does One Need to Do It?**

Unlike 'systems' there is no dictionary definition of 'systems thinking' nor is there the equivalent of Miller's work. We shall have to construct a definition here, that will serve as the backdrop and reference point for our Image of the meanings, as they relate to the way of training we are describing. Thus, I will explore a range of generic definitions and models and attempt to delineate the ones BFI seems to have evolved.

Systems thinking, as an internal mode of 'seeing' ordered
patterns of relationship, processes and interconnectedness in and between objects, phenomena, people, has perhaps existed forever in the minds of various disparate individuals. As a particular way of looking at the world that when extended becomes a shared total world view, of a dynamically interacting model of universe, that is more recent. And the body of conceptualizations about living systems has just begun to be put together since World War II.

Thomas Kuhn (1962) in discussing the history of science and scientific 'revolutions', refers to the paradigm or framework shifts, which have occurred when those in the scientific tradition asked new questions and unearthed new data, or dislodged old data and juxtaposed them in new combinations. What resulted from these processes were new images, new patterns woven into new ways of looking at and understanding the world. The shift in ways of looking at the world, to 'systems thinking' with 'ecological models' (although not named such by Kuhn) is the most recent of those 'paradigm shifts'.

While Kuhn basically limited his exploration to natural sciences the same paradigm shift was occurring in the human sciences, economics and other disciplines. For instance, those influenced by Whitehead and Russell's *Principia Mathematica* (1910-13) and the Theory of Logical Types, such as Bateson (1972), have postulated conceptual systems of hierarchical levels of messages, logic, meanings. Systems theorists in other human sciences such as Piaget, Loevinger, Kohlberg, Perry, Alschuler, and Erikson, emphasize and highlight the developmental progression toward higher levels of organization and differentiation in people, from birth to death. In such stage
theories, each progression is seen as irreversible, in a fixed hierarchical ordering, with each new level or stage incorporating the preceding ones.

These are ways of ordering our understanding. Not everybody, however, is born thinking 'systems' - conceptual or otherwise. Nor do all people necessarily automatically 'grow into' or learn to think this way over time.

**Variables in Systems Thinking**

Still there are many people today who would label themselves 'system thinkers', yet who have widely different conceptions of what that encompasses or implies. If we apply a Miller-like microscope to the range of variation in systems thinking, we would find that what is being talked about breaks down into several variables:

1) Different aspects of systems themselves

2) Different models of systems
   a) Living and non-living
   b) Conceptual and operational

3) Differences in location of the speaker when describing a living system

4) Differences in agreement as to what is considered data and its location

5) Differences in the private world views of different observers-speakers

Let us take a closer look at these variables.

1) **Different aspects of systems**. This variable can refer to highlighting or focusing on different phenomena within a living human
system. One person could be concentrating on sequential or hierarchical ordering, i.e., who is in charge, when; another could be focused on similar structure of different systems levels, called isomorphisms, i.e., the father's relationship to the mother is the same as the brother's relationship to the sister; and a third on processes between members, i.e., communication between members is unclear and fuzzy. Like figure-ground arrangements, each person could be seen as 'ignoring' the other's area of focus, though all are phenomena of fitting within living human systems.

In any living system, and particularly any human system, there are so many phenomena ongoing at one time that the human mind cannot focus on nor grasp them simultaneously. Choices of focus must be made, for any semblance of ordered understanding to take place. These choices are based upon personal aesthetic preferences (Kuhn, 1962) and theoretic leanings. While preferences then cause us to narrow the focus, all other phenomena continue to occur, focused upon or not. Different models of human systems focus upon different aspects of the human condition and ways of being organized, productive, healthy, separate and connected as human beings go about ordinary daily life. All are useful, all are interesting, none are complete.

2a) Different models of systems, living and nonliving. This is somewhat more complex. A mechanical engineer can quite accurately describe himself as a systems thinker. A computer programmer could do the same, as could a physicist, biologist or family therapist. The first differentiation that would need to be made would be whether or not living or non-living models were being talked about.
Even with agreement on living systems as the overall model, within the family systems arena, there are variations of models which are often confused. The two main such models are the Living Systems model, already discussed and the Cybernetic systems model. Let me say a little more about this second one. In the arena of human services and particularly family therapy, there has been confusion between definitions and operational models, between understanding human beings in context and implementing change.

In Cybernetic Theory as originally expounded by Norbert Wiener (1948), the basic concepts are feedback, information and control. According to von Bertalanffy (1967, 1968), cybernetic systems are essentially closed systems of information exchange, whose feedback loops render them self-regulating and circular, such as in thermostats in both living and non-living systems. A thermostat is 'set' for a particular temperature. When the 'heat' goes down, the thermostat registers that information and clicks on the heater. It keeps it on until the appropriate temperature is reached, and maintains it at that level. Such signaling feedback loops regulate the temperature of the system.

Von Bertalanffy found the cybernetic model 'applicable' to a wide range of biological regulations, subsumed under the term of homeostasis (1967). Homeostatic means, like the thermostat, self regulating and circular and staying within the same range, yet subject to a variety of influences. The same can be said for interpersonal transactions in any system they tend to stay within a known range.

However, this cybernetic model was felt by von Bertalanffy to be
Incomplete in describing or representing all the phenomena evidenced in living systems. As we mentioned before, General Systems Theory delineates a living system as open, in which there is the dynamic interaction of many variables, with certain patterns of relationships, susceptible to change over time. Living systems co-evolve, influencing each other. A thermostat, to stay with that type of cybernetic system, does not meet these requirements. For instance, it does not change over time, evolving in form or process. It does not co-evolve with any other system or entity.

In addition, other variables of living, open systems include the capacity of self-generated activity (the ideas that pop into your head); the self-organization of progressive differentiations (DNA 'programs'), and the evolutionary capacity for developmental growth and for higher levels of organization (we all grow up and change over time, whether we want to or not, and as we grow our capacities increase). The original cybernetic theory of systems, upon which several versions of family systems therapy were based, did not allow for these phenomena. Rather, cybernetic descriptions of living systems focused on these aspects of information and feedback wherein each member's contribution acts as a control upon the others, no new information is generated, and the system seems closed, automatic and unchanging.

For instance, certain 'automatic' types of information exchange are conversations likened to circular cybernetic system patterns. Consider the following two dialogues, each at a very simple level of depth and complexity, "Hello, how are you?" "Fine, how are you?".
"What's new?" "Nothing much, what's new with you?" "Not much, really, well, it's good to see you and catch up with you." Such a sequence is conducted automatically, without thought, each comment cuing the next, from beginning to end.

A slightly more complicated example, implying repetition over historical time, might be:

Son: Dad, let me tell you. . .
Father: You don't have to tell me anything. I know all about it.
Son: But Dad, I didn't tell you. . .
Father: There's nothing you can tell me. I know what you're going to say!
Son: But Dad, I didn't say anything yet...
Father: You don't have to. I know you. Now you listen to me!

These are simple examples of behavioral patterns and conversations which tend to stay the same, which like tape-recorded announcements, are automatic, wherein no new information is generated or exchanged. In addition, a fixed level of relating is indicated.

While the focus on cybernetic aspects of systems helps us make sense of the impact of such patterned sequences, it is not sufficient to explore or explain the whole.

General Systems Theory then subsumes and includes cybernetic theory as belonging within and descriptive of important aspects of living systems, having to do with information exchange and regulation, but does not see cybernetic theory as a complete or inclusive theory of human behavior.

2b) Different Models of System: Conceptual and Operational. The
cybernetic model indeed influenced some early family therapists and researchers (Jackson, 1957; Bateson, 1972; Watzlawick, et al., 1967; Watzlawick & Weakland, 1977; and Haley, 1971) in their original operational models of family interaction and family therapy. Their theories of family and of therapy do not consider the interlocking multigenerational and contextual levels of living system. The individual person is not focused upon as a functionally autonomous person at the same time he/she is an interactive member of a larger level of system, i.e., a family. The emphasis in cybernetic theory of human behavior centers around systemic information, power, control, and feedback mechanisms. Under 'information' would also come Bateson's analysis of communication by levels of logical type (1972). There is little attention paid to individual developmental processes, the impact of the context and events in one's life on the timeless mind, or individual attributes such as differences in information processing styles and the subsequent issues of fit between members.

Let us look more closely at how conceptual and operational models fit together.

While a theorist's view of a human being, in and as a living system may belong under the General Systems Theory umbrella, his/her theory of implementing change as a therapist may purposefully narrow the range of that focus. He/she may find a narrower focus more useful and effective in implementing change in a system. This latter, perhaps narrower view is called an operational model, while the full conceptual model may or may not be wider. However, understanding systems fully and implementing change in therapy are different cups of
The BFI Framework

At the Boston Family Institute, our preference is for the fuller General Systems theory model as both the conceptual and operational model, for both teaching systems thinking and for systems therapy, and perhaps for life itself. We feel there is a reflexive coherency in such an approach. When we think and work with such a model, no aspect of being human need be left out, neither the influence and impact of larger societal contexts nor the genes and biology of individuals who comprise families. It allows our approach to be an anthropological one, in which different clusterings of systemic phenomena emerge as being most relevant within different systems. We are free to enquire about all.

As therapists or human system facilitators, our range of options is far greater when all aspects of life and of persons are available to be connected in a coherent manner. For us, the cybernetic model we feel is exceedingly useful, but incomplete.

Our framework includes the awareness that human beings developmentally are each shaped and influenced by the tumbling processes of their life events, in the world at large as well as in microcosm. Some of the events by which we are influenced and which we influence are our other family members! People, we feel, learn to learn patterns by the ways in which the information of their lives is communicated in larger contexts, family contexts, as well as by the personal and idiosyncratic meanings each brings to the same
information. As developing and open living systems, one makes meanings out of the totality of the context one lives within, given one's developmental stage and style in fit or relationship to others in one's context. Our framework gives weight to the capacity for exploration, self-generated activity, play and creativity that is fundamental to our human condition. We move towards drawing forth those aspects in people that allow them to generate solutions to their own issues.

Lastly, our preference for a wider training and operational model is set in a historical context. The models of therapy and change techniques derived from cybernetic theory were developed in the context of viewing schizophrenic families (see history section which follows). Cybernetic models seemed useful and effective since the fixedness of patterns in psychotic and/or schizophrenic families seemed mechanical. However, methodologies derived to work with these families with members so far from 'normal', are rarely for us the methodologies of choice for working with all types of families and other human systems with widely varying issues and levels of inner and outer competence. Our bias is for a wider model, offering us free range of generic ways in which to approach and understand families, groups, institutions and cultures. Individuals and families often need to become aware that they did not create themselves. They seek a sense of coherence of their past learning-to-learn their inner world of experienced meanings and their present arrangements we call systems.

A fuller general systems model allows us to be curious about and to work with all systems interfaces, between family members, family and
community, agencies within the community business institutions, and so on. It is also our strong belief that the tools for change must be put into the hands of the people needing them most, which does not follow naturally from the way cybernetic theory has been utilized in family therapy. We believe that information about people belongs and needs to remain in their hands. A full discussion of these issues for family systems therapy could well be the subject of another book and is beyond the scope of this work. However, we will discuss further certain aspects of our bias and preference for the fuller General Systems model in Chapter IV wherein our concern with values is raised.

Let us continue now to look at the types of variables that play into the concept of 'systems and systems therapy' as those words are used by so many with different meanings and images.

3) Differences in the location of the speaker or reporter when describing a living system. This variable relates to the artificial or convenient 'boundaries' of inclusion or exclusion around the components to be labeled 'system', as determined by the speaker/observer. This then locates the speaker's position: the location of the 'I' who is speaking.

The differences mentioned in 4) and 5), i.e., differences in agreement as to what is considered data and their location, and the differences in private world views, will be included here in our discussion and in our diagrams, with each is interrelated with the

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1 The recently published 'state of the art' Handbook of Family Therapy, edited by Gurman and Kniskern (1981) emphasized the same point.
other.

1) Location of reporter: outside, fixed distance
2) Movement of reporter: none, or in fixed orbit
3) Theoretical world views: stated/not stated
   Personal world view: not explored, not stated
4) Information flow: one way, to reporter
5) Information source: observed system, noted by observer/interpreter
6) Interactional impact: none usually stated
7) Control of interpretation: observer/reporter

Fig. 1. THE OUTSIDE OBSERVER

Human systems thinking, for some people, refers to that ability to be a systems describer of other people as if that group were a kind of 'outside' event or phenomena. In this model (see Figure 1) the human system, being observed, be it an individual or a family or classroom, is seen as if the observer were a fly on the wall. Or else the group is seen as on the other side of some impermeable boundary, at a fixed distance, without the observees being aware that they are being observed. What is often presented, then, by the observer is described as pure 'objective' data, from 'out there'. There is no mention of data emanating from inside the observer, no 'I' position of reference.
Usually, the pronouns used are third person singular and plural. The observed have no input on which data have particular meaning to them. The epistemics (MacLean, 1975) or personal world views, bias and reactions of the observer are not taken into account as lending weight to the meaning of what is observed.

Thus, in this view of systems thinking, there is an ability on the part of the describer to note the phenomenological interconnectedness and interrelationships as if he/she, the observer/describer were not in or part of the process or system, and as if he/she had no preferred theory or idiosyncratic way of 'seeing'. This model treats the human observer as if that observer were an invisible recording computer, with data falling onto a tabula rasa, like sounds on a magnetic tape.

As the Heisenberg Principle states, the presence of the observer already changes the 'experiment' - not necessarily because people suspect themselves of being described and therefore are influenced, but because the observer/describer is not a tabula rasa, but brings his internalized context, his entire world view with him which organizes and gives meaning to the 'data'. Each 'observer' brings to his/her experiment (experience) not only that conceptualized world view (a theory-as-espoused), but also a private, epistemic, idiosyncratic world view, built out of the experiential fabric of one's life, one's theory-in-use. (See Argyris and Schon, 1974). Thus the same data can be interpreted differently even by people within the same general theory.

Though values are widely shared by scientists and though
commitment to them is both deep and constitutive of science, the application of values is sometimes considerably affected by the features of individual personality and biography that differentiate members of the group. (Kuhn, 1962, p. 185.)

The second model of human systems thinking (see Figure 2) is one in which the observer announces his/her position as capable of moving from outside the external boundary of the larger system, into the system as one of its components, and moving outside again, so as to impact on it.

1) Location of reporter: inside - outside
2) Movement of reporter: variable
3) Theoretical world view: stated
   Personal world view: not necessarily explored or stated
4) Information flow: both ways
5) Information source: observed systems - noted by observer
6) Interactional Impact: reporter on system noted by observer/interpreter
7) Control of Interpretation: reporter/observer

Figure 2 THE INSIDE/OUTSIDE OBSERVER

This model is not an unusual one in many forms of consultation and therapy, including some types of family therapy. In this view, there is recognition of and description of the actions of the reporter only insofar as he/she notes their impact on the observed human system as data, according to the held theoretical world view. A private,
idiosyncratic-learned-to-learn world view may have been utilized, but is not stated in its relationship to weighting and interpreting data of the observed system.

A third model of systems thinking is one in which the range of location of the reporter can also vary from any position and distance outside the system to any position inside, in which the source of data is both those externally observed and described as well as internally evoked from the reporter him/herself (See Figure 3).

1) Location of reporter: all positions/distance possible
2) Movement of reporter: variable
3) Theoretical world view: stated
   Personal world view: explored and stated
4) Information flow: both directions
5) Information source: reporter, observed systems, varying interfaces, their self-report
6) Interactional impact: all directions, shared
7) Control of Interpretation: consensual

Figure 3 THE OUTSIDE AND INSIDE OBSERVER

And, of course, there are different combinations of the same variables. This last model is the one maintained and taught at the
Boston Family Institute, and is the image referred to in this work when I speak of 'human systems thinking'. It is a holistic, and holographic model, allowing the widest range of exploration and options.

The same 'universe' has been here all along. We understand it differently and interact with it differently than did the cave man. Thus, both the vantage point and the personal view of each observer within a larger world view, plus the location and interpretation of data, change the description and meanings of the human systems in question.

For this author, then, the characteristics or definition of 'integration in multicentric human systems thinking' begins to emerge as those described by Figure 3:

a) An innate or learned ability to 'see' and to conceptualize aspects of behavior, (thinking, imaging, sensing, feeling, talking, acting) between human beings as being functionally autonomous and in dynamic interaction, in context and over time;

b) The ability to locate and conceptualize 'units', as interfacing with other 'units', in differing contexts and levels, never forgetting that all are present simultaneously, though constantly, slowly, and progressively co-evolving and changing;

c) The ability to conceptualize oneself as an active and reactive part of the systems one is in and describing;

d) The ability to conceptualize those actions, reactions and interactions as data;

e) The ability to recognize, depict and describe one's idiosyncratic or epistemic world view (Maclean, 1975), as well as
one's formal frameworks, or epistemology;
f) The ability to locate and conceptualize and describe oneself in a wide variety of positions, from within different parts of the context and larger systems, to distant points and meta levels; the ability to move from egocentricity to multicentricity and back, and to know which is which;
g) The ability to know that 'the map is not the territory' and to realize that it is the human mind that conceptualizes patterns. The map is in one's head and the people aren't. Maps are conceptual and ephemeral. People are concrete and real, experiencing physical and psychological joy and pain in their search for survival and meaning in worlds they never made.

The complex work and goal of training at the Boston Family Institute, since 1969 seems to have been to develop and enhance these capacities in trainees en route to their becoming sensitive, caring, differentiated and skilled assessors and facilitators of change in human systems.

Exercise: Matching Images and Definitions

At this point, I invite you to look at your brain-stormed list of thoughts and images of 'Integration in multicentric human systems thinking'. Is there any matching between what you wrote and what I wrote? What new thoughts do you have now? What new questions do you have? What new connections have you made? i.e. what new sentences, ideas have you generated for yourself? You might want to jot those down
The question can arise at this point, where does the need come from to train people to think in this way, since this way and a need for it certainly did not always exist?

The need for human systems thinking has been most keenly felt in the arena of mental health. It would be most useful at this juncture to track and map some of the major thrusts which gave birth to human systems thinking in the mental health field.
CHAPTER III
A NARRATIVE HISTORY:
HOW WE CAME TO THINK SYSTEMS IN THE MENTAL HEALTH ARENA
AND THE DEVELOPMENT OF BFI

Psychiatrist Theodore Lidz, an early explorer of language transmission in families, talked of the push given to intrapsychic psychiatry during World War II, in rehabilitating to active duty soldiers with battle fatigue and nervous breakdowns. Some were physically sound and psychologically unglued. Others had physical symptoms which could not be explained nor detected by laboratory tests. The extensive havoc that the war experience incurred, rendering many formerly functioning people psychotic, brought government support of veterans' hospitals, research in mental illness and mental health, and development of new treatment modalities for psychiatric disabilities. The National Institute of Mental Health was formed in 1949, and became the 'arm' of government which pushed and guided many of these supports. Lidz was interested in context and mental health. His early works on 'schism' and 'skew' in families were early attempts at defining how family contexts affected the development of the person identified as 'patient' (Lidz, et al., 1957).

1 Informal discussion, February 1974, at the Nathan Ackerman Memorial Conference of Family Process Board of Editors, Cumana, Venezuela.
Those who had been trained in the more intrapsychic yet evolving views of psychological man, such as psychoanalysis, came to a startling awareness in the 1950's. When schizophrenic patients in hospitals who had been treated in an individual, psychoanalytically oriented mode of therapy and who had made progress towards adaptation to reality in this therapy, then met with their families, they 'regressed' to 'pathological behavior'.

Elsewhere psychiatrist-researcher Murray Bowen had begun to observe that not only was that so with schizophrenic patients, but ordinary normal people such as himself, reverted to less autonomous, less differentiated and more 'child-like' behaviors when he was with his original family for any period of time. He had become aware that certain working situations could call forth the same type of less-differentiated behaviors on his part, accompanied by feelings of being unable to operate independently of the others. There was something within the context of those relationships and interactions of working group and original family members that seemed to be influencing individual reactions and behaviors (see Anonymous, 1972).

Bowen and others2 (later called 'family therapists' or family systems researchers) had begun their early work with people labeled schizophrenics, in an effort to help them, and became fascinated with the implications of their early hunches.

2 Virginia Satir, John Bell, Ivan Boszormenyi-Nagy, Jim Framo, Ross Speck, Carl Whitaker, Don D. Jackson, Gregory Bateson, Margaret Thaler-Singer, Paul Watzlawick, Jay Haley, Lyman Wynne, Theodore Lidz and many others.
Schizophrenics were seen as 'the growing edge' for learning, on whom clinicians needed to concentrate efforts. Most such patients did not seem to respond to the various forms of treatment evolving in the aftermath of World War II. Their behaviors invited challenge, and this new 'discovery' of 'regression' or reverting to 'sick' or 'crazy' behavior, when with family members, stimulated puzzlement and curiosity. The various individual intrapsychic approaches of psychology and psychiatry, including Freudian psychoanalysis, did not seem to offer adequate explanations for the differences in behaviors that changed as individuals changed social and physical contexts. Nor did the pure medical model of 'illness' explain this phenomenon.

Other clinician-researchers also noticed contextually shifting behaviors, such as another family member becoming 'ill' as the one labeled 'patient' improved in functioning. Clinician/researchers began to ask new questions: What were these shifts about? What were the differences and what processes were afoot that caused people to shift basic behaviors, attitudes and logic in different contexts, and with different constellations of people? How did changes in attitudes and functioning of one member influence another to change ways of being? How did the presence of family members make a difference? What was this 'system' of checks and balances in behavior?

With the exception of psychiatrist Nathan Ackerman, in New York City, who had been seeing nonhospitalized 'neurotic' families since the mid-1930's while working at Jewish Family Service (1958) the only

3 Don D. Jackson, M.D.
families that researcher-clinicians could observe in any depth or for any reasonable period of time were those of hospitalized schizophrenics.

Bowen had such families live in the hospital at NIMH, between 1954-1959 (Bowen, 1978). Satir worked with such families in Chicago, while Whitaker had begun seeing the families of schizophrenics with Thomas Malone, M.D. and John Warkenton, M.D., in Atlanta, as supportive of their direct treatment of schizophrenic patients. Many others worked with such individuals and families in other parts of the country.

Ackerman had approached the family slightly differently, through children. He had suspected years before, and had pioneered such work, that when a child had problems, the rest of the family was involved in the problem, and a family diagnosis as well as family treatment was needed. Ackerman had also studied the impact of context on families in his study of miners' families (Ackerman, 1958). Ackerman's work with families, as organic systems, was psychodynamically oriented, or in other words, was drawn from psychoanalysis.

Later researchers like Bowen became aware that different people in his own family behaved differently in combination with him alone than when more than two family members were together. Alone, each talked 'straighter'. He observed too that as more people were added, they tended to form interlocking triangular patterns of connectedness, with unequal bondings (Anonymous, 1972, 1979). Or so it seemed to him. He and his research team at NIMH began to look for these behaviors in the families of schizophrenic patients.
Bowen's work combined the medical model of sickness/health with systems thinking, in comparing schizophrenic families to normal ones - in treatment and later in training (1978). Bowen was primarily concerned with the engulfing aspects of families (their ability to be an 'undifferentiated ego mass'), issues of triangulation and individual differentiation.

Within the hospital settings, however, there were two categories of researchers: those who were clinicians first, who were practitioner-researchers, and those who were not. Bowen, Nagy, Framo, Speck, Jackson, Whitaker, Wynne, Lidz, were among these clinical researchers. In their participant-clinician/observer-researcher stance, they became aware that every mechanism and technique by which they had learned to work with individual people fell apart in the context of a schizophrenic patient and his/her family.

Lyman Wynne and others wrote of the 'rubber fence' that such families presented (1958) and spoke of the feeling of going crazy himself, of being drawn into the quicksand of the family's interior. He spoke of the need to have a co-therapist with him in the room. This was unheard of in the world of dynamic psychoanalytic psychiatry, where all was confidential, hush-hush, and private. Wynne and his team's need of co-therapists revolved around the necessity of having someone 'sane' to refer to, to talk to, for the communication patterns.

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4 1974, at aforementioned meeting of Family Process Board of Editors, Cumana, Venezuela.
of the schizophrenic patients and their families were seen as consisting of strange usages and meanings, in unusual sequences which deviated greatly from the expected 'norm'. Wynne and Margaret Thaler-Singer began then and have continued to research families of this type, constructing together and separately many hypotheses about the crazy-making quality of schizophrenic family communication (Singer and Wynne, 1965a, 1965b, 1966; Wynne and Singer, 1963a, 1963b; Singer, 1967; Wynne, 1977; and many more).

These particular early explorers, whether trained in psychology or psychiatry, were in strange territory. Psychoanalysis could not 'explain' family phenomena. Those in psychology were aware that the behaviorist theories of stimulus-response did not account for total behaviors of individuals in context, nor did operant conditioning theory explain the switches in behavior and meanings of language when contexts switched.

Neither psychiatry nor psychology had any full theory yet which dealt with multipersonal behavior, phenomena, communication and interactions. It is not surprising then that these early explorers began to look beyond their own disciplines for answers.

**Relation of Mental Health and Other Fields**

Interestingly enough, puzzles and questions without answers in one arena often are reflections of the same types of questions in other arenas. A search for more comprehensive ways of looking at the interrelatedness of economics with technology, with sciences and politics within a full ecological map had been going on since before
World War II. Indeed, in this country, the multidisciplinary thinking which mobilized, created and coordinated war efforts could no longer fully revert to linear thinking in a compartmentalized fashion.

The same thinking that went into the technology of rocket and atom bombs also brought us computer technology, as well as information recording, processing, and transmitting devices. And as the technology of communications, especially television, developed, along with transportation technology, the world became (and is still becoming) smaller and more interrelated.

The development of computer technology lent itself as a model for cybernetic communication processes, and as a model for human information processing mechanisms. And television has revolutionized our ability to see individual, multipersonal and group system patterns and interactions, including those of which we ourselves are a part. Television has helped to make multicentricity - the view from many centers - possible.

Norbert Wiener, a mathematician at M.I.T., who had worked on computer technology during the war, wrote about 'the Second Industrial Revolution'. He coined the phrase 'Cybernetics', meaning a circular and reflexive system of information flow, in which information and control are linked together (1948, 1950). (This is an important forerunner of how some systems therapists later began to look at human communication and systems interactions.)

During World War II, British anthropologist Gregory Bateson, then an American resident, was assigned to an Intelligence team in the
Paciflc5, since Bateson had studied several cultures in that area. His job with that team was to transmit messages to the Japanese which would either confuse them or give them devious information. The thinking behind these types of war-time deception maneuvers emerged after the war in published form in von Neumann's Game Theory (1947), Shannon and Weaver's Information Theory (1949) both at about the same time as Wiener's Cybernetics (1948). Most recently Watzlawick's How Real is Real (1976) delineates in anecdotal form some of the same issues.

This cerebral, logical approach to communication was investigated by Bateson after the war, when he met Wiener and began to work with psychotherapist and psychiatrist Juergen Ruesch on communication and therapy from 1948-1950 (1968). He then began to look at communication processes, humor, play and meta-messages, or contextual messages about messages.

The Palo Alto Group: Bateson and Team

Between 1954-56 when therapists like Wynne, Satir, Whitaker, Bowen and others were caught up in the direct 'feel' and confusionary process with a schizophrenic member family, through their clinical work with them, Bateson, Jay Haley, and John Weakland had begun observing the communication of schizophrenic families at the Palo Alto V.A. Hospital, California. Psychiatrist Don Jackson joined them as a consultant. Of this group, Jackson was the only clinician at that time. The others came from diverse fields: mass communication

5 Personal communication, 1979
(Haley), anthropology (Bateson), and chemical engineering and anthropology (Weakland).

This group began to look at the shift in the logic and type of communication patterns of the schizophrenic with his family in the light of cybernetics, information theory, and levels of logical type (Bateson, 1959). These researchers tracked the families' communications through levels of logical types, and the self-regulating feedback loops of cybernetic theory. Clinician/therapist Don Jackson, brought in the term 'homeostasis' (Watzlawick et al. 1967) from medicine, linking cybernetic and information theory to the emerging epistemology of General Systems Theory.

As it pertained to schizophrenics and their families, this group's non-evolving, non-developmental, and homeostatic, cybernetic model of closed systems of information flow was reflected in Towards a Theory of Schizophrenia (Bateson, 1972).

In this research, Bateson et al. formulated the theory of the 'double bind' (first published in 1956) as explanatory of the schizophrenic family's interaction and the etiology of schizophrenia. In a double bind, the patient is seen as damned if he obeys messages, damned if he doesn't, without an ally and unable to comment on, leave or escape the field of messages.

At the time this was an extremely important shift in ways of looking at family communication and at schizophrenia. Ten years later, Bateson wrote again about this double bind theory, labeling it too limited in scope to explain the full complexity of schizophrenia (1972).
Jackson's adding the word 'homeostasis' to Wiener's cybernetic model of non-living systems, rendered the concept applicable to biological subsystems, communication, and families of schizophrenics. They found that in some families when patients got better, another family member often fell apart, thus keeping the homeostasis, or balance, of process in the total group, even though the particular roles of individual persons changed.

This group became pioneers in looking at the interactions of family members, and describing this homeostatic mechanism largely in terms of communications of power and control, logical type, and paradox. All communication was regarded by the researchers as geared to maintaining each such system the way it was, repetitively patterned and unchanging.

Thus, much of the investigation of families in psychiatry and psychology, as human systems whose members were capable of creating and regulating impact on each other's behavior, began with an explanation of those families which contained at least one member considered furthest from society's norm. Much of the theory, though not all in psychiatry and psychology, of families as living systems in dynamic interaction with each other, derives from these early works with families of schizophrenics. It was as if by defining what was 'abnormal', 'normality' of a family system in interaction could be inferred. Additionally, such investigative findings in these 'extreme' families began to lead to guidelines, parameters, 'rules' for clear communication.
Group Researchers

The phenomena of related and non-related groups began to be explored and researched following World War II, which had given a push to group therapy (Ruesch, 1968). Social psychologists such as Sprott (1958), Corsini (1957), Bradford, Gibb and Berne (1964) began to look at natural primary groups and special groups with changing membership. Psychiatrist Eric Berne began to explore and write about therapy groups (1963, 1964, 1966) as did others in the field. Anthropologists Bateson and Margaret Mead and earlier, Ruth Benedict, had already done much to illuminate patterns of interrelatedness of groups in other cultures. Their influence began to be increasingly felt in psychology and psychiatry.

MacGregor and Team Family Methods

Other realizations of the concept of human systems in the mental health arena came in other ways. Clinical psychologist Robert MacGregor, working with a team in Galveston, Texas, needed to see children of 'multi-problem families' who lived in rural areas and who were involved with several different agencies (1964).

Team members began seeing all family members on the same day, then combined the information and impressions they had at team meetings. They realized that the information from all was different than information from one or two family members, as a cell is different.

6 Harold A. Goolishian, Ph.D., Alberto Serrano, M.D., Agnes Ritchie, M.S.W., Franklin Schuster, M.D., and Eugene C. McDanald, Jr., M.D.
from an organ. They also realized that piecemeal information, being colored by each team member's view, led to divergent ideas and solutions. Sharing information and views aided the team in finding convergent solutions. They soon began involving all involved agency members to the same team meetings. They realized that only when members of all involved and influencing systems participated in sharing the same information and forging a common solution, would any total solution be possible.

Later, psychiatrist Ross Speck developed similar ideas when he began to work with total family networks, including all those people a family felt to be important to them, as the milieu of and for problem solving (Speck and Attneave, 1973).

**Virginia Satir**

Of the early pioneers, social worker Virginia Satir is one of the very few who began seeing families in private practice in 1951. Her anecdotal tale relates that it was 'an accident'. A mother of a disturbed young woman Satir had been seeing, who had been improving, called her and threatened to sue Satir for alienating her daughter's affection. Satir asked her to come in with her daughter and saw the same behavior between the girl and her mother that Satir had originally experienced between the daughter and herself. She soon asked for the husband and son to join the mother and daughter, and from then on began seeing families of people with many types of problems, from learning disorders and somatic illness to

7 Virginia Satir, personal communication, 1980
schizophrenics. As she explored family life histories, she began to find that 'sickness was a result of imbalances in the family'. In 1951 she began to work with hospitalized psychiatric patients and their families.

Satir, in 1955, was asked by Kalman Yarke at the Illinois State Psychiatric Institute, to set up a training program for residents, based on her health model rather than a psychopathology model. (Psychiatrist Ivan Boszormenyi-Nagy, a well-known family therapist, was a resident in that program!)

In 1959, Don Jackson invited Satir to join him and Psychiatrist Jules Riskin to do research with families in California, at Jackson's new Mental Research Institute. Satir, within a year, got a grant to do training and became the first Director of Training at MRI, until 1966, when she left to become Director of Esalen Institute at Big Sur, California.

By 1964 Satir published the first full-length book on family therapy, entitled *Conjoint Family Therapy*, which was based upon a communications model combined with issues of self-esteem.

**The Beginnings of the Mental Research Institute**

Bateson, Haley and Weakland were brought together with Satir and Riskin for discussions of family interactions and communication by Jackson. Linguist Paul Watzlawick was invited by Jackson in 1962, and Jay Haley in 1963, to join Riskin and himself at MRI in doing research. Out of this work came a basic text in the field, Watzlawick, Beavin and Jackson's *Pragmatics of Human Communication* (1967), which analyzes 'normal' and 'pathological' communication.
Dick Auerswald and Sal Minuchin

'Information' and its role in human systems interactions and mental health became a key concept and arena of concern for psychiatrist Edgar "Dick" Auerswald. When working with juvenile delinquents of minority background at the Wiltwyck School for Boys and later with Puerto Rican individuals and families in New York City, Auerswald became increasingly aware that access to and availability of contextual information and cognitive information processing skills were necessary requisites for competence in living and self-esteem (1966).

He began looking at individuals and families in the total context in which they lived, which he termed the 'ecosystem', and discovered, for instance, that the behavior diagnosed as psychotic of many Puerto Rican immigrants was contextual, i.e., that they were isolated strangers in a strange land.

Auerswald and his team discovered that when these 'psychotic' people were 1) given information about their new surroundings, 2) were connected with other immigrants in a networking fashion, and 3) were given telephones, the psychotic behaviors disappeared. Each of these processes constituted a way by which these rural people could orient themselves and connect with other Spanish-speaking 'neighbors' in a strange and frightening city. Auerswald determined that the people weren't crazy, in and of themselves; rather, the situation they were in was disorienting or 'crazy-making' (1975).

Auerswald also differentiated a systems view from the concept of interdisciplinary approaches to people in his work with his crisis
Intervention team at Gouverneur Health Services Program in New York City. An interdisciplinary approach leaves each one still looking through varying lenses of meaning. An inclusive ecosystemic approach to individuals and families (1969) includes all information under one inclusive umbrella, emphasizing how sense can be made of all contingencies operating in their interrelationship. In other words, how do all important factors and phenomena from all levels of system fit together?

Psychiatrist Salvador Minuchin, who worked with Auerswald at Wiltwyck, had brought a variation of the team approach of MacGregor et al., to the Wiltwyck School. There he also began to observe family members through a one-way mirror. As he began to experiment and rotate different family members behind the mirror, he began to notice that different interactional patterns and sequences occurred within different family constellations. In focusing on the effect and impact of these different structural arrangements of members, Minuchin, Braulio Montalvo and others first at Wiltwyck and later with Jay Haley at the Philadelphia Guidance Center, began to explore the process of change in family members by changing their structural patterns. Minuchin in his work also 'saw' human systems interactions as relating to their context. His book, Families of the Slums (1967), elaborates many of the ideas which grew out of his work at Wiltwyck. His later book, Families and Family Therapy (1974) elaborates many of the awarenesses of family structure and context.
Family Therapy Training

Regarding the natural group called family, there are still to date very few studies which begin to explore the range of variations of normality of families in context, in all their complexity as interacting systems.

The work by Kantor and Lehr (1975) in which researchers lived with a small group of 'normal' and 'schizophrenic' families, as well as the more recent comprehensive study of normal families by Lewis et al., (1976) are among the few major research works in psychiatry expanding our awareness of the range of variation of interactions in normal families.

Thus, there have been a variety of ways in which human beings began to be conceptualized as in dynamic interaction with others and with the environment. The family, as the smallest natural human system at the group level, became the focus for much attention and description.

Once the family had been looked at as a human system, many people said "of course!" and were quite aware that no one had ever been known to grow up by him or herself without something resembling a family group, influencing him/her. The idea that one perhaps impacted upon or influenced other family members while growing up; that was a much more difficult idea to conceptualize.

Human Systems and Family Therapy Training

Virginia Satir had developed the first training program in family
dynamics in Chicago in 1955, and expanded her concepts and her training approach at MRI, 1959-66, as Director of Training. Her 1964 *Conjoint Family Therapy* contained a brief description of using certain communication 'games' in training, which she had developed while training at MRI and many California hospitals.

Murray Bowen had begun teaching his approach to family systems at Georgetown in 1956 to medical residents and Ackerman started the New York Family Institute in 1960, around clinical case conferences.

Of these three generative settings and approaches, Satir's was the only one to include play in training at that time, through the use of role played families and other games as a training technique (1964). She introduced these new ways of training in cooperation with other new approaches to training in doing therapy: observed clinical interviews, videotapes, feedback, and live supervision. In addition, her approach to training was also the only one at that time to center attention on trainees' researching their own families for a three-generational chronological and factual history, as the matrix of family influences by which the trainees were themselves shaped.

Bowen later had trainees explore their own family history and genealogy.

The 'family movement' had begun, as well as the search, research and re-search for ways of describing family interactions, for ways of influencing them, and intervening in them, and for teaching about these new concepts and practices. The various elements for an integrated General Systems approach to people in context had begun to appear.
Psychology and General Systems Theory

Ideas, those ephemeral products of human minds, like their creators, grow in context, and like dandelion seeds, seem to be carried by the winds to distant places, germinating and creating new flowering fields. Sometimes dandelion seeds are joined by those of milkweed pods, and they grow in the same soil, side by side.

And so it seemed with the Humanistic Psychology seeds, which also began germinating after World War II, as they joined those of living systems theorists.

Perhaps the heightened consciousness not only of man's symbolic capacity for discovery and creation, but also the heightened consciousness of man's horrendous capacity to destroy himself through the evil of genocide and atomic holocausts brought forth the corrective Humanistic Psychology that psychologist Abraham Maslow termed 'a revolution' (1968, III). This 'Third Force Psychology' created "new ways of perceiving and thinking, new images of man and society, new conceptions of ethics and of values, new directions in which to move." This last is important, for this humanistic psychology was not just descriptive. It was generative, suggesting choices, actions and implying consequences.

It helped to generate a way of life, not only for the person himself within his own private psyche, but also for the same person as a social being, a member of society. (Maslow, 1968, III)

This Third Force Psychology, then, referred to man as a social, interactive being, and openly sanctioned values and processes towards
an image of man Maslow had already found through his research. These ideas took root and spread throughout the country. America was also the nurturing haven for a horde of psychiatrists and psychologists, including Eric Erikson, Felix and Helena Deutsch, Kurt Goldstein, Fritz Perls, and myriad others, who had fled Europe before the war. Thus, humanistic psychology included Jungians, Gestaltists, Adlerians, existentialists, Rogerians, psychodramatists, and many, many others—all of whom held as a basic tenet the idea that man had the potential to be a humane, responsible, actualized creature, conscious of his self and others, and tending eventually towards the transcendental.

Maslow actually conceptualized his 'hierarchy of needs' (1946) towards self-actualization as a stage progression (and as such, as a biological contextual given) of individuals in interaction with other human beings and the environment, over time. Thus Maslow's theory, like Piaget's stage theory of cognitive development embodied concepts of living systems, as von Bertalanffy's theories embodied the concepts and values of humanistic psychology.

Von Bertalanffy had come from Europe to Canada in 1949, and later moved to the United States. Von Bertalanffy and Maslow both had been concerned with values in science and society, and appeared on the same program on values in 1957 (Maslow, 1959). Maslow's humanism and interest in creativity fit with von Bertalanffy's recognition of man's ability for "play, exploratory activity, creativity and self-realization, etc." (1968).

By 1953, the Society for General Systems Theory had been formed by thinkers from diverse fields, from mathematics (Anatol Rapoport) to
sociology (Walter Buckley). These thinkers had begun to cluster around von Bertalanffy's ideas. In 1954, the name was changed to the Society for General Systems Research (von Bertalanffy, 1968) and the annual meetings and yearbooks of papers attracted people in many fields.

During the early 1960's, the subject of families, family systems, family therapy or conjoint therapy, as it was first titled (Jackson, 1959; Satir, 1964) began to appear on the programs of national organizations, such as the American Orthopsychiatric Association, whose membership spanned the fields of education, nursing, social service, psychology, and psychiatry. Those disparate lone-wolf explorers in the emerging field began to find each other and excitedly share their discoveries. This excitement of exploration and discovery mushroomed - and clinicians and researchers alike searched for integrative models to deal with this new inclusive way of understanding human beings.

In 1966, spearheaded by psychiatrist William Gray of Boston, the American Psychiatric Association held two sessions on General Systems Theory in Psychiatry. The climate was ripe. By 1967, psychiatrist Frederick J. Duhl and psychologist Nicholas Rizzo aided Gray in organizing the next two APA General Systems Meetings.

When a room holding 1,500 people is so jammed that hundreds stand through an entire morning session, the subject must be one in which the audience is keenly interested. This was the situation which took place at the symposium on the use of general systems theory in psychiatry at the Detroit meeting of the American Psychiatric Association (Damude, 1967, in von Bertalanffy, 1968, p. 7).

During this same year, 1967, Duhl, with social worker-
psychologist, David Kantor, started their training program in Family Therapy at Boston State Hospital.

The following years saw repeated crowds at General Systems theory sessions at the APA, and in 1969, Gray, Duhl, and Rizzo edited a book of papers from these presentations, entitled *General Systems Theory and Psychiatry* (1969).

Meanwhile, issues and presentations burgeoned, on families and family therapy at national mental health organizations.

While today there are several hundred such programs, by 1969, there were six training institutes in Family Therapy in America. The Boston Family Institute, begun by Duhl, Kantor and occupational therapist Sandra Watanabe, and three others, was one of them.

A Bit of Local History: BFI in Formation

The founders of the Boston Family Institute coalesced around Fred Duhl and David Kantor and their innovative teaching program in Family Therapy at Boston State Hospital. Duhl and Kantor had each brought their not inconsiderable talents and experiences to join their already established friendship of three years to a set of programs at Boston State.

An Aside on Innovation and Creativity

Innovations and inventions don't happen by pure magic very often. They usually occur as the result of a confluence of factors, people and ideas in the environment at large. Usually, there have been many

8 James Framo, Ph.D.
smaller innovations and inventions along the way, and the one that emerges at the noticed nodal point is a new juxtaposition of previously available components. Creativity or genius is the new way of seeing of the inventor. We tend to call creative or genius those whose inventions of strange new thoughts, processes, or products are different enough to be integrative and new, and familiar enough to be recognizable, as existing as some already known reality, some way of thinking, or being in the world. Those are called 'mad', or 'a genius before his time' whose ways of thinking and being are so dyssynchronous in time with those of others, that others cannot comprehend them. The invention of thought that moves an entire field an inch forward are those that offer a new way of seeing, of imaging reality, that many can grasp. The components are known in another form already.

The Innovative Residency Training Program at Boston State Hospital developed by Fred Duhl, and the new Family Therapy Training Program there evolved by Fred Duhl and David Kantor came out of such a confluence of the times, the people, and the ideas in the environment at large. These programs also had elements of madness and genius, of being both before their time and in synchrony with ongoing needs and phenomena.

Fred Duhl had been brought to Boston State Hospital in 1966 as Director of Education, to head the Residency Training Program and, subsequently, the in-service educational program. Kantor, already at Boston State Hospital, was a Director of Research. The openness and innovations in the larger social context of the 1960's were reflected
In the arena of mental health by new programs, more community control of local services in new mental health centers, and the closing of state hospitals.

By 1966, in other contexts, Fred Duhl had developed innovative team approaches, creating therapeutic milieus on psychiatric wards through enlisting staff members and patients, regardless of degree, status, or condition, in contributing their skills, and talents cooperatively. At Massachusetts General Hospital, in the early 1960's, Duhl's interest in individual learning, development, and psychoanalysis, came together with Department Chief Erich Lindemann's community mental health influences, when Duhl and several others began to see families, to explore how patients' complaints fit within their contexts. As Assistant Director of the MGH Psychiatric Out-Patient Clinic, Duhl was in a position to ask residents and others to 'bring in the spouse also' of the patients they were seeing individually.

Fred Duhl's meeting with psychiatrist Bill Gray in the early 1960's provided him with his first awareness of General Systems Theory, which seemed to make room for an integration of his range of concerns and interests. He became an active explorer of General Systems Theory (Gray, Duhl, Rizzo, 1969), examining concepts in dialogue with psychiatrist Edgar "Dick" Auerswald from 1961-64, whom he met at a national meeting.

When Duhl came to Boston State Hospital, he spent one year meeting and conferring with other training staff, discussing what resident psychiatrists needed to learn to be prepared for the world of the mid-1960's and the future, and how they could go about learning

Duhl insisted that residents take courses in and be involved with all levels of system at one time: psychopharmacology, neurology, individual, group and family therapy, and community psychiatry. His goal was to train residents so that each could assess treatment or intervention by assessing which level of system might be the most effective choice for the particular issue, given the particular people, context and resources available. To make 'the best assessment' meant that residents needed to know that there was a map, that there were different options, at different system levels, and that each option affected the whole in varying ways and degrees.

Duhl's own experience by 1966 had been varied enough to know that each discipline in psychiatry seemed to demand an allegiance as if it possessed the only true way of looking at human behavior. In order for each one to hold the 'truth', each had to disqualify some other aspect or level of human behavior or system. He also knew that when people like residents, like he himself had been, want to be competent, they latch onto the first modality in which they have felt some competency as therapist, and then insist that all other ways of seeing the world and of doing work with people be fitted into the first framework of competency. Each other modality then had to be 'added on', as if in linear sequence. For instance, "first you learn individual therapy, and then add on 'group'". If all modalities are present at the onset of training, one learns that all are and can be effective ways of understanding and intervening with people.
Knowing all levels of system are interconnected, one begins to realize that one is making a choice, depending upon needs, context, resources and goals, and personal capabilities. Assessing which system level is most appropriate for intervention necessitates a knowledge of all, as well as the judgment as to which ones to focus on, and when. Awareness of one's personal capacities, competencies and limitations within a General Systems model allows for more effective decision-making, options and referrals, without a loss of personal esteem. These were some of the ways of thinking held by Duhl and a few others of the BSH staff at that time.

Several months after this model for residency training was put into operation, Duhl, with the cooperation and agreement of other staff, opened all residents' courses to other hospital personnel. This move cut across the usual medical hierarchy. The beginning attempts at a cooperative systems care model, based on task and skill rather than on status and ownership of knowledge and information, was set into motion.

In the midst of such an overall General Systems training model was to be a family therapy course, to be dreamed up by both Kantor and Duhl, neither of whom had ever taken such a course or had any direct training in family therapy. Duhl had been going to whatever family therapy workshops or presentations were available at psychiatric conventions for several years.

David Kantor, meanwhile, had been interested and involved in Moreno's psychodrama since the late 1940's, when he had studied it with Paul Covnyetz at Brooklyn College, trained by Moreno (1946). By
the mid 1960's, Kantor had finished his graduate degrees, and was involved in exploring innovative therapeutic milieus from a more sociological view. He had completed some basic research mixing the 'world cultures' of college students and schizophrenic patients at Metropolitan State Hospital (Umbarger, 1962). He was now involved with a project in which volunteer college students and former mental hospital patients lived together in a 'half-way house' called Wellmet, as the former patients made their way back into the 'real world'. He had felt that college students would offer former mental patients a much richer world view, with more peer equivalency options than mental health practitioners could, on a daily life basis.

Kantor had also begun his pilot in vivo family research in 1965, in which university student researchers lived in the homes of a small group of normal and schizophrenic families as participant observers for a month. During that time, all rooms of the house of volunteer families had tape recorders working all the time. Kantor's research aimed at investigating what ordinary family life was like, in both 'normal' and 'schizophrenic' families, in their own environment, day after day. His theory of family and findings from a subsequent grant study were later presented in Inside the Family (Kantor and Lehr, 1975).

Additionally, Kantor had been working with groups, and was very much interested in the liberalizing impact of the 1960's, and moving with that impact. Although he had never been to Esalen, Kantor was intrigued with their emphasis on action techniques which fitted with psychodrama. He felt Esalen had "abstracted from the culture the value
and use of modalities other than verbal, for communication." And in the larger context, the race for space had been giving credibility to learning through simulation.

While Kantor and Duhl collaborated at Boston State Hospital on creating a joint family systems therapy training program, Kantor was simultaneously involved in "an elaborate communications center, comprised of artists, dancers, theatre people, electronic wizards, poets, called, 'The Readeasy." His interest in psychodrama and Moreno's action approach had continued. He ran psychodrama and other groups both at Boston State and at The Readeasy. He thought a group was the "best unit for examining and demonstrating how the special use of drama, analogue and action might effect change within the group."

The Beginnings of a New Way of Training

With all this talent surging about between Duhl and Kantor, and with all their excitement about new ideas, when they actually began to teach their course on Family Process at Boston State Hospital in 1967, the method of teaching contained little new! It was time-honored, talky, didactic and deadly. They found no one was really listening! Their one and greatest innovation during that first seminar had been to open up the seminar to all hospital treatment personnel, in addition to residents' spouses.

However, as the phoenix rises from the ashes, so did their collective and individual capacity for innovation rise from the

9 Personal communication
doldrums of disappointment, to turn their training program around.

If no one was listening, perhaps the question needing an answer was: "How do you listen and hear?" as analogue to "How do you learn?" Training was never the same after that.

The "Rashomon" of Memory

Fred Duhl's anecdotal story of that exercise is his context marker, commemorating a dramatic event which turned into a whole new path for thinking about training in family therapy and systems thinking.

In the Rashomon fashion that people remember events, Duhl recalls that he and Kantor had lectured and talked their way through a course with residents, nurses, occupational therapists and others at Boston State Hospital in family systems and therapy. They realized that the group was somewhat lost, not listening nor grasping very much. In 1967, the whole field was just warming up, and there was exceedingly little written about families as systems, family therapy, and even less on training. Duhl and Kantor had no one to turn to except themselves.

They switched the focus then asking their trainees to explore with each other "How do you hear?" The group became alive, involved and interested. They switched the mode and methodology of training to one utilizing analogic exercises with active involvement and participation of trainees with and in their own learning.

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10 "Rashomon" is a Japanese film, in which the same story is depicted from several participants' point of view.
David Kantor recalls a similar metaphoric anecdote, 11 with a more dramatic flair, which is his focal organizer for making this shift. He recalls the same seminar at Boston State Hospital that he and Fred Duhl were teaching, in which he felt bored with the process, the low energy, the sense of apathy. Feeling annoyed and frustrated, he remembers standing up and purposely collapsing on the floor. Immediately trainees became agitated, upset, ran over to him thinking he was hurt or ill. According to Kantor, everyone was buzzing and animated. He got up, brushed himself off, and said he felt much better and thought that they did also. He reports they thought he was crazy. He answered, perhaps so, but that he and they were now talking about something real that had just occurred, and that he and they would never forget what had happened. He stated that he had switched the mode of expression to something active, visual, alive, and everyone had been involved and attending. As Kantor remembers it, following that he and Duhl began planning analogically, starting with "How do you hear?"

Other Team Members at Boston State Hospital

Sandra Watanabe, occupational therapist, was a participant in that first set of seminars that Kantor and Duhl taught. She had been hired to work at Boston State Hospital in 1965, on a hospital/community grant funded by NIMH. 12

As a person of wide-ranging interests and concerns, Watanabe's

11 Personal communication, 1981.
12 Personal communication, March 1981.
task was to explore the role of occupational therapy in generating new living experiences for former hospitalized, now heavily medicated 'outpatients' living at home. As part of this Home Treatment Service project, Watanabe did many home visits, and immediately realized that dealing with patients at home involved dealing with total families, in their own contexts. Her formal training had not prepared her for a family systems approach to working with patients in their homes. No one had such training at that time. As she learned and explored on the job then, she searched out others at the hospital working with families, and was directed to David Kantor, whose In vivo research had just begun.

Watanabe and Kantor began to meet and dialogue about how families lived their lives in their own environments. In addition, she participated in a case conference course with someone else in the hospital which was family focused.

Later, when Duhl came to Boston State and began the first family therapy training program with Kantor in 1967, Sandra Watanabe asked to join it. Her particular fascination with how different people learn, how they use time, space and energy, and make themselves known to others coincided with Kantor's and Duhl's interests in "How do you hear?" as analogue to "How do you learn?" Watanabe began to teach with Kantor within the hospital in the Fall of 1968.

At that time, Duhl, Kantor and Watanabe were joined by nurse Madeleine Gerrish, who had worked at Boston State with psychiatrist Norman Paul. Paul, who was also working with families, had not wanted to join forces with Kantor and Duhl at that time. Gerrish subsequently
worked with terminally ill patients and their families at the Lemuel Shattuck chronic disease hospital, in addition to working at Boston State. In the Fall of 1968 they were also joined for a short time by Cynthia Anderson, social worker, new to Boston, but already somewhat experienced in working with families in New York City.

The Educational Techniques Lab

As a core group interested in family therapy, systems and training, they began their Educational Techniques Laboratory, a long-talked-about fantasy of Duhl's and Kantor's. Kantor brought in some of the people from the 'Readeasy' - a sculptor, a dancer, and an electronic wizard - communicators in different media. Kantor himself had been recently taking sculpting lessons, working in clay. Duhl and Watanabe had been involved in theatre and the arts in other contexts also. The group of artist and theatre people joined the family therapy and systems people, in exploring drama and image, action and analogue, as they began to create innovative ways of working with groups, with teaching, with families, with understanding relationships and change processes.

While Kantor and Watanabe taught one course in the hospital, Duhl and Gerrish taught another, to hospital personnel and Northeastern University graduate students. Key themes began to be woven: Kantor's interest in family-as-theatre, Duhl's interest in family-as-system and as learning environment for its members, Watanabe's in family-as-living-space and learning environment, and Gerrish's in the family in illness and death. They began to invent ways to work with and present these themes in training, and to explore systems issues.
The Birth of an Institute

In the Fall of 1968, Duhl, Kantor, Watanabe and Gerrish began to talk of creating a training program in family therapy outside the hospital. Jay Kuten and Alan Sheldon, both psychiatrists, expressed an interest in the new project. Kuten was Duhl's Assistant Director of Education at Boston State and Sheldon, a friend of Duhl's, was involved in community psychiatry and mental health, and interested in the family/community level of system interface. This group of six started in the Spring of 1969 as 'The Boston Family Institute'.

In their opening Spring course in 1969, all six founders were involved. Duhl, Kantor and Gerrish basically taught, while Watanabe, Kuten and Sheldon joined the other trainees in this innovative, experiential approach to learning about families and family process.

A parallel course began in the Fall of 1969 with new trainees, while the Spring group was on 'hold'. Both groups were to be joined, to proceed together in the Spring of 1970, for courses in theory, and family interviewing, and a second year in a clinical program in family therapy.

Thinking About Training

The author became a trainee in the Fall of 1969, interning at Boston State Hospital, and graduating in June of 1971.

The author has been and is in a fortunate and singular position to be reconstructor, commentator, annotator, recorder, conceptualizer, integrator, and historian of BFI. While all new faculty from 1971 on were chosen from graduates of the program, following Sandra Watanabe's
move to Illinois in 1970, and Madeleine Gerrish's decision to leave BFI at the same time, the author is the only former trainee who has been consistently involved with the program from 1969 on.

When then, in 1971 both David Kantor in BFI and Jeremy Cobb, in the Boston State Hospital program, asked her to teach, she accepted both opportunities with enthusiasm. At that time, she was also invited by Fred Duhi to work with him as co-therapist in private practice, as well as a co-seminar and workshop leader. During the busy next two years, the author concurrently worked alone as well as with these three different co-leaders. The overlapping faculties of both the BFI and hospital program then met weekly for two years, evolving similar formats and processes, though adapting to the different conditions and issues that each training context brought. Both programs were co-directed by Fred Duhi and David Kantor until the Summer of 1973, when Duhi left Boston State Hospital, wanting to make family therapy videotapes, teach, and continue private practice, and the Fall of 1973, when Kantor left BFI, wanting to teach his own evolving theory of family systems.

BFI faculty has undulatingly expanded and shrunk over the years, varying with the times, and individual trainer circumstances. Since the decision was made early not to run a clinic, but to be connected with clinics, where trainees worked or had clinical placements, the faculty members have been free to conceptualize and experiment broadly for training in thinking as well as training in intervening at varying levels and types of systems. There have been many types of 'target populations' in addition to individual people and families in dis-
tress, such as school systems, hospitals, agencies and businesses.13

This integrated General Systems model has been inclusive of varying faculty backgrounds in organizational development, teaching and counseling at different levels, community development, the arts, and holistic health, interlinked with school psychology, social work, psychology, nursing, occupational therapy, and psychiatry. Thus the 'label' of field of specialization of faculty members has not been important since the boundaries around such 'fields' were felt to be arbitrary and hypothetical at best. Rather, the way each individual integrates experience in a full systems map, and how each then integrates that map into congruent actions, has been important. In that sense, both Duhl's and Kantor's original collaborative models remained as strong threads in the fabric of the organizational structure over the years.

Former trainees brought to their new role as faculty members their enthusiasm and belief in the program they had been through as well as their ideas for further improvement, integration and specificity in different arenas. Values, practices, format, content, processes and purposes have been continually sifted, sorted, re-examined, re-stated, changed, over the years.

The images drawn on in this work, then, come out of twelve years of the author's continuing excitement and interest in what contained

13 In 1971-2, the BFI way of training was researched as an agency level intervention, concerning workers' openness and competency in seeing alcoholics and their families. The positive results gave us new information about generic systems training. See Epilogue and and Research Grant Report by Herbert Hoffman and Ludmila Hoffman, 1974.
from the beginning an organic process and model for training, and which over time put its prime investment in the persons of the trainees. Former trainees, now trainers, had a feel for that fit of an idea with how it could be experienced as trainee. Their ability to approximate and to raise questions about the importance of any particular part in relation to the whole has been an invaluable part of this organicity. Thus, materials presented in this work are drawn from twelve years of dialogues, of filled notebooks from seminars, notes from faculty meetings, prepared curriculum sheets, notes to myself, as well as ten years of continued teaching in varying settings, both alone and with others.

Perhaps most important — there has been the opportunity for continued faculty integration, with twelve years of discussions at faculty meetings on all aspects of issues involved. There is no doubt that the author has been one consistent force, among others, pushing for the integration of the metamaps about human systems utilizing trainees' and trainers' own life experiences as some of the territory to be mapped.

In addition, the push for greater specificity and differentiation of approaches and techniques with varying target populations has also come from the author's push for clarity and order, and for 'reflexive coherence' (Wideman, 1970) — that the concern for individual trainees in the process of the total program be equivalent and analogic to the concern for individuals in families and other systems.

There is no doubt that many of the values held by both Duhls have been strong shapers of the program. This Integrative General Systems
model does not lose sight or connection with the individual in a system, nor does it sacrifice the larger system for any individual. It stays an open systems model, flexible, changing, evolving (Duhi, B. & Duhl, F., 1981).

The insistence that each person build his/her systems map from the inside out, in ways congruent with each one's life experiences has meant that BFI turns out no disciples who hold any one other person's way of thinking or doing things as THE way. Our basic aim has not been to turn out a rash of practitioners of a trade, but people whose way of working with, not on, other people is connected to their own life experience and sense of self in relation to other human beings.

Our aim has been to train and work with people at all human systems interfaces who can think, and act judiciously, caringly and effectively in wide varieties of human settings, with all types of human beings, including families in distress. The tools and techniques we have developed are generic ones applicable at all levels of system. A number of BFI graduates and former BFI trainers have gone on to open their own institutes, developing their own programs.

For the evolving BFI program became over time, one in which trainees could integrate their own life experiences while becoming effective therapists. They accomplished this by examining not only their roles in systems, but also by examining what each uniquely brought to those roles. We similarly have developed a methodology by which trainees can examine their epistemics, their assumptive world views of how they already think, integrating these ways of thinking with theories studied. This marriage of self-as-system with
self-in-system becomes the joining of 'functional autonomy' with 'component parts in dynamic interaction', the linking of separateness with connectedness. Self-as-system becomes analogue for all individuals-as-system, and self-in-system and system-in-context becomes analogue for all role-related activities people engage in, with the multiple meanings given to such transactional interconnectedness. This understanding of self in/as/and/system is the link to understanding 'those people out there', a Janus-faced thrust that is the central core of the entire first year of the BFI training program, and is central to thinking multicentrically, so that one can then act systemically, creatively and appropriately.

Having given some detailed attention to the people and circumstances surrounding, leading up to, and participating in the formation of the Boston Family Institute training program, it is not my intention from this point on to track every new wrinkle in the evolving program in 'accurate' historical detail, from embryo to current form.

It is my intent rather to convey the essences of the ways of thinking about training, the ways of thinking about learning, through using both sides of the brain.

Secondly, it has been and is my wish and intent to present the sense of the experience, of the impact of this type of training, of this way of thinking, on the consumers, from the author's position as erstwhile trainee, and from the later position of participant-observer-trainer.

Thirdly, it is my plan to underscore, whenever possible, from the
position of investigative and integrative reflection, "What else was happening" to which we constantly turned our attention. In so doing, we have continued to discover, to invent and to integrate our approach in training and therapy in a manner that is 'reflexively coherent' (Wideman, 1970).

There is a challenge involved in this way of training, which forces one to break old molds and old conceptions.

Such a training program provided, and still provides, a perfect arena, a microcosm, for exploring and experimenting with a wide variety of applications of human systems thinking beyond therapy - which we have done and still do.

Conceptual doors, once opened wide, seem to close behind those who have stepped through them. Like viewing 'trick' perceptual images, once perceived, one cannot not see them any more. This way of seeing, which allows for, and promotes, connection, adding AND to EITHER/OR linear thinking, seems still to have touched relatively few people in the world at large.

The world grows smaller and more interconnected daily. We feel there is a need to train humanistic generalists, who can see and use their awareness of "the patterns which connect" (Bateson, 1979) and their derivative skills, in many types of arenas far beyond the confines of family therapy as a technique and technology.

Beyond that - the 'answers' for this particular mode, style and type of training approach come down to basic beliefs, values, and intentions, and are the subject of Chapter IV.
CHAPTER IV
BELIEFS AND VALUES, ETHICS AND TRAINING

Exercise: Who Owns the Information?

If we were engaged in the kind of workshop or professional training experience that I have grown to trust and prefer, I would ask you to pause at this moment and to imagine yourself talking to someone about your personal life. Consider what kind of person you would choose. Whom would you trust? Even jot down thoughts about what would enable you to trust. How would you want him/her to 'handle' the information you impart? Who 'owns' that information?

Information and Ideas

When I was in high school in the 1940's, a self-proclaimed 'genius' student continually interrupted all eager, earnest and intense budding philosophical discussions in our groups about education and life with, "Well, answer this one: Who's supposed to decide who will teach whom and about what?"

It was and is a niggling question. I wrestled with it then, and I wrestle with it still. For whoever shapes and dispenses information, ideas and frameworks helps shape the microcosms and the macrocosm of the contexts we inhabit.

The control and ownership of information is perhaps the biggest political and economic issue in this 20th century world. Information is a powerful commodity and is the stuff of power. Nations rise and
fall based on who owns, dispenses and controls information.

The coin of the realm in therapy, teaching, training, counseling, medicine, is information. Who owns it, interprets it, dispenses it, uses it, controls it, indeed even labels what is information and what is not controls how we live our lives and perceive ourselves and others. Training (in some form of psychological thinking and skills), therapy and teaching are mind shapers, fitting data and information into existing conceptual systems, and/or creating revised or new conceptual systems.

Information and ideas are not exactly the same. Information is what is exchanged between people, between systems units or perceived by people in relation to non-human things, such as books, television, and objects, or non-human creatures. Information comprises the bits of which ideas and images are made. Information is now - it is always now and current. Information is present tense. Ideas are many informational bits strung together and are the templates which shape our understanding of information. When someone talks to a therapist, that is happening now. It is current information, data without value and meaning unless and until it is shaped by the ideas, theories, images or metaphors which both client and therapist bring to it. The power of the therapist as 'expert' to shape the information that clients bring, is enormous.

**Ideas in the Marketplace**

Ideas and the information which 'feeds' them play a definitive role in all fields - in politics, economics, in education and
training. Ideas win men's minds and influence their political and economic behavior. Conversely, political and economic 'behavior' impacts on the world of ideas and often controls their destiny.

What survives in the history of ideas whether in the field of politics or psychology does not inherently embody 'the truth', nor does newness and originality automatically capture that ephemeral prize. Rather, ideas, the product of human minds, exist in human contexts and can serve or battle within those contexts. The broader social, economic, political, spiritual contexts and processes existing at any particular time harbor and give life to, or shun and let die, many ideas. Some last long after their true usefulness, as a form of symbolic ritual. Others die too young, before they are fully formed.

Many an innovative and promising educational idea shaped into programs, died for a lack of continued funding when political views or economic priorities shifted. Anyone who worked with many of the innovative programs in the 1960's and early 1970's in this country knows the experiences of half-done experiments, halted for lack of a continued sense of priority, and therefore, funds. And the recent 1981 American Congressional budget killed whatever might have been left of many of these.

Thus, there is an open 'figure 8' feedforward/feedthrough/feedback impact loop - a kind of continuing mobius strip of ideas and events. They co-evolve and shape each other.
This impact loop, however, is not closed, linear, nor even unidirectional. Contextual forces create the nutrient in which ideas congeal and grow, in which they stabilize, mill and mold each other into new possibilities, evolving, ebbing, if for no other reason than that people who have ideas eventually die, and those who follow do not value them so highly.

Or conversely, new ideas, as well as music and painting styles, ignored during the lifetime of their creators, capture the imagination of the next generation, who work with and develop them, creating forms and derivative processes of which the originators scarcely dreamed.

Ideas thus do not exist in a vacuum. They are intimately connected to people. Although the printing press allowed for anonymity, only people think up and implement ideas.

However, the more information that is available, and the greater the difference in the variety of information available, the more there
Is challenge to ongoing ideas, and ways of believing. Old traditional ideas are shaken as new and different information begins to generate new questions which the old ideas did not answer. And new questions, once raised, create a search for answers. Countries such as China and South Africa (like families) that do not want to unsettle the status quo do not let new or 'outside' information in. Other cultures (and families in them) which have been isolated from the ongoing information and technology of the rest of the world have continued their organic way of life for centuries, unchanged. 'Underdeveloped country' means less technological information, know-how and productivity. Yet the introduction of such information changes the way of living, thinking, believing.

The idea behind this impact loop or continuing mobius strip is a key idea in the concept of open systems which are interconnected and evolving. It underlies the belief in, not progress, but coherence, fit, and change over time, with new information exchanged across system 'boundaries'.

It is a key concept then, that ways of looking at the world, as well as epistemologies for training, teaching, or therapy, are man-made, change over time with new information, rarely embody 'the Truth', and are chosen. Epistemologies are useful metaphors for grasping whole images of the universe - for 'explaining one's world', and as such, are value laden.

The Information Implosion

Perhaps, without the enormous technological expansion over the
centuries, we might never have thought this way. However, particularly since World War II, the information implosion (information bursting into our midst) brought about by multiple inventions and technologies of television, space shots, recordings and computers are as much the results of expanded information as they are expanders of the amount of information and ideas available at any moment, all part of many impact loops. Each invention in any field, and particularly microtechnological inventions, increases the amount of data generated in the field. Those data become part of interlocking information impact loops.

So intimately are we each a part of these impact loops, that today we watch in our living room and perhaps cry for a suffering child unknown to us, in Asia, while ignoring our own, beside us. Through television we can experience multiple realities simultaneously (Duhl, B., 1976a). We can walk around the moon with the astronauts and look at Earth through their eyes, while we wonder what's burning in the kitchen! We can watch a television tape of ourselves interviewing a family at the very same moment and in the same room that we are interviewing them! We have more information about ourselves and each other than ever before in history! It can and does confuse, and what's more, it boggles the mind.

With such an information implosion, and a context so large that it can include the entire universe, at least two paradoxical conditions evolve: 1) we begin to understand the interconnectedness of information, and we create new conceptual models, new metaphors, like systems within systems, or information theory and therapies to make
coherent order of our new understandings, and 2) each individual gets smaller and smaller, and less in touch with, less in charge of, experiencing his information directly, and less in charge of interpreting it within any self-secure framework of conceptualizations.

Each individual, becoming both more informed by the information available, and, less able to interpret it, then seeks out those who say they can. The greater the variety of information and the greater the areas of specialization, the greater the loss of wholeness, of unified views, and the more dependent individuals become on 'experts'. Or else, as media proliferates and dispenses more and more information on all conceivable topics, people become self styled 'experts' (Duhl, B., 1976a). 'How to' books are a booming industry.

One option, and one route taken by individuals, families, nations when the amount of information is experienced as overwhelming, is to close off, shut down, and 'refuse' to let any more penetrate. While this procedure is of survival value on one hand, it leaves those who have 'chosen' it perhaps vulnerable to a lack of other information in the contexts around them, which can and does affect their lives in other ways. In family therapy these shut-down family systems are the ones that are often labeled 'closed', in which new information or ideas cannot come in. They are, in my view, on a survival course, trying to keep the world familiar and trying to cope with change. Yet, without certain new information or frameworks, there are no new options for more successful coping and living. Patterns stay the same.
Training and Therapy as Information Transmission

In the less-than-entire-world context of training programs, therapy and teaching, one 'deals' in information, framework and idea transmission and interpretation, no matter what the name of the theory of human behavior. All try to make sense, in some way, of the information in people's lives, and to interpret it so that it is coherent, so that it 'fits' together, so that it makes 'sense'.

Some human behavior theories 'sell' the interpretation of particular 'experts'. Others offer them and leave interpretations to be picked up or rejected, at will, and still others seek to integrate the range of human phenomena under a large and suitable umbrella. All theories, however, were created by human beings, and tend to come out of the total multigenerational context, the life experiences, exposure to ideas, and the personal creativity of their creators.

For example, Freud's theories of female sexuality were quite influenced by the Victorian context in which he lived, and certainly did not derive from information from women themselves, as did Masters and Johnson's work later. Freud's and others' concepts concerning human behavior are heavily value-laden, creating categories into which human experience is then placed by the theory-holder.

When such ideas and theories are engulfed whole, the context from and in which they originated and grew is often forgotten. Yet such
values underlying the Image-of-Human are carried with all human behavior theories, long after the original context has evolved into one in which those values no longer apply.

Values which are embedded in the prevailing society and Image-of-Human at the time a particular theory is created, get carried forward in time with the theory, while the society and Image-of-Human meanwhile have changed. Those values impact on the theory carriers themselves and influence how they then interpret others. Freudian theories, as 'expert' opinion, still influence the way women and men in America perceive of themselves sexually. Indeed, Freud's larger framework of psychosexual development influences many other derivative theories. Yet the general American attitudes about sex in the 1970's-80's is hardly that of Victorian Europe.

All theories and training programs which teach them, then, evolve in context, exchanging information and ideas and have a value base. Like children co-evolving with parents, those teaching and those being taught each help shape the contexts which contain them. Trainers and trainees are each shaped by each other as well as by the prevailing forces in the larger context around them.

Sometimes the prevailing social, political, economic and

1 Although somewhat awkward, I have deliberately used this phrase, Image-of-Human, rather than Image-of-Man, since the latter tends to reinforce the concept of viewing human beings as full grown and male. In Image-of-Human, I thus hope to widen our horizon to include all ages, sizes and sexes of people as they develop, grow and change over time, in varying contexts. In that meaning, I am taking the liberty of using human to replace the generic term man, meaning all humankind and capacities of human beings.
spiritual forces in the professional or larger context exert influence towards an orthodoxy, towards 'one way' of seeing people, as in modern China. Once a framework is established, newer or diverse ideas are rejected as the contextual forces move towards pigeon-holing human beings into a particular current (or not-so-current) view of human being.

Freud's theories did not sweep all of Europe off its feet when first presented. Rather, they took root in American soil before, during and after World War II. Freud’s theories were nurtured here by those Europeans who had studied, worked and argued with Freud in Europe and who, out of the historical events of the Thirties, fled to America. Here in America, the land of Individualism, the psychoanalytic view of Individual man became THE psychological metaphor. (It is still a, if not the, predominant psychological framework in psychiatry today.)

However, in times when new Information travels freely, the larger contextual climate promotes open conflict in the marketplace of Ideas, as newer or different images and metaphors of being human push forth. The community mental health movement began to change the image of human in psychiatry, by placing responsibility for individual mental

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2 At one point, every university hospital Department of Psychiatry in Boston was headed by a psychoanalyst (see Levin, 1961). That framework, that epistemology of psychoanalysis then affected every patient who came in for any type of psychiatric issue.
health in the context of the community. Further ideas challenged the Image-of-Human during the 1960's when humanistic psychology sought to enhance the individual's power to fulfill, to 'actualize' his/her potentials in the world. Each framework represents different beliefs.

Yet each such framework is man-made. Each way of interpreting data and information becomes, when pushed to its final place, a matter of human belief, reasoning and values, and therefore a matter of human preferences, choices and aesthetics.

Even in the natural sciences is this the case:

There must be a basis, though it need be neither rational or ultimately correct, for faith in the particular candidate (paradigm) chosen. Something must make at least a few scientists feel that the new proposal is on the right track, and sometimes it is only personal and inarticulate aesthetic consideration that can do that. (Kuhn, 1962, p. 158)

Values and Training

If beliefs and values then are so prevalent in training and teaching, in psychology and the social sciences, why are they so rarely identified, acknowledged, and discussed?

3 When Erich Lindemann was a Professor at Massachusetts General Hospital, although an analyst, his prime interest was in community psychiatry. The psychiatric training program and services reflected his interests in the impact of the social context and matrix on individuals and families. Lindemann's famous work with victims of the Coconut Grove fire led to his discovery of the importance of contextual events in connection with personal, intrapsychic existential guilt, in the non-healing of burns. When people were 'heard' for their grief and guilt over loss of others in the fire, their burns healed. Lindemann thus began to connect the physical and the contextual as psychologically and experientially interrelated. These views influenced the framework for treatment of the population coming to Massachusetts General Hospital's Psychiatric Clinic at that time.
When people are in a social climate or culture in which there is consensual agreement as to beliefs and values, they are never discussed. Indeed, they are not even acknowledged as beliefs and values; rather 'that's the way life is'. As with the air we breathe, we notice only unfamiliar and strange odors. The human mind notices only differences (Bateson, 1979; Bruner, 1973). And noticing differences requires, by definition, more than one experience or situation - a comparison, at least an N-of-2.

With the information implosion, we have been exposed to myriad experiences and comparisons about values, life-styles, therapies, though less about training. Newspapers, magazine, radio, movies, and particularly television broadcasting nationwide 16-20 hours a day, have created millions of experts who unfortunately have no cohesive, connecting overview:

This televised information, however, is random in time and place, without individualized contexts that fit each viewer, and the processes for debriefing, or social sorting, leading to integration, are absent...

Today's bombardment of disparate bits of information supposedly makes 'great thinkers' of us all. But alas, many lack a perspective, especially historical and developmental, in which to fit the information. For most children born since the mid-fifties, anything that is seen is considered possible (Duhl, B., 1976a).

In the fields of social service, psychology and education, value bases about goals have often been taken for granted as being honorable and consensually agreed upon. With the information surge, coupled with the other active forces of equivalent democracy of the 1960's, many untouchable ideological 'sacred cows' were carefully inspected, questioned, and put on tethers rather than allowed to roam free as in
the past. Means used towards achieving ends in therapy came under surveillance as the humanistic psychology and humanistic education movements made their impact felt. Underlying values and beliefs were being exposed to daylight.

The specialists to whom people go had shifted markedly from the clergy and physicians to all sorts of mental health and other professionals, and paraprofessionals. Since 1949, with the creation of the National Institute of Mental Health, the field of mental health, or rather the field of mental illness, has burgeoned. We have seen the continued development of mind-state changing drugs, such as tranquilizers, and the continuing recognition of the internal world of human beings as relational and governed by a different logic and ordering than mathematical logic.

Psychiatry, coming out of medicine, traditionally took care of crazy people, attempting to 'cure' them. Psychology traditionally looked at human phenomena and strove to find relatedness between variables and factors, and focused on wider ranges of human behavior. Both began to come together in this country in the last 40 or so years. However, the values prevalent in Freudian theory were translated into social policy, for instance, in the labelling of actions as sick, neurotic and criminally insane. The idea of mental rehabilitation prevailed in the world of law and criminal justice as well as the world of health.

On an international level, the theory of individual guilt joined that of the Christian-Judaic value system in the Nuremberg trials, following World War II. For the first time in recorded history,
Individuals were held accountable after a war as guilty of crimes against mankind. Paradoxically, the victors who held and presided at the trials were of the very same nation as those who developed and dropped the first atomic and hydrogen bombs on Japan!

The incongruity of our values-in-action and values-as-espoused began to hit closer to home as our technology made this type of information immediately available to all.

Assassinations of national leaders in the 1960's and the Viet Nam war and riots of the 1960's and '70's brought challenges also of the 'ideal' standards against which people were being measured. I.Q. tests as well as psychiatric labels were accused of being used to manipulate and control people (Szasz, 1960). For labels are value-laden. The bunching of people into various types of labeled categories based on minimal testing information led (and is still leading) to questioning these types of procedures. As Kuhn says, an instrument can only measure what it sets out to measure (1962).

And the idea began to creep through that the national leaders, specialists and professional label makers were subject to the same general forces as the rest of society, and as fallible. It became harder and harder to tell the 'good guys' from the 'bad'. The whole of human beings in their human and environmental contexts began to be evaluated. Either everybody has to be considered 'neurotic' or 'sick', or, as many felt, the full range of variation (Fox, 1967) of ways in which human beings live, develop, cope, love, solve problems, connect, think, disconnect, die - had not been looked at.

Today, people are demanding more and more control of their lives.
Paradoxically, in the context of more information and greater specialization, which brings with it greater stress and fragmentation, more and more people are also turning to some sort of psychological aid, to another group of specialists, to help them gain control of their lives.

People seek relief from the 'problems' that arise from living in a world in which they are more and more removed from the source of their information, and from the results of their endeavors. They seek guidance in finding their way when there are fewer and fewer intergenerational and traditional patterned paths to follow, and where there are multiple expectations of how and who they are supposed to be.

In such a situation, more and more people are seeking from specialists and from lay people either some sort of interpretation, some coherent framework for understanding, some relief from psychological pain, some form of grounding, guidance, direction, and/or some sort of empowerment in handling their lives, or a mixture thereof in a chaotic world they never made.

The increases in self-help groups and in cults are also ways people have chosen to deal with fragmentation, psychological anomie, the lack of predictable patterns and the complexity of information.

The values underpinning training programs may seem inconsequential in the light of assassinations, wars, bombings and presidential and vice-presidential resignations. However, those previously mentioned events highlight even more pointedly the issues of values, of trust and non-trust in leadership. Trainers, therapists
and educators are a particular kind of leadership, whose 'permission' to be effective professionally is based on an assumed trustworthiness, and/or ethical behavior. The amount of information available about human life is enormous. Teachers and trainers choose, both in and out of awareness, selected types of information and frameworks to pass on.

In describing this situation in training, Michael Rossman wrote in 1975 of the 1960's:

With the sorts of training now available comes also a subtler cost, which reinforces the same effects. However new their subjects, most involve equally a retraining in the old lessons of relation between teacher and learner, therapist and client. These lessons define again the authority of expertise... and ensure that the new knowledge will continue to be created, transmitted and used in contexts of dependency (Rossman, 1979).

An indication that the public, feeling disenfranchised by the expertise of specialists, no longer accepted 'expert' opinion or behavior as unquestionable is found in the great rise in number and percentage of malpractice suits in the past decade. For real specialization has brought with it distance between the expert and the consumer, between the practitioner and the client, where the client is not fully known by the practitioner and feels 'acted upon' and 'done to' rather than 'acted and done with'. The 'rights' of individuals as patients to have some say in their own behalf continues. Legal suits brought by mental hospital patients against the institution and its psychiatrists, for dispensing drugs or treatment without patients'...

4 For the past 6-7 years, the American Psychiatric Association biweekly Newsletter has reported consistently of the increase in such suits, and the prohibitive costs of malpractice insurance.
Consent grow in number. In such cases, the patient/client does not feel known, heard or cared about by the specialists who administer to him/her.

Therapy, training, counseling programs and education in general then, are the contexts where future 'people interpreters' are offered theories, which help shape how they are to perceive, connect, interpret, and use personal information. Such programs vary in whether there is congruence between values espoused and values in action. Private epistemic world views and the values that go with them, already held by the recipients are often ignored while a new 'epistemology', a new way of seeing and interpreting, and the new technology that goes with it are taught. It is as if the new framework and technology are to be welded somehow onto the existing substructure. Yet personal epistemic theories differ widely, as do more formal theories and have a tendency to shape the particular epistemology with one's personal values, Images of life and human beings.

Certainly, the value bases and processes of Carl Rogers's client-centered (1961) approach to people, psychology and therapy are as different from Freud's psychoanalytic approach as they are from Skinner's behaviorist stimulus-response model (1953, 1963). Each theory and approach projects a different Image of human being. Each purports to be a model for helping people in psychological distress and each has advocates.

The same can be said for approaches to treatment of people using a 'systems' model, the most recent paradigm for viewing mental illness
and health. There are as different variations on types of systems as discussed in Chapter II, as there are concomitant different variations in images of human beings in each of those systems models and theories. These images, in some cases deduced from the treatment modality, constitute the ballast values and beliefs in each ship of systems theory.

Both the theory as taught, with its view of human beings, and the technology that accompanies it, are products of human beings. However, we live our private views. Those private world views of trainers and learners are individually enacted. Each advocate of a theory really takes from, presents and enacts then his/her own version of it. The only true Freudian was Freud.

Hence there is no training program, no educational program nor any form of therapy or system intervention in any context without a value base. Each person's or program's theories and practices are replete with implicit and explicit beliefs and values, core images and ideas of who one is, who others are, could and should be; core images of man/woman/boy/girl and his/her potential or lack thereof, of his/her equivalency or his/her superiority/inferiority.

Beliefs and values imply goals and solutions, often dictating rules for how these shall be achieved. Any value base, any philosophical, theoretical or ethical stance of training, teaching, or therapy, is basically a political and economic stance defining relationships. Once enacted, it structures roles, relationships, information flow and control, creating hierarchies or equivalencies, and delineating standards for roles and processes.
Training programs then, have beliefs and values which are interwoven with and welded to the subject matter itself. They frame images, color information, and shape ideas and people's lives.

With the people-helping industry as large as it is today, it is difficult for the public as well as trainees to know the differences in modalities.

All psychotherapies in this country have the eventual goal of helping people to feel better, to function better. Many therapies have the goal of helping people to become more 'whole', more integrated and more responsible for self. How each patient views him/herself and/or others represents each patient's image of man/woman. Some therapists administer drugs to all psychologically distressed patients, which in their use presupposes an image of causality and solutions. Other therapists, however, offer alternative images of human behaviors, of self, of what is possible, and the processes or contacts necessary to help clients achieve alternative images. Yet, whether the client is party to this process or not in any inclusive and valued manner, is an ethical issue basic to all forms of therapy.

At base then, every training program in psychological counseling or therapy is 'selling' some image-of-Human kit, complete with instructions on how to help oneself and/or others achieve this image. The kit hopefully also contains the tools needed in the construction

5 A recent publication, entitled Guide to Psychotherapies by Richard HerlInk, 1980, listed some 250 different named varieties of 'help' the consumer could explore and/or seek. A consumer would again be hard put to know what he/she was 'buying'.
process. Sometimes the Image-of-Human is more covert and ignored than overt, more implicit than explicit, and harder to pin down and acknowledge.

If, however, each training program is indeed 'selling' an Image-of-Human kit, including ours at BFI, descriptions and 'advertisements' are in order!

**Exercise: Image-of-Human Kit**

In your role as a giver of help, write an advertisement with a description of the 'Image-of-Human' kit that you are 'selling'.

When concentrating on or comprehending the ideas of others, our own can easily get pushed so far into the background that they are difficult to retrieve. Rather than this work be seen as that of another 'expert', to be 'bought' wholly, I would encourage you to actively engage in sorting out some of the same issues for yourself concerning your values, your Image-of-Human. We have struggled with these issues over the years and continue to struggle with them.

At this moment, let me invite you to write out your own Image-of-Human kit, playfully, as an advertisement, as a useful way to begin to tease out and make explicit one's implicit assumptions about human nature.

And so, before considering the Image-of-Human derived over these many years at BFI, I heartily suggest that you take a few moments to play with the Image-of-Human kit that you advocate or feel you 'sell' in your work.
As you then read, you may find yourself dialoguing with what is written here, sharpening and developing your own images further.

**Exercise: Experiencing Your Information**

What thoughts come to mind about the values underlying your current setting and program? About any training program or therapy you experienced? What is the Image-of-Human kit each 'sells'? Are they congruent and the same for trainers/trainees, therapists/patients?

**The Image-of-Human at the Boston Family Institute**

The Image-of-Human derived from the reflections and dialogues of dozens of people over the years at BFI is a major foundation for the kind of training developed and for what is presented in the rest of this work. This image and the processes congruent with it, have been forged out of dialoguing, doing and more dialoguing. What is offered here is essentially a formulation, in one place, and at this moment in time, of what has evolved over twelve years, and will continue to evolve. The values in action will perhaps be more fully recognizable in later chapters descriptive of actual seminar processes.

First, as they cojoin our personal world views, there are a number of beliefs and values inherent in General Systems Theory that emerge as having been important to us and highlighted over the years at the Boston Family Institute. The beliefs and values that relate to our image of human are those that speak to:

- the symbolic capacities of each human being, who brings
brings symbolic and conceptual ordering to the universe;
- the idea that the conceptual ordering humans bring also creates the concept of systems, as well as any other concepts by which we live;
- the idea that the human capacity for symbol formation and use renders humans different from animals, and from robots;
- the idea that each human being is simultaneously affected, involved and influenced by all levels of living systems; from cell to supranational systems, and by the ecosystem as well;
- the idea that people are not things or concepts;
- the idea that human beings are more than a sum of their different parts;
- the idea that man is both proactive and reactive, and can be more one than another at different times, in different contexts and conditions;
- the idea that living organisms, humans, are open systems with constant exchange of matter, energy and information, across boundaries, with the physical and living world;
- the idea that living systems at each level from cell to supra-national entities, of which individual human beings 'compose' one level, have the qualities of developmental growth, differentiation, and increasing organization, in a natural and evolutionary life cycle;
- the idea that an "organism matures gradually, or in sudden critical periods, makes jump-steps, by means of differentiation of primary and undifferentiated structure-
functions" (Grinker, 1967);
- the idea of equifinality, that there are many ways of getting to the same place, that many different forces and processes will achieve the same results;
- the idea that "organisms search out their goals in a purposeful manner to maintain and regulate life. They are also goal-changing, reaching out beyond need gratification, utility or preservation and thereby become creative and evolving" (Grinker, 1967).

There are other personal world views and beliefs that shape our Image of human that perhaps have nothing to do with General Systems Theory, but which certainly influence the way in which we train.

We believe that life is sacred, that it is a limited resource for each of us of about 75 years, and is to be treated with respect. In addition individuals are more than the sum of experience, environment and genes. There is something else that defines life, call it spirit or soul or divine spark. We respect its presence and the uniqueness with which it appears in each of us (Duhl, B., & Duhl, F., 1981).

Individuals come into this world with different types of uniqueness, including different types of 'wiring' - that is, with inborn tendencies towards particular styles of information processing. We believe these styles of information processing are shaped, molded, supported and thwarted in their dynamic interaction with human and non-human environments. These information processing styles are not the same as stages in cognitive development, yet are basic to how people interpret and make sense of the world (Duhl, B., & Duhl, F.,
We believe that people look for a match between what is imaged or expected and what exists among members of a human system. Out of that image matching arises the sense of the type of fit of members with each other. Out of the sense of the difficult fit of differences, comes conflict.

We believe that information important to younger developing individuals, as well as the availability of more differentiated, caring and/or empathic persons with whom to sort, are key issues in the growing of competent individuals whose self-esteem will be in their own hands. We believe that when there is a deprivation of information, as well as a lack of an adequately differentiated or empathic other, momentary issues of vulnerability become patterned as core images of context of self in context, and what to expect in the world (Duhl, B., 1976).

Values-in-Action in Training

We are interested then in trainees' closing their gaps of information and giving them as full access to our thinking as we can. We believe that people have the right to the information which can shape their lives, to question and be in dialogue with others about it. We believe in making the covert overt, the implicit explicit, and in openly examining that which is subsidiary to focal moves and beliefs.

We believe that each trainee needs to be grounded in, centered in, his/her own life story first, as the core of integrity and
identity which forms each person's sense of reality, and from which one's view of the world emanates. Each one needs to experience his/her own information in such a way that each can feel into it and know it for oneself, as well as to be able to extrapolate or approximate similar feelings empathically with others.

We believe each one needs to become observer to one's own experience and information in such a way that each can become bystander to it, weaving conceptualizations of a multicentric nature—a key to generic human systems thinking. Multicentricity evolves from the simultaneous acknowledgment of competing realities, which are explored in our training groups. We further believe in trainees' experiencing their paradigm shifts with as much awareness as possible.

As we have inquired into theory-building of pioneers in this field over the years, we have found that constructs about human behavior begin as individual 'solutions' to personal questions, issues and puzzles, and then get tested more scientifically.6

Yet history, anthropological and sociological studies, as well as ethnic legends and myths illuminate that human beings have uncountable combinations of ways of being with each other in different cultures and contexts, over historical time. Thus, we believe in each person first tapping into, exploring and discovering his/her own beginning constructs and theories, derived from his/her own life experience and personal world views. We have found that each person first takes from

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6 See Anonymous, 1972; See Duhl, F. Dialogues: The Person In the Therapist, Videotape series; see MacLean, Paul, 1975; and Gray, W., 1979.
another's theory of human behavior those aspects that are 'safe', that fit one's own epistemic world views. Familiar constructs require no shift in one's own premises. We feel that internal explication of one's epistemic world views and values, as well as one's vulnerabilities and defenses, makes possible more paradigm shifts that are congruent with individual values and life goals.

We believe and aid in the integration of the person, in providing frameworks for a metamap of self-in-context, systems-in-context, and intergenerational systems over time.

We believe in teaching human systems thinking from the inside out, from the person-in-context, out to the eventual task of problem solving with those in need. In most mental health training, people in and with problem situations define and become the matrix for training and thinking about all human systems. We feel from our experience at Boston State Hospital and elsewhere that the latter not only limits the range and type of systems thinking possible or probable, but competency and self-esteem needs of the trainee too early supersede curiosity and creativity. In addition, a hierarchical split is often created between Images-of-Human, and at least two images emerge: us therapists up, you patients down.

We want our trainees to risk with each other and with ourselves, to discover new answers and ways to combine curiosity and search, to mix the new and untried with the proven, yet not to accept the proven automatically. We want them to derive the formulas for themselves, and find the mode, path and style that best fits each one's talents and style, after exposure to a range of ways of being and seeing.
necessarily fully in touch with their own information processing modes, except on the grossest levels (Duhl, B. & Duhl, F., 1975). However, we believe that people do not learn, grow and change unless the information is available to them in their own mode (Bruner, 1973; Bandler & Grinder, 1976, 1977), their own 'language of impact' (Duhl, F., 1969).

5) When the modes of teaching incorporate multiple ways of learning (Duhl, B., 1978, Piaget, 1952 on; Bruner, 1973). We believe that people learn by immersion and reflection, by analogy and metaphor, by detailed analysis, by imagery, by doing, seeing, looking, hearing, feeling, writing, drawing, reading, describing, modeling, imitating, exploring, by challenge, by making the strange familiar, the familiar strange, using right and left brain functions (Ornstein, 1972; Bogen, 1968; Gazzaniga, 1968; Buzan, 1974; Samples, 1978), and probably other ways as well.

6) When there is invitation, room for and appreciation of the 'having of wonderful ideas' (Duckworth, 1972) that keeps the spark in life and the sparkle in living.

7) When the body is involved in physical activity (Duhl, Kantor, Duhl, 1973, Piaget, 1952 on) in which the integration of meanings and concepts recapitulates each stage of cognitive development, from sensorimotor through formal operational functions. Piaget's conception for children (1952) of all learning being based in sensorimotor activity, seems to extend to a great many adults (Duhl, B., 1978). It certainly seems to apply to catalyzing integration in systems thinkers with more than an intellectual understanding. In addition, the body
has memories and associations the verbal mind knows not of (Duhl, Kantor, Duhl, 1973) which we uncover in sculpture and spatialization, and other action metaphors (see Chapters IX and X).

8) When any aspect of processes, persons or content are grist for the learning mill of human systems. Thus aspects of trainees' or trainers' lives, institutions, families, cultures, as well as the thinking behind any exercise, intervention or idea is open for discussion, questioning, experimentation, challenge and change.

9) When all can be safe enough to take risks of new integrated learning and innovation, and have fun and enjoy the process (Duhl, B., 1976; Duhl, F., 1976). Humor is a needed item in every teaching-learning setting, if not in all settings. Not only is humor a great teacher in and of itself, we assume it is an absolute requirement for balance and sanity.

10) We assume that people learn best (and learn systems thinking too) when they are aware that their style of learning has an impact and helps influence the style of teaching, that the interactional fit of learning/teaching styles is key between themselves and trainers, educators and therapists. The same interactional fit is key between people in families, and between therapists and clients.

11) And finally, we believe each person learns best when information is transmitted in "the language of impact" (Duhl, F., 1969). Sometimes that language has no words.

All of the above assumptions hold for trainers, as well as trainees, and other real people.
Assumptions about Adults and Needs for Adult Learning

As we begin to conjure up the associations to and assumptions of our image-of-man-as-learner, we find there are many. We will be continuing to discuss these throughout the book. Let us look then for a moment at some of our assumptions about adults and learning, since our trainees are adults. All our teaching, in all contexts, has been from college age level and up. Our oldest trainee was 69. Thus we have gathered many impressions and assumptions about what adults bring to a context that perhaps differentiates them from children in their learning.

We Assume:

- That each trainee has been brought up within a family or social context of one form or another and therefore each adult trainee has core Images of and expertise in at last one model of family system;

- That adults bring with them core Images, their epistemics (MacLean, 1975) and assumptive world views (Parkes, 1971) which color their lenses; that these core Images, like the air one breathes, are taken for granted and guide one's thinking and active behavior until challenged and differentiated (Bruner, 1973); that each adult trainee needs the opportunity to explore the constructs, hypotheses and concepts, the epistemic theory of family and image of human that each brings with him/her into the program (Duhl, B. & Duhl, F. 1974);

- That each adult already has a theory-as-espoused (What I say) and a theory-in-use (What I do) (Argyris & Schon, 1974) which
may or may not have anything to do with each other. Certainly each adult has a theory-in-use relating to his/her personal image of family systems and has perhaps no theory-as-espoused as yet;

- That each adult's personal theories are idiosyncratic and can be drastically different from one another's, often depending upon the interaction of each person with all aspects of the culture, the family and social contexts, and one's individual learning style;

- That adult trainees bring with them, in addition to their knowledge and skills, many developed aspects of self, in their learning styles, in patterns of vulnerability and styles of defensiveness, which are connected to the phenomena of core images and actual interactions at the boundary with all people;

- That adults reflect in themselves and in their interactions, like a fragment of a holographic plate, aspects of all the systems of which each has been a part;

- That thinking, feeling, sensing, imaging and acting are all aspects of threads weaving the fabric of self; adult trainees can be aided in each noting their similarities while distinguishing the differences;

- That each adult is equivalent and different from each other trainee and trainer, that each is singularly expert in knowing most about one's own world view and how to best be oneself.

- That in this utilitarian, technological and cost-effective
culture, adults need permission, heavily reinforced, to take time to be curious about and focus on the integration of self and how one experiences, senses, thinks, images and acts, in a setting other than therapy, that is, when there is absolutely nothing wrong with oneself. (In this culture, the only excuse for concentrating on self, towards integration of one's life and one's theories, has been a therapeutic context, even for those training to be therapists.) We believe that some adults need to see this permission as a requirement. We insist that the exploration of each trainee's active and reactive self-in-context and of the impact of various contexts-on-one-self be the focus of concern - the process goal and product of trainees' endeavors, for a given period of time;

- That adults need permission to see, feel and experience in new ways, in non-routinized roles and contexts;
- That adults need to analyze how oneself-in-systems and other human beings-in-systems are analogous to each other;
- That adults like to play, once given permission and a structure;
- That adult trainees need to know they can influence others and systems, including the one in which they are trainees. Over the years, we have relied upon trainees' feedback, discoveries and evaluations of curricula as well as upon observed and personal reactions of faculty to shape curriculum content as well as processes;
- That adults, when in an atmosphere of safety from ridicule,
delight in being stretched as persons, theorists, and therapists, and welcome the challenge to increase their range, to add on, to innovate and make the Familiar Strange (Gordon & Poze, 1973) and to dare to have wonderful ideas;

- That trainers, teachers and therapists are adults who get bored with repetition, and 'tune out' just like trainees, parents and others when they say the same things over and over again. Repeated dialogues like 'recorded announcements' give no new information, scan for none, and wear us down. We assume exciting training and teaching, therapy and parenting, means arriving at novel ways to encounter similar material, with curiosity and search, humor and play;

- That adults, trainees and trainers alike learn best when stimulated to participate in a concrete experience, to reflect on their doing, to draw some generalizations and hypotheses about what happened, to plan a new event and try it, repeating the process cycle (Kolb, 1974), though not the content;

- That although 'grown-up', adults can be at different cognitive stages (Piaget, 1952, etc.) and different self-knowledge stages (Alschuler, et al., 1975) as well as demonstrating different learning styles; that because in our experience this is so, not all adults can evolve into systems thinkers at the same rate or during the same period of time;

- That no training program in human systems thinking is a total substitute for wide ranges of life experiences, although such a program can expand, catalyze, and help integrate those life
experiences and offer suggestions for the 'patterns which connect' them (Bateson, 1979). Experiencing, having 'been there' is a different kind of knowing than knowing through analogic exercises, or knowing about; analogic exercises and simulations are far better than no exposure at all.

And lastly, 'Integrational' and multicentric thinking may well be the next stage after the formal operational stage of Piaget's theory. We believe such a stage to be the result of extensive exercise in uniting right and left brain functions through metaphor, in all forms. Perhaps the further subsequent stage is holographic. As the studies of Plagetian principles and cognitive development show, cultures in which there is no support or process by which to develop to the next stage, will not develop to that stage; development does not happen without context and exercise of the function (Bart, 1977; Luria, 1976). Adults need a context, and time for that next stage to gel, in which to experience their own major paradigm shift.

Thus, we assume that integration in adults is an organic developmental process which takes time, which cannot be instant, and cannot be rushed. One can help catalyze it and shape its direction, beginning with acknowledging and providing structures for the spontaneous connection of ingredients already rooted in the person. Such connections we believe are best made through exercising the analogic functions of mind.

This concludes our "Assumptions About Adults-as-Learners" section. We wonder how they compare with yours.

The ways in which these assumptions then guide our thinking about
and planning for training will become, I hope, evident as we explore specific themes later in the book.

At this point, it seems important to explore what impact such a set of assumptions about learning holds for trainers. Let us now take a look at some of these implications.

**Premises and Implications for the Faculty of a BFI-Type of Training Program, or What Will You Have To Do?**

**Exercise:**

Imagine again an old and timeworn idea you are somewhat bored with. Imagine yourself having successfully presented it in a novel way to your group. They have 'caught' your idea, and you are very pleased with yourself and with them. Imagine now, you wish to teach them to be able to do the same thing with another group. How will you go about it? Can you think up a novel way to teach them to be novel?

If we think about this exercise for a moment, we begin to realize that the price of such pleasure in teaching implies a fair expenditure of energy and effort, creating, implementing and monitoring the teaching/learning process on the part of the faculty. Like a 'good' relationship, you have to want to be in it. Otherwise, it can seem burdensome.

That is, perhaps, the first premise or implication of following
our goals and assumptions for a training program. As we follow the framework of our paradigm, we become aware that if we want our goals to be achieved, and if we acknowledge our values and our assumptions, we have to want to be there, working at the interactive process of shaping procedures to meet goals.

What else must we do to make our goals happen? What will it take to catalyze processes in and between people? And, how can we evaluate the process?

It is difficult at this time to recapture the innocence and the electric excitement of enthusiastic, surefooted naivete that pervaded this program at the beginning! As we become knowing and educated by the findings of our and others' virginal endeavors, we struggle to keep alive a certain quality of enthusiastic curiosity. "I wonder if..." and "What if?" free us by keeping our conceptual map an open one, constantly expecting new information and ideas to emerge, to be incorporated and integrated into the whole. One of the ways in which this has flourished has come out of our weekly faculty meetings.

As I mentioned previously, by 1969, there was not a large body of knowledge compiled either on defined methods of working with and/or treating families. There was a beginning body of theory of various types of family system functioning, concentrating on schizophrenic families. Bateson, Jackson and Haley (See references, Chapter III) had published quite a bit. Ackerman, Satir, Whitaker and Bowen had also published.

There was no body of literature on normal family functioning. Watzlawick, et al., at the Mental Research Institute, had constructed
a framework for normal and irregular communication patterns in their
elegant Pragmatics of Human Communication (1967).

And, at that date, there was absolutely no body of literature or
total framework for training for some still amorphously-defined field
called family therapy.

Virginia Satir's Conjoint Family Therapy (1964) was the only
book-length work to be devoted to theory (also coming out of her work
at MRI) and therapy, with a very small section on training. And no one
at all had written (or has, to this date) any curriculum or process
for training in multicentric systems thinking inclusive of self as a
level of human system.

The founders of BFI then began to trust their inspirations,
combined with that by-now basic idea of 'how adults hear and learn'.
They began to watch and listen carefully, with combined curiosity,
intensity and humor, and to reward themselves with the delight of
sharing their new learnings about teaching at their faculty meetings.

Excitement at the beginning of a program is one thing. However,
if training is to continue in an exciting way, with a growing edge for
trainers, faculty members will need to meet regularly to discuss
teaching goals, processes and outcomes. Over the years we had meetings
devoted to new ideas and experiments, meetings devoted to
administrative scheduling, meetings discussing trainees. After a
while, we realized that when and if our meetings were fully devoted to
administrative detail and/or trainees, we ourselves began to be
irritable and less enthusiastic. At that time, we then realized that
faculty needs to have some input for themselves, some growing edge
discussions, on a regular and close basis. The faculty needed some sort of process analogous to the one they had set up for the trainees. As trainers, we found we needed to create an environment that is boundaried, open to experimentation, and safe from put-down and ridicule, so that the trainers themselves can take risks for a new kind of learning, without the need for justification or defending loyalties to old learning.

This is not an easy process for trainers, who even more than trainees feel they are 'supposed to know' when maybe they, too, are not always quite fully sure. Especially in the field of psychology and psychiatry is this prevalent. In this newest arena of science, skill and art, professionals seem to feel the need to insist that their own map is complete.

All the usual group and system issues can and do take place among faculty members unless there is a conscious and cooperative process to change the faculty environment; into one open for new learnings about self as trainers and training processes. This is easier said than done, and requires constant attention and monitoring, as well as specific processes respectful of all input.

For while BFI trainees had developed new ideas for new ways of exploring concepts, it was not until 1974, with the author's invention of the 'Vulnerability Contract' (Duhl, B., 1976) in a theory lab seminar, that we had a tool for the emotional 'safety' of risking new ideas and behaviors among ourselves.

As trainers, our best times have come when in planning new curriculum, it becomes a dyadic (if co-leaders) or group process (if
several 'section' leaders are planning together) and we are openly able to challenge, explore, formulate new constructs or integrations in our planning. This is priority time.

The paradigm 'forces' us to be clear, by the time we are finished. However, during the process of planning, new, rather than tried and true methods of imparting ideas, are sought. New and expanded integrations are striven for. Brainstorming of new 'what if...' exercises takes place, and as faculty, we 'try on' any appealing exercise or idea briefly before using or incorporating it. In this process, we must refine our thinking. We are free to question whether values are being respected with any design. We can examine which processes of mind are being called into play, whether the exercise under discussion is also analogic to issues in therapy, and so on. Such discussions constantly keep faculty creative and aware.

We have found that when we have not made time for our own dialogic sharing in this manner, the way in which training takes place suffers.

This process over time has increased the reflexively coherent sense of integration of concepts, processes and practices in faculty members, enabling them to further aid trainees in the weaving processes of connection-making and innovation. More importantly, this process energizes and rewards the faculty, keeping them involved with attention to their current thinking.

**Implications for Trainers Concerning Trainees**

Trainers will need to pay attention to what is already known by trainees about themselves, about families, about all levels of human
systems and the ecosystem, about people in particular, and in general
in all types of contexts, as well as about their epistemic 'assumptive
world views' (Parkes, 1971) and formal epistemologies.

In such a program trainers will need to invite discovery and new
connections among themselves and trainees. They will need to design
procedures in which they and all others can experience making the
Familiar Strange and the Strange Familiar (Gordon et al., 1973,
Gordon, 1977), and linking the resultant findings together in
metaframeworks. Trainers will need to invite each trainee's 'set
molecules' to rearrange themselves in new, evolving patterns.

In designing, trainers will need to create a great variety of
learning situations to explore what is already operating, to present
new content and promote new processes. They will need to invent new
designs to explore all the arenas of interest listed in their goals,
taking into consideration their values and assumptions.

Trainers will need then to design both real and analogic
experiences and simulations, to provide the widest arena of exposure,
experience, rehearsal, feedback, and evaluation, all of which lead to
organismic integration.

The seminars themselves will then also be seen as analogic in
that the training process is to the trainees as the intervention
process is to families and other human systems. Trainers are to the
trainees as interveners are to families; processes in training are
analogues for processes in therapy. The way one thinks is the way one
thinks.

Trainers will have to then design direct and analogic situations
In which many levels of human systems can be explored (direct) or evoked (analogic) (see Chapters VI-X).

If trainers can indeed create such analogic exercises, they will find that such exercises 'carry' within them the metaphors touching all 'levels' of living systems: cell organ, individual, family (group), institution, community, national, international. One as trainer will never be exactly sure how many levels are being touched by what, whom and when, and so again, we will have to ask for and gather that information each time.

As the systems represented in the seminar itself are explored, through each trainee as a 'bit' of a holographic plate, each person can be both valued for his/her uniqueness, and connected to others by the similarities that each one. shares. Thus trainers will be able to highlight the unity in diversity, the part/whole constructs, and the generalizations which can be made from 'concrete' data.

In the best of all systems worlds a key implication of this form of training is a dynamic systems one, which emerged at BFI rather early: If the trainers were indeed interested in message reception and interpretation, in how people hear and learn, they then needed to include both self-report and feedback from trainees, as well as their behavioral observations as trainers on the 'results' of their 'hypotheses', tested by whatever teaching plan they had constructed and tried.

Thus the trainers' curiosity about message reception, internally as well as behaviorally, in combination with the trainees' evaluations and self reports, created a cooperative and continually shaping
feedforward/feedback/feedforward loop. This implication was not conceptualized and highlighted first as a theoretical systems concept to follow. Rather, it was a systems-concept, consciously being enacted as a practical matter, and conceptualized later.

The early goals and assumptions began to lead to implications for a model which would allow input from trainees as well as trainers. Such a model as began to take shape was a collaborative model of equivalency, where power began to be shared by teachers and learners.

As a trainer using this model in a new program, one will need to solicit and receive feedback from trainees in such a way as to demonstrate that one has been influenced. As trainers do so, the training group's sense of competency and confidence is affirmed. Not only will the model with them be analogous to therapy, but the affirmation (validation) of trainees' imagination and risk-taking will reinforce their becoming more authentic and imaginative as human systems thinkers and change agents.

As the BFI model emerged, the fuller implications for a training program not only in family therapy but for integration in multicentric human systems thinking, became much more clearly delineated.

We became aware of the ultimate implication of our training program: when each trainee derives theoretical formulas anew, as generalizations from experiences and observations of him/herself and others, each trainee experiences his/her own paradigm shift and in that process each trainee re-invents human systems thinking. The entire map is available from the inside out, and one is free to choose which route to take when, depending upon the assessment of context,
components, boundaries and situations. One can enter and work at any level of human system and know that all are interconnected.

The trainee who then owns the process of invention within the wide map of human systems thinking, is never at a loss in any human system for a way to think how it works at any level of system, find out more, arrive at goals to influence it in ways congruent with and in conjunction with the participants in that grouping. One then designs interventions, implements and assesses them, with the empathic competency that remains in touch with the human experience of each person involved.

Trainees thus learn the basic processes needed in any human systems intervention whether it be one in organizational development, school systems, or any type of therapy.

Thus, another key implication of this type of training is that in creating various kinds of setting, context and exercises drawing on different levels of human systems, each trainee learns to learn the process of following hunches, thinking about and designing goal-oriented inventions.

**A Hole in the Hologram**

In elaborating the full paradigm by which we train, one could discuss or set up a series of exercises, at this point. Indeed, we have been sprinkling some throughout the book thus far, to enlist the reader's imagination and participation.

To list 'exercises' either by some name, or even a cookbook full of recipes at this point, would be completely inappropriate. Rather,
the remainder of the book will investigate designing metaphorical, analogic and other exercises, how we think and go about designing and planning.

Debriefing and Conceptualizing

In summarizing here the framework outlined in our paradigm, the subject of 'debriefing' needs some general comments.

On one level, papers written or given about the program (Duhl, Kantor, Duhl, 1973; Duhl, B. & Duhl, F., 1974, 1975; Duhl, B., 1978; Duhl, F. & Duhl, B., 1979) become the conceptualizations that emerge from our plans and debriefings. For us, debriefing and conceptualizing of any event are guided by questions which can lead to the integration in human systems thinking:

1) What did you find out - or what did you learn?
2) About yourself and others? At what level of systems about interactions of self and others?
3) What does that new information do? How and with what does it connect? What generalizations can you make about self and others? About interactions of self and others? About the whole system?
4) What is new that was not expected?

Much of the debriefing and conceptualizing from our twelve years of training is being evidenced in what has already appeared in this book and what remains to be read. Debriefing and reintegrating is an ongoing and never-ending process.
Exercise: Debriefing and Conceptualizing Your Experience:

Perhaps it might be interesting now for you to get in touch with what you have been experiencing while reading this book thus far. What have you thought about? What have you felt? How have you acted? Have you tried the Exercises? If not, why not? If so, why?

a) What got stirred up in you and what did you find out just now in answering the above questions? About your own experience? About yourself and about any other people? (In which level of systems?) About interactions between yourself and this book and/or any other people involved?

b) What does any of this new information connect to? That is, does it remind you of any other reading, learning situations you have been in? Or any other contexts or situations? How does it tie in? What themes are there in your life which connect this experience to any other?

c) What generalizations can you make about yourself? Or others? About interactions of yourself with learning materials, other situations or people? What patterns do you see? Make a generalization about them.

Basically, that is a basic debriefing framework, and, as you perhaps can surmise, can be used at any level, and for any type of endeavor, with lesser or greater scope and detail.

We are also aware that time is an important component: how and when one answers questions like those above will depend upon each one's learning style. Some people need to put new information and
ides on the back burner, to simmer, while others make new conceptual sandwiches, immediately.

**Evaluation**

When we evaluate a training or therapy session, or any procedure, a different set of questions is required. Basically, it is here that we look for 'reflexive coherence' (Wideman, 1970) on a variety of levels relating to the design itself and the carrying out of the design and feedback about the design.

The long range, overview questions are basically the same ones we ask after each seminar. In a general and more informal way, the questions were asked irregularly from the inception of the BFI program on. However, once we included Evaluation in our paradigm thinking, this key to reflexive coherence became more regularly used. The questions are important for both trainers and trainees:

1) Did the exercises we designed evoke or allow for exploration of the desired content? Utilize the imaged processes? To what extent were the exercises successful compared against the backdrop of our image when we designed them?

2) Should anything be changed? What? To improve what? To reach what goal? (Outcome, process, content?)

3) What new information or ideas or connections emerged that we did not expect or imagine? What have we (trainers) learned from that about our thinking and training? What new constructs does that new information lead to?

Realistically, these evaluation questions are not asked in all
that detail consciously each week. Periodically, they are asked at the end of seminar sessions and at specific feedback, evaluation and planning sessions on the program which involve trainee participation. However, the faculty discusses these evaluation issues constantly, at some level.

Faculty trainers discovered early in the game that if they repeated curriculum exactly they got bored. So we began to devise new ways of evoking or exploring the same content or processes. Still, we found that certain processes and exercises seemed to 'work' beautifully to achieve desired results with one group, but not as well with another. Our evaluation sessions allowed us to compare, then, different groups and to arrive at the perhaps slightly different versions that would allow for the wished for 'messages' - processes and content - to be explored with specific groups. We could ascertain the "difference that made a difference" (Bateson, 1979).

The key questions in evaluation seem common to many arenas of experience. However, it is important to underscore that the questions we ask are inherently self-reflexive. The answers often lead us to new information. For instance, when we ask, "Did we achieve the results we expected?" a negative answer does not presume 'fault' or 'blame' for a failure. A negative result wherein we evaluate that "no, this plan did not achieve our imaged outcome," invites our curiosity about design, about sequence, about where trainees are at, about the 'fit' of plan with people, and the processes involved.

With such a paradigm and such an approach to human systems issues, there is no 'right' or 'wrong', there is only new information.
Subsidiary information or processes then become examined and focal (Polanyi, 1958). The new information derived corrects assumptions that were way off target, and realigns the 'fit' of plans with people.

It is precisely through the process of investigating what happened that we did not expect that our new learnings and integrations have occurred. We do not have to cut down or cut out any territory. We simply enlarge the map to include the new findings. We promote the application of the same principle to therapy, and other settings where learning or change is expected.

Assignments

This is no new category for anyone! In our program, it can relate to a wide range of tasks: from reading articles and books to writing papers, to interviewing a three-year-old, to tracking inter-generational themes in one's family, to drawing a flow diagram of one's learning style, to interviewing members of one's own family, nuclear, enucleated, extended or overextended. Any task creates new living experiences and that basic way of knowing. The report of the project or assignment describes knowing about, and helps to integrate in another way.

Footnotes

This whole book could be called a 'feetnote-on-a-12-year project'. Like the house-that-Jack-built, in footnotes are the theory-spinnings that faculty share with trainees, that come out of the seminars themselves, and the metamap connections that have been
made from the ideas evoked from exercises, faculty meetings, papers, readings, and our own thoughts. All footnotes are meant to be sharings, dialogic in nature, and not dogma.

More recently we have instituted trainees' writing short 'feetnote' summaries of each seminar, which are distributed the following week to all, along with each seminar's planned curriculum 'sheet' in which the entire paradigm is spelled out.

**Summary**

This paradigm then has been found to be remarkably useful as a metaparadigm for any reflexively coherent and/or goal-directed activity or program, including therapy.

In terms of planning at any level, one can start at any 'step' in the paradigm, and work forwards and backwards from there. Let us suppose one starts with an idea for an Exercise. We can then ask what goals would be achieved, what material would be evoked by this Exercise? Does the Exercise have anything to do with where we think the trainees are at? And so on. If one should start with this last question, relating to Faculty Assumptions or the assessment of where the trainees are at, we can then ask: given how we see them, what do we think will reach them in a connecting way, in order to get an Idea across? When such a model is followed for each seminar, the synchrony between people, content and processes is more readily maintained. Trainees are and feel included in the designs. They know that how they learn will shape how we teach.

By this time, it would be possible to do a microanalysis of the
development since 1973 of curriculum planning, of the development of our expanded goals, assumptions, propositions, implications and exercises developed, as well as the evolving theories on training and therapy, from all the seminar teaching plans.

Each week, the paradigm guides the planning for each seminar. As mentioned previously, a sheet, following the paradigm form is written out ahead of time and given to students at the end of each session. Thus, each group of trainees has a written record of plans, of 'where they have been', and can reflect later on an evening's design - or a whole semester's plan.

Thus, paradigms such as this one are operational models for how to think about wide varieties of situations, settings and issues. Once values are clarified, this framework is available to serve as the structure in which and by which spontaneity can take place. In addition, the paradigm serves as a yardstick against which all the events within the program can be judged, readjusted and measured for their:

1) Predictability
2) Congruency
3) Reflexive coherence
4) Impact and effectiveness
5) Generation of new sentences

As such, this particular conceptual system, this paradigm, fits with an open systems model of human systems. Built in is the analogue that each set of processes creates an impact loop, helping to shape the next event. With the conscious evaluation process contained within
it, all involved in the program can, and indeed do, influence the evolving shape.
CHAPTER VI
AN ANALOGIC TALE

Exercise:
You have carte blanche to design a program to explore human systems that includes all aspects of a family's life, as well as all aspects of the lives of each individual in the family. How will you go about designing such a program? What will you include? Exclude? Which factors and arenas do you see as important? Unimportant? How will you go about thinking about this?
Indeed, if BFI were beginning such a program from scratch today, with no previous history, I am not sure how I would or could answer these questions. They boggle the mind.
What would one include? What does one think of when one thinks of 'all aspects of a family's life'? What about the persons 'inhabiting' family? What can we say about them?
Several images flash on my mind, drawn from the pictorial archives of families: photographs. The first is of a young woman, captured in a snapshot laughing and playing with three children. Another image is of several old brownish very formal portraits, in oval wooden frames, hung on a wall. The people stare out, looking quite distant in dress and expression. Still another image is of a wedding photo, on a piano, surrounded by individually framed photos of each child, each chosen at an arbitrary moment in the child's life, and destined to become the remembered photo by others in the family.
What would we say about the people behind those photographs, who lived real lives, day in and day out, year after year?

**Exercise: A Fantasy**

Or suppose we had the task of conveying our knowledge and assumptions about human systems to beings who had no experience with systems or humans? Imagine if you will, that we have taken these photographs with us on a space voyage, and we have landed on the planet **Clonem**, where friendly English-speaking extra-terrestrial beings live. Each being in front of us is identical to each other one. We are curious, and so we ask about that.

The Clonems tell us that on their planet, every new member is an adult replica of the peer who produced it. Each member produces four other replica members at exact intervals during a Clonem's 'being-time'. All beings exist for the same amount of 'being there' and each instantaneously dematerializes when the 'being there' is all used up. All new members perform like those who produced them immediately on 'formation', and members cannot distinguish the one who produced them from the ones they then produced. Each Clonem is the same in all ways. Speaking to one is the same as speaking to another. That is the way it is, always has been, and always will be.

They are very aware that we are **not** exact replicas of each other, and they ask us 'how it is' where we came
from. What would we tell them?

How can we explain how human beings 'work'? How can we get them to understand about the issues of history, of developmental time, and bonding, the issues of 'form' and 'fit' when Clonems reproduce by binary fission and have no past or future, and no group forms? How could we tell them that in our world everyone has a history, that families beget families; that the beginners of a new family always come from two other and different families? And how can we explain that no two human beings or families are exactly alike, as no two countries or eras are alike, though certain forms and processes may be alike?

"But what are these things called families?" they ask.

What would you say to them? How would you make yourself understood?

Our Story

What indeed would we say?

Well, as I imagine it, we answer first, that families are not exactly things, but are groups of living beings who are all different ages and connected to one another by mysterious and special 'bonds'. These bonds seem to call forth special and singular meanings and behaviors among those members who belong to a 'family' and those who do not.

Can we see those bonds? No, these bonds between members are
invisible and intangible, yet are felt or experienced by all members, who usually know by a certain age who belongs and who does not.

Age? Yes, different amount of years lived. No, the members are not replicated adults. They each have to be born. Born? No, not 'materialized' like here.... Born means that the new member has finished developing inside the mother, and has come outside to continue developing, and forming, until each dies. How does one get to 'develop'? Each new member is formed by seeds from two different members, a man and a woman. No, not every man and woman put seed together to make new members, called babies. Can they? Yes, they probably could, but they don't. Why? Because there are certain customs and rules about that. Why? Because, unlike here on Clonem where you are all the same, people on Earth live in groups, within larger groups, and making rules keeps them clear who goes with whom and who belongs where. Why does that matter? Because it does. Why? Well, human beings assign meaning to and try to make order of everything they experience or perceive. Thus, they experience, assign meaning, and make order of the bonds of connectedness and caring which they have with other human beings, which 'make' some bondings more important or more meaningful than others.

Are there rules for caring and connectedness? Well, there are 'rules of order' for belonging, and there are customs and rules about how people are supposed to care and make connections with each other as family members, in each grouping. And there are personal preferences, personal aesthetics.

The Clonems ask: are all the rules the same for each group? We
wonder: how can we talk and explain ourselves to beings who cannot conceptualize difference? However, we continue. No, different groups have different rules. Why is that? Well because a long time ago people in groups that got started in different places developed different ways of being with each other and then made rules to continue the ways they had developed. A few groups still exist, with the very definite and clear rules of order and rules of access that their ancestors evolved long ago. However, in many places on earth, lots of these different groups of people have gotten combined, and intertwined with each other and so have their rules, and ways of doing things and being together.

'rules of order' and 'rules of access'? Yes, those are the ways that each group derived to deal with that sense of belongingness, to provide for how the group as a whole was to be organized and survive physically. For unlike here on Clonem, where 'life' or 'being there' is supported by the atmosphere, on earth human beings have to find food and to provide for the physical survival of their group, for the ongoingness of it. The 'rules of access', which relate to who can get to know whom, and who can be with whom, how, when, and under what conditions, used to be part of those 'rules of order' within each group. In a very few groups that haven't mixed with other groups, more unified rules of order and rules of access still exist.

What happened to the groups that got mixed up together? Well, they developed individual, personal and particular rules of access to add to the more general ones in the larger group we call the 'society'. The unified rules of order and access used to allow people
more of the sense of similarity, of sameness, closer to what you have here on Clonem. But here on Clonem, you don’t seem to have any sense of meaningful belonging, or bonding, which all human beings can have. You are all the same to each other.

How does one get to belong and be bonded meaningfully? Well, new members are usually born into belonging, into a family, or clan, with the capacity to bond. Then the new ones, the babies, and the older and more capable people who take care of them, become bonded to one another through their involvement with each other. Why this bonding happens is a wonderful mystery of human life. Some adult members have a sense of bonding without caretaking simply because the new member is from their seed, or the seed of other family members. The new members are helpless when born, and must be taken care of until they are each mature enough to be able to take care of themselves.

Mature? Oh good grief! Never mind. This is endless. We’ll have to think of some other ways to get these Ideas and Images across to our Clonem hosts. How can we tease apart what is so woven together as the fabric of our reality?

Indeed! What can we tell them? And how? How can we explain to them what families are about? How do we say they are made up of individuals who belong but then go on to belong to other units but never stop belonging to the first group? How do we explain that while each belongs, at different points in life, within other groups of members and assumes multiple roles, that each member is also a separate, unique and special entity, encased in one continuous skin? How do we explain the affinity and the bonding of belongers, and the
exclusion of non-belongers? How do we explain the separate/connected aspects of all human beings?

How do we look at and explain what we all take for granted as a given, which has been in front of us, no, which we live in the midst of, in some form or other, each day of our lives?

How shall we say what families and human beings are about, when THEY are US!

The Clonems become a little loud and active. They would still like to know what a 'family' is and what an individual is and how life is lived on earth.

Maybe the Clonems will understand through specific stories, rather than all general this 'talking about'. We take out the photos we've brought with us and we ask the people trapped within the paper to tell their stories to our strange new far-planet hosts, for on this planet, photos can speak. We ask that each 'tell it like it was' in their lives as a family, before, during and after the chemicals froze their likenesses on paper at particular moments in each one's life's flow.

What story will each tell us of their lives? How will each tell it? What will they emphasize?

We are curious. Which events will be selected by each to grace with focus and meaning? Which moments drawn from the infinitessimal number possible for people in a family, will appear highlighted and illuminated with those particular emphases that make each person's story his/her own and unique? Which inner snapshots and movies, registered on the film of each one's mind, will punctuate and
Illuminate each one's presentation of the flow of life as lived?

For each one's story contains the 'I-Eye' of the individual. One's story is the thread in one's life, containing and locating one's sense of bonding and belonging, of continuity, fit and coherence. For that sense of bonding, belonging, continuity and fit resides only in the inner world of each story creator-story teller.

Let us ask those with stern and formal countenances encased in the oval frames to speak first.

The story starts with the oldest photoperson, a man who tells us that he was born in a place called Russia, just before the beginning of this new century, in a family of many children. There was a leader there called a Czar who did not like the group his family belonged to, called Jews.

His father died when he was six, and his mother became busy running the dried fish business that supported the family. His uncle helped his mother. He tells the story that he left and came to a place called America by himself at age 12, because he knew, as a Jewish boy, he would not be allowed entrance into the 'gymnasium' in Kiev. He had heard that America was a 'land of opportunity', and he wanted to become a doctor. So he came to where some cousins had previously come, to America.

And then we hear from another portrait, a woman. Her family was originally from Austria, also Jewish. Her parents had come to America with their six children when she was very young - just three years old. The man and the woman speak of how they met at a skating rink, and 'fell in love' - a type of strong invisible connection and bonding
of each to the other. They tell of their courtship and their story together, and we have a beginning sense of 'how it was for them'. We learn how the father became a salesman and not a doctor, and how the mother had worked before she married, after her father died when she was 14, and how her mother lived with them after they married.

And as we ask them to elaborate their story for the Clonems, we ask what each did, and about the births of their children, and how they each fared in life. We learn that one child was stillborn. The parents tell how that left a hole in their family that never closed over. We hear how they 'got on with it', and how they as a family managed to struggle, doing whatever they could, to survive the Great Depression so that they could send their children to the colleges they had never gone to. They were very proud of what they had been able to do and thought they had a fine family.

Each photochild then talks, describing the family differently, each from his/her own time and context of entry. At this point one could almost believe each talked of a different family!

Our Clonem hosts are interested in the stories, and ask to hear some more. They say they are not sure they grasp the idea and meanings yet. And so we ask the next 'photofamily' to tell their story, and we find that their stories of 'the way it was' to be quite different than that of the first family.

The parents in this photo were each born right before World War II, in America. Neither had ever known struggles for food or money. The man who is now the father had moved around quite a bit as a young child, living in many places while his father was in the Army. He had
never stayed in any one place long enough, until he was 11, to make any friends, and by that time, he didn't know how to. He learned to be on his own a lot.

The family of the woman who was photographed as the bride in the wedding picture had lived in the same town in upper New York state for three generations. Her father had a bad leg and had not been in the Service. She was a rooted, church going and socially capable person who had at first felt attracted by the man's shyness, and the excitement of his knowing about so many different places. They married when he was in engineering college.

Then they moved a lot as he pursued his engineering career. This father earned a good living, yet he and his wife battled regularly about their type of invisible bonding and who made the rules. The wife-mother did not like the moves and her husband's travel. It took her from her sense of bonding to and belonging with her earlier family, friends, and relatives in her community. He said he had to travel and to move, because of his job and she was supposed to go with him, to be 'behind' him. One child hated her father traveling so much because her mother made her stick around when he was gone. Another teenage child enjoyed her father's absences, saying he was very strict, and when he was not there, she had more leeway to be with her friends, to whom she felt more bonded than to her parents.

The Clonems get very confused at this point. They say they are having trouble understanding about rules, 'bonding' and 'belonging', developing. They cannot grasp what all these 'things' mean. Is there some way the photopeople can tell them more about that?
The photofamily members start to talk together about what actually happened among and between them, and what it felt like to be a part of each family, and what they thought bonding and belonging and rules meant.

While they all agree on certain 'facts,' or events, there is hardly any unanimity on the meaning of any events. One talks of belonging, meaning that inside a family one can do anything and still be loved. Another says that's not so - not in her family. A third says he never felt especially loved, yet he feels connected to other family members, that family is family, and that family means obligations!

This then provokes arguments, and we begin to hear tangled voices: "That's not what happened", "You never asked how I felt", "You were always a bad child!" "Funny what kids will think", "I always loved you even if you didn't feel it!" and "Yes, I remember that! You were wonderful to me" and other mixed impressions. Soon, everyone is jabbering all at once to tell how it really was, what the rules were at any moment in time, and how each experienced the sense of connectedness and his/her world. Each seemed somehow to want to be acknowledged in the family by each of the others as important enough to be heard and known.

We wondered whose story our foreign hosts would believe? For each member's story would be his/her 'true' account, yet incomplete as part of a whole. What sense could they make of these accounts?

The Clonems say they do not understand why everyone was talking all at once and they do not understand why the stories of the photopeople in the family groups were different. They don't understand
what a Depression or a World War II is and why any of these would matter. They are confused by the wide range of voice tones, and don't understand what the different speeds and loudnesses of talking are about and why people move in certain types of ways. In addition, they really do not see why the photopeople emphasize and make much ado about where each grew up and who died, and whom they married, and why that seemed to make a difference with how people were with each other. Could we please find a way to help them understand why all these 'things' seem to be important to us earthlings.

And so we think and think. How can we get our images and messages across about differences - about families and the very unique individuals who comprise them, to a group of beings who see everyone alike and interchangeable? How can we convey to beings who have no sense of differences the specialness of situations, bondings and contexts which shape human beings, and by which people help shape each other? Was there a way to present the 'whole picture' of what being human encompasses?

We then ask ourselves, can we find a way in which we can use their way of understanding as the base from which to draw comparisons? Could we go from what they did know and lead them into some new territory to a new way of seeing and understanding? Could we take them through a 'paradigm shift' so that they could not only understand us cognitively, but comprehend us wholly, so that feeling, images, thoughts, sensations, actions, and context were all interconnected in that comprehension?

What if we were to say to our hosts, "Would you be willing to
play with us for awhile?" And what if they then said "Yes!"

And what if we then said, "O.K. then. We are going to play 'house'. Please, you there, come over here. Now, you must be the woman-mommy, and you must be the man-daddy. And you must make believe that...." And off we would go.

Just think of the fun we could have, inventing so many ways of informing the Clonems about us and our world. Imagine! What a range to choose from! Why, we'd have to reinvent theatre! And pantomime! And story telling. We'd have to become playwrights, choreographers, directors, actors, role players. Why even to do a role play, we would be free to invent all the possible scripts we could think of for them to play out. We would be free to remove the dialogue and to portray the dynamic pulls and pushes of human bondings in pantomime, in dance, in movement. We would be free to explore the essentials of relationships between human beings, in varying cultures. What wonderful fun we could have telling the Clonems what gestures to use, what stances to take, what words to say in what voice tones, in order to express certain Earthling ways of being!

What a delight it would be to watch them evolve into new ways of seeing and thinking!

But wait. Would they be able to evolve new ways of seeing and thinking? Could we ever get our images, ideas and messages across? I mean, would the Clonems be able to develop that very special structure of mind that human beings have - that ability to see differences? To
think anew, and to 'go beyond the information given'? Would they be able to fill in the 'space' between, to connect by a process of mind, separate phenomena? Would the Clonems be able to have an 'aha' - that external expression of an internal integration that proclaims "Yes, I see! I know! I understand what you mean!"?

Or, with the Clonems would we just have to hope that after myriad exposures to many, many ways of presenting the holography of human and family life, each Clonem could create the Images, Ideas and connections we human beings so take for granted?

For as Earthlings, all our sensings, imagings, thoughts, feelings and behavings over time, fill our well of tacit knowing upon which we constantly draw. Our past knowing informs our present, and guides us, as our new and now experiences inform and are added to the well.

Indeed, with Clonems, we would indeed have to hope that they could learn, for Clonems have no comparable experiences against which to reference so many ways of being which are so different from their own. Clonems would have to believe on 'faith' that everything we say is 'true'. They would have to learn expressions, feelings and ways of being by rote, as the only way to 'know what they can't know'. Their impoverished base of comparison gives them so few or no ways of approximating by which to extend and transform images of their world into a sense of or comprehension with ours. Would their mind structures enable them to bring from inside themselves metaphors and

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1 Bruner, 1973
2 Polanyi, 1958
analagous, those leaps of generalization from one particular experience to other experiences which create connection and relationship between phenomena?

For how else, except by those analogic and metaphor-creating structures and processes of mind, could they grasp the idea of patterns, connection, flow, and relationship in human life? How else could they become cognizant of the co-evolving ongoingness of individual persons, families, and larger groups? How else could they conceptualize multifocal relationships over time, wherein, for instance, one person can simultaneously 'be' many people? That is, one can be a daughter, a niece, a wife, and a mother, with different behaviors and sense of bonding in each 'position'. That same person can simultaneously be a sister to four, and an aunt to yet another six, while currently being a supervisor of a work team, on a community council, as well as a neighbor, friend to numerous others.

We could present many types of experiences then for our Clonem friends to try, but we would doubt from the outset that they were educable, that is, capable of being 'drawn forth.'

Points of Entry, Points of Departure

Let us leave the Clonems and draw our fantasy story to a close now, as we come back to Earth. Let us talk about training programs for human adults in exploring human systems, including exploring families and the individuals who make a human system what it is.

My version of the space travel fantasy above expresses the general framework in which we look at both individuals and families -
as part of and shaped by the patterns of the larger contexts of which they are a part, while interacting, changing and co-evolving over individual developmental and historical/contextual time.

Our educating attempts with the Clonems also reflect our sense of what training is about.

However, the differences between Clonems and adult earthling trainees is enormous. Here on Earth, we do not have to hope that comprehension can somehow find a way and a place to jell inside adult human beings, for each one comes to such an exploring/learning experience with the available mind structures and vast numbers of comparable daily life experiences, as bases against which to bounce one's sense of similarities and differences, that is, one's sense of patterns.

Each adult trainee brings with him/herself into a seminar a completely equipped transactional and analogue-forming human systems laboratory. Unlike Clonems, adult human beings can already think, feel, image, sense, and act in context in relation to other human beings. Each adult trainee knows at least one variation of the first human system larger than self, i.e., family. Each has experienced some version of those intangible essences I am calling 'bonding' which, when combined with our human capacity for meaning-making, create uniqueness and differentness in relationships, in intimate and non-intimate ways of grouping and belonging. Each trainee knows something of the 'rules of order' and the 'rules of access' by which each has survived and navigated in the varying systems of which he/she has been a part. Each adult has an awareness of the differentness and
the importance of personal stories, especially one's own.

There are available to adults in a seminar then, many points of entry and points of departure into and through the holography of thinking about human beings in relationship. What better and easier way to explore the experiences of these entities called systems, and the concepts about those human systems, than by capitalizing on all the resources and data already present and available to be tapped? How better to explore theories of human organization, behavior, experience and interactions than by drawings on the differences of trainees' live families, home and work settings, contextual cultural influences, and individual idiosyncrasies?

How better can one's way of thinking about human relationships, and one's way of behaving be interlinked than by having to experience theories of human behavior in action? Each then has to pass it through the filter of the self, adding to one's explicit and tacit well of knowledge.

For when each person's thoughts, actions, images, senses and experiences of self in/as/and system are drawn forth, and are received by others as 'valid' data, several other conditions follow: 1) it is very difficult to think in right/wrong terms when all experiential data are affirmed as being valid! 2) categories must be found inclusive of all these different types of processes and phenomena, that are data; 3) the maps evolved must have a way of connecting all such categories.

In so doing, we are saying, "There are larger weavings into which the fabric or metamap of our lives fit. Look at the threads in the
fabric of which you are a part so that you may know, recognize, and approximate those threads in the designs that you and others make. Know how to connect the experience and raw data with the metamaps."

Unlike trying to reach and teach Clonems in what human beings are like, here on Earth we can use each one's epistemic territory as the base for the epistemological map about all such human territories. The more experientially one owns, walks, explores and expands one's 'territory', the easier it is to extend one's personal understandings to new epistemological constructs that then feel old and familiar. Such acceptance of each one's epistemics takes the meanings given experience out of the realm of context, of 'what' and into the realm of types of 'fit-in-context' by which we define relationship, and system.

With such a way of exploring and learning, former paradigms shift out from under oneself in a series of exciting 'aha's' which mask the movement of the moment, which only later are recalled as the context markers of a change in perception.

Let us now turn to exploring how we approach the phenomena of 'fit-in-context' or living systems here on earth in ways that we'll never be able to try with Clonems...whoever they are and wherever they may be!
CHAPTER VII
SYSTEM AS METAPHOR:
METAPHOR, ANALOGY, AND ORGANISMIC LEARNING

In Chapter II, we defined 'systems' by a formal and verbal linear abstract map of living systems, in the framework of General Systems Theory. But if we ask ourselves again, 'What is a living system?' we must rely not on an abstract concept of linear and logical thinking, but on our own images... living system, dynamic interaction of component parts, within a boundary, in/over time-space. There are so many phenomena occurring at once each suggesting an image, we cannot comprehend them by any manner of simultaneous focus.

As Polanyi states (1975), when we visit a house or building and see several rooms, only the mind can connect their simultaneous existence by some sort of inner imagery. So it is with living systems, in 'dynamic interaction'. Only by some inner imagery, some image of the senses, like the hearing of an orchestra, or the imaging of a dance, can we capture the idea of living systems!

Living system, then, is a metaphor for a whole, whose simultaneity we cannot comprehend. It is a metaphor for a sense of the summative quality, the greater than the parts, whose essence we cannot see, touch or kiss. It is a metaphor for the betweenness, for the sets of relationships, which we must sense, imagine, connect, create. Thus, living human systems are like a moving hologram again, constantly shifting planes and fields, there but not there. The only comprehension we can have of living, human systems, is metaphoric,
analogic, organismic, synesthetic. 'Living, human systems' is not even a way of thinking; it is an invention, a way of imaging the world of people and oneself in it.

How then does one train in ways that others may invent an image/conception of the world of human beings, with oneself in it? How does one unite abstract theories about living systems to the trainees, who are, by these definitions, concrete living systems, and parts of larger living systems? How does one connect external conceptions called living systems theory to each person's invention processes, to internal thoughts, images, feelings, sensations, ideas, actions? How does one train others to unite that which we call experience, personal knowledge (Polanyi, 1958, 1969, Polanyi et al., 1975) or one's epistemic view (MacLean, 1975), the map from the inside out, to consensual or public knowledge, to epistemology, the formal views, the maps from the outside in?

The answer for us at BFI seems to be through involvement in metaphor, analogue and action.

The discussions of training at the family therapy meeting in 1979, where the question came up about ways of getting trainees to think metaphorically, analogically and systemically, struck me with a sense of surprise and delight. For I realized that while finding solutions to other puzzles in training, we had indirectly developed and evolved answers to quite a few of those questions being raised. Since the first 'how do you hear?' exercise, trainers at BFI had been involved in 'experiential learning'. We had been very aware, since

1 International Forum of Trainers and AFTA meetings, 1979 - See Prologue.
1973 particularly, of our intent to assist trainees in integrating all aspects of their experience, akin to the tuning of an instrument, so that all notes could be called upon to play in whatever combination necessary. Our basic vehicles in that experiential learning which resulted in integrated and multicentric thinking had been and is metaphor and analogue in many forms – spatial, imagistic, verbal, kinesthetic, aural.

We had been providing exercises, or common metaphors, as analogic isomorphs. As psychologist, Larry Allman, BFI graduate, and founder of the Los Angeles Family Institute, puts it, we had been teaching 'non-linear material, non-linearly.'

In this chapter and the next three, I will be exploring some of the ways of approaching and thinking about such 'experiential learning' or 'action' techniques.

Connecting Thinking in Children to Thinking in Adults

The questions at these 1979 meetings had brought to mind for me ones that I had had a year and a half earlier, when, as a doctoral candidate at the University of Massachusetts, I took two courses on Piaget with Klaus Schulz and with George Forman. Although I had read Piaget years earlier, I was in a different 'place in my life', and so read with completely different focusing and associative tracking. The more I read about children the more I thought about adults and

2 Personal communication
specifically, about our methodology of training at BFI. Both Fred Duhl and I had been interested in the issues of fit (Duhl, F., Kantor, D., Duhl, B., 1973) how people learn, and in different learning styles (Duhl, B. & Duhl, F., 1975) since the birth of our children, if not before.

In these Piaget courses, I kept trying to find some links between learning styles and learning stages. The more I read and discussed Piaget, the more I kept puzzling as to why and how our way of training seemed to result in trainees becoming capable of decentering, while staying in touch with their own point of view. I kept wondering where our way of training 'fit'. I kept seeing in our training the integration of 'right' and 'left' brain functions (Bogen, 1968; Gazziniga, 1968; Ornstein, 1972; de Bono, 1970; Buzan, 1976; Samples, 1976).

During the spring of 1978, I was in the fortunate position of having in George Forman a professor who, although an authority on Piaget and children, listened to my concerns and curiosities about the extension of Piagetian stages into adult life and the integration I felt we were achieving with trainees, primarily through action, metaphor and analogue. But Piaget does not talk about such events, and particularly not in adults.

There are those wonderful moments when as a trainer one has the luxury of being in the position of learner, and has other persons in those trainer positions, who really listen to the questions with which one is grappling. George Forman listened, and I am forever indebted to him for pointing me in the right direction, for the 'aha' and 'eureka'
which started then led to a wide range of new combinations, of tracking our training and looking at what we were doing in completely new ways, which continue to this day.

I began to find the conceptual underpinnings which 'explained' why what we did 'worked'. This book is an extension of that process, another 'knot in the handkerchief' (Bateson, 1972).

George Forman had suggested that I look into an article written by Jacques Jimenez (also a University of Massachusetts School of Education graduate some years before) in Piagetian Abstracts, entitled "Piaget and Synectics" (1976). I read the article and felt like those who cracked the code on the Rosetta Stone must have felt! For here was the missing link I had been looking for. Like the house that reportedly sits straddling the four corners of Utah, Arizona, Nevada and New Mexico, this article straddled and linked the arenas of concern to me.

Jimenez had put together the basic processes of intelligence, of assimilation and accommodation, as elaborated by Piaget (1952), with W. J. J. Gordon's Synectics (which "taken from the Greek, means the joining together of different and apparently irrelevant elements" [Gordon, 1961]). Synectics is concerned with creative problem-solving through the use of verbal analogy and metaphor.

A paper I wrote at that time, entitled "Piaget, BFI and Metaphor," was my first exploration of the linkage between our way of training, Piaget, Bruner and other learning theorists, and the metaphor-making processes of the mind (Duhl, B., 1978). Fuller explorations of some of my newer discoveries relating to integration
and multicentricity starting then, appear throughout this book.

**Plaget, Synectics and RFI**

According to Jimenez, Gordon states that "the mind has two basic jobs to perform. One is to 'Make the Strange Familiar'\(^3\), that is, to incorporate new facts, events, experiences, etc., into the frameworks already established by previously appropriated facts, events, experiences, etc." Gordon calls this 'learning'. This is Plaget's assimilation process, occurring in play, in which the child uses the world as an extension of himself, and celebrates himself as the paradigm of the world. "Symbolic play is merely egocentric thought in its pure state" (Jimenez, p. 104).

According to Jimenez' account of Gordon, "The other process of intelligence is the opposite. It is to 'Make the Familiar Strange' that is, to free something already known from the stereotypes we have put into it...to alter one's angle of vision to meet new realities. Gordon calls this 'innovation'. This is Plaget's accommodation process, accomplished by imitation. "Here, the child adapts himself to what he sees, and tries to understand it by imitating it, getting the feel of it from inside...."

"Children's play is a form of 'Making the Strange Familiar', or of simply keeping everything as familiar as possible. Children's imitation is a form of 'Making the Familiar Strange', of exploring the

\(^3\) In this chapter, in presenting Gordon's concepts, I will capitalize Strange and Familiar when they appear together, for emphasis, as Gordon does.
At BFI, we design exercises which involve both play and imitation, making the Strange Familiar and the Familiar Strange.

Jimenez quotes Piaget's description of when J. opened and closed her mouth after watching Piaget opening and closing his eyes: "...The model is assimilated to an analogous schema susceptible of translating the visual into the kinesthetic." He goes on to say:

What Piaget has done in this passage is to give a description of metaphor at work. In assimilation/ play the work of metaphor is to reduce the world to the child, to 'Make the Strange Familiar'. In accommodation/ imitation, the work of metaphor is to expand the child to the world— to 'Make the Familiar Strange'. It is precisely Gordon's discovery that metaphor is the simple device by which the human mind, both child and adult, accomplishes its twin prodigies. The difference between the child and adult is not that the child thinks by metaphor, and the adult without it, but that the child does not know he is thinking metaphorically, while the adult does know, and the child cannot control or balance the metaphor while the adult can. Piaget's circular system of assimilation and accommodation is therefore, explicitly: a description of the workings of metaphor... (Jimenez, p. 105)

"And so, putting Piaget and Synectics together, we may well have a three-word definition of intelligence; the complementary processes of assimilation and accommodation, both accomplished by means of metaphor." (Jimenez, p. 108).

The Application of Piaget, Gordon, and Others to Training Therapists

One may reasonably ask, how does all of the above have anything to do with a training program for adults in family therapy.

At BFI, through a series of exercises done in a group interview, we choose people for training who have some observable sense of
systems and empathy, who seem to be able to report and make sense for themselves out of what they have just experienced. We are most concerned with how they look at interface issues - the happenings between people, between aspects of self, for these are the issues in family and other human systems.

Yet a system is also not a 'thing' but a metaphor for patterns of actions and relationships, which interact simultaneously as well as over time, eluding linear description. Systems are 'wholes' of relationships. Metaphors grasp 'wholes'.

We see every trainee as a representative of at least one family system. The way we teach family systems is by analogy and metaphor, in action as well as words, using the 'raw data' of trainees' lives and families as analogues, as well as data and concepts about families 'out there'.

Discovering the 'Set'

To train people to be change agents, on line, with live families, in a setting where the only 'tool' is oneself and one's ability to conceptualize what the relationships are 'out there' in families, means to also train people to draw forth and to know what representations of systems they already carry in their 'mind'. Such representations, such core images, are already 'coding systems' (Bruner, 1973a).

If people do not know what their own 'set' is, they will impose it on whatever new situation is in front of them. As Bruner (1973a, p. 226) says,
Obviously, the principal giver of instruction is our own past history. For, by virtue of living in a certain kind of professional or social setting, our approach to new experience becomes constrained—we develop, if you will, a professional deformation with respect to coding events....One's attitude toward learning, whether a transient or an enduring thing, will then determine the degree to which one is equipped with coding systems that can be brought to bear on new situations and permit one to go beyond them. (1973a, p. 226)

Trainees cannot approach the 'data' coded by trainees directly. Such 'information' can only be approximated, through metaphor. Certain already coded 'data' are equivalent to closed systems, in that they are out of awareness and not available. At BFI we have felt it is necessary to make that which is taken for granted, overt. In this sense, we are 'Making the Familiar Strange' in Gordon's terms. Metaphor "evokes the preconscious, and watches it work" (Jimenez, 1976).

When the Familiar is made Strange over and over again, trainees learn to learn options—options in ways of thinking, being, seeing, doing. Learning is connection-making (Gordon, 1977). Trainees learn to learn that how you look and intervene and label depends on where you stand, your 'set' or 'professional deformation'. "The more freely and frequently one makes such analogies, the more freely and frequently will he be thinking. [italics his.] Thus, in his teaching strategy, one will teach not only the subject matter itself, but also how to think about the subject matter" (Jimenez, 1975).

From this other Jimenez paper, I had found a key to our way of training: Through our use of metaphor, analogue and action, we were teaching not only the 'subject matter itself, but also how to think
about the subject matter. We were using the metaphor-making processes of mind to discover the metaphors by which we live and work.

What is a Metaphor?

David MacDermott (1974) states that the word metaphor translates literally from the Greek as "a carrying from one place to another." That is the sense in which we will use it here: Metaphor - the transposing of an image or association from one state or arena of meaning to another, highlighting similarities, differences and/or ambiguities.

We all carry many associations and meanings from one place to another automatically. Thus, metaphor is the linkage of meaning - that which connects any two events, ideas, characteristics, modes. And metaphor is hardly only linear and verbal. Paintings are linkages between what an artist perceives, or imagines, and what is transposed, transported and transformed by the artist with brush and paint. Choreographed dance is metaphor as is music. Verbal metaphors can carry the past into the present, as well as the totality of images of one person onto another, as in, "You're your father, all over again!" Metaphors in any form, spatial, imagistic, verbal, kinesthetic, aural, are symbolic linkages and transformations of meaning, generated by a human mind.

Metaphor then seems to be the key in that integration or equilibration process of mind (Jimenez, 1976) in which the individual transforms experience from one mode to another, from 'outside' self to 'inside' self. If we restate the main process here, Piaget describes
J. opening and closing her mouth as a 'translation' of his opening and closing his eyes. J. has translated 'the visual into the kinesthetic' (Piaget, 1962, p. 44). Jimenez comments on this process as 'metaphor at work' (1976).

We have no related action verb form of this word for this process. MacDermott uses the word 'metaphoring' and that seems a more appropriate one to use when speaking of the activity itself, and one that I will use.

The child is then 'metaphoring' - in the process of mentally carrying a perception, awareness, or image, from one place to another, from one mode to another, from one realm to another. Metaphoring is the process of making relationship, of connecting. Mind is metaphoring process.

Human beings seem to be born with the capacity for metaphoring and for creating metaphors. These processes of mind are found operating at each and every level of development and at every stage in life. When we play or imitate we are 'metaphoring' - carrying experience from one realm to another. We each seem to have basic stances, towards the world, basic styles. We tend to make the Strange Familiar, make the Familiar Strange and try to keep the Familiar Familiar.

The intentional creation and spontaneous process of metaphoring seem to me to be key phenomena in the developmental processes of decentration (Piaget, 1958, and in Gruber and Voneche, 1977). What we translate and transform during decentration processes are not externally perceived behaviors, or events as Piaget's J. perceived,
but another's internal attitudes and constructs of mind.

An Aside on Decentration

Decentration in Piaget's terms is intrinsically and originally related to perceptual activity - and focusing or centrating - and is key in systems thinking. "The passage from one centration to another (or decentration) [italics his] thus tends to the correction or regulation of centrations by each other, and the more numerous the decenterations, the more accurate becomes the resulting perception." (Piaget in The Child's Conception of Space, 1956).

From those beginnings to adult objectivity, however, is a long and continuing pilgrimage.

Essentially, the process (of objectivity) which at any one of the developmental stages moves from egocentrism toward decentering, constantly subjects increases in knowledge to a refocusing of perspective [italics mine]... Actually, it means that learning is not a purely additive process and that to pile one (newly) learned piece of behavior or information on top of another is not in itself adequate to structure an objective attitude. Objectivity presupposes a decentering, i.e., a continual refocusing of perspective. Egocentrism, on the other hand, is the undifferentiated state prior to multiple perspectives, whereas objectivity implies both differentiation and coordination of the points of view which have been differentiated. (Piaget, in The Growth of Logical Thinking, 1958.)

In decentering, or achieving integrated multicentricity, in the process of trying to understand another's world, we need modes of translating, transforming another's words, and behaviors from 'outside self' to 'inside ourself'. We need modes of metaphoring, of trying on and experiencing another's micro and macro world views and carrying them from another to ourself, as a way of both differentiating and
Integrating them. We need ways of perceiving relationship between events as if through another's eyes.

In decentration, we expand our experience to include a view of ourselves and the world by mentally inhabiting a space outside our own skin. For a moment or more, we image the world, our own behavior, or another's experience, that which is Strange, as if we were seeing with someone else's eyes, experiencing another's sensations, and make them ours, Familiar.

In this Internal metaphorizing, we carry ourselves mentally from one place to another. Momentarily, we leave our own sense of self 'on the shelf' as it were, as if we did not at that moment possess an epistemic view of the world, and we attempt to approximate another's, thereby making that which is Strange Familiar.

Approximation is the closest we can ever get to knowing another person's Internal world, or to communicating the essence of an idea, feeling or image to one another. Empathy derives from such approximating. Various forms of metaphor serve well as vehicles for this process. I call the type of metaphors by which we do this, metaphors of approximation.

Metaphor does not exist in nature or naturally. Metaphors are inventions of the human mind, whose use of them seems to function in the service of integration, connecting disparately experienced realities and multiple phenomena. "Metaphors are made by a brain perceiving a relation between two or more clusters of characteristics" (MacDermott, 1974).

Our minds work to create order, Integration and coherence.
Metaphoring then seems to be the mental process of inclusion and connection, implicitly, in preverbal or paraverbal awareness and connection making, and metaphors the explicit expression of that connection of unity in some symbolic, humanly created form: spoken or written words, created objects, expressions or patterns. "Patterns are clusters of metaphors.... Realities are clusters of patterns" (MacDermott, 1974) Theories, epistemologies and paradigms are also metaphors.

The human mind then, is an interactive event. It seems to be a set of processes requiring contexts and other human beings to metaphor into relationship. Without belaboring the point, each new human being requires at base other persons, with both nonvocal and linguistic interactions with those persons, in order for each newly born human mind to develop.

Each child, however, begins to give meaning, long before there is language. He/she metaphors into relationship vast amounts of data. MacDermott, an artist, speaks of 'clusters' of metaphors, in one way, which Piaget had stated in another: that each infant very early begins to create schemas, and weaves clusters of schemas into schemata - to create the sense of reality, of how things are. The human mind creates relationships, which are neither one thing or the other, but are something else instead. These relationships, these metaphors for betweenness, are created in the mind of each human being.

Myths, Metaphors, and Metaphoring - Thinking about Thinking

If we extend these concepts out from the individual to the sense of a totality of individuals, to a society, we can look at culture and
the processes practiced in a culture, as illuminating both the concepts of metaphor and metaphorizing. Anthropological and sociological studies aid us in this direction.

If we look at pre-technological and isolated cultures, such as the Netsilik Eskimo culture or the Tlingit Indians of British Columbia before the invasion of Westerners (and Western metaphors for how to live), we can say that the people in them lived a 'holistic, organic, metaphor, or reality', wherein all aspects of their lives were connected to all other aspects. The clusters of patterns and processes were interlinking clusters of relationships. Within such cultures, there was no bit that did not reflect the whole, no 'abstract, rational thinking' that did not loop back into organismic integration.

The artifacts of the culture were organically related to living. They were often both utilitarian AND symbolically related to the belief systems. The traditions of dress, the practices, were the metaphors of the culture, the linkages of meaning, carried in time. Each new member born to the culture soon learned and connected, or metaphoried, the same meanings.

Such an organismic culture then carries its ideas from one place to another within the culture and over time, in a congruent and interconnected fashion so that the images of life in that culture are shared ones. The roles, rules, routines and rituals fit together in an interwoven, interlinking fashion with beliefs. There are common metaphors, which have the same meaning to everyone. Each person's core images of meaning, ways of coding events, are essentially the same.

When such a culture is isolated, little or no new and strange
Information from outside crosses its boundaries. New information always forces members to think and connect new relationships or to exclude and reject the new information. When there is no comparison with other ways or other cultures, there is no diversity; there are no mixed metaphors. The macrometaphor remains essentially the same, and the inhabitants have a surety of their sense of reality. It is shared and 'stable'.

In such a culture, the clusters of patterns and practices continue unperturbed, generation after generation. Such a macrometaphor of clusters contains and defines the whole story of life, all the events within life, 'explaining' the patterns that people have learned to learn in that context. With such a pattern of meanings, the Familiar is kept Familiar (equilibration) and the 'patterns connect' (Bateson, 1979).

Within such a culture, the metaphors of Identity - the ways by which people know who they are, over time, are shared as consensually accepted metaphors of Identity. These metaphors are usually sex, role, task and status related, carrying meaning from the outside in. These meanings progress and evolve for each person according to the culture's set rules of order and succession for each stage of life. What is expected is clear. The image of self from within matches the images of persons from without, and each person is an integral part of the macrometaphor of the culture. It is a reflexively coherent culture (Wideman, 1970). Everyone has a place and knows relationships. All are inside, within a 'boundary'.

These rules of order and succession also prescribe the 'rules of
access' to each person, and one is regarded and approached according to one's position by consensual rules.

The experiences 'under the skin', experienced phenomena, are not acknowledged, differentiated phenomena. They are expressed in metaphoric stories, and are not dealt with in direct and personal terms as aspects of self, subdifferentiations of individual entities, where one is responsible for one's own actions, decisions. The myths and metaphors of the culture place one's actions in relationship to the context, to the whole. The myths of the culture, like Indian stories, symbolically express the unordered, nonpredictable, yet expected nonrational ways of being. The legends, tales, and myths wrap coherence around all experience and lace individual experiences with a sense of integrity, of fit, of relationship to the whole.

One accepts oneself and the world as 'the way it is'. One is consciously and unconsciously linked to, and is part of, the macrometaphor.

**Types of Metaphors**

Thus, in such a culture, the metaphors of identity are also available to be utilized as metaphors of approximation - the ways in which each person can best imagine how another acts and experiences the world. Both such sets of metaphors are part of and connected to the metaphors of organization, the structures and hierarchies of the culture, the rules surrounding roles, and prescribed relationships. All three such groups of metaphors are automatically and equivalently interwoven with the metaphors of operation, embodying the processes
and rules of access of the culture, defining the way in which things are to be done. Such metaphors of operation are the standardized routines and rituals, the movements and processes that happen between those in roles. Such integrations make for the reflexive coherence of such cultures. (Paradoxically, these terms are already metaphors subdividing that which had no subdivision.)

The predominant myths and metaphors of our contemporary American world, however, are not integrated, holistic and congruent, and do not loop back in a reflexively coherent fashion. Images from within do not match those from without.

If we were to consider the major metaphors of our contemporary western world which seem to be operating in America, we have those of the 18th century Age of Reason, emphasizing rational thought and technology, the 19th century Age of Romanticism, emphasizing love and emotion, and the predominant metaphors of the Judeo-Christian religions and ethics.

Add a new land of America - the first place on the earth of which we are aware that was voluntarily populated by peoples from many, many lands and unified by egalitarian codes of law. Such codes are metaphors of operation and organization inclusive of basic human respect of each individual human life.

The values of those particular men who wrote the American constitution reflected both the bondedness people had to their ways of being and being different from each other, and the newly emerging concepts of equivalent democracy. The keeping of certain myths, images and metaphors, the traditions they had brought to this new country,
carried in time and geography, were attempts to make the Strange Familiar. Their ways of thinking and believing came with them; meanings - of roles, rules, routines of other places came here with them.

At the same time, the Familiar was Strange with the sense of new freedoms and new empowerment. The 'melting pot' was available as a new Ideal - a new metaphor, as were 'the land of milk and honey', 'the land of opportunity'. People had enough room, enough resources with which to blend into the common image of each individual person able to 'make it, to live the good life'.

The 18th Century western emphasis on rational thought gave impetus to science and technology, and human control of the environment. As the level of technology increased, bringing us these imagined products of the good life, we began to use them. Some, like railroads, steamboats, automobiles and planes, took us new places. Others, like wireless, radio, telephone, television, and computers, bombarded us with new information, continuing to change how we lived. We had more and more part roles, part relationships, more and more part decisions about how to live and how to be a 'full' human being.

In this century, space exploration, imagined in what used to be the Strange Flash Gordon fiction of my childhood, became reality, brought to us by our ability to both imagine, to make the Familiar Strange and to analyze, plan and produce, to make the Strange Familiar.

The "I wonder if..." feedforward metaphorizing (Richards, 1968) of images of what does not yet exist, fires the ideas of science, the
creativity in art, in music, in technology, to explore and create - to metaphor the image from inside the mind to the creation of it outside. We then make manifest our image. We create it in real time and space. It then becomes part of our contextual world, part of 'the way it is', with which we interact. Often, we begin to describe ourselves by the new metaphors we have created.

As creatures of context, we first understand the world by the act of transposing what is outside to a corresponding something inside, as J. did, with Piaget. We draw our metaphors for understanding ourselves from those already existing, as we begin to create new ones in 'combinatory play' (Piaget, 1969). We make the Familiar Strange and the Strange Familiar when we use a metaphor or way of thinking in one arena that borrows from another one where it would normally not be used. As Gordon wrote (1961), Harvey could describe the heart, because man had already invented a pump. The principle operating to create an external metaphor, pump, could be used for a way of understanding the principle operating for a part of the human body, heart.

Metaphors and Metaphoring in Mental Health: Borrowings from Other Fields

Thus, the subdifferentiations of science have given us new metaphors. New ways of thinking in science have given us new ways of understanding human behavior. After all, the ways of looking at anthropological man, of cultures, comes to us not out of the myths of the people themselves, but out of our western and scientific
recognition of parts and wholes and interrelationships, first applied to total 'foreign' cultures. Our meanings for the workings of a whole culture can be described from the outside by metaphors, carried from other places.

The human mind must metaphor into existence the rules underlying processes. The metaphorizing processes of people involved in science or technology have created greater and greater subdifferentials, uncoverings, and explanations, that we must cope with, once made overt. For the processes of technology change our lives as much as the products. We have information, images, and new processes by which we live, without the integrating and connecting processes by which to cope (Duhl, B., 1976).

As actions create ideas create actions (see Figure 1, Chapter IV), so 'macrometaphors generate micrometaphors generate macrometaphors', and so on. Fields of thought in a culture develop with the prevailing ideologies and macrometaphors, and human systems thinking is no different. Predominant metaphors change slowly, while technology changes our concrete existence quite rapidly.

As science uncovered smaller and smaller units, investigating that which was subsidiary in what heretofore was focal (Polanyi, 1958, Polanyi et al., 1975), man looked beneath the skin for subsets. Psychology has traditionally employed the metaphors of the physical sciences and of religion in a carrying of images and concepts from the observable outside to the unobservable inside.

Freud borrowed freely from both macrometaphors. However mixed the metaphors may be, Freud's leap was to begin to define the subunits of
the individual person as a system (Rapoport, 1960). He began to explore processes that might be idiosyncratic, yet also pervasive. He could only operate in the language and metaphors of the time in which he lived. Thus, his metaphors are borrowed from religion, where the superego replaces a deity, where the human being is replete with good and evil forces (Id) and the rational man (ego) needs to be in charge of the irrational man. The divisiveness of science and religion was inherent in Freud's theory, in which energy was then a concept metaphorically transposed from physics into human relationships.

Freud's genius in putting such metaphors together in an adult version of 'combinatory play' is the metaphoring process at work. And Freud's theories you will remember took hold in America, the land of subdifferentiations. For people to then reify the ideas of id, ego, superego, as concrete entities, as if they were realities of emotional and conscious man, was and is a huge error of map and territory. The metaphor is not the event itself. However, once man was envisioned as having subsets to his psychological self, which interacted and 'fit' together, that overviewing metaphor/conceptualization remained.

In other parts of psychology as in the family systems movement, the full range of metaphors of science, spirituality, economics, religion, ethics, all find representation, as the latest Handbook of Family Therapy (Gurman & Kniskern, 1981) makes evident.

Von Bertalanffy's General Systems model of human systems, deriving primarily from the metaphors of the biological sciences, cybernetics and religion, allows us the greatest flexibility to fit our epistemics, the world view and beliefs we learned-to-learn, our
subsets or aspects of self and our behaviors - together with epistemology, the formal, consensual way of looking from outside. We at BFI are as concerned with the metaphors of identity (individual isomorphs) and approximation (transfer) as we are with metaphors of organization (structure) and operations (function) and General Systems is inclusive of all of these. We are concerned with how people experience their changing reality in developmental time, wherein the Familiar becomes Strange and the Strange becomes Familiar. We are concerned with how human beings bond in varying combinations and with the roles and processes people enact, by which they make the Strange Familiar. And we are concerned how information is transmitted and received in ways that confuse or clarify the bondings and the metaphors of relationship.

People carry with them their learnings, their metaphors, from one context to the next. A changing context can also make their metaphors obsolete and ineffective. Therapies, of varying sorts, arise to 'cure' the people, often as if each was solely and totally responsible for his/her condition. The metaphors of science have given us the metaphors of developmental time, of information theory and cybernetics, of system, as they have also given us the metaphors of parts. As we try to cope and to live the processes our technology forces upon us, we live more and more part relationships. The rules, roles, routines, and rituals for how to be and see oneself in relation to a sense of the whole have changed dramatically in the last 40 years particularly. We live by our images, our metaphors clustered into 'realities', yet the concrete realities of our lives no longer
facilitate those idealized realities in being reached. We do not know how to make the Strange Familiar, to image the many parts we each have to play into human wholes that fit the human needs for functional autonomy and bonded connection.

The 'compressed conflict' (Gordon, 1971) arises when what has been promoted as one of the relevant metaphors of our lives, technology, is then seen as irrelevant to our connectedness and sense of self as individuals in relationship.

**Living with Mixed Metaphors**

However, while the macrometaphor of technology is here, in America, the full acceptance of it as the common metaphor of personal and cultural identity is not. Many people find that the technological, cybernetic and consumer metaphors of the current world are too limited to carry their images fully from one place to another. These metaphors do not further the person in encompassing or grounding one's understanding of his/her own experience as and in human systems, nor in approximating those of others around him/her.

The social rebellion of the 1960's in America highlighted the search for differentiated, self-actualizing personal and idiosyncratic metaphors of identity, while at the same time searching for new common unifying and coherent cultural metaphors of identity. This search continues today. The contexts and focus of the search may be different, but the overall search is current.

When people in the same neighborhoods can grow up with similar ethnic and religious backgrounds, but 'incompatible' personalities,
when every marriage is a 'mixed' marriage, when family forms practically are matters of choice and include every possible variety, when women with women, and men with men, as well as women with men, differ on their roles, rules and routines and rituals, then we can safely say there are few common metaphors of identity that many can feel are representative, consistent and suitable for all. In this particular culture, we have so many diverse groups, ideologies, levels, psychologies, and views of the elephant, we have few common metaphors of personal identity. There are almost too many discrete aspects of the culture to draw upon, without any inherent reflexive coherence of parts to the whole.

This lack of common metaphors creates the need in each person to search out his/her own grouping or constellation of metaphors of identity. The only true commonality is diversity. When there are so many idiosyncratic metaphors of identity, there is more need to create opportunities for metaphors of approximation to be exercised, so that individuals may be in communion in their communication.

This participation in the activity of metaphor creation, communication and transformation is essential in a culture in which the individual, family and societies are all different. The covert ways in which people expect to be approached and connected with are personal, and the social rules of order and succession for what is supposed to happen when and how, in a life cycle of individual or family are no longer stable.

Thus, people who would learn the totality of a full organic model of human systems thinking, need ways of grasping their metaphors of
Identity in such a way that these same metaphors can become the route to approximation. They need to explore their personal metaphors of organization and operation so that they may know others and connect themselves in new congruent metaphors and patterns.

Metaphor and Analogue in Training

Given the diversity in this culture in general, the rapidly changing technological metaphors and processes, and the relatively new metaphor of 'living systems' theory, one could not necessarily expect those in the early stages of the family systems movement to have formed clearly defined and usable images of human systems. One could not necessarily expect that even the words 'human system' themselves would or could conjure up similar images of 'component parts in dynamic interaction.'

System, being a metaphor already, can only be perceived through other metaphors and analogues which carry associations from one place or arena to another.

Over the years at the Boston Family Institute, we have been creating exercises or common metaphors that act as analogues to various aspects and levels of systems as they draw on and draw forth different aspects of people's lives. Each trainee dips into his/her well of images and experiences, retrieving and creating for examination and comparison by self and others, personal metaphors of identity.

When you train or teach by setting up 'exercises', you are providing common metaphoric experiences which connect trainees in the
'here and now', which are real and stand for themselves, as they are also analogic. As analogic experiences, in which each trainee’s idiosyncratic personal meanings, memories, and metaphors are evoked and elicited, previous, current or future contextual situations are also evoked in the mind’s eye as are images of the persons populating those associations. These 'characters' in one's life, in context, and in dynamic interaction with oneself and each other, are then available to be 'looked at' as system. System on one level with self as member, is then available as analogue to other units or levels or metaphors of system with self as member or non-member. From there, it is an easy step to abstractions, in this case, systems conceptualizations and General Systems Theory. When training occurs in this manner, there is much less ambiguity about which images, aspects, or concepts of system, such as those previously differentiated in Chapter II, are being referred to. When people share common metaphors of experience, they more easily accept each other's metaphors of identity as metaphors for approximation.

Theories are complex metaphors, complex images of the world. When you train with analogic exercises, each single exercise can stand for the whole, as bits of the holographic plate can reflect the entire hologram. Conversely, as one can find the whole in the bit, one can design the bit from the whole. Analogue is a many-faceted phenomenon. (See Figure 4).
Figure 4

Analogic Exercise Through-put Loop
The designed exercise, which creates the structure for spontaneity, thus becomes the common vehicle which allows trainees to carry one's imagery and ideas from one place to another. Exercises, as common metaphors, become the vehicles of transformation.

**Matched and Mismatched Metaphors**

I am reminded of being on two different panels of trainers at different times. The first took place in 1972, in Chicago, in a room full of eager emergent family therapists, excited by the not-yet-defined metaphor of family therapy. They had all had some experience with working with families, in one way or another. This audience listened attentively to whatever the panel said of training and therapy, at a time when there were no sharply defined, delineated or defended modes. In that setting, each listener brought his/her idiosyncratic metaphoric image of working with a family and of training to the conference, and placed what panel members said into that image-vessel. Each took his/her filled-out image home, to translate and transform into action. In this case, each participant at the conference already had a metaphor of family system. Some may even have had an image of a way of training people to work within the metaphor of family as system.

Another panel concerning training on which I participated took place December 1976, at the convention of the American Academy of

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4 "Growing Family Therapists" sponsored by The Institute for Juvenile Research, Chicago, 1972.
Psychoanalysis, whose topic was "The Family." By this time, training programs in family therapy had proliferated and some had become quite well formed, and very different, though not well differentiated from each other in articulated conceptualizations. Panel members represented varying ways of 'looking' at the elephant. However, the audience members came from a 'distant land'.

In that setting, to begin with, three quarters of the audience was hostile to the idea of therapists seeing more than one person at a time. The prevailing metaphor for 'therapy' of those in the audience was one-to-one, therapist-patient, with a boundary of confidentiality around that dyad, exclusive of other family members. Therapy as such then is seen as a private and circumscribed experience.

When a therapist sees a whole family together, that boundary of one-to-one exclusionary privacy disappears as do some of the secretive concepts of confidentiality of information between members. In addition, at this meeting, each panel member drew from his/her personal image or inner vision or training program for preparing people to do this very 'public' form of therapy. The combination of unknown, unshared metaphors and language of both family as the 'patient' of therapy, plus training for such an event, created tremendous dissension, dissatisfaction and annoyance in the audience. When given the opportunity to do so, most of the audience left. The remainder stayed, struggling to connect in a positive manner with this new idea of family as unit for 'systems therapy' while the panel

5 Atlanta, Georgia.
talked 'about' diverse ideas and methods in training and therapy. The result was like forming a container for liquid with loose sand.

I came away from that last experience, saying I'd never do that again. I was aware that while panel members might hold different views of the elephant or camel, some common experience or common metaphor had been needed for each person on the panel and in the audience to acknowledge that an elephant and/or a camel had indeed been in the room at all.

Each panel member in the room had an image, an idea of what he/she meant by certain words. And several panelists had different meanings for the same words, as did audience members. Yet words are like metaphors - they are symbols for things, for states of being and ways of seeing, and so on. The literal meaning of a word still conjures up one's idiosyncratic version of that word. When there was misunderstanding, there was no other metaphor to move to. One could not say: "Let me show you", in that context. There was no film clip or role-played family or videotape to refer to. An immediate event, witnessed by all, even if not actively participated in, was necessary to act as a common metaphor to analyze, discuss, in order for audience members as well as panelists to feel connected, to feel heard, to feel included. Without a common experience to act as organizing analogue, much of the audience walked out on what seemed to them a Tower of Babel. Similar events happen in families.

The panel members, like Japanese Noh players, were performing in concert and in pidgen English roles from different plays, to English-speaking tourists who searched for meaning by watching and
listening to what they presumed to be a performance of one play.

The wonderful irony here was that people who habitually train others in family **systems** did not catch the analogue that panel/audience is also a system, and panel/audience communication is a living systems issue, no matter how you boundary it, package it, or assign blame for the meeting's failure.

Yet the panel leader and members treated that setting and situation **as if** they were external to the communication problem and **as if** the audience indeed had common metaphors as vehicles of transformation. Analogically, the situation was akin to a different common metaphor - that which many parents and many teachers act on or presume with children, "You're supposed to know before you know."

I learned at that time that it is as easy for a group of supposed experts as for a group of beginners in human systems to assume system is what they're talking about rather than what they **are while** they are talking about it. I learned it is as easy for 'experts' as for beginners to forget and lose their analogic awareness when their usual context shifts. In each case, there is an assumption or presumption of shared and common images and metaphors when in actuality there are none. The lack of these common images or metaphors precludes any clear communication, as well as the very learning, exchange, evocation or change of perception that was intended. In these cases, there is no vehicle to successfully carry a message from one mind to another.

As 'Dick' Auerswald used to say of such episodes in families and communities: "Both sides are playing cards - except one is playing
poker while the other is playing bridge."6

In real life, there is no human setting or situation which cannot also be seen as analogous or isomorphic to another at the same or different levels of system. The Individual level of system also encompasses many component 'aspects' in dynamic interaction, other than physical 'parts'. What happens between individual subsystems, how one thinks, feels, senses, images, and acts are the component aspects of individuals, and 'create' the larger system. There are those models in the family therapy movement which tend to ignore individual persons as a 'non-system' and to make 'system' synonymous with 'family' only, as if looking at what happens between total persons (individuals) does not also include how each individual thinks, feels, makes meaning, acts. Yet the interventions are based on interpreting individual behavior in context. Individual minds, those subdifferentiated units of people, and behaviors, images, thoughts - Individual systems - change when total systems change and vice versa. Each level of system, conceptually from Intrapsychic through interpersonal to transactional is analogous to another, and can be evolved from the inner image to an active transactional interaction.

The key is to play with and train people to recognize the organismic and nonlinear connection of isomorphs, the leaps of metaphor and analogue from one level to another, from one realm to another, and to learn the languages of translation and transformation. Actual and

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6 personal communication.
menl'al escapades of this sort generate new definitions of experience - for oneself as well as for others. Skilled facilitators create many types of new metaphors of hope for people in need.

Learning the holography of human systems thinking involves inventing human systems thinking through metaphors and analogue so that each can own it for oneself. It evolves out of the invitation to trainees for exploration, for 'what if?' discovery, and the 'having of wonderful ideas'. We invite trainees to make the Strange Familiar and the Familiar Strange, and to experience, heighten and illuminate the compressed conflict in all systems. During this aspect of training, there are no experts and no novices - there is only each one's inner challenge to oneself, to play with novelty and draw from oneself its connection to the already known.

In some programs, only one level (group) and one type (family) of system are being addressed, so that all that can be compared are analogues of the same level and type. The trainee as person, integrating self in, as, and with systems, is often left out.

We believe that when training programs include a focus on self as experiencer, organizer, conceptualizer, and actor in systems, self as a system, and/or self with systems, each trainee develops many analogic routes from the hub of self to family, society, out to the far-reaching 'rim' of multinational systems. After all, it is the analogue-forming mind of the trainee that will need to carry the concepts from one realm to another after training. Many of these realms will differ, according to the differences of people's contexts, and the issues with which they come in contact.
As multiple analogues are explored, trainees not only develop wide ranges of new metaphors of identity and approximation, they learn to learn (Bateson, 1972) the process of metaphor-making and analogue scanning. They see differently and originally. Any human experience can be represented in metaphor - can be carried from the intrapsychic realm to the transactional and back again, in various types of metaphor - verbal, spatial, or kinesic.

I say 'back again', for the thoughts, feelings and ideas about systems, as well as the images of and the metaphors for systems all are experienced in a human mind - that which we label the intrapsychic realm. It is here that we make the Strange Familiar, the Familiar Strange and keep the Familiar Familiar.

Each trainee begins to develop an available reference gallery of analogic experiences and metaphoric associations. Contemporary contributions to the gallery are offered periodically, as products of practicing, rehearsing, and exercising the creative freedom to assume any role, to play with any image or role, and to break through old rules of behavior and concomitant labels of 'silly' and 'absurd'. Trainees are free to make the Familiar Strange and the Strange Familiar in many varieties of ways.

A Common Metaphor Right Now!

The metaphor of 'labels' is as good a place as any to share an exercise which will illuminate our organic and analogic processes of training in which people begin to invent a systems image of the world. This first example is an exercise we originally developed for a
workshop setting and brought 'home' to the training program.

An Aside on Exercise Design

Our primary goals in this original situation were: to create a vehicle to 'transpose' 50-60 people from outside the room to inside, to have them meet each other in a way which would be fun and feel safe, in which each person is in self control, and to create a vehicle which would **Introduce participants to each other and to systems material** all at the same time!

The following exercise, designed to meet these requirements, was our 'answer' to those wishes for goals. It introduces people to each other in a playful manner, one in which the Familiar is made Strange and the Strange Familiar. In addition, this particular 'common metaphor' quickly locates one in and as member of systems, radiating out by analogic extension, to all levels of system.

Exercise: A Label by any Other Name

Think of two labels - nicknames, adjectives or phrases repetitively applied to you as a child - one which felt positive to you at that time and another which felt negative. These 'labels' could have been given to you by family members, playmates, kids at school, teachers, relatives, neighbors. They could have been nicknames, qualities or attributes. Take a moment to remember. Now, go around the room to each other person and introduce yourself by your 'labels' only, as if they were names - first your positive one and then your negative one. Do
not explain anything at this point. Just introduce yourself with your version of: "Hi, I'm Hardworking, and I'm Mule."

I will now describe in some detail the actual exercise process to give you as close an image of approximation as I can convey in this form, of our way of training.

The Action

As people mill around the room introducing themselves in this new way, some are awkward, others do it with gusto. Usually, if it is a workshop, there is some self-consciousness. In all settings, there is laughter and the aha's of recognition. We have never met anyone, including people from other cultures and countries, for whom this particular exercise was not a valuable resource. We are asking participants to take that which is familiar and private, and use it in a strange and public way, for connection, with individualization.

When people have introduced themselves to each other, through the metaphors of their labels, we ask for samples of the pairs of labels which we write on newsprint. We write them down, since some people 'hear better by seeing'. We ask for the meanings of those labels not obvious or those 'usual' words which may have idiosyncratic meanings (Images within metaphors within images!). We will ask then for a very quick connection between the labels and the aspect of self labeled.

In between asking for pairs of labels and jotting them down on the newsprint, we will also ask:

1) Whether individuals met others with labels that also could
have applied to themselves?

2) Whether other memories and associations contextually related to labels were stimulated internally as they introduced themselves and heard others' labels?

3) Whether each person could indeed have chosen several other labels for self which would have been accurate metaphors and still be within the requirements of the exercise?

The answers to these questions have always been 'yes' with examples and samples of other 'monikers'. Some people report how they changed their introductory labels during the exercise, as they became more aware of specifics about past contexts. Others hear and recognize appellations long blocked or forgotten as more appropriate to their own early life than the ones they originally chose in this exercise.

The Experiential Context Discussed

We then often ask participants to discuss the derivation of those labels - the where, when, who, how come and what about - of them with another person. Here we are asking for origins, for the characters in context. We want each person to have a little private air time to reexperience, in the telling, other aspects of the original, to carry it more fully into the present. And in listening to each other's label stories, we also want each person to have the opportunity to approximate another's original situation and content.

Person/Larger System Interface

In further debriefing this exercise in metaphor then - the issue
emerges that 'labels' are often boundary markers used by the label-givers, i.e., that 'labels' often define and delineate whether one is 'inside' or 'outside' a system boundary set up by the label-maker him/herself or by a larger context or system in and of which the label-user is an agent. These label-boundaries are not necessarily permanent and fixed. Indeed, they can be quite arbitrary.

Thus, someone positively labeled 'Hardworking' and negatively labeled 'Mule' finds himself labeled for the same quality in either different contexts or when fitting or not fitting the label-giver's image of and for him at particular times. 'Hardworking' was so called, in a positive tone, when he was seriously doing what his father wanted him to do. 'Mule' in a rejecting tone, was his father's name for this man as a boy when he was thoroughly involved in doing something he wanted to do for himself, of which his father disapproved.

We aid in the differentiation of types of labels, distinguishing those which refer to physical attributes from those which refer to attributes or characteristics of style or cultural origins, and so on. Being long-legged, short, blonde, or dark-haired, blue-eyed or club-footed are accidents of genealogy as ethnic and cultural origins are accidents of history.

Sometimes the labels that go with these attributes are metaphors of affection and connectedness. Others are meant to be disconnecting and disapproving. There is not much one can do about the length and skinniness of one's legs, as in the taunting label 'daddy-long-legs' nor is there much that anyone can do about being born of Italian, Irish, Jewish or Black parents. Yet in these as in those other labels
which refer to perhaps changeable attributes of self, when the label is negative, the person labeled often feels burdened, as if he/she were responsible for and expected to change the attribute.

Thus, an exercise such as this becomes, for many people, their first awareness that 'labels' represent another's metaphors for oneself, another's world view and/or wishes, and as such, are representative boundary markers of larger systems and contexts.

**Steps Toward Multicentricity**

This type of exercise sometimes represents a major step in the empathic decentration process of self-in-system: that ability to look at oneself in one's own dynamically interactive systems of past and present, from a variety of positions.

When the person called 'Mule' begins to think of those situations in which he was so-called by his father, and those in which he was called 'Hardworking' he can begin to analogically inhabit his father's skin, and to see himself and his behavior from his father's eyes and wishes, as if he were his father. He can begin to look at and experience by approximation his father's images and methods of achieving those images, momentarily, even as he has been on the other side of them. In so doing, he can experience another side of the compressed conflict.

Adding "Be the label-giver, in voice, tone and gesture" to the exercise instructions adds a command role-reversal which moves each person even further analogically into the approximation and decentering modality. (This can be a loaded situation for some people.
We would not add that command unless the setting were one in which a climate of trust and safety had already been established for the participants.)

**Change Points and Updating**

We will ask participants, "Are you still referred to today by those labels? If so, with whom and in what contexts? If not, what happened to those behaviors of yours that others hooked onto, if indeed they were behaviors? Did you change or did others change? Did your context change?"

We sometimes ask directly about self-imposed labels - those metaphors that people make up for themselves along their way through life - have these changed? When and how and where?

With these types of questions, we are engaging participants in the process of rethinking their experiences and their change processes. We are asking in contextual terms, whether past behaviors, attributes and the metaphors for them have continued into the present, unchanged, based on others' labels or one's own labels. **We are asking about change points.** We are asking if externally observed change is linked with one's internal image or has one's self image remained the same while one's physique (from heavy to thin, short to tall) or behaviors have changed.

Many people hold onto old metaphors of identity and do not update them until given the opportunity, an invitation, and a process by which to do so. Until one asks, "Is the familiar still familiar and current?", people often have not caught up with themselves that the
old familiar metaphor is no longer appropriate if not even strange, indeed. We all tend to describe ourselves as when we last stood still, in some previous time or context. The metaphoring comparisons of past and present in this form can allow for updating the "information - the difference which makes a difference" (Bateson, 1979), into new metaphors of identity. Each participant is also learning, with cognizance (Piaget, 1974), a process by which change can take place in therapy and other settings.

As a tool for exploration, any such exercise is a rich well of metaphors and analogues for wherever one wants to take it. Once each trainee has plumbed the depth of the well, each brings to the surface the data - the information, from which generalizations and conceptualizations can then be made. Each is in an equivalent position to do so for each has equivalent data to draw upon. While the trainers may have played more with the total map, each trainee has explored his/her own territory and can now begin to create his/her own map, in context, through dialogue with others. In addition, as each listens to others' descriptions of their experiences (territory) and their generalizations (map), they are easily followed, for they derive from a common exercise and concept of labels as system metaphors. By extension then, each trainee can recognize the differentiations - the range of diversity - in common themes, and include them within a meta-generalization. They do not get caught up here in differentiating details.
Generalizing from Concrete Experience:

Generalizations from such an exercise can range from 'near' to 'far', space ideas. 'Near space' generalizations is my term for those that are 'close to home', relating to aspects of self in system, to family, in a first level of abstraction from raw data.

Examples of 'near space' generalizations would be:

1) Parents' labels for children reflect parental wishes and expectations.

2) A child's self-definition or self image includes the labels others assign to him/her.

3) Parental labels demarcate boundaries for children. These parental labels can delineate overt or covert rules of behavior.

'Far space' generalizations is my term for concepts that are extensions of these ideas either to systems further removed from the hub of self or conceptual systems further removed in levels of abstraction.

Examples here would be:

1) Labeling by parents of children is analogous to labeling by society of its citizens.

2) Those persons are said to be deviant whose behavior does not conform to the ideal of the enforcers of the cultural norms.

3) 'Boundaries' are a metaphorical representation of the rules of inclusion/exclusion.

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7 The 'near and far space' concept has been adapted by the author from Jane Hart's conceptualization of how infants explore space. See Where's Hannah? (Hart, 1968).

At each level, the trainee can feel him or herself connected to the generalization from the inside out. Each can follow through extension of the metaphor of labels the route from his/her own experience and data - his/her epistemics - to labels in general, the function of labels, and so on.

Labels of self are then transported by each person's metaphoric extension from singular incidents in one person's life to a class of incidents in the life of all human systems. This class of incidents, i.e., the labeling of members, is organized around the concept of the fit, the match or non-match of actual behavior with ideal images or standards of behavior at every level of human system. The metaphors of identity given to members define the fit within the label givers' image, or within the label-givers' metaphors of organization and operation.

**Larger System Labels:**

Prolonged discussion or quick mention of the 'subversive' labels given many Americans (Heilman, 1976) during the McCarthy era, labels given anti-Vietnam War demonstrators, or even psychiatric labels of 'neurotic' and 'psychotic' are natural extensions of the label metaphor, with analogies on a national scale.

Trainees discuss contextual shifts in their own lives, as well as in the culture at large, which alter the importance or power of labels thus transforming the impact of these metaphors of identity. Formerly 'subversive' people are exonerated and/or reembraced. Amnesty forgives
draft evaders. One's awareness and knowledge of regional customs, history and politics, becomes personally useful, locating people and their labels in context.

Children 'outgrow' old labels. Conversely, formerly benign or descriptive labels become negative or pejorative. 'Cute' at 5 is very different than 'cute' at 25. 'Asylum' meaning refuge becomes a euphemism for 'crazy house'. Reframing in therapy gives new labels to old meanings and makes the Familiar Strange. Trainees begin to look at words, labels, and concepts in a new way.

Another Analogic Exercise

In the aforementioned example, we have stimultated the individual's world in microcosm through a few basic directions only: 1) to think of positive and negative labels of childhood, 2) to walk around, introducing oneself by those labels to others, and 3) perhaps to employ the voice of the labeler. We have suggested in this metaphor of labels, that a part (label about self) stand for the whole (all of self), and we explore it as if that were indeed so. In so doing we have made something old, but Familiar (i.e., labels) Strange, allowing oneself to look at it.

In another type of exercise, we activate the opposite processes in which we suggest that a whole stand for a part, and in which we make the Strange Familiar.

An example:
Exercise:

Think of an animal that best represents your learning style in academic settings. Go around the room being that animal.

This probably seems like an unusual request for adults with such a serious subject as learning. However, we find that when the climate for safety, fun and exploration has been created, adults can be freed up for incredible learnings of far reaching impact for themselves and others. Trainees get into the mood and play out their imagined animal metaphors.

We ask, when the grunts, squeals and laughter have died down, "What were you? And, what aspects of your learning style does this animal represent?" People in the room begin to single out qualities or attributes of self through their animal metaphors of identity.

One man said, "I'm a boa constrictor. I take a subject and slowly wrap myself around it and squeeze it. Then I swallow it whole. Then, I take three months to digest it and discard waste and keep what is useful."

Another reports himself a lion - who waits for the lioness to kill the prey. His translation: He waits for someone else to search out and prepare the material and then he is very ready to engage in the process directly.

A third sees himself as an eagle - soaring above, slowly,

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8 We have been playing with such animal metaphors of identity since 1973 and wrote a fable employing them in a paper entitled, "Cognitive Styles and Marital Process" (Duhl, B. & Duhl, F., 1975).
deliberately, scanning the terrain below, with an overview. When ready, he becomes a predator. He swoops down, targeting his prey, grabs hold and soars away.

Metaphors of Identity such as these allow one to look at oneself in totality - i.e., as if one were an animal, to see which attributes 'fit' a 'part' of self - one's academic learning style. This 'externalized' image is now available to be played with, explored and questioned with curiosity. Trainees find themselves enjoying the process without defensiveness. The range of appropriateness of that animal's attributes to oneself can be sifted and sorted to increase cognizance and differentiation of one's style; i.e., "As an eagle, are you a loner in your academic learning style? Do you soar alone or with others?"

It is important to keep the questions related to the original target, in this case 'academic learning styles', though one can go far afield in extending such metaphors, often with humor and wit.

While this last aspect can indeed be enjoyable and is useful when the purpose is different, one must not lose sight of the goals:

1) To use the animal metaphors as analogy in a more pointed search for differentiation of learning styles;

2) To explore one's optimal conditions and contexts for academic learning;

3) To offer new metaphors of approximation to others by one's own metaphors of identity.

Treating animal metaphors as unfocused imagery and fantasy while enjoyable, can lose the value of specific analogic positions. Trainees
learn to treat such exercises with a kind of spontaneous and expressive fun in the doing. They often joke a little commenting on self and others as they move into the reflective space. Then, they debrief their metaphors starting with "What were you?" and "What attributes of self are represented?" While there may be wonderful double entendres in responses, the learning style metaphor comes through clearly.

Trainees learn by the trainers' modelling to ask analogic questions with a gentle and respectful dignity for the 'as if' reality that accompanies the 'what if you were' (an animal) supposition.

When the original focus of such an exercise is lost or gets muddled, adult trainees feel foolish and embarrassed and one can see that they have switched from intellectual curiosity to self taunters, from a stance of explorer to one of social critic.

Breaking through the boundaries of one's sense of self requires that a new mode not just be something new and different for its own sake. The novelty of and in the metaphor must contain a real and meaningful analogy to self and others, and offer new information. Then one can take oneself seriously while playing with absurdities, like 'animal forms'. The focus of the questions and goals provides boundaries for safety. The metaphor then furthers the image of the self and one's own sense of acquaintance with oneself - that meeting of a part of self in a new decentered position.

To make the acquaintance of a part of self means not to explain it away or absorb it or to be aware in the usual sense. It means, to treat an aspect of self as if it were an independent and for the
moment, external entity. Via metaphor as analogue, one then interacts with the chosen aspect of self - and uses the metaphor to discover and compare isomorphic qualities. It is another way of decentering, while integrating.

"If I were looking at me, how would 'me' look to 'I', and how would 'I' describe 'me'?"

'Becoming acquainted' is the opposite of 'taking for granted'. Novelty, focused curiosity and attention are keys to that process of becoming cognizant (Piaget, 1976). One makes the Familiar Strange (Gordon, 1971) so it can be seen freshly. Analogic metaphors provide the vehicle for people to become acquainted with aspects of themselves and others in new ways.

A Summary of Our Thinking Thus Far

When we design metaphors in action, we find that the body movements, for instance, of one's animal of choice, seem to stimulate different thoughts and associations than thinking about an animal. The active process certainly enhances the precision of the image. More resources in oneself are called upon in 'becoming' an animal than in thinking of oneself as animal. When we use our primary sensorimotor equipment (Piaget, 1952), we tap into other aspects of self.

In the earlier exercise, more resources and memories are stimulated when one becomes an active label-giver than only by remembering labels one was given. (There will be more discussion of the importance of action in Chapters VIII and X.)

A curious set of phenomena occurs in this type of externalization
In a group setting. Each person:

- is in control of the original image;
- has complete control to accept or reject comparisons;
- has useful shared metaphors by which to achieve approximations of meanings of others. Through these approximations can come meaningful dialogue.

Each person:

- can play with the idea, since one knows one is not an animal, whereas the usual adjectives descriptive of attributes and qualities about oneself can be argued with by others, and can thus prove threatening to exploration;
- has given novelty a chance to happen, has generated a new idea, has a new image to bounce off which helps clarify self and self in systems.

One can extend the metaphor in various directions, as we do, and ask what type of animals represent the learning styles of other family members? Yes — and how do these animals get along? Not only can trainees rethink difficult and often emotionally charged relationships in this way, extending metaphors of identity and approximation into metaphors of operation and organization, they are learning modalities for and analogues to working with real families. In addition, they are developing metaphors to keep tabs on themselves, as they explore themselves in new ways. They are also developing new images by which to tune into others. Similarities and differences take on a new configuration.

If you extend the metaphor in another direction, one can ask and
enact, as we also do, how each one's animal metaphor for styles of learning is similar or different than his/her style of teaching or doing therapy? And which animals could represent those styles? Which animals would symbolize the styles of teaching each person experienced others as employing in schools? In training? In therapy? Are one's own learning styles and teaching styles the same?

Again, the analogues to different aspects and levels of system are present, as are the issues of fit of styles of any two or more people. For the essence of system type is the type of fit and pattern various 'parts' make in their dynamic interaction. Different types of 'fit' create different metaphors of organization, i.e., different types of systems.

I am reminded of a formula I made up years ago, following the birth of our third child: "The first, an N-of 1, is experience. The second, an N-of 2, offers comparison. And the third, an N-of 3, offers the opportunity to find patterns." Multiple analogic experiences offer each trainee multiple N's of experience to scan for contrasts and patterns, in both the experiences and resulting conceptualizations.

Over time, trainees begin to ask themselves before trainers ask them: "For what is this exercise also an analogue?" When they do that, we know that they have learned-to-learn (Bateson, 1972) a metaview, that events can stand for themselves and stand symbolically for something else.

A not uncommon concept in the family therapy literature in general is that a symptom in a child represents a disturbance in the parental relationship. This concept is another level of metaphor and
analogue. The child's symptom is seen as carrying disturbance from one place to another. However, that construct is already at a level of abstraction of metaphors of identity within metaphors of organization and operation that tends to remove people from their felt experience.

Our trainees begin to learn that any experience in a family, like any exercise in a seminar, will contain several levels and varieties of meaning. In so knowing trainees are open to explore, from the family's epistemics, the family's inside-out metaphors and to use their own creativity in the process.

Trainees are empowered then to know that there are many possible descriptions and analogic meanings given to system processes and no one correct one. Many ways of intervening are possible then. Using the General Systems term of equifinality, "There are many ways of getting to the same place". When people's metaphors of identity and epistemic metaphors of organization and operation are explored, they feel grounded in their lives and the coherence of their internal patterns. Change can then be connected to seeking relief from their own compressed conflicts.

A Summary of Process

When training thus creates exercises which then become analogic backdrops for personal images, meanings and metaphors, it is not difficult then to lead each trainee:

1) Back to the 'original' or other systems and settings wherein each one's idiosyncratic and personal world views are formed;

2) Into an exploration of all those systems, like neighborhood,
family, school, church, and the factors and dynamics operating;

3) To capturing the metaphors of identity of self in system and in context that each trainee carries like hidden badges from the past into the present;

4) To trying metaphors of approximation - ways of understanding each other in the seminar;

5) To exploring the elements in the current systems one lives within, highlighted by the exercise, including the training setting and system; and developing beginning metaphors of organization and metaphors of operation;

6) To radiating to 'far' space isomorphs;

7) To conceptualizing and generalizing one's learnings gleaned on such a journey, into ever expanding maps into wider metaphors of organization and operation;

8) To designing metaphors for intervention and change.

Thus, our image of 'living systems in context' far exceeds the boundaries and limits of family systems as the only system of focus. We span and explore the range of systems and interfaces in such a way that trainees are as much at home thinking and acting in school systems with principals and teachers, with clinic personnel, with homes for delinquent adolescents and with people in business and institutions, as they are with parents and children. With such use of analogic exercises, we can expose trainees to simulations of situations they could not necessarily encounter in a clinic setting.

Yet the learnings from such analogues carries them from one place to another and prepares trainees to identify and choose appropriate
and relevant interfaces of focus for interventions. As Jerry M. Lewis, M.D., stated at a recent workshop9, "if you are thinking and working on one level of systems only, you are missing something and you are making a mistake."

Analogic exercises, as structures for spontaneity, can:
- project into the future - via an experimental 'what if'?
- simulate and replay or explore very current material of the recent and timely now;
- evoke by re-enactment memories, associations and meanings of long-term past events;

Each analogic exercise can also draw on that which is familiar or that which is strange (Gordon, 1961, 1971), on conceptual material in analogue form or concrete material to be conceptualized; on persons in the room as real in relationship, and as actors in each other's lives and so on.

No matter which arena and aspect is incorporated in an exercise, for trainees it is happening now, in the present. Each trainee then is in the process of information exchange, enacting and drawing upon both the planned tasks, themes, ideas, constructs intended by the trainers, and the novel, unknown ones brought by each person. Each is creating the now information in the present while also creating another metaphor from which to refer and from which to generalize ideas later.

You may remember that we spoke in Chapter IV of information as

9 BFI sponsored workshop, Boston, March, 1980.
now', with an urgency of current and immediate status. Ideas are about and are formed in moments of reflection and metaprocessing. These exercises, then, provide the structure in and by which each person creates the now information first hand in a vital way, from which he or she will weave ideas.

There is no doubt that these exercises are also meant to be important to trainees in their relationships with each other in a seminar. Each exercise is also a route to knowing each other in very full ways — to empathic approximation, to trust and the dialogic exchange of equivalents.

When exercises can become relevant to trainees by analogy to a variety of settings and/or relationships inclusive of the trainee's personal life, trainers find trainees excited, energized and actively integrating their understandings in a wide variety of ways, both inside and outside the seminars. They keep bursting through the membrane which forms the boundary of their experience — and that process becomes a high that is habit forming. It becomes one's own 'anti-tedium tool'.

Thus our organismic, analogic presentation of simultaneously existing material allows for organismic learning, even though the paradigmatic teaching plan and process may follow a more predictable and even sequential process. With each exercise or created event, there may well be questions to be debriefed that would include some or all of the following:

- What memories or associations or ideas were stirred up by this exercise?
- Where were you? With whom? What happened?
- At and in what system level were you? What contexts?
- What did you learn then that this memory association or image stands as metaphor for? or
- What is/are the rules or messages implicit in that image or memory metaphor?
- How are the present events, exercises or people connected to your associations - that is - what characteristics in this event are analogues or isomorphs of a previous event? In structure? Process? Content?
- How is/are the present event and persons unlike any evoked associations? What new metaphor can you evoke?
- What is the current message this new metaphor contains and in how many of your contexts is it applicable?

All of the above types of questions are intimately related to each trainee in his/her own contexts, past and present, in a very personal way. In addition, as each trainee exchanges information and reflections about personal experiences and ideas set in motion by the same exercise, a range of responses emerges that allows for the development of metaphoric themes of new constructs, with variations in varying systems and contexts.

Strange and Familiar Images and Ideas combine in new ways. From such themes come new concepts and beginning theories. Such themes become the 'jargon' of Insiders - those who share common metaphors. The jargon of Insiders incorporates those communal verbal metaphors of identity into system metaphors of operation, or concepts, which create
boundaries of exclusion for those who do not share the images and have had no approximation opportunity. Jargon is that which is familiar to those inside and strange to those outside. Trainees together invent or create a jargon which is comprised of the verbal metaphors for common core images. Out of such shared experiences comes each trainee's sense of bonding with others - emotionally, intellectually, actively, conceptually. They learn to connect and translate their epistemic jargon into epistemological theory and back again.

A Mini-Meta Rap

Each field has its jargon - its metaphors of identity. Not all have metaphors of approximation, organization and operation, which loop back in a 'reflexively coherent' manner (Wideman, 1970).

We find that through creating the common metaphors of designed exercises and by raising to consciousness each trainee's theories-in-action, and each exercise's inherent analogical potential, adults in training invent new connections between aspects of self and other systems within a common metaframework. Connection at some level is assumed. The questions always ask: where, when, how, what and who. The 'patterns which connect' (Bateson, 1979) are elicited and evoked.

There is no right way to make connections. We are concerned rather with the fundamental question: Can trainees see, comprehend, make connections for themselves out of their own data, that fit for them? Can they weave their own life experiences via their metaphors of identity and approximation, into systems metaphors of organization and operation? Trusting themselves to find connection, create or adapt
theory that is experienced as coherent and appropriate, gives each trainee the base of trust in oneself as therapist, to work from the inside out. Trainees thus work from their epistemics to epistemology. Each one's epistemics then runs like fibers in the rope of epistemology.

In training for working with family systems, we are training people for both the known and the unknown, and we attempt to have them be open to both, to be competent (I know what I can do) and creative (I don't know yet, but I'll invent something) therapists and teachers of others, skilled, with options.

Bruner sums up what we attempt to do when he says:

I would submit that it is only by imparting 'casually fertile' propositions or generic codes that general education in the broad range of human knowledge is made possible. General education does best to aim at being generic education, training men to be good guessers, stimulating the ability to go beyond the information given to probable reconstructions of other events. (1973, p. 237)

These 'probable reconstructions of other events' are metaphors, and as David MacDermott says, "Brains make metaphors....All metaphors exist in brains and nowhere else....All metaphors, at one time or another, have to be invented" (1974).

At the Boston Family Institute, the idea is to train people to recognize, invent and intervene with moves and metaphors which facilitate competency and quality in living.

Each exercise then can be looked at also for its level of metaphor as well as system. Other exercises we will explore throughout the book are concerned with varying types of human systems and
metaphors. Trainees translate, transform, transpose. They carry themselves from one place to another - yet never lose that essential and existential thread of connectedness of person to his/her own felt experience, with each exercise being run through the filter of the self.

And we find, like the Greek hero who mastered the Minotaur, that following the threads of connectedness leads one out of the maze of self and system to the freedom of integration.
CHAPTER VIII
INTRODUCTION TO PART II
FAMILY-AS-SYSTEM/ANALOGIC DESIGN; FAMILY-AS-THEATRE/SPATIAL METAPHOR

In the previous chapter, examples of particular exercises begin to illuminate some of the actual processes utilized in training as well as our way of thinking about any particular exercise as an opportunity to help connect one's sense of self to a sense of self in/as/with system.

In this section, I would like to explore some of the broader questions raised in human systems thinking and the BFI approach to them.

On Generic Questions and Generic Processes

When one begins a training program with a seemingly simple set of generic questions, and when they are periodically brought to the forefront of thinking of the trainers, then it is akin to sailing a boat in both calm and rough seas: The purpose is to stay afloat, and to get to one's destination, with oneself and one's boat in good shape. Sometimes, one must 'tack' into the wind, and go in what seems like the wrong direction, in order to be able to utilize the wind and wave force to help one to get to the right place.

So it is in training. Generic questions can guide the overall direction of a training program, as stars and sextant guide the sailor. Yet often destinations cannot be reached by a straight line. Sometimes the best route is indirect and circuitous.
The first basic goal at Boston State Hospital — 'to train people to work with families as systems' — had hit rough seas and bumped into a basic generic question, "How do people hear?" (How do people learn?). Other generic questions, such as "How can one train therapists to be competent and creative systems thinkers and actors?" took the training ship into unknown and unusual seas. Inherent in the very words 'competent' and 'creative' are multiple subdifferentiated images of what those words mean, to different trainers and trainees.

Thus strong winds while sailing are akin to subsidiary generic questions: each relates to the actual processes to which we must attend in order to reach generic goals. Each time we have hit a forceful wind coming directly at us from the direction of our goal, we have had to pay attention and 'tack'. Thus, it has been necessary to tack in many different directions during this voyage, in order to stay afloat, to go further towards the stated goals, while constantly charting the new discoveries along the way.

For perhaps unlike sailing, within a training program one has choices of many goals. Every moment we are free to alter direction, timing and processes, for training/learning is a human systems issue. Since the purpose of training programs such as ours includes that trainees grasp ways of thinking as well as ways of doing, what one does as trainer is only half the story. What trainees think/do is the other half. Fortunately, in a training program one has the resources always present in the persons of the trainees, the sailors, to be collaborators during the voyage. They can indeed help chart the waters just passed through and can contribute direct information concerning
what gets in the way of us all in reaching desired goals.

As self-chosen captains of a new type of ship on a maiden voyage, the original new trainers had to find out how to sail while they were sailing in order to keep sailing! They had never been there before. They had never taught or taken such a course before. As directors of the ship, however, they could enlist the sailors to collaborate in the process of sailing, so that they all could succeed.

With hindsight I can say that whenever trainers at BFI did not pay attention to issues raised by trainees, and the trainees were seen as 'resistant' or lacking in some other way, as trainers we found we had been ignoring an important generic issue or question. For 'resistant' is an outside-in label given when trainees do not fit our image of how and where they should be at that time.

Originally, when trainers began asking "How do you best learn?" somehow the trainees' 'resistance' disappeared, and was replaced by involvement, curiosity and openness to risk new learning. Generically - when trainers explore what is occurring and ask new questions, new processes open up in trainees.

Trainees, then, more and more over time actually were invited to help sail the ship. They were invited to attend to the learning process, to be curious about themselves. In a reverse process, they were invited to give trainers the answers. The trainers could then incorporate in their teaching frameworks the answers trainees gave them. The issue of type and quality of 'fit' could then be attended in ways congruent with those present.

When, during the early years, hassles between group members
disrupted the learning context and rendered continuing with the
planned material impossible (see Chapter X), we found, after trial and
error that we would do best to let the sail out and run on a broad
reach. That is, we would do best to use the situation as a systems
issue, making it an opportunity to explore the 'disruptive' interface
in a new way, which would bring us all new information about the
people, the context, the expectations and processes which had created
the environment we had labeled 'disruptive'.

Such switching of direction led to the discovery of yet other
generic processes, each connecting with what happens between and among
people, and new information. Each time we 'solved' such a problem and
uncovered a generic human process, we incorporated it into our systems
map, our training program, and into therapy.

Through such explorations, I feel we have uncovered many of the
interconnecting and overlapping routes of access at the interface
between any two or more human beings, whether they be trainees, family
members, trainers or co-workers on a job. For the rules and routes of
access, discovered while solving different questions for ourselves at
the time, basically rely on how people process information, in its
widest sense, through sensing, imaging, feeling, thinking and acting.

In exploring the phenomena at the boundaries of interface between
people, we have uncovered generic systems processes pertaining to all
people, relating to one's sense of self, aspects of self, and the fit,
the interactive dance of physical and verbal behaviors with others.

Thus, whether in training, family therapy or organizational
consultation, we can focus on the particles; the persons; or the wave;
the transactional betweenness; the component parts/dynamic interactions, at any level of system, in context.

What happens 'between' people is the way they behave and process information, make meaning, metaphor connection and relatedness, and respond or generate new messages. We each also are the entities between the flow of transactions.

And that's what the rest of this book is about - generic constructs which relate to ways in which we explore:

- how trainees learn, behave, change;
- how all people learn, behave, change;
- how any system, especially family systems, can be explored, experienced, looked at, explained, facilitated in changing;
- how inside felt meanings and dynamics can be externalized and how external interactions can be explored for their meanings to all, including theorists;
- how the intrapsychic, interactional, transactional and intergenerational aspects of any human event are all parts of the same and can be approached and explored and linked through analogue and metaphor;
- how ways in which we explored led to the realization that we had discovered a cluster of ways of approaching basic generic human processes, an interface where 'information' takes place;
- how such ways of approaching the ways in which trainees think, feel, image, sense and act are all contextually linked; how by looking at individuals in context, we look at systems, issues of fit, and types of fit - the Isness of people in
relationship.

In the next two chapters we will look at those generic stances and the generic methodologies introduced at the beginning of BFI, which, by involving different tasks and processes of mind, provide the structures, tools and language with which to explore and discover everything else.

System Formers

Specifically, as we look at two basic frameworks operating at the beginning of BFI, family-as-system and family-as-theatre, we will see the way in which these two very different thrusts provided the fullness of range which allowed us to explore families and all other levels of human systems holographically from the outside in as system, and the inside out as theatre.

Two very different types of processes developed which seemed to be linked, in the beginning. These two different stances of looking at people through the conceptual lens of 'system' and the felt, experiential lens of 'theatre' promoted the development of two different methodologies for exploring people/system or people/theatre: Analogic Design, as begun by Duhl and Kantor in the "How do you hear?" exercise, and Spatial Métaphoring, as begun by David Kantor in Family Sculpture (Duhl, Kantor, Duhl, 1973).

Each of these methodologies draws on different mental processes for participants. Family-as-system emphasizes the exploration of interactive processes, how people behave with each other. Family-as-theatre emphasizes the exploration of the experience, the
drama, the meanings of living in the midst of those behavioral processes.

All of these ingredients were present in neonatal form in the training program during the very first semester of BFI in 1969, and contained within them, in the way in which we seem to have utilized them, the critical elements for developing our current way of thinking and training for integrated multicentricity.

Let us turn our attention now to a closer look at these first two basic processes, so that we can illuminate the subsidiary generic processes which formed the foundation for the focal ones (Polanyi, 1958). At the time of their serendipitous coming together, the BFI trainers' focus was on methodology and new ways of approaching understanding family, understanding systems concepts, and designing inventions to help families change. Various new processes were indeed being tried. No unified way of thinking about them and utilizing them for training in the holography of human systems thinking existed at that time. The way of thinking about the processes developed as the assessment of their range developed in an ever-continuing, evolving feedforward/feedback/feedthrough/feedforward spiral.

A Bit of History

During the first four years, those at the helm of the BFI ship, Fred Duhl and David Kantor, brought with them to its stewardship an interesting set of 'supplies' for the voyage. They each brought a sense of freedom and excitement in exploring uncharted territory. They brought great skills for blue-skying 'what if?' and for then finding
ways to play with and try out the hunches. They brought their previous experiences and their complementary ways of looking at families, systems, groups, and teaching or training in psychiatry and psychology, and mental illness/health.

In addition, as you may remember from Chapter II, Kantor had been exploring metaphor and analogue with his groups at the Readeasy, and he had been playing with the metaphor of family-as-theatre. Duhl had been exploring changing organizational structures, such as residency training programs, to general systems models, and he had been playing with the metaphors and stories of family-as-system. Duhl had been involved with theatre, while Kantor's research had started him thinking of family-as-system.

As you may remember from the anecdotal story in Chapter V, the first group of BSH trainees were bored, not 'learning'; they were not hearing the messages the trainers thought they were sending. They were not taking in the information.

Fortunately, this predicament created a need to do something different in order to dissolve the block. That problem fit right into the inquiries raised in the Educational Techniques Laboratory with which the trainers had been experimenting. There, they had tried lighting and dramatic settings with props and platforms, as settings for learning, in which messages could be delivered and received in more meaningful ways than lectures.

The "How do you hear?" exercise was analogic to "How do you take in information?" or "How do you learn?" It was also analogous to how people in families hear, take in information, and learn.
In taking the problem and making it the issue to be explored, the trainers had switched the focus to the generic question underlying mutual message sending/message interpreting transactions.

Experiential Learning Defined

And in the process of so doing, the trainers plunged the trainees into what is termed 'experiential learning'.

However, experiential learning is as gross a term as 'classroom teaching'. There is no type of learning that is not 'experiential' in some manner, including the experience of being bored to tears, where that message is not quite the one the person teaching thought he/she was sending.

However, if by experiential learning we mean that we ask that trainees base their constructs on active personal experience, that is something else. We can then involve participants in any of a wide range of activities, designed to evoke personal experiential data. Such information can then be elucidated by each trainee into conceptualizations, which when drawn together and categorized, create generic maps of experience.

If we think of experiential learning in the above manner, there are exceedingly different types of activities we can draw upon. Certainly there are those that involve imitation (accommodation) and those that involve play (assimilation) (see Chapter VII). There are those based on part/whole constructs, those involving metaphors of identity and approximation, as discussed in Chapter VII. There are those that make the familiar strange and the strange familiar. In
addition, there are those experiences which focus on how people interact in patterned ways: metaphors of operation and metaphors of organization (People-as-System, People-as-Theatre). And last, for the moment, there are those which go from the 'inside out' and others which go from the 'outside in'.

For purposes of clarity and definition of these terms particularly in this chapter, arbitrary as they indeed are, 'outside in' here refers to exercises which are planned by drawing on a theoretical construct or formal metaphor of organization/operation, whereas 'inside out' refers to an evocation of personal and idiosyncratic images, beliefs, metaphors and constructs as yet unlabeled and a-consensual.

To speak of outside in and inside out depends on who you are, where you stand, and what you are doing! As I am thinking of these terms here, the trainee is at the locus of concern. In an 'outside in' design, trainees enter a construction preformulated by the trainers, into which participants bring their versions of roles, and enact them. In an 'inside out' design, trainees themselves create a construction in which either they or others participate.

Thus, in either outside in, or inside out exercises, the trainees are involved in evoking the raw data, the material from which either the system aspects and/or the individual, personal and dramatic aspects of a situation can be grasped.

**Importance of Twin Foci: Family-as-System/Family-as-Theatre**

Within the first month of the inception of BFI, the underlying
juxtaposition of these two different metaphors - family-as-system, originally through analogic designs, and family-as-theatre, through Sculpture, emerged in this new training program as the twin holographic laser beams and lenses by which we would be able to discover the full hologram, later. At that time, the beams were not focused, nor did they necessarily work together. Nor was the light very pure.

For convenience, I am using the terms family-as-system, family-as-theatre to refer both to families and to people at all levels of system in the model of General Systems Theory. Thus these terms are being utilized as generic terms in this discussion. When completely inappropriate to speak of 'family', I will speak of people-as-system, people-as-theatre. The emphasis for me here is on system and theatre. People-as-system refers to conceptualizations about the experiences of being human, i.e., the map. Theatre allows us to explore experience, the territory. Words are about. Experience is. Both are necessary to grasp the whole. The multicentric glide from approximation to observation, from inside to outside, from territory to map, and vice versa, allows us to 'know' aspects of the hologram in different ways.

Thus, both family-as-system and family-as-theatre were explored experientially at BFI, from the outside in and the inside out, through analogic design and spatial metaphor.

Soon they began to overlap. Role playing in analogic exercises became an important way of entering into the drama and theatre of people's lives, in which people struggled with their issues of bonding
and belonging. Sculpture and spatialization became a way also of expressing the metaphoric nature of a system, in ways that provided nonvocal and synesthetic (of the senses) definitions for cognitive constructs. We found that relationships between territory and map, through analogic design and spatialization, could be bridged.

Thus, as I consider the evolution of our current way of training, I would suggest that the exploration of both family-as-system and family-as-theatre are essential elements in the development of a sense of congruence, coherence and integration between epistemics and a systems epistemology, and between theory-as-espoused and theory-in-action. Additionally, such an exploration is essential in the development of the actor in the therapist, who is able to take many stances and roles in order to know all positions from the inside out and outside in. I would also suggest that the marriage of family-as-system and family-as-theatre allows for and facilitates the integration in the trainee of his/her appreciation of his/her own family (life) as story, theatre and system, providing the analogic base for understanding others in the same manner. Such a marriage allows therapists not to lose touch with the people (the component parts) in the interconnectedness (dynamic interaction) of the members (system). As we stated in another paper, "You cannot kiss a system!" (Duhl, B.S. and Duhl, F. J., 1981)

The metaphor of system allows the trainers to plan from the conceptual systems epistemology, to then design an experiential example of the concepts, into which the person/trainee enters, bringing his/her personal world views or epistemics (such as the
Labels exercise). The metaphor of theatre allows the trainee to move from his/her personal experience (sense, image, memory, feeling) to an externalization of it (such as in the Be-an-Animal exercise), and perhaps then to conceptualization (see Chapter VII).

The emphases in each are slightly different. In an analogic design, the trainee is a responder/role filler to another's suggestion; in spatial metaphor, the trainee is the initiator/creator of his/her own roles/images.

Let us take a moment, with an example of each, to compare these two combinations of processes: 1) analogic designing, from the outside in, exploring family-as-system; and 2) metaphor designing, from the inside out, exploring family-as-theatre, as through Sculpture. Both of these are the types of exercises we use in training.

**On Outside In and Inside Out**

**Exercise #1: Family-as-System: Analogue to Metaphoring: Outside to Inside**

I invite you to consider the following scene: A father and mother are arguing with each other about what their child should wear when they go out for a walk. If you can possibly do so with others, enact this situation through roleplaying. Debrief. What did you learn/find out?
Exercise #2: Family-as-Theatre; Metaphoring to Spatial Metaphor:

*Inside to Outside*

Imagine yourself with your family when you were a child. Where are you? What is happening? As you remember and image yourself with them, walk up to each person, in the theater-of-your-mind. Get in touch with how you experience yourself with these people. Whom do you like to be close to? To whom do you not go readily? Whom do you avoid? Who else connects with whom and in what ways? Are the members of your family touchers and huggers? Do they like distance between them? Who likes which?

In your training group, choose other people to represent your family members. Communicate your sense of yourself with your family members, they with each other and with you. In this instance, place them in appropriate positions with appropriate movements and gestures which capture the images on your inner screen of their relatedness to each other and to you.

What do you suppose is your mother's image of this same group of people? Your father's?

Now, what did you learn?

In each of these exercises, the processes of mind involved in doing them are different, and the persons exercising the mind processes are different. It is important to remember here that we are focusing on the trainee, on how he/she thinks, sees, images, conceptualizes, moves. We are concentrating on his/her processes of
becoming an integrated and multicentric thinker, capable of analogic thinking and metaphor making, while working with others.

**Family-as-System**

In the first type of structured exercise above, or structure for spontaneity, the trainers have some concept in mind, some specific sets of generalized systems principles that they may wish to get across. Or perhaps the trainers are thinking of the types of situations that are common for people to be in, from which human systems principles were originally derived, and they want trainees to explore what it feels like to be in such a situation, and/or what 'original' systems principles are exemplified by such situations. In the exercise above, the trainers could have been thinking either of systems principles relating to three-person systems, triangles, triangulation, or they could have been thinking of common types of family scenes to explore, in which there is dynamic tension.

As I write of 'systems principles or concepts' I employ them as generic terms, and thus may refer to constructs drawn from General Systems Theory or specific family systems theories, or family therapy systems theories. For each of these can be very different cups of tea.

In either case, the trainers want to design a situation, an 'exercise', whereby in the experience of that exercise trainees will find the data, the process from which each trainee can derive and invent systems principles and analogues. The trainees will discover, through their own interactive experience, the concepts indwelling (Polanyi, 1975) or immanent (von Bertalanffy, 1968) in the processes
In this case, the trainers have to be thinking analogically and isomorphically, in an algebraic equation of: this is to this as that is to that. They must go from 'outside', i.e., abstractions, to 'inside', a concrete experience.

The trainers have to design an interactive situation: a concrete experience, which 'contains' in the 'doing' the abstract systems principles. Only after the experience is completed and debriefed can the trainers know if the exercise 'fit' their image and accomplished the desired goals.

The trainees, however, are into different, though reciprocal, processes of mind. Trainees enter and enact the roles set up by the instructions. They bring their own ways of being, memories, images and metaphor these into roles in action, in relationship to others. They play out a situation. Who they are and how they enact it will again depend upon instructions and what each person brings.

In then being asked, "What did you learn?" and other questions, trainees will be able to metaphor from that concrete experience to abstractions. The discovery of particular generalizations is rooted in what has just happened. The trainees first participate in creating an experience, and then are asked to generalize from the experience. They must then think analogically from the concrete experience to an abstract generalization, image or idea, a reverse process to that of the trainers. They are going from inside the experience to outside - to the conceptualizations or theories.
Family-as-Theatre

The second exercise above derives from David Kantor's sense of family-as-theatre, which he developed under the different metaphor of Family Sculpture (Duhl, Kantor, Duhl, 1973). Kantor considered that the one who had the images was 'sculpting' the figures of one's internal configurations in external space. Family Sculpture, then, as he developed it, is a means of creating one's condensed and essential images of a family's context and patterns of transactions in external space, so that one can experience and/or observe the whole of one's image enacted outside of oneself. As such, Kantor's theatrical creation brought the dynamics of action and living to 'living systems'.

In this modality, Kantor introduced a way of starting with each person's ethereal and internal sense of relationship, with the request that each person re-create that sense externally. In so doing, the Sculptor of such a physical representation is moving from the intangible internal image to a concrete external representation. The trainee checks the 'fit' of the inside image with the outside constellation.

Only later, through analogue, can this particular constellation of people in patterns with each other be 'seen' as representative of systems principles. The particular family group is first related to other family systems and then to generic family system principles. At that point we are free to ask what outside constructs seem to provide a framework for these particular patterns. Or we are free to metaphor once again, poetically, framing the whole with verbal, imagistic
metaphor.

**System and Theatre Together and Separate**

As we can see, these contrapuntal themes of family-as-system, and family-as-theatre, call upon different metaphor-making and analogue-scanning processes in the trainee, and in different sequences. In the first, the trainee is an actor in someone else's play or skit, enacting one role at a time, through approximations. In the second, the trainee performs the roles of the author, producer, director, choreographer, costume designer, makeup artist, rehearsal coach, and oh yes, often an actor, in his/her own full production.

Let us take a closer look now at how these alternating positions of responsibility and task allow for the possibility of integration and multicentricity in the trainee that I continually refer to. Trainees learn to enter into family systems and to know the individuals, and to translate ideas into the metaphors of the family, their 'language of impact' (Duhl, F., 1969). Trainees also learn to view and comprehend the total system from the outside.

Through the experiential processes of walking through many territories and creating the data from which the maps will be drawn, trainees thus expand their metaphors of identity and approximation into aspects of transactional systems, themselves metaphors of organization and operation.

Now let us explore these contrapuntal themes of people-as-system, people-as-theatre (metaphors of organization and operation) through the structures of analogic design and spatial metaphor.
For the purpose of this exploration, I will separate these themes as resonating with different ways of analyzing the symphony of human life. In the two subsequent chapters, IX and X, I will examine analogic designs concerning people-in/as-system, and spatial metaphor, concerning people-in/as-theatre, sequentially.

We will be exploring analogic designing and spatial metaphorizing as generic processes, as goal-oriented ways of exploring issues, people, systems, rather than as prescribed ways to use specific analogic designs or spatial metaphors. For in this discussion, I am not directing our focus at particular techniques, but rather towards generic processes.
People-as-System(s) and Analogic Designing

At this juncture, I will do something that I presume is not usually done in books. I will repeat here the first three pages of Chapter I, describing my first evening's experience at BFI. For I would like to examine that experience from several different levels.

I would like to continue the exploration of creating structures for spontaneity, from my experience as trainee first, from the inside out, before we discuss the development of design and designing from the outside in. For what is so often left out in discussions of training and teaching are explorations of the process called upon in the trainees' performing any particular activity or exercise.

When as author I make a claim that the way of training developed at BFI can facilitate integration in the trainee, and can lead to multicentricity, I feel it necessary to explore what it is I am calling integration. To do that also means to look at what is happening for the trainees. As trainers, we so often do not look below the surface at the manner in which we send our training messages and by what processes we expect those messages to be grasped. Yet as trainers we are working with people, training others about people in systems. We indeed are doing, seeing, sending, receiving many complex messages at any one moment, as are trainees. Over time, how trainees think and act changes.
What are the processes of mind involved in such learning? How do we go from experiences to constructs? From constructs to experiences? In discussing these questions here, we are still involved with the generic question, "How do you best learn?" I will thus be sharing some of the learnings we have gleaned and some of the discoveries I have made in this wider arena of concern with the generic processes by which we meet generic goals.

Let us now look at one set of analogic designs in depth, and at the designing process. Let us furthermore look at the processes below the surface for those doing the exercises, and examine those mind processes for their role in action-oriented, experiential learning.

I invite you to come and walk through the exercise with me again, this time, from beginning to end, debriefing and metaprocessing the whole.

**Scene One - 'Take 2'**

When I walked into the room, the chalkboard said "SILENCE! DO NOT TALK." So the group of some 14 adults sat and looked around, uncomfortably, smiling awkwardly. Some stared at the floor, others examined the peeling pale green paint, the steel-meshed windows. Eyes searched out the inanimate, moving upwards to investigate the four-sided balcony with slatted railing in this mammoth two-story room in an old Boston State Hospital building. Stark bare light bulbs hung in the center of the room, casting soft shadows under the balcony. Eyes scanned each other fleetingly, and shifted away. One woman rummaged in her pocketbook for something. Anything so as to pass the time in nervous silence, wondering what this was about and trying to
look casual.

If we had been younger, the chances are we would have giggled and whispered and hidden behind our hands. I knew two of the 14 people. They were a couple - friends through children who were friends. He was a business man, she was a homemaker. They were each interested in family and human systems and had just joined the Boston Family Institute course as I did, during its initial seminars. It was September 1969. The leaders had had a first Spring semester. Now they were going to start with a new group of trainees, while the first group 'waited'. After three months, both groups would be joined together - to continue a two-year, part-time course.

So there we were - no names, no talking - no exchanges of the usual social and verbal information. We were left without our usual tools of establishing our places vis-a-vis each other. Without such tools, we were amorphous. We were left to deal with information and communication with our first and earliest pre-verbal skills, and we were uncomfortable using or interpreting this language, directly, in conscious awareness.

I was reminded of sitting in doctor's offices, waiting rooms, the subway, airports, and all those similar places where you are supposed to pretend that you are the only person in the room, or else that you and 'they' are invisible. The chalkboard only said: "Silence, do not talk." It did not say, "Do not notice each other. Do not communicate." Yet we acted as if it did.
The leaders of the seminar arrived. I knew them. One said something like: "We want you to meet each other without words. We are going to divide you into two groups and those halves into two smaller groups and give you each instructions as to what to do. After you receive your instructions, you will mill about - using no words - carrying out those instructions. When we say 'switch' - you are to switch to the second instruction we have given you. Then we'll talk about this. Remember - no talking."

At this point, the leaders arbitrarily divided the group down the middle and then again, in quarters. Each leader spoke to each of two sub-groups, telling them what to do and in what order. Each small group knew only its own two instructions. Mine was to first be a 'positive responder', who, when the signal was given, was to become a 'negative responder'. These ways of being were to be carried out completely without words, solely with movement, facial expressions and gestures with each other. No matter what others did, one was to stick to one's instruction, one's role, and not speak.

We began to move: awkwardly, avoiding, then tentatively towards each other. Some people looked 'pleasant'. Others looked 'mean.' All of a sudden, someone pushed me hard, looking quite angry. Automatically, I felt like pushing back. My instructions, however, were to be a 'positive responder'. I smiled and tried to take the person's hand. She shook loose abruptly, turning quickly towards

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another person whom she purposely bumped into. There was so much going on. I smiled somewhat rigidly, and nodded nicely no matter who did what with me. I noticed a woman slumped down by a pole. I saw others smiling, bumping, moving abruptly. One felt the sense of awkward tension, of restrained energy, in the room.

The command 'switch' came from the leaders and I became just as fixed as a 'negative responder'. I must say, for the first few minutes it was a relief not to be nice, to shrug others off and to turn away, to give a push back when pushed. My own tension and held back energy felt released. This situation however was awkward. We didn't know each other. We didn't know who we were pushing or avoiding. We were just 'roles'. We were grownups and strangers, not children. We were enacting these behaviors in awareness, and we 'knew better'. It was both fun and freeing, and equally uncomfortable and tense.

The leaders said 'stop' and asked us to come sit down and debrief what had happened. They asked each person to mention his/her first name only as each spoke and began by asking us, "What did you learn?"

My mind was swirling with images, impressions, reactions, thoughts. My hands still felt the memories of others' warm grasps. My shoulder still tingled from someone's push. In my mind's eye, I still 'saw' the woman slumped down behind a pole. I realized with a start that we had not as yet said one word to each other. Still we each had available huge amounts of data: kinesthetically, through our bodies in action; tactually, from all the touches, pushes and body contact; aurally, from all the movement noises we had heard, from nervous laughter and sounds that accompanied movements; olfactorily, from the
different odors we had sensed; and visually, from all that we had each seen both during this exercise as well as while waiting in silence earlier. All of these data had been taken in, and many had been given meanings from memories, images of other contexts, and rules of behavior whose origins were long since forgotten. Particulars were competing inside me for mention with more general associations, all stimulated by these people and these exercises in this context.

What does one talk about? Which data does one choose to offer to this group of unknown people? We had no guide lines. Questions are organizers. Answering through speaking involves selection, choice, censorship, omission. What did I learn? As adults in this type of a setting, one searches for a sense of appropriateness, a sense of context. That in itself was problematic here. There were no clues.

The social rules for the politeness of first meetings had been altered radically, in a way that was both freeing and frightening. The situation was freeing because one could not assign meaning to others by any context or situation other than the one we were all in at the moment. Therefore, one was free to say anything one wanted, without assuming one should have 'known better', politically. Each could respond 'authentically' in and of the moment, calling forth one's reactions and impressions freely. The situation was also frightening, because it would be difficult not to be 'authentic', since we had no contextual labels, roles or rules of relationship to guide or hide us. Being authentic, saying how and what one really felt or thought at the moment, felt frightening, like premature exposure/disclosure against an internal sense of rules of order for such a process. We were to be
with each other not for a quick encounter, but for two years, in a training program. We each had now, this evening, and a long projected future together. It did not feel safe.

I felt full of varying kinds of information. The context markers for trust were missing and I had to assume them as either present or absent. We did not know how the information in the answers offered would be received or dealt with, by either each other or by the trainers. The questions "What did you find out? What did you learn?" that the leaders had asked were wide open. Questions like these put a little more weight in the 'trust department'. With such questions, it was hardly likely there was only one set of right answers, or that anyone would be ridiculed or put down for their contribution. But then again... Somewhere in the middle of me I was feeling both scared and exhilarated.

Debriefing the exercises:

People began to speak with caution, exchanging responses to the exercises which included the sitting in silence at the beginning. We talked about that only briefly - for the moving exercise had much more energy behind it. One short woman said she had felt awful sitting there - like she was a very, very little person in a group of giants. She later stated that she was youngest of eight children with significant age gaps between each child. Another said his only pleasure was that others looked as nervous as he was. He figured they didn't know any more about what was going on than he did, so he relaxed a little. Someone else said he tried to guess what others did
and where they worked. The leaders acknowledged comments. Everyone had looked at and observed other people, yet not one person made any direct, personal comments. It was as if, without words or interactions, we had had no vehicle of connection between us, even though we had each been subject to the same experience. Comments were awkward with a floundering, searching quality reflecting the nature of the experience itself.

A little lightness entered the discussion as people shared some associations. One woman mentioned trying to count the slats of the huge square balcony railing, but the peculiar lighting on them had created the effect for her of the slats 'moving', making counting impossible. All had wondered about this room and for what purpose it had been built, and no one knew. While it turned out that no one had liked the exercise, no one had disobeyed the chalkboard sign and talked. All had taken "Silence. Do not talk." to mean: "Do not make conscious contact and connections with each other".

As we began to discuss the second movement exercise, the energy changed. Again, we had been asked, "What did you find out? What did you learn?" Everyone had something to say, all wanted to talk at once. People were animated and interested. It became clear as we talked that instructions related to a cross-grid of behaviors:

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<th>Positive</th>
<th>Negative</th>
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<tr>
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<tr>
<td><strong>Responder</strong></td>
<td>Positive Responder</td>
<td>Negative Responder</td>
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</table>
One woman, whose version of 'negative responder' had been to withdraw into a sunken down position, with hunched shoulders, head tucked down, stated she had experienced several people either pushing her, or trying 'nicely' to get to her, to persuade her to come away from hiding behind a post. She said the more they tried to move her, the more she folded into herself. She said she felt as if she were a child, having a sulking tantrum. Another person said that she too had used withdrawal as her form of 'negative responding', except hers was an active withdrawal. She felt that she wanted no contact, of any type, but that she would just keep moving, to avoid it. That meant she had to keep looking over her shoulders to see if anyone looked as if they were approaching her. As we talked, someone said 'paranoid patients acted like that'. One leader commented how paranoia then may be a way of responding negatively in some interactive dance.

The 'positive initiators' had felt very rewarded by 'positive responders'. They had been smiled at, received and accepted. And not everyone was aggravated by pushy 'negative responders'. One man said he felt energized by the physical challenge with which some 'negative responders' met his very physical 'positive initiating'. Those who were 'negative Initiators' had all been physical and provocative with others.

The leaders asked about, and we discussed contexts and situations in which we had experienced or witnessed such reactions and behaviors. One man stated that another man, a 'negative responder', had acted 'disgusted and mopey' with him "just like my older brother used to".

The woman who had been sunken down like a sulking child said of
two 'positive initiators' who had cajoled her: "I got so mad at you. I wanted to scream at you to go away! I also didn’t want to let either of you know you could reach me at all, that you could have any effect on me. It was like being a kid again with my goody-goody sister trying to cheer me up."

A second person talked of how hard it was for her to be rejecting. "It made me feel guilty," she said. Another person mentioned how welcomed he felt when smiled at by a particular 'positive responder', who reminded him of a good friend.

Considering that this was just a 'game', without a script; considering that there was no prior history with or information about the people involved in the 'game'; and considering there had been no verbal exchange between group members, there was a remarkable amount of energy and interest invested in what had occurred and in talking about those incidents. In addition, I was amazed in realizing how much information had been generated, gathered, processed, all stimulated by two exercises, without any exchange of words, that had taken about 30 minutes altogether!

Somehow, it seemed to be easier to reveal personal material and images and impressions about self in relation to others in debriefing the second exercise than in the first one. The exercise itself had acted as the vehicle for direct interaction to take place. It was evident that this activity had stirred up a lot of 'stuff' for people. For as we talked, it began to become apparent that by entering into actions which each one associated with certain generic processes (initiating, responding) and certain generic attitudes (positive,
negative) trainees were tapping into whole universes of feelings, thoughts, meanings, images about people in interaction that we each brought with us.

For as we now were speaking, all our previous life experiences had begun to creep into the room with us, in words, as they had in action, moments before. Our only experienced 'history' together as a group was what had occurred that evening. We had no other shared memories. Yet people were giving a lot of meaning to what had been happening. The meanings we were giving to others' behaviors and/or our own reactions began to reveal what I began to call our core images of ourselves in the world which we each carry with us from context to context in our timeless minds.

Our assessment of behaviors gave clues, if not facts, reflecting previous contexts and the learning-to-learn about human behaviors we had already done, in many settings. Our freedom or restriction in disclosing reactions hinted at our earlier family upbringing and cultural rules. During the second exercise, people had moved, smiled, reached out, pushed, jostled, withdrawn from one another, as each enacted his/her version of certain words: 'positive Initiator', 'negative responder', and so on. The process first of choosing behaviors and then seeing those of others evoked internal associations to people and places, family, schoolmates, friends and other people in one's past contexts and current situations. These interactions were now bringing forth comments relating to social and ethnic rules, going far 'beyond the information given' (Bruner, 1973). The exercise had acted as an 'assumptive world view' mind-set stimulator (Parkes,
In this second action exercise, yet still without words, one had to rely on one's body and sensorium to transpose, transport and translate messages out and in. Such simultaneous translations were possible to check for definition only in one's personal dictionary of core images and meanings. Each trainee had 'brought in' such a 'dictionary'. Whatever each said in debriefing began to reveal definitions previously 'entered'. Some definitions were familiar. Others were strange.

Thus these two simple exercises had tapped into our total life spaces!

By the end of the evening, all were catching the drift. We had created roles with distinct interactive and transactional processes, devoid of specific content or personal relationship. We had actively experienced that as initiators we were free to move; responders had to wait. It became sharply clear these assigned roles were limited in scope, thus accompanying processes were also narrowed in the range of options for movements, gestures, posture, demeanor. A 'responder' has no option to initiate. An 'initiator' does not stand around waiting to be responsive. Yet as 'initiator', one needs a 'responder' to initiate something with. A 'responder' needs an 'initiator' to respond to. There are patterns of interaction between the two. None of these metaphors of identity, no matter how stereotyped, and none of these processes can exist in a vacuum, without the others. None could have come into being without previous contexts.

We each had learned from those earlier contexts about behaviors
labeled positive and negative, and could enact them here. Not only that, but the feelings evoked by those roles were familiar. The positive initiators reported themselves most distressed by negative responders, for they felt rejected, angry, and annoyed that their good will had been met with so harshly. Those feelings in these roles were brought in from other contexts, since we did not know each other, and each group knew only its own pair of roles. The roles were then contextually interdependent process roles of relationship, comprising human systems. Oh.

However, while cognitively this was very exciting, we still hardly knew each other except through the exercises. Socially it was awkward, and as people identified only by our roles, it did not feel safe.

Indeed we knew more about the system elements of new meetings, but we did not yet feel connected to each other as group members. While the exercise had drawn on each trainee's experience, the connection with one's total life situations seemed 'out there' and ungrounded for trainees in the room. These issues became important for the author during training and later, as trainer. Certain processes developed during our explorations, especially Sculpture, began to take care of some of these issues of safety for risktaking and integrated learning (see Chapter X).

Designing the Design: What the Trainers Thought and Did

At this point, we will move from the experiential level as trainee, to a look at the exercise from the vantage point of those who
had to invent it. In so doing, we will explore the thinking of the
trainers as a way of exploring one way of thinking in designing
analogic exercises—highlighting people-as-system, from situation to
constructs to designing an experience embodying the constructs.

In this particular discussion, we will recognize that the way of
thinking of the trainers drew upon their prior awareness of group and
system processes.

The First Exercise: Analysis of the Thinking and Planning Behind It

What situation are trainees involved in?

This was to be a first meeting of a new 'collection' of trainees. They were a 'collection'—individual people who basically did not
know each other. They were not yet a group or a system. There were no
ongoing self-organizing, self-regulating interchanges as yet. They
would be system-forming (Gray, 1975).

New meetings involve getting to know one another—Introduction.
The new trainers wanted to short circuit the usual system-forming
social patterning process before trainees were well into the age-old
cultural ways of getting to know each other. Those standard moves in
new social situations usually ended up with stereotypic relationships
started that were hard to undo. Such ordinary social moves include
checking each other's badges, by asking "What do you do? Where do you
work?"

The trainers had already learned in the hospital setting the
difficulties involved in training in new ways which cut across the
usual hierarchies. Badges are labels, metaphors of identity, which
always carry the images of social and professional roles into a new arena. These images and assumed role expectations become early definers of attitudes, behaviors, and relationships, thus defining aspects of the subgroup and group levels of system from the outside in.

The trainers wanted the new trainees to be open to see, hear, act, and think freshly, differently, with each other and with the trainers. They wanted trainees to be open to new learning, new thinking, and a new paradigm, that paid no attention to badges previously worn.

The introduction of novelty was felt to be important to capture attention in a new, open, and opening-up way.

To change a pattern of social interaction from the outside, one must change the process and guidelines by which that interaction takes place. If people on meeting usually make small talk exchanging context markers, as revealed in "Where do you work? What do you do?" then one can block that process from getting started. One simple way to prevent such introductory small talk is to insist on 'Silence. Do not talk'.

Thus, if we were to write up a 'plan', as it might have been done at that time, it would look like this:

The Goals: Creating open climate for new learning, for new paradigm. Interrupting usual social group formation.

Group and Individual System Themes: New Meetings; Introductions; Entry Behaviors; Status Scanning.

The exercise: Write "Silence! Do not talk." on chalkboard before any new entrant arrives. Leaders leave room as newcomers enter, return when all have arrived.

Before we make any comments about this as a design, let us
explore the thinking concerning the second exercise. Then we will return to comment on each, in order.

The Second Exercise: Analysis of Thinking

What content/processes are trainees in need of learning about?

When one begins a program there are at least a million choices as to how to do that. In this case, the trainers were wondering how they could use the real life situation, i.e., a new meeting, as the situation to be explored for generic and systemic principles. The trainers then began to think analogically, as they thought about and analyzed new meetings.

The trainers asked themselves what people do at a new meeting, and what behaviors encapsulated the essences of processes taking place in social or academic contexts called 'new meetings'. They arrived at the behavioral categories of 'initiating' and 'responding'. Of all the greeting patterns in new meetings of people in this culture, these two aspects are predominant. Some people in new situations reach out to greet and connect, while others simply wait to be approached.

When the trainers then raised questions about the feelings, the affect, connected with such new social contexts, and the Interpersonal concerns or meanings people brought with them into those settings, the issues of acceptance/rejection kept cropping up. The concepts acceptance/rejection are already metaphors, symbolic meanings, given to very complex series of contextually related systems interactions for which everyone has images. Yet images of acceptance/rejection and the meaning assignment given to those concepts differ in different
cultures, subcultures, families, and individuals.

The twin categories of acceptance/rejection were then further abstracted to the generic polar concepts of yes/no, positive/negative. When combined with initiating/responding, one has the generic dynamic ingredients of new social human encounters; positive/negative/initiating/responding.

Every adult in this culture, by the time he/she is signing up for a program in family therapy, has had multiple 'new meeting' experiences. Each will recognize the factors involved.

The trainers then designed a bare-bones and rich exercise, calling for the mix of ingredients, in behavior, without words. They wanted the new group to conjure up and play out the essences of new meetings, a systems issue - the very situation they were in, and to do so in a way that would draw on their own previous experiences. In so doing, they 'gave' people the generic roles in new meetings, which may have been similar to or different from one's usual and ordinary entry behavior in new situations. The trainers did not wait to find out at that time what 'normal' entry behaviors were. They created roles for the trainees to fill, as analogous to those prevailing in all new meeting situations.

The trainers extracted the essence of the situation, connected it to the essence of what they wanted to see happen in a way that actively involved the trainees and connected the data to systems concepts derived from the trainees' own experiences. They had made the situation the issue.

A plan for that evening's design might have looked like this:
The Goals: Discovering the essences of new meeting situations, in action.

Group Themes: Enacting essences of new social situations; introductions by roles; initiators, responders.

Individual Themes: Drawing upon one's images and meanings; enacting images; positive and negative.

The Exercise: Divide group into four subgroups. Instruct members to be positive and negative responders and initiators. Switch positives/negatives half way through. Do entire exercise actively, without using words. Debrief.

Metaprocessing the Process:

What's Happening and What Else Is Happening?

The process of training through designing analogic exercises is only as good/complete, thorough or holographic as the quality of thinking and energy also put into debriefing, evaluating and keeping one's eyes and ears open. For if in training we look to trainees to discover in an exercise only what we originally planned, then we cut off new ideas, new information, resources, creativity and integration.

The author has learned over the years that in paying attention not only to that which fits the mind's eye image, but that which does not fit, one can discover hidden treasures and new ways of seeing and doing.

Let us now take a look at the same two exercises and discuss them from an overview position, commenting on the process, and analyzing what generic processes are involved in doing each exercise.
The First Exercise. What was Happening

The Impact:

By the one simple move of setting up a scene of 'silence' at the very beginning, the trainers had surgically interrupted each person's automatic entry behaviors, and the exchange of the usual verbal societal cues relating to status, position, relationship! Impressivel No person could program his/her behaviors to assumptions of roles and status - all definitions of relationship. No one could ignore relationships by chatting about the weather. There was no way to refer to outside events, or contexts, or data.

The new group members were caught. There was no way to avoid participating in what was occurring now, as long as one had basically agreed to 'obey the rules' and lend the situation an 'as if' trust (Bernhard, 1975). For no real concrete thing or being prevented anyone from talking, moving, leaving!

What was Being Called Upon

Let us look at this experience now beneath the surface, from the vantage point that time and overview afford us. For our human minds cannot consciously focus on surface and substrata at the same time. We cannot describe behavior, give it meaning and look at what principles of mind and of system are operating at the same time.

When new people enter a new setting and elect to obey the chalkboard "Silence. Do Not Talk" Instruction, they have accepted on the level of behavior the rules of that context. They are 'doing' the
Instruction. In so doing, new group members must then rely on nonvocal data processing (or avoiding, as the case for some turned out to be!). The meanings given to those nonvocal data by each person are direct, associative, impressionistic. It is the only way anyone can make any 'sense' of these people new to oneself. Eliminating the usual verbal exchanges also removes the guides we have been socialized to use in our meaning assigning through verbal exchange. Taking out of use one's basic social channel of communication for sense-making forces people to use other mechanisms.

And What Else was Happening?

While the leaders were quite cognizant of the ability of their 'Silence' instruction to cut out the usual social verbal interactions, they were not aware of the importance of the flipside: that in eliminating words, they were triggering and activating whole different processes. They were completely unaware that 'silence' also heightens each trainee's sensitivity to and acuity in recognizing and deciphering paraverbal information. People still size each other up, whether they use words or not. Visual and other synesthetic information is checked against an associative file of contextual and behavioral core images.

That first evening, the author was aware that in the absence of word communication externally, one has several choices. One can

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increase and attend to one's own internal verbal dialogue, the internal chatter. One can pay attention to internal stimuli and fantasy and daydream, removing oneself. Or one can attend, see and hear both internally and externally in the way we each did before we had words, or verbal modes of communication.

Our first language is direct and synesthetic. Later socialization instructs us in how we should be and in how others' dress, posture, looks, behavior should be interpreted, and we begin to interpret information contextually on several levels at once; synesthetically, affectively, cognitively, contextually.

Omitting verbal language then in an exercise concerned with a first meeting of adults, has a powerful novel shock effect! For it interrupts our basic cultural rules about social behavior. It interrupts our patterned way of behaving, allowing us to look at the underlying rules we took for granted. They stand out in their absence.

No words allowed in a usually verbal context creates an uncomfortable void. Although no one is ironclad to obey the written instruction calling for Silence, it is assumed by those participating that, given the context, this powerful instruction is already part of the program one signed up for! (Yet stop for a moment and think, image, consider the data-bank of information from previous experience that go into making even that, or any other assumption! What if the chalkboard instruction had been left over from some other class or group!) Thus, in the midst of one's discomfort with the covert acknowledgment, if such there be, that one is actually agreeing to go along with this uncomfortable 'game' which takes away one's sense of
stability through words, one is expectant at least that there is some 'sense' to it!

The familiar has been made strange (Gordon and Poze, 1973) and one is agreeing to stay with it. That which is strange can always be compared to the familiar. Silence with strangers is familiar enough. It is that instruction and behavior in this context, a new training session, boundaried by the Institute, that is strange. In such a setting as this, one is in conscious awareness of the usual expectations of first such meetings, which are to talk, to size each other up, and to see whom one can connect with in some way. We each locate ourselves contextually in some way to other group members. These expectations are perhaps in some way related to the basic human need for contextual information ascertaining safety or threat to survival.

Silence with strangers happens in public settings. This setting is not public. Additionally, unlike subway riding or airport settings, where one is en route to a chosen context and can get lost in a book, this is the chosen context, and the rules and expectations militate against getting lost in a book. In this context, unlike subways and airports, one is not free to ignore the context! The dissonance set up between the socially patterned expectation and the actuality sets up a tension in each person. One must use other equipment than words then to gather information here.

One's earlier equipment has been working for so long out of sight, and under cover, it rubs its eyes, startled, to be called upon to come out in the light. For it does not know what to do all by
Itself any more. It has worked as an undercover agent with or against words for so long, it feels awkward and exposed alone. To make one's wants known directly or to respond directly entirely without words belongs to a period of life lived long ago, before one learned rules of social interaction and appropriateness. It is almost as if this earlier and relied-upon base equipment for communicating had long ago been ordered not to show itself, except perhaps on very special occasions, and this is certainly not one so catalogued. A situation such as this is not even listed! Some people are irritated, for there are personal rules as well as social/cultural ones about 'staring' at other people. Yet how else could one get information? Another conflict between expectation and actuality - and no way to comment on it! In debriefing, one doesn't comment in words upon what was directly perceived about another synesthetically, for that is open acknowledgment of breaking these social rules, compounding the crossing of boundaries.

Boundaries? Boundaries between people? Information? Ways of processing information? Information crossing the boundaries? Rules? Breaking rules? Patterns? Interrupting known patterns of behaving and images of behavior? Core images? Core Images and safety? Safety and threat? Pattern breaking as strange? as threat? These are basic phenomena in human systems, delimiting the way that information can or cannot cross boundaries openly, according to the patterns, images and rules of the culture that we each carry with us in our minds, through the roles we each play, and the contexts which define both.

We are talking about individual people obeying rules in groups
while experiencing many unruly phenomena! All systems phenomena

The hologram is there, contained in the bit.

**Metaprocessing: The Trainer/Trainee Interface Concerning the First Exercise**

Trainers did not yet ask the types of questions that would also begin to unearth all of this information, these ideas, for that was not their focus or intent at that time. They asked generally about the experience itself and related it to new meetings. They listened to some of the flack of annoyance and irritation the Silence had stirred up.

They also did not ask what specific people had learned of others during the Silence. Indeed to have asked new trainees directly at that time about specific observations and the meanings given to each other's behaviors while waiting would have been a breach of more than convention. It would have been a breach of the barest beginnings of the 'as if' trust assigned to this new training setting. Crossing such boundaries on the leaders' parts would have completely destroyed the assumed contextual social contract for safe relating, already shaken by the types of exercises themselves.

There are tolerances for novelty, for absorbing the familiar made strange, beyond which one must defend oneself under threat of giving up one's sense of contextual reality completely. Brainwashing and other mind-changing techniques are based on how mind works under stress (Conway and Sigelman, 1978).

Training programs in mental health arenas themselves carry in

Yes, even training programs which change the context and the rules and the-paradigm and the way of teaching, and make them strange must honor the metacontext, the metarules, and the metaparadigms and values underlying how people learn, grow and change in a coherent manner. The issues of safety for nondefensive, integrated learning thus were raised the very first evening.

No. The trainers did not know what they had begun to unlock, although all the elements were there. They had merely wanted to stop some old social patterns from getting started, and to have a new process of meeting begin, in a novel and different way so that trainees would be open to each other and new ideas. They had made the familiar strange so that something new could happen. They succeeded in more ways than they ever knew!

The Second Exercise: What was Happening

Meanwhile, in the midst of the trainees' uncertainty and search, and while the trainees were off balance (and while elevating trainees' nonvocal information processing to the forefront, of which the trainers were unaware) the trainers introduced the second exercise.

Let us examine and process this one in the same way.

The Impact

Trainees are faced with empty abstract verbal concepts, to fill
out with their own images to enact: Positive/negative/initiation/responding. They cannot be 'themselves'. They must be themselves - their version of behaviors. One's usual new entry behavior is thrown completely off base. Each person has to enter by someone else's rules and game. It feels safer. It feels unsafe.

**What was Being Called Upon**

The process of finding internal meanings to fill abstract word concepts can best be stimulated by asking trainees for active positive and negative initiating and responding behaviors. Trainees must then fill the void of those image words, those concepts, by searching their own world of images and memories, and by metaphoring their own idiosyncratic, synesthetic translations and notions into those concepts.

Enacting without words those indwelling meanings allows each trainee to employ a unified modality of message sending, from the inside out. One is not being called 'negative' in putdown or blaming fashion. One is asked to be one's own version of negative or positive. How to initiate or respond is left to one's choice from one's entire snapshot or movie albums that accompany one's dictionary of behaviors.

As adults, the meanings we originally gave to certain behaviors have long ago become attached to words representing the categories of positive and negative, initiating and responding. Reflexively, these behaviors become meanings we will enact when presented with certain words and conceptual categories. These meanings enacted become ways of trying on varieties of metaphors of identity.
The underlying assumption is that we each have and know versions of negative behaviors, of negative initiating and negative responding. Equivalently, it is assumed we all have and know versions of their positive counterparts, that can be teased apart from their transactional contextual embeddedness as free-floating roles we can play.

Each trainee can 'go inside', calling on his/her own images to fill assigned generic categories with personal, idiosyncratic behaviors. In debriefing then, from one's own experience in such an exercise, trainees can move to the abstractions and generic concepts drawn from these examples quite smoothly and easily.

In dividing up the group of possible combinations, trainers ensured that all would be enacted. And by asking each person to 'switch' roles, from the positive form of initiating and responding to the negative, and vice versa, each trainee had an internal role comparison of positive and negative behavior as well as his/her experience in different contexts now and in the past. In such a situation, myriad past contexts are called upon to be brought into the present, through their essence of positive and negative behaviors. Trainees can become aware through this type of exercise that categories can contain subcategories of differing behaviors, all of whose meanings are equivalent. Each person's negative responding may be different. Each is responding negatively.

In addition, trainees further become aware as they switch roles, that each role can be a partner in some reciprocal dance, and that staying with repeating one set of behaviors continually is difficult
when there are different responses to it.

The Trainer/Trainee Interface Concerning the Second Exercise:

Any exercise can be and is a whole world. One makes choices constantly. However, if the debriefing questions or comments had been at a different level at that time, they, the trainers, could have underscored the principle of equifinality - or many ways of getting to the same place. And those ways of getting there had not only to do with personal, synesthetic meanings but with social and cultural rules and backgrounds.

The initiator/responder exercise raises for both men and women, not only family values and the rules with which each grew up, but it calls forth the rules, roles and values of the larger culture. For instance, being physical varies in different cultures. Many women in this American culture state, when debriefing this particular exercise, that it is exceedingly difficult to enact negative initiation physically. And the type of physicality used in positive initiating is felt to be sex related also.

That first evening, two women had indicated that the cultural constraint in this society against women being 'aggressive', particularly physically, had been well ingrained in them through constant family, school and peer group repetition. Each had found it impossible to use any impacting physical motion, positively or negatively. One of them had been the woman who felt 'guilty' being physical; the other had been the woman whose way of being a 'negative responder' had been to fold into a heap.
This could raise interesting questions, about the possibility of connection between depression, withdrawn avoidance behavior, and cultural rules about sex roles and physicality.

If we move from asking about personal rules to asking "Where did you learn to learn those rules?", all levels of system can be brought into the room, raising hypotheses concerning direct connection between individual images and behavior, acts performed, and the cultures one inhabits. For it is the inclusion of all data that lends coherence to our system dances.

What Else was Happening?

The trainers had successfully connected the experiences of this exercise to the generic issues of new meetings. They had successfully cut off old ways of socializing. However, somewhere in the search for analogic meaning they had not also realized that the real people in the room needed ways of getting to know each other that were also new, rather than being kept from knowing each other except through roles in exercises.

The sense, however, of the overall good will and eagerness in the persons of the trainers, in addition to the interest in the novelty of the total experience, established a sense of excitement about this new process of learning about people, families and human systems in this unusual way.

The sense of trusting skepticism, emerging from the total nature of the evening's activities, thus became a system precursor, for that group. Initial reactions of cognitive excitement and interpersonal
guardedness, were set in motion as system formers.

For a training setting is a system, as much as a family is a system. Trainers set the tone, the structure and the metacontextual rules. How trainers are with trainees and how trainers respect trainees' interpersonal needs in a learning setting about human systems is a message about how to understand human systems. The message concerning process is process. The congruence between values and theory-as-espoused, and values and theory-in-action show up here as lacking.

For the author, this beginning kindled the timbers of a long-ranging search for processes which were congruent with value positions, as these surfaced, within a humanistic and generic General Systems theory framework.

Metaprocessing the Generic Processes: What Else Is Happening?

Let us now approach these two exercises in Polanyi fashion, moving from that which has been focal to that which is subsidiary. In that exploration, let us heighten our awareness and understanding of some of the processes involved in the doing of such exercises as I make sense of them. These subprocesses of mind exercised during the doing of experiential, action-filled role enactments play a crucial part in each trainee's integration process of his/her own life events, as well as integration of life events with systems constructs.

What is being discussed, described and examined in this lengthy analysis can be taken as generic for all other exercises of a similar nature, wherein nonverbal information gathering and enacting is called
upon. For the way the mind must make meaning with verbal information is different than the way the mind makes meaning with paraverbal and nonvocal information. Both verbal information and nonvocal information are organized, but they are organized differently, by different processes and rules. There are different data processed.

We shall speak of processing without verbal language exchange as 'synesthetic', via the senses. Such processes organize the data of the territory, in ways that have little to do with conscious cognitive structures, such as words, although words are needed to explain that organization to others.

In this examination process, we are switching system levels, and looking inside the person, and it is here that all 'levels' become connected, as we speak of mind and thinking about thinking. For 'levels' are constructs of mind, 'hypothetical boundaries' (Grinker, 1967). In analyzing any exercise or any life experience, we can switch levels and explore the subsidiary processes supporting whatever was previously the focus of concern. All that is involved to do so is to ask a different question!

It is also useful to ask oneself when looking at exercises in this way, "Which level are we looking at, and what information does this level offer us?"

Thus as we move now to discuss not the interactive aspect, but the subprocesses of mind involved in doing these exercises, we will be looking for information about generic processes which are interactive, in my usage of the term, that allow trainees to 'use both sides of their brain' (Buzan, 1976), to include all data, as well as to 'go
beyond the information given' (Bruner, 1973) in the learning process.

Synesthetic Learning: Some Thoughts on our First Language and its Importance in Understanding Systems

Each of these exercises, as well as many others utilized at BFI, either analogic in nature or metaphoric, calls upon trainees to enact scenes and situations without words, as a way of heightening how much knowing there is of a nature that has nothing to do with words. Words are about. Experience is. Interactions are. Systems concepts are about.

Enactment without words, as we see here, can be very powerful for all involved. In addition, as we will also see in the subsequent chapter on spatial metaphor, such nonverbal enactments can be utilized to illuminate system and/or to intensify the sense of theatre, or both simultaneously. Such 'strange' ways are novel enough to allow us to see and understand in a different manner.

Yet such ways of knowing are generic to us all as enactors and as receivers, interpreters, every day of our lives.

Let us pause and examine these generic ways of knowing, in greater depth.

Exploring the Known

We human beings are amazing, yet we ignore ourselves so well. We are wonderful to behold when we stop hurrying around long enough to stand back and take a good look at ourselves. At such rare moments, we can remember, and raise to consciousness the very amazing phenomena which we usually and continually take for granted: our human
capacities 1) for conceptualizing relationship between one thing and another; 2) for creating symbols and rules expressing those relationships; and 3) for externalizing those expressions and rules.

To the best of our knowledge (that is, to the best of our human ability thus far to think about thinking in all species), we are the only species to have ever inhabited what we call the planet Earth to be able to conceptualize and to communicate with one another by symbolic language, thought, metaphors and objects that can be externally represented.

Being loving and intelligent as John Lilly believes them to be (1975), the dolphins just can't paint. Imagine if you will, the human race without spoken or written language, or tools!

However, the infant hears, sees, smells, touches, feels, tastes, before he learns language. Bodies are. Interaction is. Experience is. Infants interact with their environment. Soon children begin to 'catch on' and find out that there are rules concerning what they are supposed to think about what is seen, heard, smelled, felt, touched and tasted, and how one may or may not use one's body. They learn these rules through behavior and through language. Children learn language and become enculturated (Lidz, 1963; Bruner, 1966, 1973b, 1973b, 1976; Piaget, 1952, 1965, 1976, 1977) by language, and socialized by rules. They learn the social boundaries of their cultural systems, with one's family as the first and most meaningful culture.

Yet before that happens fully, the infant has already a great understanding of his world. For there is inborn in each of us the
structure, or the capacity, for sensing, and for 'knowing a betweenness' that precedes language and those early rules. The normal infant is born with the capacity to discern the betweenness for instance, of hand-mouth actions, the reaching, grabbing, pulling, and bringing something to one's mouth. This basic capacity is not limited to physical actions.

The brain/mind capacity for making connections between something and oneself, between someone and oneself, and between events, objects, persons with each other, is so fundamental, so basic, we never think about it in relation to ourselves. Yet Piaget's lifetime works as well as those of Luria (1976); Hunt (1961); Bruner (1966, 1973a, 1973b, 1977); Brazelton (1964, 1969, 1981); Thomas and Chess (1977); and myriad others, keep exploring the capacities in infants and children for organizing and giving meaning to experience.

Each adult, if I am not mistaken, each one of us, was once an infant, a toddler, a child, who also had a 'knowing of betweenness' which preceded words. This 'knowing of betweenness' which we can call the metaphoring process, as Jimenez suggests (1976) (see Chapter VII), comprises what we can also call 'understanding'. Without it, there is no meaning-making. And no 'meaning' as we know it. We call those who do not have such taken-for-granted mental capabilities 'defective' in some way.

It is somewhat circular. Understanding itself implies relationship. "There is no such thing as one thing" (MacDermott, 1974). Each thing or item, each bit of behavior, or word, event, object or person stands in relationship to another 'something' in a context.
'Relationship' however is dependent upon each individual's human ability to perceive and to assign that connection, that relationship. The mind only notices the differences between one 'thing' and another, to which we assign meaning and relationship (Bruner, 1973; Bateson, 1972, 1979).

This internal meaning-making capacity begins to be exercised shortly after birth, as researchers have discovered. We each began to associate certain phenomena with other phenomena: bottle, with milk; this face with being picked up. We 'know a betweenness'. We have metaphored connection, relationship. A certain face 'means' comfort, another face 'means' fear. By 6-8 months, we get upset with faces we do not know. This 'stranger anxiety' has nothing to do with words or verbal language expression. It has to do with perception and cognition of relationship, with recognition of differences, with strange and familiar.

The original connections we each make, then, the linkages in metaphoric meaning are made actively, synesthetically, via the senses, before verbal capacity. By the time we have language, we have solved many complex problems, and have a well-established sense of certain human and nonhuman systems and of context, all paraverbal and organic, synesthetic, and connected as 'schemata' (Piaget, 1952). Such 'images' or schemata are the base of all personal meaning for each of us. They form the inner context for understanding, by which we make sense of the world, and upon which we continually build our sense of safety, sanity and reality.

The particular equipment, or 'wiring' and physical condition that
we are each born with contributes to the generation of distinct personal as well as communal meanings we each give to experiences. We call our unique constellations of meanings our 'reality'. That same capacity for metaphoring betweenness/relationship allows us to create symbols and objects, thus expressing those relationships externally in spoken and written words and things and metaphors. We also create relationships internally, in dreams, in juxtaposing past, present and anticipated future, in combining wishes and images with actions, in creating all things and ideas not of nature itself. And all of these capacities exist in, and comprise our timeless minds.

For the multitudinous events and experiences we each have over developmental time are contemporaneously available, in some miraculous way, in our minds, though mostly out of conscious awareness, as deep hypnosis and brain research have shown. Meanings and information are transposed and transformed in many ways, not just in images of word sounds. There is, for instance, a 'memory' that muscles seem to have, which context evokes. In everyday life, our muscles and bodies tune into and adapt to the context continually. Repeated contexts create repeated patterns of body movements. We can walk in the dark in rooms we know and never bump into the furniture or walls. And in another type of 'memory', musicians talk about the translation and transformation of 'heard' music into the finger positions which can elicit those sounds on their instruments, without their thinking about it.

The normal infant, toddler, young child then, establishes by this metaphoring process basic meanings of personal safety, comfort,
distress, and so on early. By the way in which a young child is
touched and carried, by voice tone and intensity of touch or tone, by
facial gestures and expressions, in combination with other contextual
phenomena, by all these signals do we each begin as child to make
meanings of core significance to us before we know a word of language.
For we are making the beginning meanings of relationship.

As children learn language they do not learn the words that
describe how they experience others. They act their experience and
later use imagistic metaphor to describe their internal worlds. Adults
are amused by descriptive poetic metaphors of children, as if such
metaphors are less real than the literal category words for internal
states that adults use.

Children experience disparity between how they are and experience
and how they are supposed to be and experience. As children we cannot
escape developing an overlay of other meanings which relate to the
spoken and unspoken rules of relationship of the family, the society,
the culture. These rules are transmitted in many forms, verbally and
by behavioral patterns.

As the child is instructed in what is okay and not okay to see,
hear, taste, touch, smell, think and feel, he not only learns the
rules of the culture, he learns ideas about being. Yet, while these
rules of the family relationship or wider context are instructions for
behaving, according to externally derived programs for order, they do
not necessarily have anything to do with the information metaphorized by
one's own sensorium and meaning-making processes. The meanings
assigned by earlier internal synesthetic 'knowing of betweenness', of
relationship, often are quite separate from the external rules of relationship imposed from without. How one actually experiences the person called 'mother' has nothing to do with how one is supposed to experience her, or how mothers are supposed to be.

We each then metaphor on at least two levels of meaning-making at once - the synesthetic, which gives us basic information about the rules of access and our sense of self in relationship to other persons, and the cognitive, concerning the contextual rules of relationship and rules of order.

These two levels may be related to what are called right and left brain functions (Ornstein, 1972). Synesthetic metaphoring and meaning-making is personal, idiosyncratic, coherent, yet often nonlogical by analytical logic. Cognitive metaphoring and meaning-making begin to be contextually consensual following external rules of order. The first type of meanings often get buried in the overlay of the second, or can be conflictual, as described in Bateson, et al.'s double-bind theory (in Bateson, 1972).

As children, we monitor our basic sense of trust/distrust, connection/autonomy (Erikson, 1950) synesthetically, as we also learn the ways of our family. We learn how we are supposed to be for all these other people, how we are supposed to behave. We learn the 'yesses' and the 'no's'. We learn the positivess and the negatives about ourselves and the world, according to 'them'. We learn limits, boundaries, labels, systems. We learn how our family 'works'. We don't know we are learning all that, at the time, at all. We are living our learning.
As children though, we are in a peculiar position. We know a lot more than we can express in words. We are reading systemic behaviors all the time, and may only learn how to express this knowing verbally years later. (Piaget calls this 'vertical decalage', a gap in time.) We monitor how people are with us by their voice tone, gestures, facial expression and lots more. We do not know however, that others, like mother, father, sisters, brothers, are doing the same thing with us. We cannot know that adults and other children give meanings to what they see and synesthetically experience with us - our touch, our gestures, our facial expressions, our tonality, and our movements, as we do theirs. We really cannot and do not see or hear ourselves as they do. We do not realize that we send and transmit data which they metaphor into their meanings of relationship. As children, we cannot conceptualize 'fit'. We experience it. We cannot conceptualize a transactional world in which each person is the data for meaning-making in each other's lives. Each of us, as a young child, is at the center of the world which exists only for us (Piaget, 1952).

While we now have language by and with which to learn and understand such different rules, we still monitor all physical behavior for its congruence with the spoken rules. For the verbal rules tell us cognitively what we can or cannot do in certain contexts, and how we must behave here. They denote what our roles in each context are supposed to be.

However, the synesthetic knowing still monitors our interpersonal relationships. Direct experience combined with observing others' behaviors tells us what is safe and what is not, what is play and what
is serious (Bateson, 1972), what the context is, and what our role can be. Many of us forget then just how much we know without words, and how much we rely on this other kind of knowing.

In most cultures, we learn to use our cognitive verbal language and our symbolic and logical metaphoring capacities to carry us out of our moment to moment physical world through 'reading, writing and arithmetic'. By the time we reach adulthood, then, we carry with us vast amounts of nonverbal and paraverbal data, metaphored into connecting schemata of human relationships. These schemata, these understandings are based on continuous synesthetic metaphoring overlaid with the connections metaphored through verbal language, interconnected with the learned expectations and rules of the culture— the cultural metaphors of organization and operation. Personal schemata are so interrelated and embedded within other interlocking schemas, they are taken for granted as 'reality', as 'the way it is'. Such amassing of schemata, of core images, becomes our 'assumptive world view' (Parkes, 1971), our epistemics (MacLean, 1975). These schemata comprise the substrata to how we now think, what we now think, notice, talk and do not talk about in relation to other people, ideas and events. They form the bases of self in the world and the meaning we each give to our life.

By the time we are adults in new situations, the synesthetic cues we have metaphored into meaning long ago are read, checked, noted, and tucked away. They influence our words, voice tone, body posture, and sense of relationship. Our words then talk about other data, and we stay within some boundaries of 'role' as consensually (or even idio-
syncratically) defined for each particular context.

Exercises such as the ones described here, bring the synesthesiaically derived theater-of-our-lives to the fore, and cause us to reinspect what has been taken for granted about behavior, and about meanings. Such renewed inspection allows for options for change, for updating assumptions, for finding multiple behaviors in any one category and for becoming multicentric. The timeless and flexible mind can be teased and stretched.

Synesthetic Metaphoring in Exercises

How behavior means (Scheflen, 1974), an area of study which looks at behavior from the outside in, deriving a conceptual epistemological map of territoriality and assigning labels to behavior patterns observed, is matched then and coexists at BFI with an approach that asks how meanings behave (Duhl & Duhl, 1980), wherein interpretations enacted by each person allow for the connection of epistemics, or personal world views, with consensual categories, or epistemology.

How Meanings Behave

Each trainee enacts his/her own version of the generic combinations. In boundarying and delimiting each role and in asking each person to fully inhabit one such metaphor of approximation at a time (i.e., try on the role of a 'positive responder'), trainers are intensifying each trainee's experience. Each is being asked to assume this one metaphor as a metaphor of core identity, as if it enveloped all of one's attributes and ways of being: "Be a person who is always,
in every way and fiber of your being, a negative responder." To do that without words, one must caricature and heighten one's behaviors so they will be recognized as fitting that metaphor. One's own flesh and blood human actions fill out the boundaries of that generic and abstract concept as one begins to enact one's own images of how one's meanings behave. Each person creates and lives fully his/her image of 'positive initiator' or 'negative responder'. Each is being 'negative responding' or being 'positive initiating'.

Eliminating the use of verbal language compels each person to make his/her images known through action, gesture, facial expression and body behavior, employing physically known stances of consensual meaning within the general culture, as well as those idiosyncratic to one's own imagery and meanings, or to particular earlier personal cultures one has inhabited. Behavior cannot be 'hidden behind' as words can. The unified version of message-sending can then be checked with varying versions of message 'received'. In such exchanges individual, family, or group systems issues are enacted and debriefed. Hidden messages in the message-sending are difficult, for only one level and type of language is there to interpret. If there are 'two' messages 'received', both are metaphored from the same data and the different metaphored meanings derive from different people who 'interpret' the behavior.

The origin of such varying metaphors, for total sequences of behavior can be explored. For as researchers of nonword communication processing have pointed out (Birdwhistell, 1952, 1971); Condon, 1966; Hall, 1959, 1966; Goffman, 1963, 1971; Scheflen, 1974; Bateson, 1972;
and others), behavior is. Experience is, words are about. And experience is always in context. Our bodies are. And our bodies, our expressions, our physically nuanced behaviors also speak a language of metaphor to others by their combinations and juxtapositions, sequences, cadences, and repeated patterns. Each bit of behavior, like frames of a silent movie, can be metaphored into meaning only by locating sequences of movements in context. Traditional Siamese dancing may be graceful and stunning, and appreciated as pure flowing form and grace. Its meaning in relationship, in gesture, is lost to those not steeped in the culture. It is an aesthetic experience, like ballet, carrying no consensual message.

Anecdotally, I am reminded of being in a Bush-Negro village in Surinam in 1972, with a Danish guide and Bush-Negro boatman, watching funeral proceedings in the village. Villagers were moving to the beat of a drum in a wide circle around the coffin. Close by the coffin, a woman was moving rhythmically, waving a thick handful of long twigs over the coffin. I asked our guide what she was doing, and she replied "Keeping the evil spirits away." I wondered about this, and I asked her to ask the boatman, whose village this was. She did so in the local dialect, Taki-Taki, then turned embarrassed to me and said, "She's keeping the flies off the coffin!"

We must make meaning! In this case, our guide jumped to the context of funerals - with the assumption that all behaviors were part of the funereal symbolism. In a strange setting, she ignored the behavior as having a meaning familiar to her, as if that would be inappropriate, and placed it into the ongoing context, as part of
those proceedings.

Conversely, if we have not experienced a context or culture containing some form or variety of the particular behaviors being experienced, we cannot give meaning in the appropriate metaphor. That is, if we have no contextual set for a series of physical behaviors, gestures, we cannot interpret them 'accurately', i.e., consensually, according to their particular agreed-upon essence. We interpret them actively, idiosyncratically, assigning meaning, feeling, idea and/or experiencing confusion, non-order, uncertainty. Sometimes what we assume 'means' fits the people and context. Sometimes it does not.

Thus as we enter different roles in an action exercise, our metaphoring processes synthesize the multiple contexts we have been in, in which we have given meaning to others' behaviors, and to our own. We carry the meanings from those places into our present context, where the roles we each take become parts of total systems processes. Additionally, we continue to interpret others' behaviors by our synesthetic screen of meanings, which we carry as 'core images'. Our experience in the theatre of the role then operates on several levels, which are worthy of examining.

**Self and systems**

As we fill and enact the role, we pass previous experiences which involve other people through our minds. The timeless mind is contextual as well as fanciful. In our role relationships, we are part of transactions. Our metaphors of identity can be looked at through our roles in terms of the parts they play in larger systems, or played
in the systems in which they originated. Thus, as the trainee becomes more curious about self-roles in context, he/she is examining many contexts, many systems, which he/she has inhabited. In so doing, trainees are beginning to look at the ways those other contexts were organized and the ways that they functioned, which influenced the trainees in behaving in certain ways. Over time, trainees begin to recognize the times in which those behaviors were not elicited, and begin to note differences in external and internal contexts. The self as psychological system, composed of thinking, feeling, sensing, imaging, and acting aspects, becomes available to be examined, as people explore "What did I learn? What did I find out?" in debriefing exercises.

Comments about Exercises

Where an exercise will lead depends not only upon the exercise, but upon the focus of the trainers at that time, the purpose for which the exercise was planned, the data and material evoked by the participants, and the ability of the trainers to fit responses into situational, contextual maps as well as conceptual ones. When trainers are not afraid of answers, but have a wide metamap, they can help locate and weave together themes. If the exercises contain generic human situations, there are probably boundless numbers of ways in which material can be explored: all the ways I have thus far mentioned and innumerable others as well. All it takes is asking different questions. Such exercises as the ones addressed here can introduce another metaphor - people-as-storytellers, elaborating the history
over time of the changes in one's age, stages, places, contexts, and the cumulative experiences stored in the timeless mind, woven into a tale. Such personal stories are the teller's condensations of experience, embodying the coherence and meanings of one's life events, one's sense of bondedness, connectedness, separateness, and purpose.

In the first evening of BFI, each person as system and part of other systems, each person as storyteller, each person as a theatre full of experiences upon which to draw as actor and approximator, was evoked.

Summary Thus Far

We have covered a great deal of territory in this exploration as we have crisscrossed back and forth, under and around the paths through the hologram of these two first-night exercises. It is time to review here where we have been and the significance to the author of choosing these first-night exercises as the ones to explore when discussing generic processes.

While other analogic exercises which I could have chosen could have explored family as system, I purposely chose ones that look at interaction generically. In addition, I chose a system level, group, that is not family, that does not have the bonding qualities that family has. Without such intricate bonding and belonging, it is easier for us to look generically at how new systems, like new dating relationships or new training seminars and programs, get started. There are certain generic processes involved in each such situation.

In professional training groups, there is usually no expectation
of strong interpersonal bonding of any significance, thus, there is less at stake. Yet, while we can more easily look at the idiosyncratic differences that each one always brings with him/her into such situations from previous contexts, we can also begin to become aware of the role of safety for disclosure in a learning setting, when the learning model draws upon inside/out material.

Beginnings of programs are interesting because they are system formers. Whatever happened that evening influenced what was to come over time, as the group and trainers became a total human system themselves, with varying subsystems and self-organizing, self-regulating patterns.

The examples of the first night exercises examined as under an electron microscope were thus chosen from myriad numbers of systems-exploring designs as a way of making several points at one time, concerning training in integrated and multicentric systems thinking:

1) I have wanted to paint some pictures of the generic methodologies present at the beginning of BFI from which all other discoveries flowed, positive and negative: the valuing and use of analogue, theatre, stories, metaphor concerning all levels of human systems, the need for safety, congruence and integration in the way we trained.

2) I have wanted to communicate, if possible, the power and pull of this kind of learning experience, and to begin to explore the mixture of types of learning ongoing in any one exercise. In such an examination we can see that for instance, one exercise can be
cognitively exciting, affectively engaging, synesthetically distrustm-
ing, physically disconcerting as well as playful, imagistically
mind-expanding, and socially pseudoconnecting, all at the same time!

3) In searching for the source of so many 'reactions', we come to
realize and to underscore how such designs call upon our associative
metaphoric mind (Samples, 1976) to tap into any and all other
contexts, where aspects of any role-to-be-enacted might be found
waiting in the wings, for an invitation to join in the play. The
associative mind gives personal definition in making behavior mean the
role. That is, in such exercises of generic categories, one invests
into each behavior that one does, a chosen conscious meaning. The
associative mind, a filter through which all designs and roles must
pass, connects what is ongoing to other contexts. This
cross-contextualizing capacity is an integrative one. It closes the
horizontal decalage that Piaget speaks of: that knowing of principles
in one situation which have not been recognized as isomorphic to other
situations.

4) When we then speak of the associative metaphoric mind, we can
highlight the timeless quality of mind, for in an active engagement,
each trainee generates his/her 'now' data out of all the screens-
of-the-past-in-the-present (Duhl, B., 1973). From these internal raw
data of idiosyncratic meanings of behavior come generalizations about
categories of behaviors and about individual differences.

5) When we can take the time to explore an exercise fully, we can
perhaps share the author's delight in discovering that no exercise
does one thing; that the questions "What else is happening?" and "On
what level?" are perhaps the most important questions for trainers to ask, and to pass on to trainees. The same questions are useful in other settings, like agencies, institutions, therapy, and in daily life.

6) Once we realize that there are so many levels, we are free to examine a wide range. One can look at the conceptual metaprocessing, designing activity of the exercises themselves on the part of trainers. We can explore what is actually involved in doing exercises. We can look in depth at debriefing exercises, wherein meanings begin to emerge. From there we can explore subsidiary processes of mind wherein meanings live, hinting at contexts/situations where idiosyncratic meanings formed when self was a part of other systems. And lastly, we can examine transactional aspects of any individual role from many different vantage points and positions.

If we review the main headings of this approach, as questions, they would look something like this:

a) What do you want trainees to learn?

b) What kind of situation best exemplifies that principle? Or what kind of exercise essentially is a metaphor for or analogic imitation of a real situation?

c) What is the manner by which you will have trainees do the exercise?

d) What does that type of exercise design and the manner in which it will be done, 'do for/to' the trainees, as individuals? as a group?

e) What types of questions will be asked during debriefing?
f) What will you do with the answers? And what will you do with the answers that 'don't fit' what you had in mind?

7) No one can grasp the full implications of any act while it is occurring. Yet it seems relevant to underscore the importance of first events as potential system precursors, system formers (Gray, 1978). The processes set in motion on any first night begin to define the ways in which people are to relate, and unless attended to, can create problems in one arena while in the process of solving others.

8) The tenuous quality of the safety to risk self-disclosure that first evening led the author to raise questions about the quality of the learning environment as well as the cognitive and thematic content to be explored. The question "What else is happening?" allows the delicate balance of trust/distrust prevailing in such a seminar to be addressed.

The question of safety/trust was not addressed directly and broadly while the author was a trainee. Experiential exercises, in drawing upon each person's own interpersonal life experiences, raise issues of exposure and disclosure. Such role enacted interactions in the group system of the trainees require real connection of the people in the room if they are to be free of defensive learning, and open to new integrations. The real people behind the role enactments need routes for new connections to other group members besides the roles they play. Attention must be paid to this need and processes developed to meet it (Duhl, B, 1976b).

9) Thus, it has been my wish to share an important experience that changed the direction of my life, by giving me permission to use
everything I brought with me in the process of my learning and participation. Over time, I was able to help create a context where others could do the same, where no one had to censor aspects of self, but could draw upon their rich inner resources to reinvent systems thinking, integration, multicentricity, and new behaviors.

In 1969, the trainers did not know what a demon-goddess they had unleashed. For generic processes and questions have a habit of sticking around. Explorative processes do not lend themselves to being wrapped into neat little packages. There are always untucked edges sticking out. Organicity, which begins to develop a cohesiveness and a coherence as more and more 'what If's' are explored, does not fit neatly into pigeonholes. Linkups which connect one's internal experiences from the inside out with epistemological conceptualizations are never complete. The processes of mind engaged seem to be all of them. Yet generic gestalts are possible that feel and think whole.

In 1969, the trainers would have spoken of the importance of concept or issue, action and analogue. They would have spoken of the importance of trainees being involved in an exercise conveying conceptual material.

However, they would not have spoken of action and the use of nonvocal information processing as essential to engaging 'both sides of the brain' (Buzan, 1976; de Bono, 1970; Delkman, 1968; Gazzaniga, 1968; Ornstein, 1972). Nor would they have spoken of that active engagement of both sides of the brain in many forms in an atmosphere of respect and safety as a key, if not THE key essential element in
the organismic integration of mind necessary which allows us to go 'beyond the information given' (Eruner, 1973) to multicentric systems thinking.

For all of these considerations, the first night exercises are significant to the author. However, while I am sure that the generic aspects of looking at the exercises can be followed, I am also aware that one example of an exercise does not necessarily do the trick. Rather, as I mentioned earlier, 'one' example is experience, 'two' allows for comparison, and 'three' allows for the sense of patterns.

Some Learnings About Sequencing

Let me now present several other N's of experience in analogic designing to explore multipersonal systems called families, so that the reader may have several from which to catch the sense of pattern in designing, and some of the types of situations that one can explore.

Before we examine these other exercises, however, let me add some words of introduction concerning our sense of sequencing of exercises, which evolved out of the author's learnings from these early years: While it is necessary to interrupt the usual social patterns in ways that allow for new learning and new ways of looking, it is also necessary to connect the members of the group so that these new ways of looking can be connected to the interior of each person in terms of his/her own life. This same principle holds for people called clients, students or patients.

Thus we have found it important to first connect the people in
the training group from the inside out through first utilizing exercises which explore metaphors of identity and approximation, as illustrated in Chapter VII. We then move to those highlighting metaphors of organization and operation of systems. Thus we progress from self-as-system to self-in-system to systems-in-context.

When people feel comfortably connected, they are free to inspect all aspects of ways of thinking, feeling, interpreting, acting, seeing. Thus, we will work from the trainee's sense of self to the contexts and systems in which that sense of self developed.

Exercises which tie into the themes of system interface, heightened since 1973, of vulnerabilities and defenses, learning styles, boundaries and core images, allow us to move from the individual person to any level of system. Trainees then can look at ordinary families and those seeking help, or other human systems, with a 'map' that can go from the person to the entire system, without losing anyone, or from the entire system to the persons, without being reductionistic. When there is a general map inclusive of all aspects of human beings, the clusters of behaviors can be seen analogically as the bits which project the entire hologram.

**Family-as-System Explored**

At this point, with the preceding as background, in order to underscore and highlight analogic design as an essential tool for exploring family-as-systems, let us explore briefly some of the ways in which we have used analogic designs to illuminate different types, levels or aspects of systems.
I offer these now not as cookbook recipes for analogic exercises, for I am sure there must be books full of them from the National Training Laboratories in Bethel, Maine, and other places. Rather, I mention them now as exercises highlighting multipersonal systems, as a range of ways in which we approach the multicentricity of stance in the trainee, and as ways of exploring consensual metaphors of operation and organization, and as one of the routes to analogic thinking.

The earliest version of analogic exercises developed by the BFI faculty tended to draw upon generic transactional systems issues, prevalent in families and other systems with which families generally came in contact in this culture. In the beginning of BFI, since all the active trainers/founders were also working at Boston State Hospital at that time, the range of system issues drew upon the types of family and contextual situations prevalent with families of hospitalized and clinic patients, as well as other generic system situations. Those exercises set up situations in which trainees had to fill a role drawing upon whatever they had personally experienced, read, heard, seen or even made up, to fill that role. The exploration of trainees' own families and systems originally developed more fully through Family Sculpture (see next chapter).

Examples and Samples: Multiproblem Families

An interesting exercise designed to demonstrate one way of understanding 'multiproblem families', while the author was a trainee, emphasized the importance of escalation of issues that families had to deal with.
The trainers asked several group members to roleplay a lower economic class family of the type in the area served by Boston State Hospital. The trainers' design then called for events to 'happen to' this family, one after another: The father deserted the family. Mother applied for and received welfare payments to take care of herself and the children. The school counselor called to say the son had been suspended for smoking in school. Another child needed an operation. The welfare worker threatened to have welfare payments taken away if mother did not return a small television set she had purchased. Another child in grade school was doing poorly and found to have a learning disability, and so on. We each took parts and played out the scenario, building upon our awareness of the total context of these families.

In the debriefing of how it felt to be in those roles, trainees discovered and expressed the impact of feeling out of control, helpless, trying to cope on all fronts at once. They reported the sense of lack of resources, and of enormous amounts of energy going into sheer survival.

Trainees then generalized that when people feel threatened around issues of basic survival, there is competition for all resources, and a sense of deprivation with not enough of any resource. Trainees associated to similar escalated crises in their own lives. Empathy for those in such situations, as contextually harassed, rather than as noncaring and incompetent, began to grow, as we re-experienced and discussed bombardment to our sense of stability. The system interfaces between family and other system entities, such as schools or the
welfare department, were highlighted. We became aware of the prevalent inability of families in such situations to focus and to feel any sense of control over their lives, pointing up the need for focused step-by-step problem-solving with competency enhancement as a goal.

Deviancy as Generic Issue

Other such contextual analogic exercises drew on drug-related issues such as alcoholism, or on school/family interfaces, on family/police interfaces. In a grant-sponsored training program developed and taught by BFI faculty for Family Service Agency social workers concerning issues of alcoholism in families, alcohol was treated as a type of deviancy, in order to help promote attitudinal change in the case workers.

In a series of exercises, originally designed for this exploration and used ever since in varying ways, trainees are asked first to role play a 'normal' family, choosing some very usual topic to discuss. At one point as the family 'gets under way', the trainer, who has arranged a predetermined signal with one role-player, signals that person to become deviant in behavior in some way. The rest of the 'family' members do not know of the prearrangement. They then begin reacting to whatever the deviancy is, in role, but 'from the guts'.

When the exercise is debriefed, there is a spontaneous and very real element to the range of feelings about the deviant and deviancy! The sense of confusion, betrayal, annoyance and anger come through.

3 United Community Services, 1971-72. See Epilogue.
The system reactions can be looked at also, as a whole. Again, trainees become aware of context and transactional processes. As they then relate their own reactions to deviancy in the exercise to people who use alcohol excessively, trainees begin to make connections between their rules for behavior, their bias, and clinical practice.

In a sequential exercise, group members are again instructed to break into groups and to form a family, per group, decide who they are, decide on their general context and an issue they have to deal with.

The instruction is then given, "One of you will decide to start drinking alcohol. Your reasons will be your own."

Trainees play out such a situation, and derive reasons why they might want to drink from the ongoing transactional processes in the family situations they are enacting. In such an exercise, trainees are drawing upon personal and professional experience. However, as they try on the roles and debrief them, they combine the sense of such situations from the inside out with an exploration of the entire systemic process.

As role players in such contextual and issue laden analogic exercises, trainees begin to feel what it is like to be on the other side of the therapist's chair and begin to ascertain what types of internal processes lend support to people becoming alcoholic. Generalizations concerning alcohol as a regulator and substitute for more substantial connecting processes are often drawn from this exercise. Trainees begin to raise questions then concerning what ways each person could be touched or moved that would allow for change in
Individuals and change in the whole system.

**Subsystem Exercises**

In other types of exercises generic aspects of subsystems are explored: dyadic relationships, triadic relationships, multiperson alliances.

In a dyadic relationship exercise, two thirds of the trainees are asked to pick partners from among themselves, non-verbally. Without words, they are asked to negotiate a place in the room that they would like to 'have' and call their 'own' space. After they have done that, the remaining one-third of the group are asked to decide which of the pairs each would like to join, to choose such a pair, and to negotiate their way, again without words, into each dyad.

Again, in debriefing, trainees become aware of having had to make needs and wishes known without words. They have to work much harder at that, and as a result, they have to attend more carefully to each other to understand what each wants. As such, in a very short time, each dyad builds a sense of exclusivity that can stand for any courtship, friendship, couple.

Into that a third person comes, and 'bumps' into the boundaries of exclusivity previously set up. Upon the internal imagery of each person involved and the 'meanings' privately assigned by each member to this dyadic relationship depends the outcome of the attempted 'invasion'. Some dyads do not allow a third person to enter. Other dyads quickly welcome a new person, and still others truly allow negotiation into their 'space'.

Such exercises are rich and can be provocative of, as well as
evocative of, many sorts of experienced systems issues for each trainee, as well as illustrative of issues in families and other systems.

In an exercise concerning family and alliance building, generic issues arise. In the first several years, a non-verbal form of 'Farmer in the Dell' was used to build a family.

Starting with one person, the entrepreneur then chooses another, negotiating the 'marriage' without words. These two then decide on a metaphorical 'amount of time', still without words, before 'having children'.

Of course, without words, it is sometimes hard to be precise, and so, the misunderstandings of signals becomes symbolic of daily life misunderstandings. 'No words' becomes metaphor for the lack of discussion between real life partners, which usually leads to enormous assumptions and misunderstandings.

In any case, the instructions then are to 'choose' (have) a child, decide on 'time between children', and to 'choose several', stopping when they feel they have 'finished their family'. The whole exercise can then be debriefed by the group on many levels. Given the universality of this situation, one has only to limit the choice of questions to debrief and the focus, at any one time. Individual feedback is immediately made analogous to 'real life' situations, by trainers and trainees alike, through the generalizations drawn.

Focusing on Focusing and Interpretation

In another very simple exercise, two trainees are asked to have a brief verbal argument, while others watch and listen. We will then
ask, "What did you hear?"

It is amazing how many adult trainees respond with evaluative and judgmental interpretations! Trainers will ask the observers again, "What did you hear?" And again—until trainees begin to respond with what they actually heard.

We will then ask, "What meaning do you give what you heard?" So often, trainees (and practically everyone else) interpret without tracking what was actually said, which does not allow them the option of being free to help the arguers be clearer in their own communication processes.

The same type of exercise is done, asking trainees, "What did you see?" and "What meaning do you give what you saw?"

As I became aware, such exercises also aid in re-walking trainees through different Piagetian stages of cognitive and self-knowledge development (Piaget, 1952; Alschuler et al., 1977; Duhl, B., 1978). Asking "What did you hear or see?", asks trainees to pause momentarily at the pre-operational stage, in which we all are capable of describing events. "What meaning do you give?" brings trainees into concrete operational thinking where hypotheses are posed from data.

The Therapist/Family System

Analogic exercises highlighting systems issues for the trainee's eventual role as therapist began in 1969 and have remained a source of rich exploration. One of the prime methodologies begun was role playing many types of systemic situations.

One such generic process, which emphasized interviewing as information gathering and exchange, has been in constant use since the
author was a trainee. For when trainees enter a training program in family therapy, many still have a hard time not thinking 'pathology', not thinking in we/they terms of one up/one down, of the usual medical, psychiatric and psychological models. Family therapy originated as part of the field of mental health. 'Mental health' was/is seen as the opposite of 'mental illness'.

Mental illness however takes on a different twist when seen as systemic and contextual adaptation. It is akin to asking, "For what type of context is this behavior appropriate? In what types of contexts are these sets of thoughts and actions fitting?"

The idea that one could look at the interactive, transactional and intergenerational schemas of family members and 'find' the problem arising within the transactions 'between' members was (and still is) a new idea. Originally, the following exercise was designed to steer trainees away from specific conventional and prefabricated ways of thinking about people who seek help, to thinking of them contextually.

The Job Market Exercise

In heightening the metamessage that interviewing is contextual information gathering and exchange, the leaders created a number of almost ridiculous (at that time!) job situations: two people needed to go to live on the moon; two trapeze artists needed for a circus; men and women needed for an escort service; aquanauts to live under water; balloonists to go across country together; tennis players for a team.

In each situation, one person is to be Interviewer. Other trainees, two persons in teams, choose which jobs they will apply for. All trainees have a chance to be both Interviewer and Interviewee. In
each of these situations, because they are fairly extreme and removed from usual daily life contexts, the interviewer as well as the interviewee has to stretch somewhat to consider the total context and to assess what skills, interactive attributes, and personal qualities are most needed to fit each situation.

In addition, each trainee is applying for the job as part of a two-person team, and each can only be hired as a team member. It is difficult for any player to be cut and dried, or to enact any of these roles without thinking afresh. It is impossible to act on some assumption of knowing automatically what would be 'right' and required in these jobs as well as fitting oneself with a teammate. One has to think and act creatively, transactionally, instantaneously, with regard to all aspects of the situation, presentation of self, and self as desirable team person, all without rehearsal. Interviewers also have to be on their toes, to become aware of which questions will give them the widest range of information in the same arenas.

For trainees, this exercise is always important. When one begins to think simultaneously of self, of team issues, of skills and tasks in context, one is thinking systemically. The stretch that one has to do mentally is to quickly puzzle solve how to find out what the image of job and fit is for each side of interviewer/interviewees. Such rapid sorting and acting takes in all the levels and metalevels of systems thinking holographically. Biological and physical attributes, such as stamina and general health become important aspects of person in each of these off-beat job situations. 'Personality' attributes in terms of disposition are important in stressful dyadic jobs as are
'character' attributes, such as responsibility and trustworthiness. Careful interactive teamwork or ability to fit with another and with a task must be assessed, and so on, to say nothing of actual skill and performance capacities.

Anecdotally, it was during this exercise as a trainee that the author experienced that kind of delicious 'aha' that feels so rewarding, integrative and permission-giving all at once. For in the midst of doing it, it occurred to her that everything she had ever done or knew about could be useful in thinking conceptually and systemically and in working with people. Everything she had ever experienced could be utilized in some way for connection-making with or about other people and how they 'worked'. No part of her experience nor capacities nor diverse arenas engaged in need be shut off. It was as if the barriers between compartments of mind rolled down. The process over time then became one of discrimination of not what to use, but when and when not to, and how to do so effectively.

Rent-a-Family

In another series of interviewing exercises, trainees interview ordinary families, which we call our Rent-a-Families. We pay them to be interviewed by teams of trainees, and to give feedback about each interview. While these exercises are not analogic designs of the usual role-taking sort, they are analogic in a different way. The emphasis here is on information evocation and integration, focusing on how ordinary families work, love and play, and organize themselves. In that sense interviewing a Rent-A-Family is analogic to any system interviewing. In addition, trainees have an opportunity for rehearsal
and feedback about their styles, from 'consumers' who are not seeking help. This is a luxury not possible with families seeking care.

**Trainees' Families as Clients**

In an important series of analogic exercises, trainees role play their own families of origin as coming into therapy around an important family issue, and are interviewed by other trainees.

For the past several years, the author has started her supervision groups with some version of this exercise. Basic questions are asked of trainees: What issue or what kind of issue would have brought your family into treatment? How would the idea of therapy have reached your family? Who would make the decision? What kind of therapist would your family need? With whom would the therapist have to connect in order for therapy to have a chance?

Before possibly role-playing the family situation, the trainee must answer all of the above questions for him/herself and spatialize and/or diagram the family dynamics, as he/she perceives them. The role play then ensues, and comparisons are drawn between the 'presenter's' sense of family and the interviewer's. For many trainees, this becomes the first time they have actually thought about the processes any family undergoes before they even make a phone call or walk in the door of an agency or office.

Trainees again learn interviewing as an interactive exchange, needful of respect for each person in the situation, and the need for interventions fitting both individuals and the whole system.

When trainees have the opportunity to interview ordinary families such as their own and Rent-a-Families, so that they can find out how
'normal' families 'work', they can approach the task of facilitation and therapy of those who do seek their help from a broad range. In interviewing families to find out 'what's wrong', they can begin to assess individuals and families as if along a continuum of issues and conditions ranging from discomfort to jeopardy (Duhl, B., 1978; Duhl, F. and Duhl, B., 1979; Duhl, B. and Duhl, F., 1981).

**Individual Attributes as System Components**

As the program progressed, and for no strange reason, with a great deal of push and help from the author, BFI began to expand and develop the range of exercises to find the themes that linked them together in an integrated manner through all levels of human system, as well as all levels of mind, intrapsychic, interactive, transactional.

Exercises highlighting individual biological attributes as part of individual learning styles, which influenced and shaped systemic interactions, became another category of exercises which began to link the trainee to individuals in total systemic transactions (Duhl, B. and Duhl F., 1975; Duhl, F. and Duhl, B., 1979). The author's development of boundary sculpture in 1971 (see next chapter) became a major tool for varieties of exploration about personal styles and preferences, as components in larger systems (Duhl, F., Kantor, D., Duhl, B., 1973).

In another such type of exercise, trainees are asked to form family groups and to assign themselves family roles of mother, brother, and so on, and an age. That one role and age assignment stirs
up enough image material from which to work.

Each family is then asked to simulate waking up in the morning, in its own 'home' in the room. (Hopefully, one has a rugged room in which to do this exercise!) All are asked to: lie down, go to sleep in your most comfortable position. It is morning. Wake up, and get up in your usual style. Do your own usual morning routines, in your style of being, without words. Debrief.

In such an exercise, trainees discover how their different ways of being, called 'style' become grist for the family systems mill. How people go about being themselves, coping with mundane daily life, becomes grouped under a category of information-processing styles. Trainees learn that all is not structure of roles and contextual constraints, but that personal attributes are key phenomena in such structures and roles. Functional autonomy and dynamic interaction seem to come together in exercises of this sort. An exploration of the full range of such personal information processing style exercises is beyond the limits of this work at this time.

Conclusion

It is hoped that these additional family-as-systems exercises, while not presented in depth, have served to stimulate the reader to think of his/her own setting and program and what is needed there that can be explored analogically, through an exercise designed for that purpose.

Over time at BFI, by continual experimentation, we have found ways to draw upon all categories of analogic exercises in order to
combine content, process, skills, themes, and tasks in the training setting in a manner which is reflexively coherent (Wideman, 1970) integrative and systemic, all at once.

Some exercises call on analogic or metaphoric thinking before entering the exercise, as a part of it, while others call upon those capacities during the exercise, and others, afterwards, in debriefing. Over time, trainees begin to listen, think, talk and act metaphor and analogue, as well as to think analytically. There is no embarrassment about the use of either. The senses are tuned to be able to speak 'the language of impact' (Duhi, F., 1969) of whomever trainees work with, and to analyze what is occurring. They have been 'trained' to think associatively, using all of themselves, to capture the metaphoric essence of whatever is of importance to the people with whom they then work. The total process is a holographic one at this point, wherein each bit contains the whole and can be directed to any part. We will explore further certain aspects of this process in the next chapter.

The analogic exercise of family-as-system provides the mechanism for a here-and-now experience as common metaphor for the group of trainees. The now data is information, of a moment-in-life, without history or depth. It is our meaning of the moment. It has no past or future, until each trainee infuses it with meaning, images of contexts, situations, people, systems, ideas, wishes, dreams, that we each bring with us all the time. At the same time, the wonderment of our human capacity for metaphoring is that there is no limit to the amount of metaphoring we can do. We can create new experiences and new memories and transpose, transport and transform data and images from
one arena, context or form, to another.

As a here-and-now experience, trainees are generating the data on many levels. Trainees are finding out about who people are at the individual level of system, as well as at varying types of group levels of system, and the amount and type of hierarchy within each system level. As each person connects this event to other experiences through questions, either woven into the exercise itself or raised in debriefing, trainees become aware and find out about who people are in family systems and work systems. Some of the people they are finding out about are themselves! - in varying contexts and over time.

Trainees, then, are information gathering and analogically problem-solving on several levels and arenas simultaneously. The multiple roles and ways of being and acting each person has and plays in various contexts and systems can be elevated from subsidiary to focal awareness. Categories of experience are generalized by individuals and in the group. How much one is the same in different contexts and how much one is different and in which ways, gives clues to how that might also be so for the people one will be working with, as clients. Thus, grounded in one's own personal experiences, each trainee's assumptive world view gets transformed to a place in a larger map. Each begins to invent a General Systems metaphor and way of thinking.

Creating analogic exercises which cover wide ranges of situations, in addition to utilizing experiences of each person in the room as resources, creates many such M's of experiences, giving trainees the opportunity to search out many types of 'fit' in the
similarities, differences, patterns and metacategories of types of experience among themselves and among clients.

Trainees who go through many 1-2-3-plus experiences begin to map their theories from the inside out, into patterns which connect as they locate the generic categories which group their singular and idiosyncratic variations of experience. Conversely, they learn to recognize patterns of human interactions in a variety of ways. In tracking back from those patterns they learn how to find the connection of the patterns with variations of singular individual behaviors and experiences. Perhaps most important of all, such continual exposure to varieties of analogic exercises in which generic questions are asked both in entering the exercises and in debriefing, connects for trainees personal individual behaviors with human systems theory, when there are integrating themes. In such analogic exercises, one discovers how one's own behaviors and those of others derive from contextual settings as well as one's inner world, and are given individual idiosyncratic meanings. The principle of equifinality - of many ways of getting to the same place - is 'seen' and experienced.

Trainees learn respect for each individual view of a situation as a valid view of system, 'correct' but incomplete. Each explores the views of the system from the 'outside' as well. Such diversity of experience is critical in training therapists to work in an open systems model with other human systems. Only by understanding multiple meanings can each trainee not lose touch with each person's essential human core while working with and within the whole context. Each trainee needs to be able to approximate many persons' vantage points
as well as to see the whole pattern fit together, as if he/she were outside it. One cannot approximate and know multiple stances, multiple meanings, without the multiple opportunities to practice, to 'get into' those stances.

Thus training through analogic exercises in a context that will consider family-as-system as well as family-as-theatre, is critical to training in multicentric systems thinking and the type of therapy which keeps touch with each individual person involved.

As therapist, trainer, teacher and agent of planful change, the more experiences one has had in life, the better, and the wider one's scope will be in knowing the ways of the world and the people in it. The differences between an 'old pro' (Kramer, 1980) and a novice consist in the range of variation, the numbers and types of experiences the former has had, that the latter as yet has no map for.

We attempt, through analogic designs, to help our trainees become 'Old Pros' sooner.
CHAPTER X

SCULPTURE AND THE THEATRE OF THE MIND

I was his 'younger sister', aged 10. I stood by silent, helpless and heavy, as I saw my 'brother' pick up my 'father' from under the table, to carry him home. We moved in silence. 'Father' was drunk as usual, and it was my 12-year-old 'brother's' task to find him and bring him home.

My stomach was tight, and I felt as weighty as the load my 'brother' was carrying. The lights were low capturing the mood and emotional tone as projected and described by my 'brother', the 'Sculptor'. We were a well-to-do Indian family, living in Malaysia. We had moved, for business reasons, from the entangled matrix of the extended family compound in New Delhi. Here we were isolated and exposed among strangers. The helplessness felt intense.

There was something grippingly stark and awesome in this, for I was in a very delicate and special place: standing inside someone else's private and existential image.

Another time, I was a butcher, one of the few people that this woman stopped to see on her way home. As a newly divorced parent of one, her network had shrunk, and I was one of just about ten people in
it: the edge of trouble and craziness.1

These were early forms of Sculpture, David Kantor's invention, (Duhl, Kantor, Duhl, 1973), which perhaps also could have been called theatre-in-the-raw; no rehearsals, pure, fast and quick essences of the dramas of our lives. More involved with interactive patterns than psychodrama, with the world of words removed, its images and meanings are the Sculptor's, drawn from his/her internal gallery, metaphorized into a reality in external space and enacted by members of the group. Each 'player' searches the images and feelings within self, and screening them, finds the essences that accompany the Sculptor's descriptions, poses and directions. Once enacted, actors debrief the whole experience. Observers comment: the ensemble together discovers key themes, personal wishes, wants, bondedness, conflicts, contextual restraints, patterns, possibilities.

Then and now each person becomes an actor, a player, in someone else's drama. We enter each other's lives, and discover the rich interior images we each carry, the condensations of our life experiences, where environments and spaces as well as people hold special tones and sensations, special meanings, forces, ambience. We discover new and rich ways of externalizing our internal spheres of meaning, memories, and maps. Each representation of our real life

1 According to Ross Speck, M.D., Family Forum, BFI sponsored series, 1969-70. During the discussion of his interview of a commune in front of an audience, Speck stated that when an individual's network contains less than ten people, that person could be expected to become agitated, edging towards disorientation and craziness, due to the lack of enough people resources to meet ordinary grown-up human needs.
dramas and situations becomes raw data from which to learn about self, others in the group, families, systems, contexts. Here, the first questions are not, "What did you learn?" and "What did you find out?", but other versions of those: "How was it for you to be in that role, in that position, that interaction, that sequence? What was happening for you? What did it evoke in you?"

In that early development of Family Sculpture, in a class of fourteen, we became knowledgeable, from the inside out, about fourteen family systems, making it a very crowded and populated room. And yet, we had explored the essences of each trainee's personal sense of family and family system in dramatic form in relatively short amounts of real time. We had explored and learned system through our participation in the creation of those dramatic essences in moving spatial and kinesic metaphors.

As Kantor first developed one form of evocative Family Sculpture in depth, the private family dramas in our minds became theatre. We sculpted our aesthetic and symbolic impressions of the physical and interpersonal contexts of our lives and the dynamics of living in each of our families, giving these impressions external form and shape in the staged time collapse of theatre. We illuminated relationship, and began to discover the forces in each character that helped move relationships in the way that each did.

We were deeply involved in the dramas of our ordinary lives. We began to catch sequences and patterns. We invented system, from the inside out.

Now, some twelve years later, many of these evocative experiences
are still vividly available, to be run on the screen of my mind and to be reintegrated, reexamined and conceptualized in still a dozen other ways.

'My family' means my sets of images and conceptualizations of my family, just as my sister's family means her sets of images and conceptualizations of the same group of people, of which I am one. The family in my office similarly means my set of images and conceptualizations of them at any given time.

Sculpture, as it was first developed in depth, became a rapid metaphorical idiom for presenting the symbolic essences we carry of the people who gave and give our lives meaning, in our sense of relationship with each of them and they with each other. The symbolic essence we portray is guided by our private aesthetic valuations of each person and context - our idiosyncratic sense of 'fit', order, bonding, comfort, dynamism, beauty, balance.

In the evoking, in the doing, in the discussing, in the thinking about, such spatial representations rapidly allow new information to come forth, all filling out and expanding images and

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2 Again, I am using the word 'image' generically, as a generic sense construction, to include all varieties of synesthetic metaphoring, wherein we translate, transform and transpose from one sensory modality to another. Thus I am using image to encompass various modes of phenomenological representation.

3 Some years ago, Ray Birdwhistell, M.D., of the Eastern Pennsylvania Psychiatric Institute, produced the Hillcrest Series: four interviews of the same family done within two consecutive days. Not unlike the Japanese film Rashomon, or Lawrence Durrell's Quartet, each family therapist interviewer (Don Jackson, Carl Whitaker, Nathan Ackerman and Murray Bowen) drew forth a different image and sense of family and sense of 'problem' from the same unit of people.
conceptualizations.

**A Bit of History**

The birth of Sculpture took place during the Spring semester of 1969, the first in BFI's history, when founders Fred Duhl, David Kantor and Madeleine Gerrish were leading the group. There, in what perhaps can be described as a characteristic fashion, David Kantor recalls himself as impatient and bored with the way in which material concerning a family they were discussing was being handled. He wanted to "try interacting with that material in yet another way". As he recalls it, he started to describe a board game idea that he had been thinking of, on which there would be wooden figures representing family members, that could be moved around, using spatial distances between figures to represent relationships. As he began to talk about the board and figures he said, "Here, let me show you what I mean," and Live Family Sculpture was born.

For instead of continuing to describe the family members linearly, by language, Kantor moved to the language of pantomime and the spatial metaphors of theatre, dance, and spatial relations to carry the ideas and images he had formed of the family they were discussing.

In that spontaneous happening, and yet drawing upon his background in psychodrama, Kantor chose several people to represent

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4 Personal communication, March 1981
the family members they had been discussing. Telling each player a little about how he 'saw' each member, he then placed each in positions of relationship to the others, utilizing horizontal physical space to represent degrees of closeness/distance, and vertical space to represent power/helplessness. He asked players to employ certain gestures, capturing and externalizing metaphorically the organizing meaning Kantor gave to his perceptions.

He started by asking father to stand on a chair, finger pointing, and frowning to indicate his authority, anger and displeasure with his son; mother to stand ten feet away, pointing to the daughter, trying feebly to get father's attention by a halfhearted wave; the younger daughter at a distance, oblivious to the whole scene, reading a book; the son standing back on the other side, shielding himself from father. As mother tries to get father to pay attention to daughter, he 'yells' at the son. Mother then runs to protect the son. Father 'yells' at her and she runs away as the son hides again. Father again turns to the son, as mother points to the daughter. And so on.

Kantor thereby quickly represented his internal Images, his sense of how each person seemed to be in relationship to each other. And he told each what to do when, in what repeated sequences. Thus all could 'see' Kantor's Image of relationships in the family they were discussing. Each person in the room had a common external metaphor against which to compare his/her own private internal understandings and Images of the family they had been talking about.

Thus, Family Sculpture became an unusual mix - a concrete and enacted event, yet simultaneously a representation of abstract
conceptual as well as intuited and known phenomena, in context and time. Sculpture became a metaphor of meanings, and of the dynamics of interactions.

The idea took off at BFI among faculty and students, as well it might, and training was never the same after that! Sculpture expanded in many directions. Kantor's quick casting of characters in a stylized moving sequence, which he entitled Family Sculpture, was immediately recognizable. It was intuited in every cell of each person. Each trainee and trainer immediately grasped and understood this powerful metaphorical language and presentation that captured the dramatic essence of known and lived sequences of everyday life. Indeed we already operated within this modality and had since infancy. Our sensorimotor learning and knowing precedes and is the basis of all other learning; metaphorizing, through imitation and play (see Chapter VII) is our connection-making apparatus at work. 'Show me' follows close on the heels of 'doing'.

When BFI trainees briefly presented Sculpture a year or so later to other family therapists from the Northeast, at the Boston-based Society for Family Therapy and Research and at major BFI-sponsored ....

5 America's most pervasive and thriving communications medium, television, owes its beginnings to the silent movie, not as technology, but as a medium understood by all: actions without words, in spatial metaphor, denoting relationships.

6 Boston, 1971. It was at this meeting that social worker Peggy Papp, a former actress, first saw a quick Sculpture in another of its emerging forms: quick, static, photo-like positioning of members highlighting their structural arrangement; quick stabiles similar to single drawings for animated cartoons. The modality appealed, and she began popularizing it in this static form, later 'adding' movement and renaming it 'Choreography' (Papp, 1973; 1976)
workshops in 1973 and 1974, Sculpture took off completely. It unleashed and provided a vehicle and channel for the restive creative energy in people in this new field who had been struggling with linear language to present the multiple, simultaneously occurring and interconnected phenomena of family life, in and among members, across, within and between varying types of boundaries. Sculpture captured the imagination of those who were looking for a modality for the creative exploration of and experimentation with ideas about family relationships.

Sculpture, or spatializing, as I now refer to this medium, became the idiom by which to express experientially that which is experiential, and which has first been perceived and given meaning experientially, before it is given conceptual or theoretical meaning. Sculpture and spatialization provided the means of organizing, defining and expressing the verbally inexpressible: the idea of simultaneity, of betweenness, of action and relationship in and over timespace. The medium fit the message.

Sculpture and spatializing also allows us to incorporate and interconnect in juxtaposition contextually dyssynchronous events. In our timeless minds, such events are often fused in their meanings, constituting our inner sense of reality and coherence. The mind makes

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7 The 1973 and '74 workshops sponsored by BFI were host to over 100 family therapists each year, and explored a plethora of ways of utilizing spatial metaphors to grasp, represent, and explore meanings and images of, and potential change in, system interactions. Constantine's article (1978) is based on notes and materials developed by the author and others for these workshops.
meaning from the way in which it 'sees' connection and pattern of
disparately occurring phenomena. Our minds create 'FIT' and the sense
of order.

The first form of Sculpture enacted by Kantor that first evening
was a spontaneous one, both from the inside out and the outside in,
depending on who and where you are. In his metaphorizing process,
Kantor, as trainer, imaged a production inside his theatre-
of-the-mind. He asked others to enact and make manifest his internal
image of a third 'party', the particular family being discussed (a
modality still utilized by us in training as well as in therapy). For
the observers, it is an 'outside in' experience, of information
transmission of a point of view. It allows them comparisons,
conceptualizations, judgments. For the Sculptor and Players, it is
both inside out and outside in.

Sculpture: The Language of Theatre

As a trainee, and later as a trainer, I like others felt this
medium to be a bottomless, unending wellspring, forever generative,
forever fresh, capable of flowing in all directions and of being used
for many purposes. When I was invited by Kantor to teach with him for
two years in BFI and simultaneously and concurrently, by Jeremy Cobb
to co-lead seminars at Boston State Hospital, I found myself with the
opportunity to invent multiple ways of using this spatial metaphorizing
process until, within a few years, it became not a modality but a
fluid and fluent language, spoken as easily as 'verbal-ease'.

It is a generic and native metaphorizing language of form,
gestures, movements in space, known by all of us, used and translated constantly by each of us every moment. It can be raised to an art of translation and transformation by people who would more fully understand the taffy-pulling interconnectedness of human beings with each other.

However, while it is a familiar language, it is also a strange or estranged language for us as adults. We are uncomfortable speaking it consciously. Like people well inducted and assimilated into another culture, we are a little ashamed of having known this first language so well. It is the language of children, of play, of imitation, of delight in the discovery of being and of meaning-making, before others impose their meanings on our behavior. It is the language of finding out how behavior means, and how meanings behave.

For most adults, it is the language of theatre, of exhibition, self-consciousness and discomfort. Often we are not aware of what we are 'saying' to others, or are uncomfortable to talk about such paraverbal, nonvocal and contextual messages, expecting that blame and/or ridicule will accompany that which is undertaken as the very beginning of an exploration.

As adults, we are all actors, but not necessarily informed, intelligent, cognizant ones. Yet where in this culture does one have the opportunity to be a 'fair witness' (Lilly, 1972) in becoming truly cognizant of oneself as a message-sending actor? Where can one experience and observe oneself as system member while others are doing the same, without penalty?

In the world of theatre and dance, pantomime and all forms of
paraverbal spatial metaphorizing are used, in aesthetic balance, in presentations of relationship. The world of theatre helps communicate the interconnected drama as well as the zaniness, absurdity and humor of and in our daily lives.

Yet theatre is but a fine and refined tuning of what we in daily life do, know and struggle with. Theatre but highlights the essences of meanings already known to us in some form. Theatre reflects the configurations of our behaviors, experienced by us in real time, in another pacing, with other people. Theatre takes us into the land of strange and familiar - enough that is strange, novel and new to capture our attention, awareness and interest, enough that is familiar that we can feel and recognize, to create coherence of events and messages, spoken and unspoken.

Sculpture, then, took us into the world of theatre, where, as consummate directors, we staged our images and fantasies of relatives, relating and relationships.

Sculpture also returned us to the world of our inner thinking, that private dialogue that takes place within self, that inner commentary on the current scene and context. It returned us to the world of our childhood, when we first became aware of what we liked and didn't like, and where we knew that beginning sense of differentiation, of discrimination. Sculpture returned us to the inner world of images, of preferences, of opinions never spoken, known but never made public.

As adults we call Sculpture 'theatre'. As children, we used to call it play. It was what we did for a living. We imaged, we created,
we played with actions, words and life scenarios as we played with crayons and finger paints. We said 'what if', and 'make believe'; we entered the world of playful imitation when we directed and said, "You be the mommy and you be the daddy, and I'll be the baby," or "You be the Cowboy and I'll be the Indian". Sculpture reawakened the sense of the inner 'I' who discriminates, knows, sees, and who has a certain inner set of aesthetic rules, very private ones, very idiosyncratic, which guide the sense of how relationships ought to be, could be, should be.

And Sculpture provided a most interesting idiom for the exploration of images and of human systems of all sizes and shapes, and of concepts about systems. New questions raised new searches, new information and answers. Our original 'metaphoric mind' (Samples, 1978) which orients us in the world, in space (Piaget, 1956) in our explorations (Pearce, 1977), and in our preverbal knowing, is revitalized and reawakened in the playful drama and dramatic play of spatializations. And the wonder of it is, that we have all 'been there' before. We have all created theatre-in-our-mind, as child, if not now.

Thus Sculpture belonged to honored traditions. However, the traditions were out of context. Theatre and play did not belong in the serious field of education, training, professional systems thinking, psychotherapy. What did theatre have to do with knowing how families work, and how human systems work?

We had entered the world of theatre and play - to focus and learn more about life and living.
Let us explore that world for a moment, for its importance in training generic systems thinkers.

**Family-as-Theatre: Theatre in Training and Therapy**

The role reversal and alter ego techniques developed by Moreno for use in *Psychodrama* (1946) had been some of the first in the world of psychotherapy to offer trainees and clients an opportunity to 'be' both inside of self and an 'outside' enactor with self.

In early psychodrama (dramas of the world of mind/soul), Moreno had participants take their internal tape recordings of the mind and give them an external audition, in a performance, a hearing, with an audience. That audition was to take place in dialogic form, with the author of the scripted internal dialogue, and another participant. In such dialogues, the protagonist of theatre is the inner voice of want, wish, the 'I' who is pushing for something different, who would grow, develop, be. The antagonist is the voice of the oppressor, the one who stops growth, movement, thwarting emergence of competence and confidence. In psychodrama, the actor first takes the voice of the protagonist - the push for differentiation and integration.

In role reversal, one takes the side and voice of the antagonist - the person one sees as outside oneself restraining one from being the way one would like to be, from doing what one would like to do. The author of this dialogue steps into the shoes of the antagonist, speaking the words of the original characters, while one's co-dialoguer speaks one's own words as protagonist. It is a powerful step toward decentration, when one can begin to see oneself from
'outside'.

In alter-egolng, Moreno lends support to the protagonist who is unaccustomed to speaking his own cause for survival well, who is too frightened, or untutored in being in touch with the inner 'I'. Alter egolng, or doubling, offers other optional dialogues of inner thoughts, feelings, sensation, meanings to such players. This support of ego-centrism in the Piagetian sense of a developing and separate sense of 'I', again is fostered by borrowings of the 'aside' from theatre.

Such vocalized dialogues bring the Intrapsychic, psychological self alive, externalized, to be explored in new ways in training and therapy. Such inner dialoguing, externalized (which also takes place in the Gestalt therapy approach of Fritz Perls and the Psychosynthesis of Assagiolli), allows the originator of the script to become aware of the inner system of 'parts of psychological self'.

When/if such dialogues are viewed contextually, participants become aware that their internal dialogic system is often 'populated' with the characters with whom one has lived and interacted, and been impressed by, in one's own particular Idiosyncratic mix of meaning-making and definition.

Yet the meanings we give to our relationships, the data for such inner dialogues, come from more, much more, than the spoken word. Kantor's Sculpture, extending psychodrama, translated the dialogues into the meanings of the dialogues - in action, in space, as such dialogues represented the distance regulation messages sent and received by family members.
In addition, he included not only the disapproving gestures, the intensities of tone, the ways in which members moved and when. He included the knowing that is nonverbal, the generic and metaphorical issue of boundaries, of self and others in contextual and interpersonal space over time. Such essences of experience do not inhabit the world of words. They inhabit the world of image, of sense, of aesthetics. And that world is the world of theatre.

Sculpture allows us to enter this world of theatre to explore our images, and our thoughts, through the most complete, untapped, unschooled and original part of ourselves - our inner sense of personal aesthetics. It is through that experiential, aesthetic sense that we somehow give weight and value to 'external' and internal phenomena. We metaphor those weightings into meanings (right brain). Only later do we try to make sense and weave coherence of the meanings we derived or gave to our perceptual world with reasons, explanations, theories (left brain).

Sculpture allows us the opportunity to join the right and left sides of our brain in joining our aesthetic sense with our sense of reason, through the full vehicle of theatre.

For theatre is more than image. It is also the world of form, of order and sequence. And the world of theatre is where the idiosyncratic human trait of being able to bond psychologically in varieties of ways is played out. Not only are human beings capable of being bonded to certain persons, evoking great emotions in life dramas with each other, but human beings are peculiarly able to be psychologically bonded to certain ideologies, concepts, theories,
images of human, myths, and beliefs about people and the purpose of life itself.

Not only are we capable of remembering and juxtaposing past and present, we human beings are also oddly able to image an as yet nonexistent future, be it the pie one is going to eat for dinner, an unformed masterpiece in clay, a nonexistent machine, or an unheld battle in a war. We are able to feed that image forward, to plan for making that future happen, to create its being. We dream what does not exist, create it, then receive, react, incorporate and 'bounce off' the fact and wonderment of the existence of our creations, only to begin the process anew. We are indeed marvelous creatures.

In the creations of theatre then, the vicissitudes of daily life are reflected to us, as well as the universals of bondings, of imaging past and future, of aspiring, hoping, wanting, and planning, making something happen. These universals are the stuff of dramatic conflict and resolution. They are also the stuff of the drama of ordinary family life.

It seems then, that in the introduction of Sculpture, historically, we had come full circle from another tradition and age: from psychological, systemic dramatists to dramatic system psychologists.

**Systemic dramatists**

Indeed, in the ancient Greek dramatists we find some of the first systems psychologists and systems thinkers of the Western world, whose themes are as fundamental for us today as they were for their actors
and audiences in Greece, who struggled with them.

The emphases change, but the themes are the same. (After all, it was the 5th Century B.C. Greek playwright, Sophocles, who made famous Oedipus' complex family story, in which he unknowingly kills his father and equally unwittingly, marries his mother. However, Jocasta is as much married to her son as Oedipus is married to his mother. In the 20th Century version, Freud reawakens that legend, by 'inventing' and analogically labeling an individual 'complex' honoring only one member's part of that family system's transactions.)

Not only did the Greek dramatists capture the psychological and ideological themes of importance, they also captured the awareness of the multiple roles each person plays in life, in his/her private and public spaces, and in relation to his/her own inner sense of self and purpose. The personal bondings, the social rules of order, the invisible enacted loyalties and disloyalties which give human life meaning are masterfully captured by Aeschylus, Sophocles, Euripides. They, and Shakespeare later, fully caught in their plays that while one person inhabits one body, he/she 'is' a different person for each other with whom he/she is in relationship.

Each son and daughter 'sees' his/her mother and father quite differently than the father and mother 'see' each other. Romeo's trusted and beloved friend, Juliet, is seen by other family members as the enemy.

We decide relationship both by outer constructs of role (who one is for another according to the cultural status hierarchies of that context) and by the inner experience of fit of personal preferences
(of who each other person is for oneself in his/her way of being).

The dramatic tension in ordinary family life comes from the many roles we play in our own and each other's lives, both symbolically and in actual process.

Each relationship then is the betweenness, that essential something that brings vitality, intensity and unique meaning to human life. Like snowflakes, no two betweennesses are exactly alike. Relationships in their fine tunings are infinitely varied, they come with the range of difference for which our unique fingerprint is also a metaphor. Each betweenness, each relationship, has its own fingerprint.

The dramatist, like a systems theorist/therapist, must find meanings and patterns, and must represent varying points of view, varying types of betweenness. He/she must have a sense of how each character acts, believes and speaks, and thus how each plays a part in the whole enterprise. He/she creates connections by the juxtaposition and sequence of contexts, actions and behaviors, intent and meanings.

The Greeks and Shakespeare exemplified in action, commentary, and metacommentary each author's profound visions into the complexities and ironies of human nature in play with the forces beyond any person's individual control. The plays were the playwrights' inner metaphoric images of the external world, remetaphored again through and into the vehicle of theatre. In Greek theatre, the story was first told by a chorus, and then with one, two and later three actors taking all parts while the chorus commented on the whole.

The Greeks highlighted the relationship of man to Fate and to
each other. From those beginnings, dramatic theatre - or the portrayal of conflict, of dynamic differences, was born, which has continued to portray and communicate messages about human beings and the human condition to this day.

Drama is in the juxtaposition of symbol, meanings, and behavior. The closer behaviors are to the desired symbolic meanings, personal and consensual, the greater the harmony. Drama occurs in the mental space 'between' symbolic images of what should be, one's sense of what has been and what is occurring now. Drama is the betweenness of symbolic meanings and actions.

What constitutes theatre, then? Inner images organized by an imager, externalized, carrying extracted and heightened essences of perceived and known phenomena, in a cohesive set of messages, within a coherent set of relationships, comprehended by an audience.

**Systems Thinkers/Terapists as Playwrights and Dramatists**

That task of organizing images, of selecting particular components from one's 'reality,' and metaphoring them into a 'play' which tells a connected and coherent 'story', is also the task of systems theorists and therapists, trainers and trainees.

Family systems theorists and therapists are not unlike dramatists then. As plays reflect the cultural themes and Images-of-Human of the author, so theories of human systems reflect the observations of human life within the experience and Image-of-Human of the theorist/therapist.

We all know that home movies are boring. They seem to just go on,
without purpose, without particular focus. Cinema verite, too, is tedious for us, for it has no plot, no definition. It just goes on. Somehow, though, human life is like that. It just goes on, and without each of us to give it focus and meaning, it is boring, tedious, unending and happening. It has been doing so for millions of years.

It is our human capacity for symbolic meaning-making that focuses and organizes our experience into what we call our reality. Each human being has a mind that searches for relationship, for betweenness, for connections, for meaning, for patterns, to organize the 'bloomin' buzzin' confusion' (James, 1950) of the simultaneous ongoing cinema verite of our lives. Like the playwrights, each individual as person first, as theorist/therapist later, selects from all that bloomin' buzzin' confusion those themes and patterns seemingly most cogent, important and interesting to organize and 'explain' one's experience. Like playwrights, theorists too select what is in the hypothetical unit called system by what they include. Omission defines what is not included or is outside.

Our learning set, the culmination of our previous experience and personal aesthetics, frames the way in which we approach coding events, adding to the 'professional deformation' that Bruner speaks of (1973, p. 226). This is as true of the dramatist as it is of the systems thinker or scientist. It is no less true of the developing trainee in human services and systems thinking.

Each systems thinker/theorist/therapist frames his/her hypothetical punctuation of life according to his/her inner perceptions, images of human, and world views, extracting essences and
thematic patterns from the plethora of data lived in the run-on sentence of life. Through abstract language, these essences are heightened and contrasted by theorists, thus mapping the territory that the playwright/dramatist/therapist walks.

Thus is epistemology colored and shaped by one's personal aesthetic preferences and one's epistemics (Kuhn, 1962; Bruner, 1973).

In theatre, when the playwright, director and performers succeed, essences of relationship are heightened and contrasted, and the dynamic tension within which life is lived is organized into a comprehensible whole. Each participating or observing human being of that culture can recognize him/herself and his connection to that play, to those themes. Each viewer is able to approximate that which is happening on stage to the degree that he/she is able to enter that way of seeing and thinking. For each brings his/her own inner theatre-of-the-mind to the play (as each theorist/therapist brings his/hers to the plays of life). Each observer must be able to metaphor, to carry from one place to another, the experience which is happening between actors upon the stage and the experiences inside him/herself and to make meaning of them. When that occurs, we know the person has 'entered the play'. He/she can approximate and feel with the characters and can understand their relationship. Although watching from the 'outside in', one then understands from the inside out. Trainees in systems thinking need to be able to do both, in order to keep in touch with each person while seeing the whole perform.

Without such abilities to approximate and feel with, cognitive 'translations' are needed, which 'explain' meanings and what is
happening, from the outside in. One stays detached, outside, knowing the system but not the people.

**Drama in Systems Theory**

Drama is conflict unfolding.

The height of drama occurs when innocent intention is betrayed. The tragedy of paradox and irony occurs when one innocently makes one's own worst thing happen, especially when trying to avoid it, in the process of ordinary living. Resolution in drama comes when 'crooked talk' becomes 'straight' or congruent, and 'crooked' or fixed relationships become fluid. Theories of human family systems and family therapy speak to these same issues.

Americans at the Chinese theatre do not understand from the inside out the drama and significance of what is happening; we need a cognitive translation. We are told. We make up an explanation based on our previous experience. Or we tune out, and disregard the theatrics as sending messages of any importance.

As theatre goers, it is of little significance if we do not comprehend and tune out. As facilitators of other human beings, it is most important that we have ways to tune in - to know human relationships from the inside out. As facilitators, we hopefully help 'crooked talk become straight', in 'the language of impact' (Duhl, F., 1969) of each person's aesthetics. It is most important that we consider others as we consider ourselves, as real actors in real life dramas.

The use of the world of drama and theatre in training systems
thinkers allows us to explore the epistemic lenses and personal aesthetics then, which color our professional theories. For systems theories, even the most scientific ones, are our professional myths, the best we have at this point in time, for how human behavior organizes itself. Each of us brings our epistemic theories into the room, covered by the label of epistemology.

Theories of therapy, systems variety, each talks to a version of resolution in the drama of 'crooked' talk and 'crooked' relationships between people becoming 'straight', so that people can get on with the everyday cinema verite of their lives, somewhat more in charge of themselves.

Theatre offers us many ways to tune in. Theatre offers trainers, trainees and clients many ways of 'seeing' in ways that shift their 'assumptive world view' (Parkes, 1971).

The trainee who can approximate many roles, metaphorizing connection, enters the lives of people as the empathic audience enters a play, from the inside out, discovering the systems of systems, of relationships, and building constructs which go 'far beyond the information given' (Bruner, 1973).

We must be aware how the theatre-in-our-mind frames the dramatic stories and organizes the data of our own lives as well as those of the people who seek our help.

As each individual within a family has its own story, its own sense of drama, and its own sense of how the family works, so does each individual trainee carry into the training programs images of family systems and family stories.
As we each make coherence of life, family dramas and systems, we later carry into the room with our therapist person, our individual aesthetic and epistemic person who has lived a life within such important and shaping dramas, systems and contexts.

We each have a frame, a way, which we have metaphorized into being, formed from the myriad interactions of self in the world. We are each born with capacities, a context, and a *tabula rasa* of meaning, of understanding. We configure our understandings as we experience the interaction of self in our contexts in the world. We learn-to-learn and build our epistemic theories of experience from all that we interact with and touch externally and internally. We are each authors, dramatists and playwrights of our own version of life. Yet most of us are not aware of the organizing principles of our personal epistemic theories, or of our versions of drama, and how they shape our epistemology.

As the aforementioned Hillcrest Series (see footnote 3) so blatantly yet subtly illustrates, the family data are not the family data, but how the therapist sees, evokes, and organizes the family data.

We cannot know how our epistemic version of family system distorts our lenses such that we recognize and look for in other families our personal version of life or its opposite. However, we cannot transcend that which is unknown to us. We cannot look at that which we cannot see. We cannot know how our epistemic theories of experience contribute to our 'professional deformation' (Bruner, 1973), unless we are given the opportunity to bring them under the
spotlight for scrutiny. Nor can we know how our avoidance of looking at our own families and contexts keeps us out of touch with the very real human actors in the dramas unfolding before our very eyes in our offices, agencies, classrooms, institutions.

Sculpture and spatialization allow for this looking, for the beginnings of this transcendence in training and therapy. The medium is a many-splendored mechanism by which personal epistemic versions of family and other systems can be put outside the self to be explored, examined, questioned, later compared and grouped. That which is covertly intrapsychic (in the mind) becomes overtly transactional (across, in and among members). The spatial metaphor of Sculpture gives form and shape to the dynamic interaction, the theatrical essences, of messages meant, sent and received by component members. Drama and system become one and the same.

*Sculpture creates an 'N-of-2 plus' experience for many people: a second look at the first opinion.*

**Family-as-Theatre: Evocative Sculpture**

While Kantor's first Sculpture was a quick 'outside in' version, he then went on to develop an elaborate form of 'evocative' Sculpture in depth, from the 'inside out', as a fuller theatrical form in which trainees metaphorized their own image of their own families, spatially, as in a pantomimed play, without words. Other trainers at BFI began to try on, try out and experiment with the new medium of spatialization, and also joined Kantor in exploring this extension of psychodrama in the metaphor of *family-as-theatre.*
When Kantor began to develop this form of Sculpture, he was interested in how normal, ordinary families 'worked', in keeping with his *in vivo* research with normal and schizophrenic families, and the generic questions he and the BFI faculty were pursuing about families. He was also interested in how each family member and the family as a whole used space as territory, how the family defined that territory at the interfaces within the family, and with outsiders as well. Additionally, Kantor was interested in the ethos, the feeling and the aesthetics of both contextual and interpersonal space. He thought that the enactment in spatial metaphor would serve well as a way of exploring those concerns.\(^9\)

In our training sessions, the same questions that concerned Kantor were raised for us as trainees, as generic questions with unknown answers. In that sense, we were all on a search together, in exploring how families 'worked' and how families used, defended, conceptualized and gave meaning to space. Obviously, as members of families, we all had information in some form and degree. We thus were on a search to find personal answers as well as broader conceptual generalizations inclusive of all our individual answers. We were all searching for metaphors of organization and operation, with Sculpture as a major tool in that search.

With Sculpture, we began exploring space and assigning meanings

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8 For the original description of this form of Sculpture, see "Learning, Space and Action, A Primer of Sculpture," Duhi, F., Kantor, D., Duhi, B., 1973.

9 See Kantor and Lehr's *Inside the Family* (1975) for a full explication of Kantor's theory of family spaces and organization.
to family members. We selected spatial distances to represent emotional and hierarchical distances, and relationship.

The guidelines for this newly developing form of theatre-in-training, which evolved from our explorations, began to include those for defining the context and its inhabitants. We developed procedures for setting the stage, for selecting dramatic personae, as well as those outlining tasks for Monitor, Sculptor, Players and Audience.

We created the family-as-theatre, discovering how aspects of mind work, and a new vocabulary with which to question, search, uncover, explore, and even facilitate change in family and other human systems.

Aesthetics and Physical Metaphor

It is interesting to note that we use words regularly to represent the aesthetic sense and feeling of physical space. We speak of 'dark and depressing' rooms, 'cheerful and warm kitchens', 'cozy corners'. Novelists and playwrights rely on such phraseology to present their image, their meanings. Every play begins with such instructions:

The room is fairly large, homely looking and cheerful in the morning sunlight, furnished with scrupulous medium-priced tastelessness of the period. . . .10 (Cerf & Cartnell, 1941).

In our verbal vocabulary, we already use many phrases representing physical and spatial relationship: 'I felt very close to him', 'he's a drag, a weight around my neck', 'she kept herself at

10 Beginning stage-set descriptions for Eugene O'Neill's Ah, Wilderness!

Wilderness
arm's length', 'he turned his back on me', and so forth. Everyone speaks such metaphor in everyday language to capture one's image of reality.

With Sculpture we began to 'speak' a different kind of metaphor to bring the same reality to our cognizance: the vocabulary of the theatre. In so doing, we discovered the other side of ourselves that had not been valued in this culture for its ability to contribute to knowledge, understanding and exploration of conceptual material.

As I now begin to describe the process of Sculpture with words, we should not forget that Sculpture originated as the solution to problems of verbal communication. Sculpture was Kantor's solution to the problem of talking about simultaneous family interactions.

Let us now investigate this spatial process and its generic underpinnings. Let us discover how presenting human events, images, interactions, systems in an enacted theatre form facilitates integration and multicentricity in trainees.

We shall begin by exploring this earliest form of Sculpture developed in depth by Kantor and the BFI faculty, for from this seedling which took root, germinated many other versions which we shall examine in a moment.
Evocative Sculpture:

Context and Process

Consider the training room large enough, with movable chairs and space to walk around. There needs to be room for the enactment, the metaphoric space of one's scene to be 'laid out' as a stage set is laid out. There needs to be room for the players in that 'set' and there needs to be room for the audience to observe.

In the place of the playwright, Kantor had and has the creator, the Sculptor, who was/is aided in his task of evoking and externalizing his inner imagery and memory by the sensitive guidance of a Monitor, in the place of the director of a play. Instead of working in clay or stone, the Sculptor was and is seen as creating his inner image spontaneously, directly, with real people. The Players in Sculpture are like actors in improvisational theatre. And in this theatre-in-the-round, the audience plays an observer-commentator role.

Setting the Stage

In this most complex and comprehensive version, the fullness of such a process recreates externally one person's core images of specific and generic family experiences or processes in their contextual space.

The externally constructed 'stage set' image involves the evocation and mention of remembered tones, textures, ambience, and atmosphere of the actual physical space, as well as of the experiential and aesthetic meaning given those different physical locations in one's home. Such symbolic metaphoring is not meant to
capture the concrete memory of exact details, or to attest to accuracy of memory recall. Sculpture is not to be realistic, but as memories are dream images, this type of Sculpture is meant to evoke and to then externalize felt experience in symbolic form: the meanings and experience of living in a particular context with particular people called one's family.

The Monitor's Role

The Monitor is a guide, one who stimulates data with his questions and who sets up the search for definition. It is the Monitor's job to facilitate the Sculptor to clarify his/her images, to bring them from the fuzzy edges of awareness to external space to be tried out. The Monitor must also protect the Sculptor in this process and keep the sense of dignity and respect around the aspect of disclosure of self-in-family-system taking place. For the Sculptor has only one job at this point: to re-experience, evoke and re-present his sense of the contextual and interpersonal spaces of his family.

The Monitor asks the Sculptor to think of a time in his life when he was younger and still living with his family of origin. The Monitor then asks the Sculptor how old he is, and where he is living at that time. She may also ask what year it is. These three questions already organize and locate the Sculptor in the contexts of his life cycle, family space, geography, and in relation to world events occurring at that time.

11 From this point on, in this context, for ease of reading I am imagining the Monitor female and the Sculptor male, and so will use the appropriate pronoun for each.
The Monitor then asks the Sculptor to set the stage for this particular scene and cast of characters. She asks the Sculptor to pace out a space, metaphorically representing the living context, and to describe the sense of size and shape of it as he goes. She walks with him, pacing him, asking the Sculptor questions about the actual physical type of space in which the family lived and the emotional sense of the space in which his image of family lives.

Literalness begins to give way to metaphor. The 'stage set' that begins to take form is the external representation of internally felt and remembered moods.

As they walk, the Monitor asks about the sense of the boundary around that total space and metaphorically, of what it is made. Questions as to whether there is easy access to and from the outside world through the 'boundary' raise questions about metaphors for its texture and type. The Sculptor may describe walls of ribbons, heavy curtains, one-way windows looking out, high steel panels, and so forth. How family members enter and leave this space is explored, not only through which boundaries and when, but with whom in charge of entries and exits in the family space.

The Monitor asks about the feel of different areas of the house, and the quality of such spaces, as well as who 'owns' each space. Some spaces in families belong to everyone. Some supposedly belong to all yet are controlled by one member - as in 'the living room was mother's'. The weaving of physical and interpersonal space begins to occur through metaphor.

The aesthetics of brightness (light, dark), intensity (color),
temperature (hot, cold), atmosphere (dense, clear, dry, wet, hot, cold), texture (rough, smooth, prickly, soft), form and shape, which represent the feel of one's sense of context, are asked about, and answered by the Sculptor, often through metaphor: 'We walked on eggshells; it felt gloomy like a dungeon in the cellar'.

Though these might sound like strange questions to ask about one's early (or current) environments, this is metaphorizing we all can do, because we have all experienced our own contexts in all of these ways.

As the Sculptor is answering these questions, his eyes become glassy, as he begins to turn inward, reentering the original environment internally. He is entering a type of trance state, as the myriad inner images cross the screen of his mind. The search is on for the appropriate aesthetic equivalents of the original with which to 'paint and light the set' here. When Sculpture was first developed, in that huge barn of a room at Boston State Hospital (described in the 'first night' exercises of Chapters I and IX), Kantor and others actually adjusted lighting to help create the desired mood and tone, as the Sculptor began this intense re-entry into his original environment.

The early literal answers mark the beginning of the Sculptor's inward trip as he remembers and has to notice now what he previously took for granted as 'home'. He has to make focal that which was subsidiary (Polanyi, 1958). As he continues inward, he is able to become more and more symbolic and metaphorical, in touch with the feeling, ambience, tone, texture and qualities of the space and the
experience of living in that space.

Such aesthetic and emotional awarenesses and descriptions are usually reserved for poets and playwrights. The medium and form of the spatial metaphor of evocative Sculpture allows each of us to reach the poet inside ourselves.

As in our childhood 'make believe', with minimal or no props and much imagination, each person in the room begins to have a sense of the feel, the ambience of this metaphorical physical and interpersonal space of the Sculptor's.

**Casting the Characters**

The trainee involved in creating such a situation is then asked to populate it, calling on other trainees to play the parts of the people who had lived the original version. One at a time, the Sculptor scans the group for an actor to fill the role of one of the well-known people in his life. As the Sculptor searches the faces, a person is chosen for each part.

We became aware very early that often a selected individual reminds the Sculptor of the original character in some paraverbal modality, such as voice tone, looks, or expressions. This associative connection is most often out of the direct awareness of the Sculptor at the time he is choosing someone to play a member of his original family.

The Monitor tells the Sculptor to give each character a thumbnail description of him/herself, using the present tense, 'you are', as in "As my mother, you are a small woman, though very energetic". Such instructions put people into a here-and-now setting, yet put the
Sculptor deeper inside his trance-like imagery. Each character is told of characteristics that stand out as predominant to the Sculptor, as he begins to think-see in condensed images. The Monitor then asks the Sculptor to position the first character in relation to himself, using space to represent emotional distance, with questions such as: "Do you feel your father as very close to you? Distant? What amount of space represents that distance?"

As in Kantor's original quick presentation, vertical space is often used to represent power, or aloofness to which authority is attached, in which the 'father' stands on a chair or platform when he is 'in the home', or in relation to the Sculptor only.

Additionally, information is requested by the Monitor concerning specific gestures and movements, representing how each particular family member is remembered and was experienced by the Sculptor at the general time being described. The Sculptor seems to stare inside. He has to become more specific and differentiated at this point. He must search for and tease out from the many blurred and fused images the essence of how he perceives this person. He extracts essences, in stylized symbolic form: "My mother's typical gesture for me would be one of smiling, her head to one side, reaching out to me. I would take her hand and move in next to her. We were fairly close at that time."

**Discovering the System-as-Context**

As each person is added to the scene, the Sculptor is aided by the Monitor in paying particular attention now to the interrelatedness of people. In this form of self-as-center Sculpture, while the Sculptor remembers how each person appeared to him, in relation to
himself, he is challenged to be more focally in touch with how each family member also related, gestured and moved from, to and with each other person in the family. Thus, the Sculptor/trainee must think systemically: how the whole functions and is dynamically interacting, all the while focusing on his private and personal view of the whole family. He may not talk about them. He must re-create them, in active interrelationships.

Questions such as: "While mother is frowning at you, and begins to turn her back on you, where is she in relation to father? And where is father in relation to you? If mother is 'out of the picture', how do people realign themselves?" force the system-thinking issue. One cannot think unidimensionally or linearly any more. One must create system 'with dynamic interaction of the component parts'. The Monitor can ask about family roles at the same time in spatial terms, such as: "To whom does each go to talk about personal issues? To get permission to do things? Who is 'in', who is 'out'? Who controls the center space of the family?"

Any and all family processes can be explored in this manner, as the patterns of the family are revealed through the Sculptor's eyes.

The Roles of Players

As this form of Sculpture developed, so did guidelines for the Players, devised to keep the process from becoming too literal, or from being taken over by any or all of the Players. For instance, the Players are instructed to ask questions in the first person to get ideas of behaviors and relationships with each other family member: "Am I...angry with father as well as mother? Do I comfort you or seek
you out in any way? If I am 'outside' the rest of the family, how do I get 'in'?

Players are asked to be pliable to the Sculptor's positioning and instructions, and to check out one's own sense of gestures and connectedness with the Sculptor's sense of that family member's way of being. Each Player is asked to BE the family member, to enter into his/her shoes and to enact the part as the Sculptor has described it. Thus, they enter and try on total metaphors of approximation: "If I were his mother, how would I be? What goes with being his mother?"

Then, the Players are instructed by the Monitor, that as they stay in role, to be aware of the range of feelings and thoughts that get stirred up as that person, in relation to the ongoing action, postures, sense of self in the midst of these others, in the context of this physical space. Such impressions, thoughts, feelings, are to be saved for feedback time when the entire process is debriefed.

At various times, Players may be asked to act differently, in different variations of evocative Sculpture when seeking options to a pattern or options to the role as conceived by the Sculptor, if desired. Players at times are also asked to be ready to enact their own options for those roles, still using the data the Sculptor has given.

The Monitor asks the players if they feel themselves as whole persons in their roles, and if things make sense to them. They are asked to keep aware if any such puzzles as they might have are 'answered' during the process and during debriefing. These queries, their answers or lack thereof, are to be raised later as part of the
feedback process. Trainees, as players, are stretched to feel, think into the roles they play, using life experiences.

Big gaps in one's sense of oneself as a Player often point out 'grey areas' or lack of information on the part of the Sculptor about that family member and his/her role or interconnectedness with other family members. One by one the cast of characters is added, each in relation to the others, with appropriate gestures. As each character is chosen and joins the group, the Sculptor is adding information and fleshing out the story of that particular time in his life.

Invariably, without conscious awareness, we became aware that each Sculptor chooses a scene or time containing some 'unfinished business', some deprivation of information still awaiting fulfillment, some painful or unresolved puzzle awaiting closure.

**Silence! and Action!**

At this point, as the trainee-Sculptor has presented the fullness of his/her Images of context and interpersonal space, and the Players have a sense of who they are, the ensemble, including the Sculptor, is asked by the Monitor to use no more words. The 'family' is then asked to put the actions of this story into motion, so that a sense of the family's interactions can emerge: the patterns created by rhythms, sequences, pulls and tugs of movements and ritualized behaviors. The symbolic essences of these interactions surface, for each Player, for each person watching, as each assigns meanings to them.

The dramatic conflict of the family emerges as the action begins and continues. Speeding up and slowing down the sequences illuminate the stresses and strains in the family, the missed connections and
missed moments of an ordinary family 'dance'. How people use time and energy in that family space emerges as of critical importance, as contributing to issues of connection, disconnection and the emotional distance regulation of members.

The Role of the Audience

In the early days, the Audience, those trainees watching, would try to push for closure, for a happy ending or therapeutic break-through, which was not the purpose of this exploration, as it may be in psychodrama.

Out of such learning-as-we-went, a framework also developed for the Audience, meant to increase their activity while observing. These guidelines also serve to protect the dignity of the Sculptor and the respect for the process.

Audience members were and are asked by the Monitor to tune in and pay attention to: "What gets stirred up in me as I watch this Sculpture? What does this remind me of? Who are these people in my life?"

Observers are asked to hold the associative answers for the debriefing period. In this, Audience members are asked to consider themselves as private people first, rather than as professionals. In this self-observation process we are asking trainees to shed light on the subsidiary processes of mind which are basically analogic in nature. Observers are also asked to watch what the Sculptor and other individual members each brings to the scene that contributes to getting that person into some type of knot.

This Sculpture is also expected to be a training process.
Observers are asked if the Monitor is clear in her choice points, in guiding the process? Does each observer understand the Monitor's rationale for her moves and statements and way of monitoring? The Monitor in Sculpture is analogic to the therapist guiding a therapy session.

The Audience then has the task of observing the Sculptor and his Sculpture, the Monitor-as-Guide, as well as the interaction of Monitor, Sculptor and Players. A range of questions is thus available for Audience members to consider, about the data the Sculptor presents, the process itself, and the manner in which the process is handled.

Questions given to the Audience members ahead of time alert them to these overlapping dimensions:

1) What got cut off or truncated in the Sculpture that you think should have been expanded? What else would you do? What would you do differently?

2) Do you have new thoughts about how this family operates as a system?

3) Can you risk telling the Monitor what made you restless and/or uncomfortable?

4) What feedback will you give to the Sculptor? The Monitor? Players? What feedback will you not give to each of them? Why?

5) What does this tell you about your own knots?

In addition, the Audience is reminded that they have a special vantage point, from which they can see what others perhaps cannot see, and thus they may have a sense of the total ensemble from the
'outside'. As such, Audience members are often asked for metaphors which would grasp their images of the essences of the 'family' in this Sculpture. Sometimes they are asked for a metaphor capturing the total process of the Sculpture inclusive of the Monitor's direction of the event. Hence, the spatial metaphor now becomes a stimulus for a verbal metaphor capturing the whole system. Thus each participant has to recreate and remetaphor the portrayal of a family and translate it into another image of the whole.

After the feedback and discussion have been concluded, the Monitor guides the Players, Sculptor and Audience in 'de-roling', in returning to each one's own skin, here, now.

This then concludes a bare bones outline of the process of Evocative Sculpture. Let us continue now with some comments about what happens inside that framework.

Discussion of Evocative Sculpture

All the elements of multipersonal systems can be experienced and observed in essential raw, or stripped-down structure, dynamics and transactional patterns, while simultaneously all the elements of each person as a functionally autonomous entity can be experienced and observed.

When the Sculptor chooses an event or time to portray, it is usually representative of a transitional point, before or after some change in the family, either by loss of a member, a move, or change/crisis of another nature. The Monitor, in such situations, may move the Sculptor either backwards or forwards in time, asking for an
example of the structural arrangement of members or their stylized processes with each other before or after this event, still using space as the regulator of relationship. The drama in the family is inherent in the placement and movement of people in relationship as it is in an important crisis. For as the Sculpture is put into motion, it takes on a life of its own.

Sculpture is an activator of the timeless mind. The re-creation of the context and mood of one's earlier living quarters re-evokes behaviors long ago learned in that context, as fitting both physical and interpersonal space. Movements long remembered in the muscles, but forgotten in the conscious mind get set into motion, as the context and conditions evoke restraints on action and relating for the Sculptor. Small movement cues, indicating stances or attitudes of relationship contrary to what the Sculptor originally indicated in his verbal description, are taken note of as they emerge and are discussed in debriefing.

The actual experience of enacting such a scene is a powerful emotional event for the Sculptor, who re-experiences the same internal feelings and dynamics as in the original context. He knows this play. He's been there before. Except now the Sculptor can be an observer as well as an actor. Sometimes we ask another person to actually stand in for the Sculptor so he may watch 'himself' with his family.

The ethos of the family culture emerges, the feel of it, from the inside. Individual meanings and behaviors now have a context in which to be understood as fitting and coherent.

We can look at the parts. We can look at the whole. We can look
at change points. We can, if we choose, experiment and experience how any intervention might affect any part, any member, and/or the whole group.

When one does such enactments with trainees, or with families, all people in the room are privy to the same information at the same time. All have tasks in the process. And there is the constant generation of material from inside each person involved. The feedback from all members is essential in this process.

In the clinical arena, this form of Sculpture can best be and is used in couples' groups, multiple family therapy, and in family therapy. In the latter, teenage children taking the roles of their grandparents - their parents' parents - allow them to see parents as former children.

The Importance of Debriefing and Feedback

As Kantor and others at BFI developed this form of Sculpture, the debriefing of participants became as important and impactful as the enactment itself. As stated earlier, the first question, was not "What did you learn?" but "What did it feel like for you to be in that position, that role?"

In such feedback, even from brief enactments, comes the individual experiential components of system transactions, and the joining of psyche and system. That which is inside each person, or intrapsychic becomes joined with actions in transactions. The intent/action/reception/intent/action interchanges among members become vividly clear. The personal aesthetics and the sense of order of each family member emerges as the 'view from the other side' of those
relationships originally set up by the Sculptor. The view from inside others is often the information which has been missing for the Sculptor, especially as it relates to how the Sculptor was perceived and experienced by those other members.

In addition, Players give feedback to other Players as family members, regarding their impacts on each other. In this self-as-center, hub-of-the-wheel Sculpture, the Sculptor, through the debriefing process, becomes but one of several centers.

We are all actors in someone else's version of the play.

Each Player, including the Sculptor, experiences self as actor and receiver. The differences between intents/actions/impacts begin to be explored. Each describes the many views from the inside.

The Sculptor who had set up the scene and prescribed the original action, often tries to 'correct' feedback which is discrepant with his own world view and memory. He so sees the Players as the 'real' people, he expects them to report on their insides either 1) as he has heard it in the past; or 2) as he has imagined each to feel; or both. In any case, he wants to keep feedback familiar.

For the Sculptor, when Players take on the gestures, positions and movements previously requested by the Sculptor, as those capturing the essence of each original family member, the Sculptor hypnotically 'sees' each Player 'as if' he/she is the original cast character. The gestures which 'stand for' the whole of the original versions are seen as the whole person here. Thus the bit projects the hologram, hypnotically.

Thus the moments of feedback are crucial moments for the Sculptor
- and the time at which the trance 'breaks', and something new is possible. The Sculptor is then asked by the Monitor to just 'hear it', to 'let it come in'. The Monitor suggests that that which is discrepant can also offer information as yet unknown to the Sculptor, perhaps available to be checked out with the 'real' cast of characters.

Feedback from each player then, from inside the experience which the Sculptor himself set up, is heard with the potential for possibility, for accuracy. The Players 'are' the real members, yet they are not the real members. Feedback comes from each as part of the 'results' of the Sculptor's own 'controlled experiment'. The Sculptor cannot not hear what is said, for it is as if his own voice speaks to him from outside.

For the first time, the Sculptor has a gap now between his image and his sense of possibility. He is decentrating (Piaget, 1977) as he begins to hear information he has never heard before, and beginning to consider it.

Since one Sculptor's Players are often another Sculptor's Audience, trainees learn to play all parts, and in the roles of Players, they become more and more comfortable and 'authentic' in each one, searching self for an accurate handle to 'how do I feel in this position, in this role?' Such feedback of Players cannot fail to be contextually related to the enacted experience, and as such it is 'kept honest'. Players get into this experience. They do not want to do a poor job of 'being' someone's brother or mother. And, it is hard to have a personal and particular axe to grind with someone in the
midst of a role enactment of a member of another's family.

The Importance of Simple, Radical Questions to Players

Questions asked of the Players in debriefing, such as "What was it like for you to be in that role, that position? What was your experience?" are radical questions. The very posing of such questions sets the framework for acceptance of all the answers as valid, and all as incomplete. Incomplete also includes the views of the observers, who saw all the actions, yet knew not of the meanings for individuals. The only valid view as full view would be one that includes all information, a generic holistic systems view. Such a complete view includes intrapsychic phenomena as part of observed transactional events: the personal and interpersonal dramas of life, in the apersonal world of human systems.

A Sculpture of this sort rarely ends with the Sculptor seeing his world in quite the same way.

The cognitive dissonance or discrepancy in the feedback process between what is known and what is new information sets up a search, a question, reaching for a new answer inclusive of the Sculptor's and each Player's experience. 'Real' information later, often affirming comments made by a Player, result in mini to major paradigm shifts, wherein the Sculptor/traineer no longer sees himself-as-center of system, but as self-in-system, a self as member of system.

Such discrepant (that is, non-matching) images of the Sculptor's 'reality', constituting a 'grey area', are left to the Sculptor to ponder, search, explore. We know he will. He is free, and invited to bring new or illuminating information from the external world about
family members back to the training group.

The Importance and Pitfalls of Feedback from the Audience

The Audience is asked for feedback. As the non-enacting observers of the entire sequence, the Audience early tended to be critical and judgmental, and to speak in what I term 'the first person accusative' to the Sculptor, relaying how he could have made life easier, different, more acceptable to himself, if only he had had the sense to...

We then instituted the rule that stated that all Audience feedback had to have an equivalent of the Player's feedback, starting with a statement of what had gotten associatively stirred up for each observer during the enactment, as plays and movies also touch one's center. Then at that point, the observer was free to continue with observations, not criticisms.

This rule constituted the first major inroad towards maintaining the safety for trainees to take the risk of exploring family contexts, space, unfinished business, and the right to have had one's own experience in life, with one's own point of view.

For Audience members, such a rule drew them in yet created 'fair witnesses' of them (Lilly, 1972). It gave them permission to be human, not perfect. It gave them a way of staying as well as greater freedom to search for a metaphor fitting the whole. With such a rule, each Audience member is at liberty to overview the whole as well as to connect with each Player and Sculptor, with what I call 'short-term empathy'. Each of these abilities is a key to becoming generalist systems therapists.
As we began creating more Sculptures, we became more acutely aware of the pitfalls of this type of Sculpture in a training setting and discussed them. All related to safety and to inhibiting the process of exploring the Sculptor's perception. The move towards catharsis, as in psychodrama, promoted by anyone, demanding it of the Sculptor as a way of taking care of oneself; fairy tales, including the nonvalidation of the Sculptor's perception along with the 'Happy Ending' syndrome; Voyeurism, in wanting something to happen to entertain the audience through drama, comedy, or titillation; and over-literalness, not utilizing Sculpture as metaphor. This last sometimes came about by the Sculptor defining a space in 'real' terms, with 'real' chairs and so on, rather than schematically, poetically or analogically. Or, at times the Sculptor would take the Sculpture as a real event recreated rather than as a dream image, representative of or an exception to a more general pattern in the family. Such pitfalls are addressed as they occur.

The multidimensionality and simultaneity of experience represented by the feedback from this active spatial metaphor led Kantor to use the word 'multicentric' - to represent the simultaneously different existing 'centered' views of the same event. For in such events, each person is data for the other; subject for the self and observer of others, and object of other people's observations and feelings.

Impact of Sculpture for Trainees

The introduction of this form of Sculpture opened a veritable Pandora's box of riches, still untamed. It opened up the world of the
right brain, of pantomime, of imagery, of action, of raising questions and answers in new and fluid forms, about aesthetics, bonding, interaction, systems, interventions, hierarchy, and lots more.

Family-as-theatre became the way of exploring and expressing family-as-system and mind-as-hologram.

Feedback from trainees concerning this and similar evocative forms of Sculpture have never been pallid or tepid, including comments made months later.

For example, one trainee in 1978 reported several weeks later that the feedback of feelings had been 'most important' to him: "It gave me feelings about people who never let me know what feelings were. The feedback filled gaps for me." He further stated that knowing that those emotions were possible in 'cool' people allowed him to see his parents differently: "I have much less anger and understand those people much better. They didn't have control of the scene as I thought they had." This trainee has new information about families - his and others - to carry with him as therapist. He can believe feelings in parents are possible.

This particular trainee could also see the impact of his parents' deaths in his tendency or pattern of exploration-avoidance. "I'm still afraid people around me will die, or be taken away. It connects for me." The external pattern was analogic to the internal fears and vulnerabilities. He was aware that the same pattern of exploration/avoidance went with him in his style as therapist.

In each of these statements, the trainee's sense of self expands to include new information which not only updates information locked
In at a much earlier age and stage of development, but which is also accepting of and inclusive of the previously held information.

When that happens, one's mind takes a leap. Rather, one switches paradigms. One is thinking, in this arena, at the next level of logical type (Bateson, 1972). When people's world view or sense of 'reality' changes, their behaviors and feelings change, from the inside out.

The modality of Sculpture soon became the source of discovery of myriad ways of using kinesic-spatial metaphorizing to explore meanings, expectations, actions, systems. Through Evocative Sculpture and other forms, we found ways of giving expression: 1) to the 'betweenness' of human relating, 2) to the sense and feel of family and other human groupings, 3) to the internal world of Idiosyncratic meanings with which we live our lives and fill abstract language; 4) to relationships over time and 5) to the personal aesthetics of relationship, those senses or personal rules of form, correctness, order and ambience, by which we measure and monitor our total sense of FIT of Self with others and Self in the world.

We gave form and motion to abstract concepts. Closeness/distance, inclusion/exclusion, omnipotence/helplessness, fusion/disconnection and many other ethereal constructs, became multidimensional continua, filled with Idiosyncratic behavioral and contextual definitions. We began to explore what I term individual and consensual rules of access and rules of order, in powerful, graphically dynamic ways. We began to find out how families 'work' without having to ignore any aspect of human experience. We grew towards multicentricity, knowing systems,
knowing relationship, from many insides, inclusive of the views from inside those who were 'outside'.

The validation of the process of Sculpture, in capturing the internal essences that accompany external behaviors and gestures sculpted, occurred one evening in 1974, when a trainee invited his mother, stepfather (since age 8), his sister and brother-in-law, and wife to watch him create his Sculpture. He chose a period of time when he was age 10 and his family had moved from one house to another in another town, where he felt quite isolated. He had felt his mother to be pleased with the move. And he had experienced quite a few 'grey areas' about his stepfather, not knowing much about him.

As the feedback concluded, concerning 'what was it like for you to be in that role', the young woman who had 'played' mother in the Sculpture reported how ambivalent and torn she had felt between moving where her husband's new job was, and wanting very much to stay where they had been. The mother of the trainee turned to this young woman and exclaimed: "How could you know that that's exactly how I felt then! He [her son] gave you no information like that and he wouldn't have had it to give!"

The stepfather then concurred with his Player counterpart that he had not been very available as a father, and filled in information missing for his 33-year-old stepson.

Importance of Sculpture for the Author

As a trainee and a trainer then, I have been fascinated with the modality, the process and the potential of Sculpture/spatializing. I
found myself freed up to legitimately experiment with and try out and try on roles and positions in relationship far different and discrepant from any I'd ever lived, to discover their meanings in particular contexts. I found opportunity to 'see' how others 'felt', and to 'feel' how others 'saw'. I could try on short-term empathy, by approximating others' lives and then returning to 'my shoes', carrying my new cognizance with me. As a trainee, with Sculpture I could be 'audience' to an entire scenario and draw my own impressions. Then I could listen to how/if each player's presentation of the view and experience, when debriefing each role, filled out and 'matched' what I had observed, intuited and concluded. I could be one of those players, or creator of the entire drama, the Sculptor, wherein I instructed others in their expressions, gestures, movements, to match those active and alive in my theatre-of-the-mind.

When one is Sculptor, startling new information challenges the mind's eye image as soon as action begins, as the Sculptor faces his/her image role as system member, and as he/she then listens and receives comments from inside others.

I was exhilarated by this new modality, which seemed to unite both sides of my brain. I could 'see' dynamic interaction. I could 'see' system, in many shapes and forms.

I felt compartments of mind flow one into the other as an entire new world of internal imagery opened up. The back-of-the-mind daydream type chatter began organizing itself into vignettes concerning people, ideas, relationships. I began to look inside to 'see' what was occurring 'outside'. In the beginning, the types of Images startled
me, as irrelevant, irreverent or absurd. Then I began to pay attention, and with that, I discovered an incredible resource for myself as person, therapist, trainer. The inner screen pulled together as metaphor what I was seeing, hearing, experiencing, in ways that words could never do for me. Words still have to be translated by the perceiver/receiver into 'relationship' images.

The medium of spatialization had stirred and restimulated in me an entirely different way of knowing. And it offered me a way to access and to express the verbally inexpressible, metaphoring process (see Chapter VII) in three-dimensional space simultaneously, with energy/motion, over time in spatial metaphor. It allowed me to express differences-in-relationships, in dynamically interacting ways.

I got hooked then. I still am.

Generalizations

The process of sculpting itself exemplifies for me how mind works while the medium provides us with ways to represent, comprehend, compare, and group many individual versions of relationship and system.

Piaget and others postulate that all thought begins with sensorimotor action (Piaget, 1952). Sculpture is thought/action. With sculpting, there is always new information about self, about others, about families, about systems, about contexts, about how we think and make sense of the world, and most of all, about the many simultaneous views of any situation. And one can always ask new and different questions of the same raw data.
The awareness of the aesthetic rules that each person tries to make manifest became clear to me through spatializations of many types, as people expressed personal preferences with a well-defined certainty.

It is in our individual versions of relationship where subtle nuances show up as those differences which make so much difference. In couples, in families, in nations, individual versions of bonding, of relationship are what the fuss is all about: who is what for whom and in what ways, against images of what should, could, or needs to be, and the tradition of what was. Sculpture, as we developed the idiom, allows for the presentation of such multiple organic images.

When information internal to every member of a system is available and information about the whole is also available, developing a map from the inside out, about part/whole relationships called human and family systems becomes almost a given, in a challenging, exciting and self-expanding way.

All concepts and theories are grounded in the experience of each original theorist. Sculpting provides the walk of experience through each territory, in ways that trainees are challenged to conceptualize, to create theory anew and to create new theory.

Intent/action/impact transactions debriefed from all directions and parties in a common experience allow for the holography of systems to emerge. As one begins to understand the contribution of each member to the ongoingness of total transactions, one begins to link differences of ability to cope with similar events and issues within different human systems to questions concerning individual
uniquenesses, resources, context and experiences. One learns that there are optional reactions to almost any event, and therefore choices of actions which could influence patterns in any family or other unit we choose to call system. One learns conversely that certain types of situations, contexts or events seem to evoke certain types and patterns of emotional and behavioral responses within an expectable cultural range.

**Learning-to-Learn and Analogic Patterns**

In that early form of Evocative Sculpture, we did not move to create interventions, to interrupt patterns. We used it to begin to understand system, our own and others'. And we began to understand much more that influenced us as we continued. The analogic connections between sculpted real-life scenes and one's type of approach to certain contexts became examples of the learning-to-learn of our timeless minds. Certain events and contexts are lessons in coping and establishing patterns of information processing.

For example, the woman trainee who had been ill for a year as a child with a complication of measles that led her to be deaf and almost blind for most of that time, sculpted that period in her life. She included her tendency as a child to cross the major street outside her home totally unaware of danger, as her deafness and near blindness gave her no information. She had never had a mishap and could not understand then why her mother got so upset.

She realized with a sudden shock that she approached many situations as an adult that others would think of as dangerous,
completely unaware of that potential. She said she 'had not learned to look, to see danger' and possible consequences. She had not felt fear as a child, crossing the street. She did not have the pattern for processing as 'dangerous' information which aroused no sense of apprehension in her.

Another trainee's family of origin Sculpture revealed how she could control her family members and their activities by the way in which she moved slowly, by her pacing and timing. She still tended to do that with people who moved and responded faster than she did, with whom she felt uncomfortable. We discovered direct and analogic types of 'replication' in such ways (Bloch and Rosenthal, 1964).

We became alerted to the power of ghosts in the family through a trainee's Sculpture which included a Player in the role of her dead twin brother, lying at the feet of her mother, who prevented the Sculptor from ever getting close to mother. The ghost represented the mother's grief, constantly aroused whenever the alive twin wanted cuddling and connection.

We had started out to explore space, and its meaning to family members. We discovered 'spaces' we had never dreamed were there. For we had begun to tap into what I term the Themes of Interface through the medium of Sculpture: the realm of learning styles, vulnerabilities and defenses, core images and boundaries, key aspects of each of our lives. And we had begun to tap into the connection between each trainee's epistemics, and experiences in his/her family of origin and growing up, and his/her epistemology, his/her world view as therapist.

Sculpture and spatialization then began to form a bridge between
epistemics and epistemology.

Sculpture as Cognitive Organizer

Thus, at BFI, it was not just Sculpture as a theatrical form in training that was new. Sculpture provided the bridge by which trainees could make a paradigm shift, to see individuals systemically as interacting members in varying contexts, some of which they carry in their timeless minds. For Kantor's leap of creativity provided us with Sculpture as a cognitive organizer of systems thinking, as well as the language for externalizing one's sense and images of relationship of all kinds. And Sculpture puts the tools of equivalent views into the hands of each user, be it trainee, therapist, family member, agency worker, teacher. Each becomes a researcher, and an authority, an author of, 12 his/her own images of people and events in the world. From new images, new combinatory play (Piaget, 1958) come new conceptualizations.

Kantor's first "Here, let me show you what I mean", in that particular context and time, became a move that was itself a new system former (Gray, 1978), for it opened the door to the right side of the brain to be developed. The inner metaphoric mind which works on hunch and image was freed up to work towards the same understanding as the linear analytical 'left brain' mind. Feeling, sensing, hearing, seeing, imaging, acting came together with thinking, and thinking

12 With thanks to Mel Bucholz, hypnotist and friend, for this usage of authority/author.
systemically. The medium became a necessary link fostering integrated knowing.

With the exploration of the idiosyncratic differences that make for individuals and betweennesses came the appreciation of possibilities for developing processes which foster harmonious uniquenesses.

And in each sculptural process, each trainee owns the results of his/her exploration for him/herself, fitting the data organically into his/her evolving map. Each creates and 'sees' relationship systems and enjoys the process. The combination is unbeatable.

Sculpture: Themes and Variations

_A note for the reader:_ As we now begin to explore a number of different types of Sculpture, it is my hope that the reader will take the liberty, risk and time to try out and take part in these forms of spatialization. Indeed, any spatialization or Sculpture is much more informative, and more fun, created and experienced, than read about. And the doing allows you, the reader, your own sets of discoveries and your own inside-out knowing.

The language of Sculpture and the forms developed at BFI keep growing. As words can be used to create different forms of poetry, novels, plays, stories, books, newspapers, so has the language of Sculpture and spatialization been used to develop a variety of forms, all serving slightly different purposes, and highlighting different aspects of the hologram. And indeed, as with verbal language, there
are always spur-of-the-moment conversations, repartee, and momentary definitions.

As we now examine other types of spatialization, let us remember that any such procedure is a solution to the problem of talking about multiple, simultaneous interactions, or to revealing covert intrapsychic meanings and images.

**Boundary Sculpture**

During the first year of teaching at Boston State Hospital's Center for Family Therapy Training and Research, in 1971, Jeremy Cobb and I were struggling with the issue of a repeating 'fight' between two trainees, both easily in their fifties. The man was a reserved British pastoral counselor, in the States for a few years for training, and the woman a rather energetic and somewhat scattered children's teacher/therapist, daughter of missionaries and married to a minister.

As group leaders, we had asked them to settle their differences outside the seminar. They said they would try, and failed, if they did indeed try. We had asked if we could mediate, and they said there was nothing to mediate. The fight took the form of a kind of bickering, but we could not ascertain what the goal or purpose of it was. He found her irrelevant, with a presumption of knowing things she didn't know.

Their fuss would erupt at various lull points in the seminar, between exercises, at the beginning of the session, in a most disruptive way for the entire group. After several weeks of wishing it or they would go away, we discussed at a faculty meeting our attempts
and our dilemma, and decided to see if we could do something with their stylistic differences.

At the next meeting of this seminar, the author and Jeremy Cobb invented Boundary Sculpture, which has become a most useful and extraordinary tool in training, therapy, agencies, organizations and business for exploring the overlapping boundaries of more than one person or system.

That day, I asked the Pastor to describe and outline by walking around it, his sense of his personal territory. He chose a 9x12 rug. Again, as in the earlier form of Sculpture, I asked what constituted the boundaries to this space and he said "brick walls, with a door and a bell on the door."

We then switched and I asked: "What if I ignored the door somehow and came at you all of a sudden?", as I indeed did just that.

He responded as he held me off at arm's length, that he wouldn't let me - nobody could do that. I then went back and walked towards him at my usual pace. He said that was too fast. I then asked him to reverse roles with me for a moment and to show me how he liked to be approached. He moved slowly, at an even pace, halting every few feet, before continuing towards me. He said "The newcomer has to make signals that he is approaching and if he doesn't, I resent it."

As we continued to explore his space and the way that people could enter or not enter, we learned that his aesthetic preferences dictated that people enter one at a time, slowly, never in groups, and never from behind. We discovered the many boundaries inside his personal space, which were quite clear to him on his inner screen.
Those boundaries related to who could come how close and when.

As a divorced man, his daughter was the only woman whom he would let initiate touching him, or hugging him. He was quite ordered and orderly about his way of thinking and moving about his space, and he wanted others to respect his aesthetic sense of order, pacing and privacy.

Jeremy Cobb then began to work with the Teacher, attempting a similar exploration, and found it exasperatingly difficult, for she claimed the whole world was her space, and that her boundary was her skin.

Indeed, growing up in the wilds of Brazil with her missionary parents, there had been few boundaries for her to attend to, and she had had a very spontaneous context and way of playing with native children. She had felt constrained when her family moved back to the States when she was eight. She did not mind people coming up to her at any speed or pacing. She saw every such connection as a chance to 'play'. Jeremy tried exceedingly hard to get some sort of contextual boundary definition, and Teacher kept eluding such definition. She kept moving all over, with Jeremy close behind. She claimed no boundaries for herself, stating that any place Jeremy wanted to be was fine with her. Her answers, like her boundaries, were elusive. She said she 'knew' which boundaries she was supposed to have as those her mother told her she should have, but she didn't feel that way. She liked being close to people, kinesically.

At that point, I suggested that we put the two metaphors together, with myself enacting Pastor and Jeremy enacting Teacher.
Pastor kept trying to avoid Teacher's advances on his space, or to contain Teacher once she was there. Teacher kept breaking through boundaries and eluding any attempt to be contained. She was like a butterfly, flitting from place to place, all around him, and he was not able to maintain any sense of order for himself.

The real contestants saw the patterns and the conflict immediately as one of boundary preferences, contextually learned behaviors and personal style, and felt relieved. As we all talked with them about the process, and their situation, we learned that Teacher's husband was the head of the Pastoral Counseling program, and she knew Pastor outside, also. She had felt he should be more friendly to her, since she was such a 'friendly person'. She had taken his personal idiosyncratic style of handling space and boundaries as a unique and personal message to her about herself. The whole concept of attending to personal boundaries had not been part of her lexicon, although it began to be from that day forward.

Their conflict disappeared. She left him alone, and we felt their dispute had offered us an amazing opportunity to delve into an entirely new but related area. We had tacked directly into the storm arena with curiosity and discovered a whole new territory.

**Boundary Sculpture, Cotherapy and Coupling**

Boundary Sculptures have been part of our training program ever since, for we found they are a key to illumination of any two- or more person relationship.

Since we expect our trainees to do cotherapy as a way of understanding dyadic processes and coupling, as a way of having a
mirror held up to their own processes, as a way of having a peer to explore and discuss families and therapy with, and as a way of not getting swallowed up by the first families they see, we have trainees explore their own sense of personal space and boundaries. They negotiate with each other the combining of those spaces, as well as the processes of entry and exit from those spaces. Trainees explore pacings that are comfortable, the differences of who and how many may come in when, from which direction, at what rates of speed, to which depth within the personal space. They explore what it takes to get the other 'out' of his/her space in an acceptable fashion, as well as what type of combined space is possible for both. These are metaphoric ways of dealing with the actuality. Trainees begin to bridge and translate between types of information being processed, for all of a person's behavior is information, crossing the boundaries of awareness and meaning as well as space.

The author 'took' this approach into therapy and found it an amazing tool which circumvents verbal masking of what is actually happening between people. Both in training and therapy, watching the enactment to confirm if the sculptor indeed maintains his/her boundaries where he/she says they are is of critical importance. There are those people who say their boundaries are two feet away from them, but actually do nothing to stop another from walking right into them. It is as if they expect the other to stop where they wish them to stop, without the Sculptor making a stop signal in any way. They then hold the invader responsible for crossing a boundary! Boundary Sculpture reveals such couple processes.
A slightly different version of Boundary Sculpture, as a way of orienting people who do not think in such terms (and how many do?) is enabled by asking people to think of an ideal space that they love, either indoors or out of doors - that they could consider their own. We ask them to let their fantasies go, that if they could have any space in the world for their very own, where and what would it be? Indeed, let me invite you to pause and consider your own ideal space and to create it in physical metaphor.

People describe, and 'create' physically all sorts of spaces, from ocean beaches and mountain tops to houses to space capsules. We explore 'the territory' for markers and signals. Again, the issues of entries and exits, how people let others know about their boundaries can be explored in a rich and revealing manner.

In couples therapy, this is a particularly important modality for going beyond lip service of differentiation and respect, to the respectful differentiation of self and other, with regard for both and for negotiating the personal aesthetics of joint spaces with their overlapping boundaries. For that is, the essence of coupling.

**Boundaries as Perceptual Analogues**

Boundary Sculpture opened up another door to whole realms of new possibilities and information. We found in a BFI seminar which I was co-leading, a relationship between early eyesight conditions and personal boundaries, with an 'of course' type of effect.

When Jim explored his personal space, his boundary for closeness of acquaintances was about five feet away from himself. He asked people to please stop there when they entered his space. Jim wore
thick glasses. I asked him how long he had worn them. He said, since age six, when it was discovered he was exceedingly nearsighted. I asked him whether his vision had changed in the ensuing years. He answered that it hadn't changed markedly. I asked him to take off the glasses, standing about twenty feet away from him, and asked him to tell me when he could clearly see what I was doing with the expressions on my face. I walked toward him, smiling, grimacing, frowning, and so on. He said he could see and discriminate clearly, at five feet! Clearly his 'boundary' had formed at the distance at which he could discriminate smaller cues. Piaget states that decetration (a type of differentiation) requires perceptual activity (Piaget, 1956).

If there is no perception, there can be no perceptual activity.

An N-of-1 means nothing, except as a possibility that there is a new question here - something to pursue in enquiry with other people who wore glasses since childhood. Over the years, we have found a fairly close correlation (not researched, but personal contact!) between eyesight and other sensory irregularities in childhood and boundary phenomena.

We also became increasingly aware that as the human being is an information-processing mechanism, how people approach oneself is one kind of information processing analogically linked to other types of information processing and learning styles. (A full exploration and explication of these topics, of great interest and involvement to us in our training program, and very tempting to pursue here, are beyond the scope of this current work.)
Minisculptures

In the process of teaching with David Kantor in the BFI seminar also in 1971, we had added the idea of minisculptures to the original form described earlier. Minisculptures were like Kantor's first invention - very quick essences of a situation, a family as system scene, or a sense of a family being worked with in therapy.

Additionally, we ask trainees to quickly think of a typical scene in their lives, such as the dinner table, growing up, and ask them to sculpt not necessarily who sat where, but the sense of the dynamics at the table during dinner. Each trainee takes a few minutes and quickly organizes such a symbolic 'dance', using other trainees as players, sculpts it and quickly debriefs it.

The idea here is that each trainee chooses one key scene, others experience it, in the dynamic tension of the emotional and political pushes and pulls in that family. The group debriefs how it feels to be in those roles. The entire process for each person can take as little as ten minutes. Yet, it is a very powerful vignette and sense of system that comes through. One can move to discuss and/or explore our five R's: family rules, roles, routines, rituals and resources from such a quick enactment. One can discuss or explore structure, processes, context, myths - whatever seems to be relevant for trainees at that particular curriculum time.

Historical Sculpture: From Pre-Birth to Network

During 1971-1972, also during BFI teaching, I began to wonder if we couldn't use a combination of 'minisculptures' and Kantor's
in-depth version together to get a sense of the key themes, the intergenerational themes in a person's life. With that, one evening while planning to sculpt a trainee's family, I stated to David Kantor that I was going to try a new idea that evening.

I asked the trainee what legends she had heard about her family from before she was born, about other siblings and people on the scene before her. Such legends could be about those in her immediate family, about grandparents, and about 'who' she was supposed to be when she was born. What myths and legends were there surrounding her birth and infancy?

With that information, I asked her to begin to populate her world with people, one at a time, in relationship, with gestures and motions, to each other. We were not attending to the quality of the living space in as great detail at this time. Rather, I touched on it for a general sense of ambience and tone, comfort and atmosphere.

Choosing significant times or events in the sculptor's life cycle, for example, a time before age 8, between then and 15, between 15 and 20, 20 and 30, we sculpted her family at those times, adding or taking away significant members and contexts until we reached her present-day network. We then needed to use players to represent the needs or demands of entire institutions in her life, as well as significant people.

When we reached the current context, as she moved to touch base with all her commitments, obligations and connections, we discovered that the key themes about work and responsibility in the family at the time she was born were still present in how she conducted her life:
Her time priorities, her sense of being a 'workaholic', her 'role' as the symbolic 'good daughter', responsive to the parents' need for positive feedback following earlier tragedies in their lives became clear to her, as intergenerational themes she was living out.

**Historical Sculpture in Problem-Solving**

Later in the semester, a man in the seminar, a priest who had been struggling with the very serious issue of whether to stay in the priesthood or to leave it, asked me to do that particular type of Sculpture with him. He had struggled for five years with an image/idea of eventually getting married and having a family.

Again, we started before he was born, and it was clear that he had been seen as the one who would lead the religious life, who would be the 'family Savior'. He had never doubted that he would be a priest, particularly after he had recovered in childhood from a serious illness, during which time he received special attention and care from his mother, whose goal this was for him. She had told him then that God had saved him to do this work. As we sculpted time-slices, the system dynamics leading him to the priesthood became very clear. He had welcomed and enjoyed certain aspects of this life.

However, he had also felt the priesthood to be a heavy burden to fulfill, a yoke. As we brought the family context up to the present day with him at 35, we had added his wide-ranging network of demands, friends, obligations, parish, counseling recipients, the other institutions he attended to, and so on. In addition, we included the significant church superior who had just turned him down for a new position relating to a family life education project to which he had
wanted to devote his energy.

At that moment, I went around to each person, playing these many parts in his current life, and asked them quietly to start beckoning to him, and tug at him as he went by. I asked him to walk around touching base with each of these contacts and obligations, and as he did so, asked him and them to speed it up, until he was racing from one to the next, and they were grabbing at him as he went by. He put his hands to his ears as he closed his eyes and shouted "STOP!" And we did.

He said everything was whirling outside the way it had been inside, but that this was the first time he had had a chance to interact with all the parts of his life at one time. He was dizzy. He felt intensely as he sometimes felt at the end of the week, like an automaton who raced from need to need.

We debriefed the Sculpture, with players giving feedback on their experience. Not only had the themes of the past family flowed through into his future, basically unconsidered and unchanged, but players expressed their experience in role, that their sense and condition of wellbeing demanded that he not think of himself.

We ended there. The whole process had taken some forty-five minutes. Three weeks later he came into the seminar, saying he had made his decision to leave the Church. He is now married, the father of three children, and very happy. He is still very busy.

The above incident brought home the power of Sculpture as a problem-exploring tool, which frames the 'eventshape' (Auerswald, 1969). All the important factors, from different timeframes, come
together in the timeless mind and coalesce, forming the shape of this event. The internal world of events, images, people, messages and issues can be externalized in such an active way that they can be confronted all at once, or as in this last anecdote, confront the sculptor all at once.

Several years later, we learned that Virginia Satir had also developed a form of historical spatialization, which she terms 'Family Reconstruction', which also weaves together the life stories, events, life contexts and processes in families over several generations. She, as we do, believes that people's behavior is contextually derived and related developmentally to each individual's ability to make meaning.

The difficulty of mind is that it is hard put to consider many diverse aspects of one's life at one time. The animation and spatialization of such a plethora of messages and events over time allows one to interact with one's juxtaposed, real yet internal intangible world in a very real way. One can confront one's nightmares, yet more eyes also see the nightmare, take part in it and talk about it. One is not alone with it anymore, and one has new information to consider.

**Impromptu Sculpture**

By the time the last incident had taken place, I was feeling delighted and very free to use this medium as a language. My own internal imagery had started 'appearing' regularly and spontaneously, in ways that seemed to represent the dynamic tugs and pulls between people. Particularly in therapy situations, I found myself saying: "I
have an image I'd like to share of what's happening here." And as I was saying that, I would get up and ask the various family members to join me as players in my image for a moment.

One that stands out in my mind as an early such happening occurred while listening to a husband and wife go at it again in their weekly argument where he essentially was complaining that she didn't do enough for him. I realized I had stopped listening to the words, since something else seemed to be going on inside. And then I asked them to join me in enacting what was on my inner screen:

I saw him in a castle, standing by the drawbridge, with his hand on the rope. She was walking up to the moat and drawbridge from afar, as he watched. I had the couple take the appropriate positions and suggested that she start walking towards him. Just as she got to where the 'moat' and drawbridge were, I told him to pull on the rope, so that the bridge came up, and she was left stranded.

With their actually pantomiming this, they both nodded and said,"Yes, that's about what happens." And then they amended it somewhat and reenacted it THEIR way! They had entered the metaphor and taken it over, adjusting it to their sense of experience.

I have found with the use of Sculpture in this way, there is never a mistake. There is only new Information. Clients, trainees, children - all take over the image if it does not fit, and 'correct' it, enacting it their way, which then gives one, as leader, missing Information as they take charge of their own process presentation. The therapist/facilitator loses nothing. The sculpting of an idea or image, with the bodies in motion, is far more effective than verbally stating it as metaphor, for the others are in charge of their own information and exploring it for themselves. And it gives them the
same tool for expression as the therapist. The mystery of 'systems' disappears. Their seeing themselves as system eliminates blame and singular causality, offering them many options.

One-Person Sculpture

Individuals are contextual creatures, who usually grew up in families and carry them around inside. Most times they come into counseling or therapy by themselves, without the rest of the cast of characters. For such times, in 1972 I evolved a way of sculpting an individual's total family system, using the client, myself and anything else in the room. (One time, the cat became a baby.)

In this process, as the client is exploring a particular time in his/her life, I have 'stood in' for each family member, asking the client to position me with gestures and movements of that person in relation to him/her. With each family member, I then ask the client to reverse roles with me for a moment, so that I can check the accuracy of my approximation, while the client is experiencing the beginnings of multicentricity, not available via feedback from other players besides myself. As we move on to the next person and positioning, I put a chair or lamp in the appropriate place of each family member, as a symbol, for where each one 'stands' in relation to others, spatially, facing the appropriate direction.

In one such Sculpture, the client who always had seen herself as the 'bad girl' and 'depressed', sculpted her family at age three. At that time, they had moved, father had gone to the army, both of mother's parents had died within the previous six months, she had lost
her 'nanny' in the move, and a baby sister was born after the second grandparent died!

As we had sculpted the scene, laying down the chairs as each grandparent died, 'leaving' the nanny behind, 'losing' father, 'gaining' a sister, she suddenly saw the lack of interaction with her, and the emotional desolation of herself by all other important family and household members. In her momentary role reversal as mother, she felt her mother's sense of loss and depression and mother's need to be attended to in her losses when she had to attend to a new baby and a three-year-old.

Her experiencing the total situation was the beginning of change for her. She saw her family at that time as a multiproblem family, with all of the stresses of such families, and not enough resources to stay on top of the numbers of changes occurring so closely together. Her sense of self as target, as patient, shifted markedly, as she 'saw' and understood at thirty-three the total system she could not have seen and understood at three.

**System Map Sculptures**

In this variation, a family or group can rather quickly portray alliances, of who does what to, with and 'against' whom, over time, or at any given time. One can achieve a very rapid sense of the structural relationships over time, in one's own or another family, organization or agency. In addition, one can project such a sequence into the future.

We use this form of Sculpture very effectively also at BFI in
supervising groups of trainees, who see families in other agencies. In addition to audio and/or video tapes, the trainees will portray by this method what they see 'happening' in the family systems with whom they are working. They sculpt how they see the family/cotherapist interface, whom they see themselves allied with at various times, and different subsystem variations. In such ways the supervisor and other trainees can experience how each cotherapist 'sees' the family differently, as they discuss and design goals, processes and interventions. Trainees will often sculpt the organization of the agency. One trainee, a head nurse, utilized this method of sculpting to explore in supervision, problems within and among her teams at the hospital. We then planned interventions from the information gathered.

In another situation, I had two trainees diagram and sculpt the administrative and clinical power structure of the drug center in which they worked. Such an exploration was necessary to determine how they could intervene in the larger system which prevented them from doing effective family therapy, by changing client appointments without consulting the trainee-therapists.

One can also ask family members to sculpt themselves this way, presenting their images of their family. This form of Sculpture is a particularly effective modality for children in families to 'speak', for it is in a language they already know. They can say what they cannot say in words,13 for often they either do not have the words or

13 Piaget refers to this as 'vertical decalage' or gap in time: knowing at one age what one only has language or verbal explanation for years later (Piaget, 1965).
are unattended when they try.

The form that we have often used with entire families, which becomes a form of Multiple Perception Sculpture, is to ask the least involved or least targeted family person to sculpt who is close to whom, who allied with whom in the family, and then to move on to ask each other family member in turn to do the same, each from their own perception. One asks the identified patient, if such there be, to do his/her image of the family, as the third or fourth Sculpture, neither first or last.

With one such family, the mother in a divorced couple with four children, kept saying: "No, that's not the way it is!" when each of her children put the only son, eight years old, next to his father. Father was present at the session. We assured her that she would get her turn, that each had his/her own perception of how the alliances were arranged. The boy had put himself by his father, as did the father, too. Since the mother wanted the boy to go with her while she and the girls went to another country for a year, she had been particularly diligent at not seeing or hearing previously how the boy saw himself. When it was her turn to sculpt the relationships, she put her son, also the youngest child, literally under her arm, huddled in close to her. However, since she was the only one who put him there, she could not ignore the information that had been expressed by all the others.

A compromise, from a black/white refusal to let the boy stay with his father, was worked out on the basis of that information. He would spend the summer with her and the girls overseas and come back to live
with his father in the fall, for the remainder of the year.

Such Sculptures cannot be argued away or verbally disqualified.

These same Multiple Perception Sculptures are useful in various types of groups, agencies, organizations, and work settings for exploring differences in views of any situation.

From Here to There: Present to Future - or From Problem/Knot to Ideal Solution

In training and supervision as well as with families, the trainee/therapist of a family sculpts a problem or knot that he/she sees and is unsure how to deal with, giving minimal verbal explanations. The Sculptor then gets feedback from the training group or family quickly as to how it feels to be in those positions, with those gestures. The trainee hears what does not fit, new information, and possible new options.

In this type of Sculpture, any individual, any group or family member sculpts the situation as now perceived, and then sculpts an 'ideal' solution. Feedback from those enacting roles/positions offers information about that experimental solution in terms of its acceptability, new knots, and so forth.

This type of Sculpture can be done to preview any thought/image of possible interventions and arrangements or interactions of people with each other. Often with families or work and other groups, it serves to clarify in ways that words cannot, solutions deemed acceptable by different members. The Sculptor is then free to find the commonalities in each version and to work towards compromises. Each
'family member' is also free to be asked, as the trainee/therapist asks him/herself: "What would be the steps from here to there, from the knot to the solution?" In simulations or in therapy, the therapist and trainee 'clients' negotiate a facilitation plan.

In training situations for facilitators in human systems, this particular form of Sculpture avoids many hours of trial and error with clients, for the trainee can try out with other trainees, rehearse, and approximate metaphors of operation and organization, which system Sculptures are. Through feedback, a likely solution emerges. At the very least, glaringly inappropriate suggestions can be discarded ahead of time. Additionally, therapists can ask real family members to sculpt how they now 'see' their issues, and how they would like them to be, cutting through all kinds of 'verbalese'. For the key issues for each are: How do you see the knot? And what do you want?

'Resistance' of clients then often shows up as the therapist's word for having wanted something the client doesn't.

Definitions/Images

It has been my experience that when any two or more people are arguing heatedly about any word or concept, they have a different image of the meaning of that word or concept. Even in the simplest language, particularly that bandied about in the mental health profession, the words of relationship conjure up different images for different people.

Whenever I hear such disagreement, I stop and say, "Show me what you mean". This may occur with trainees, or indeed, among faculty
members, and almost always between couples and family members. Again, such clarifications can often serve as holographic bits of the relationship, defined by the parties themselves.

I am reminded of a couple we were seeing who were arguing about a car ride from Washington, D.C., to Boston, in which he said she wasn't close to him during the drive home, and she said she was, too. She said she had sat near him and talked to him the whole time he drove. He insisted she wasn't close.

I asked them to stand up, and asked him to show me what his version of close was. He held her by his side, skin-tight from shoulder to toe. She said she was suffocating. I asked her to show me her version of close. She took his hand, standing by his side, and allowed about six inches between them. He said that was too far away.

That brief scenario encapsulated their entire relationship for them, for then they saw all their differences as hinging on that concept of closeness, as a basic bodily and aesthetic preference which was different for each of them. The six inches and the intensity he wished also translated into his wish for her to be intensely involved with him, to be fascinated by his ideas and thrilled with where his mind went. And she wasn't. She was interested, but not engaged, or fired by his conversation. Within a couple of sessions more, they decided that they knew what the issue was and now they had to see if they could work out compromises of value to them both.

With that experience, we began playing with trainees and at workshops, with varieties of words, exploring those which are concepts capable of being enacted by one person, those that must have two or
more people, and so on.

We ask participants to pair up, and we list some words on the board or newsprint: joy, anger, sadness, pensiveness, anxiety, depression, peacefulness, and so on. We choose different words at different times. These are examples of some words in the first group, representing emotional states possible to have by oneself, just by reading a book, thinking one's own thoughts or daydreams, or watching TV, which is some sort of outside stimulus yet without another 'real' person present.

We invite participants to choose one word at a time from such a list, not in the order listed, and to enact them, by being that word. Partners are to guess which word is being enacted. Invariably there are misread states of being, most often between: pensiveness, depression, anger and sadness. (Which ones are misread in your family and work contexts?)

We then list another set of words, such as: loving, independent, needy, close, aggressive, dependent, schizophrenic, distant, assertive, responsive, and so on. Again, we ask them to enact and guess different words. Again, partners find that not only are their versions of words different, but their interpretations of each other's are often wrong. One person's 'loving' is guessed by another as 'needy', 'independent' is often seen as 'distant'. And one person's 'responsive' is another person's 'aggressive'.

Participants in this type of exploration become aware that these are words of relationship, that it takes at least two to tango, and that schizophrenic is a word that means an inability to communicate
with another in usual or consensually meaningful ways.

Consensus Sculpture

Quite at the opposite end of the polarity between individual expression of meaning, and simultaneous meanings of many people, is the group Consensus Sculpture, or composite Sculpture, useful in any organization, agency, school, training group, or family. In this form, the leader asks all group or family members to be sculptors to themselves and players for each other simultaneously as they quickly sort themselves in relation to each other on some issue of importance. The resulting tableau may or may not be a moving one. The leader then asks all to look around and asks whether there is consensus as to whether this is the way each person sees the group, and what observations and comments anyone might have on this constellation. The leader may then select individuals and/or subgroups with whom to explore discrepancies.

This is particularly useful in large organizations where people tend to get lost in the structure, in relation to the flow of information or authority. It is also useful in training groups for leaders to be able to match their assumption and inner sense of how group members relate in toto, to the group's own sculpting of such phenomena. These procedures allow for new information and updating of previous impressions.

This form of Sculpture at Boston State Hospital, used by Jeremy Cobb as an aid in an organizational development consultation to the Administrative Staff in 1973, offered Fred Duhl the information he
needed about the shifting power structure. Upon seeing the placement of people in relation to the Superintendent, he decided to leave his position as Director of Education. The composite Sculpture gave him instantaneously data and information he could get in no other way.

**Group/Family Metaphors**

By this time, it is probably obvious that there are probably 1001 ways of conversing in this language and as many forms as there is imagination to shape them. For the lines between Sculpture, spatialization, and action metaphor become rather arbitrary and thin after awhile. It was through the 'habit' of playing with Sculpture that we began to invent action metaphor 'warm-ups' such as the 'Be an Animal' exercise of Chapter VII. In this sense, there is no limit to where one can go. And the more one does, the more one learns to learn to think metaphorically, analogically, in new and different dimensions.

One of our favorite forms of group or family metaphor was one that came out of Kantor's original sculpting. When this is done from the outside in, the therapist or leader thinks of a metaphor which captures his/her sense of the entire family or group, such as 'A Three-ring Circus', 'A Masqued Ball', 'A Speeding Train'. Each metaphor is then quickly sculpted and put into action, allowing an imagistic, kinesic sense of the whole to emerge. Speeding up and slowing down the movement allows essences to come through. Questions can be raised, metaphorically, such as "Who is the ring master of the circus? Who are the performers? Audience?" and so forth. Key issues in
this form of Sculpture are overview, circularity, and moving all members to the level of metaphor.

When this type of metaphor is created from the inside out, the family or group member will sculpt his/her own metaphor for the unit, also without necessarily assigning one-to-one roles of family member to metaphor part. In training groups, we have used such metaphorical representations of family systems to raise the issues of 'change' and 'influence'.

Particularly since there are no distinct family role functions, we will ask one group to observe another group's metaphor in action, and then to 'change' it in some way. Then we will ask them to debrief that experience from both sides, the changees and the changers. Next, we will ask them to begin again with the original metaphor, in action, and request that the other group 'influence' the metaphor group. They then debrief that.

The contrast in the feedback is remarkable. In most instances, the metaphor group has felt coerced in some way, when they were 'changed', as if they had been 'worked on' with no respect for their own ways of being. They report feeling moved 'with' when 'influenced', as if the changers had to truly stop and pay attention to what the 'metaphorees' were doing, and to get in rhythm with them in some way in order to influence them. That in itself becomes an analogue for therapy as facilitation, of working with people, rather than 'on'.

Let's Go to My House

A final example of Sculpture, which again returns us to an
original spatial concept of Kantor's, yet developed by Fred Duhl and myself for an Orthopsychiatric Association Institute conference, 14 is the House Tour (Jefferson, 1978).

Most everyone has heard of League of Women Voters' or other such group's house tours, in which participants pay a fee to go through various historical houses, or contemporary ones with special features or occupants. Our version of a house tour is to pretend one is leading such a tour of one's own growing up or current home, for several other people.

The tour starts by walking down the street to the house or apartment building, with a verbal description of the surrounding environment and context, in the present tense, no matter the age one lived there:

Here's the big park I play in. And this is my friend Billy's house, next door. We play in his back yard because ours has laundry lines and cement in it. Here we are at the front walk. We come up to the wood porch. Ours is a two-family house, and Mrs. Jones and her married daughter live upstairs. They own the house. We are not allowed to play on the porch. We go in the door on the right.

The personal aesthetic and emotional quality of each place, space and room is emphasized. One enters the house, describing each space/room as it is approached and entered, and its special meanings, including hiding places under the table, or the place at the top of the stairs where one listened to 'the grown-ups' at night.

The tone and ambience of the furniture and spaces, reflecting the

14 Washington, D.C., March, 1975
meaning of the space itself, is commented on. Mention is made of the people who occupied these rooms and some key or typical events that took place in each room. The Sculptor in this case literally walks people through the imaginary house, outlining the space as he/she goes. Again, memory evocation of core images, illuminating aesthetic preferences, exploring, shaping the physical and interpersonal context in which our learning-to-learn took place, are key issues in this type of Sculpture.

Additionally, within an ongoing training group, inviting others into one's early home introduces them to the self one 'was' in ways that have validity as each sees the world through the eyes of the Sculptor/Tourleader. For the Tourleader/Sculptor, this is a different type of experience than in Evocative Sculpture, where the monitor is responsible for pursuing and evoking clarity. Here the Sculptor/Tourleader must do it for him/herself in ways that communicate to the 'guests' one's personal sense of the total environment.

Such a 'gliding' between inner imagery and communication with others is the task of skilled therapists.

Trainees take turns within their groups of threes or fours. Each 'visits' the houses of others. They learn to actively visualize, to see into, as they listen while walking through the house, qualities indispensable to them as therapists if they are not to lose touch with the people who inhabit such spaces. In this exercising of the theatre-of-the-mind, the body, in action, helps the mind create the images of the words that each hears. Each person grasps the sense of each family and each space, from the inside out, as each walks through
it in pretended activity.

In spatializations such as these, as well as many others preceding, not only is one's imagery and sense of different living contexts sharpened, but that very sharpening opens the door to whole sets of new questions.

As we go on many tours of people's lives through their images, and through the stories they tell as they spatialize, we begin to become aware of the shaping influence of the total context on any family and the individual members - the geography, ecology, economics, culture, ethnicity, religion, accidents of history, genealogy, sex, birth order, and genes, all factors which come to bear on how life is lived and what life means. We become aware that Sculpture quickly captures the rules, roles, routines and rituals in any family's (or other human system's) life, and can become points of departure for thorough examinations.

Such sobering considerations give us pause when we try too easily to simplify the variables that make human beings, human life, human history, human capacity and potential the intriguing puzzle it seems to be and to have been, in one form or another, since human life began.

Summary

Sculpture and spatialization then are ways of keeping generic questions open while 'answering' others. Spatialization, after all, in the family systems movement, started out as answers to problems in communication. Kantor and others using action techniques struggled
with what image they wanted to get across, to communicate, and each developed methods to do so. Each 'technique' of spatialization invented has been the momentary 'answer' to a question.

We started out wondering how to rid ourselves of the disruptiveness of two people in our seminar, and invented what we now call Boundary Sculpture, a generic and metaphoric process for exploring the intangible betweenness of two or more people.

I started out wondering how my internal images related to what was happening and 'discovered' Impromptu Sculpture, a way of communicating my internal 'assessment' of interaction through action metaphor.

Others had wondered how different people 'saw' the same situation, and invented Multiple Perception and Composite Sculptures.

I had wondered how themes and patterns did indeed carry forward in families over time and 'created' Historical Sculpture. And so on.

It becomes apparent to me, then, that a technique is not a solution, but a process derived by a searcher with a question. Techniques then, are not just answers to a problem, but are byproducts discovered en route to some place else.

Some techniques are also processes for exploring generic questions. Spatializations are this type of technique: processes for finding solutions to other and others' questions.

Theories too are the human answers to human questions, the 'best' explanations that we have or will accept at any given time, a map for guiding our seeing, our explorations. Each current theory is today's 'answer' to yesterday's questions.
In most fields, when theories and techniques are taught, the original questions are left out, and the humanly derived, constantly evolving theories and techniques are often presented as closed systems, as final answers. The result is such that students and trainees become receivers of answers, technicians, rather than competent searchers.

At BFI we feel that final theories as answers to questions concerning being human, growing, developing, surviving, and living with others cooperatively and/or exploitively, are far from 'in'. This is the first time in history as we know it that we have had the possibility of information from many views simultaneously. Not just through theatre can we approach simultaneity, but the technology of many television cameras and computers can present to us the cinema verite reality as seen (though not as given meaning to) from many positions. The 180-degree films of Cinerama-type movies are attempts at that presentation on a movie screen of the reality we live.

In our search, we have tended to ask generic questions and to develop generic techniques or processes that allow for new information, new experiential ways of seeing. And even when we may not be asking generic questions, but specific ones, having generic questions in the background of our minds allows us to perceive generic issues when they emerge spontaneously.

Generic techniques illuminate human betweenness, the relational aspects of our lives, from the inside out, without necessarily dictating any particular solutions to new questions. Solutions can be evolved fitting with the particular people in each context. Generic
techniques then are languages, metaphors, communicating meaning at many levels at one time.

Spatialization, the language of drama and theatre, of image and meaning, is universal in that sense. It does not have an age limit nor does it have a schooling limit. No fancy abstract formulas are needed. Sculpture allows the most complex sentences to be said, in ways that have a boundary around the punctuation. This boundary can also be extended into the past and future, or can expand horizontally to be inclusive of other units interfacing with any grouping. Spatialization recreates in metaphor the original scenarios, behaviors, constellations, from which theories of human behavior are derived. And with attention to a few simple rules, Sculpture can offer the safety to be known, without criticisms and judgments, and to express one's view. Human systems theory after all does speak to what goes on between and among real live human beings. Yet the human systems theory that connects the individual experiential information with observed behaviors has not been written yet. Sculpture/spatialization allows for this private data to surface.

We move trainees to the medium of raw data, as experiencers, observers and playwrights all, as we also have them read the 'plays' written by others. With analogic distance, we encapsulate and remetaphor the original interactions and look at them anew.

As anyone in the family systems therapy world is aware, not only are different evocations of a family's process possible through different interviewers (i.e., Hillcrest Series), there are also different languages used for describing similar constellations of
behaviors. One person's 'undifferentiated ego mass' (Bowen, 1972) (already a compilation of metaphors from another arena of psychiatry/psychology) is another person's 'enmeshed' family (Minuchin, 1974). These expressions are but chosen verbal metaphors for behaviors, ways of being, developed among family members over time, by which each feels unable to make decisions or to act independently of others.

Spatialization avoids the confusion of such labeling and allows us not to get lost in arguing about language, and about the particular words and phrases chosen by another human being to describe what we are seeing, doing, enacting. For so often, the particular label used also conjures up the particular theorist's values and techniques for 'solving' the issue.

Rather than getting caught up in the language chosen then, we get caught up in exploring basic human processes, ways of living, behaving and meaning, in a generic language that does not immediately require limiting or prejudicial words or phrases. We can agree to a label if we so desire, and we can also discriminate fine-tuned meanings and differentiations. Additionally, without labels, we are free to innovate and invent new interventions of congruent meaning to the members themselves.

For as one becomes acquainted with wide ranges of human interacting and family forms, we realize that many types of family and individual ways of being seen as 'dysfunctional' today are artifacts of yesterday, when they were traditional, expected and accepted. We see that theories of behavior and therapy are contextual and value
laden, and change over time, in keeping with the cultural, economic, and political contexts, as well as the prevailing paradigms of particular fields.

As theorists, therapists and trainees, we are as much the children of our age, of our contexts, as are the people we speak of, help or enter into a process of education with.

At BFI, we see our task as one which helps to empower others in recognizing the shaping forces in/of their contexts, and in moving towards integration, options and flexibility in a rapidly changing world we each never made.

Sculpture and spatialization allow for the inclusion of human experience, for the contextual set, for the report from the inside, concerning pain and disconnection, expectations and losses, love and despair, craziness and the peace of coherence.

To speak of systems speaks to 'what is the problem?'
To speak of theatre speaks to 'where is the pain?'
When we speak of both, we hint at the interconnected holographic totality of human life.

In training then, we look for the generic categories that see life as an experience that we live rather than life as a problem to be solved. Problems are our labels for certain types of experiences we wish to rid ourselves of, in order to enhance the quality of our living. How we look at therapy, facilitation, and problem solving needs to be 'reflexively coherent' (Wideman, 1970) with the aesthetic image of the quality of life of the participants. As Gregory Bateson stated in 1979 at a BFI-sponsored workshop, we must pay attention to
'the delicate fabric of the psyche'.

Our trainees continue then into a clinical year, and beyond, not with all the latest gimmicks and solutions for doing 'perfect therapy' (whatever that is) but with the generic tools, generic language, and generic maps for asking the right questions, for exploration, discovery and new integrations. They 'see' system, and know the processes with which to derive new information, information which is different enough to make a difference to all involved in the search.

For Sculpture and spatializing, inclusionary of all voices and views as they are, allow trainers to 'see how trainees think'. Similarly, and reflexively, Sculpture and spatialization allow trainees, families and other individuals to discover and invent each human system, as if it were each one's very own idea and creation.

And indeed it is.
EPILOGUE

We are at a resting place, but hardly the end of a road.

I started out to write a book about a way of training in human systems thinking which provides for integration and a multicentric view in the person of the trainee.

Where can one begin such a tale, save in the middle? And that's where I began. From such a random starting place, I am now choosing to pause, without having told the full story, for sure. I have not yet informed the reader of the specific sequencing of types of exercises. I have not given language or form here to the specific courses which we teach and the interweaving of themes which we follow to fill out our hologram of human systems thinking. I certainly haven't dealt with specifics of family organization, nor with the theoretical material we cover in more traditional fashions as well as experientially. As I think of it, I am sure there is more that I have left out than I have included.

However, somehow sandwiched in between these seemingly arbitrary beginning and ending points, it is my hope that I have been able to present a comprehensive framework for thinking about training in systems thinking, drawn from the ongoing search at BFI over the past twelve years. It has been my wish to illuminate some basic ways that we have found of designing, using and thinking about analogic exercises and metaphors, congruent with content, with trainees' varying ways of learning, with processes trainers wish trainees to learn, and with generic human systems thinking. I hope I have given
the impression that in the field of human services particularly, the data for the basic themes, concepts and theories to be taught can be drawn forth from trainees' own experiences. I hope certainly that I have demonstrated that abstract concepts concerning human behavior and processes which we struggle to grasp, can be translated directly or analogically into experiential metaphors of the human behavior these concepts describe. And most of all, I hope I have conveyed the sense of excitement in learning and training for all concerned, inherent in these types of processes.

I will feel I have succeeded if I have brought you, the reader, along with me in this exploration, and have stirred up in you new 'what ifs?' I would be pleased indeed if you have been stimulated to wonder, to originate and to try your own metaphors, in your own fashion, in your own contexts. If I have accomplished some of my wishes, this then will feel like a time to pause, a time for bubbling ideas to jell, for the reader, as well as for myself.

Somewhere within this work I discussed beginnings, and described how I found beginnings interesting, for the system precursors are present in beginnings. Later one can see which ones, of all those present, emerged to lend shape to a program. And that is what this work has been about.

Yet I am also ending somewhere in the middle, a useful vantage point for describing beginnings. Our process is still ongoing and happening. I have taken this opportunity to pause and take time for the creative reflection necessary to coalesce my thinking about generic issues in training. I realize that I have brought together
learnings I knew about and those that I didn't realize were there. Some learnings were clear to me at the time they were happening, and others have needed a more distant vantage point. Hindsight is a new, later and different integration of patterns of occurrences that could not be perceived as a pattern at the time they were occurring. The graceful distance of timespace, and a human mind are needed to metaphor phenomena over time into patterns. One cannot know before one knows. And it has been a continually exciting process to find out!

**How About Trainees?**

What, however, is the impact of such a way of training on trainees during this first explorative, integrative year of our two-year program, when the focus is not on clients and therapy, but on the trainee and how he/she begins to think systemically and begins to integrate personal and theoretical data?

Let us turn our attention now not to processes and content, but to the 'target population'.

Some trainees struggle with ways of learning that are 'strange' yet are intrigued enough by their involvement to rest judgment for awhile, as connections between personal experience are made with conceptual material. Soon, they are able to relax in their reliance only upon the accepted processes which they have learned to call schooling or education. For our trainees are adults, expected to be competent in varieties of situations, which are interactive. Most have not been offered the opportunity to become competent thinkers, actors, competent in drawing upon their own epistemic and synesthetic
knowledge.

When trainees begin to grasp the idea that our version of 'experiential education' means that they will draw from themselves the data for their learning, trainees become captivated with the idea of innovation and novelty, and new connections, in such a way that anticipating participation and nonboredom becomes routine! They look forward to the creative exploration and fun of role-taking. The sense of play joins the sense of work. The ideas of metaphor and analogue become more and more overt. Trainees begin to expect to be involved and challenged, and become sensitive to and vocally responsive to tedium in the seminars.

Human beings and human systems are active entities and do not live their lives sitting down talking. Trainees expect to be active, and to pass their now information through the filter of the self as they weave it into ideas.

Trainees put pressure on the leaders to keep delivering in the model the leaders have set up. Leaders, having stated they are concerned with how people learn — how they 'take in' information and give meaning to it, open themselves to each group anew. The trainees thus put pressure on the leaders for excellence in leadership in guiding the trainees in reaching their goals, in learning how they learn, in learning how to see and act with multifocal awareness. The pressure is also on faculty to keep their creative processes going, for repetition becomes tedious for the faculty as well.

In the more usual Platonic trainer/trainee model, the trainer is the source, owner and dispenser of wisdom and the trainee the receiver
of that wisdom. That puts great pressure on trainers to be wise. And always wiser than trainees, in order to retain the status, identity and position of 'one who trains'.

At BFI, particularly since 1973, the trainers have tried something else. To use a phrase from the family therapy field that was not yet being bandied about at that time, the trainers 'triangle in' (Bowen, 1972) many types of exercises designed to connect each one's epistemics with epistemology. Such triangulation gives trainees an excuse to have a wide range of interactions and transactions in varieties of roles and metaphors, serious and playful. Each trainee then has new shared events and experiences to speak about authentically (as author). Each can draw upon such common metaphoric experiences, connecting new ideas and concepts to his/her own personal experience, and to each other, person to person.

Multiple interactions within structured metaphors create material for continuous new dialogue, and new integrations. Trainers do not have to know the answers. Rather, this modality allows trainees and trainers to ask, look at the same questions, and discover, find and create 'answers'.

In this more Socratic model, both trainers and trainees ask the questions. The trainees do the experiment which trainers have 'tried on' in planning. In debriefing with the leaders, trainees come up with the data for some of their answers.

The trainers don't have to be wise, for trainees keep giving them data by which to keep becoming wise. Indeed, trainees even offer new and unexpected data or conceptualizations which sometimes push
trainers into wisdom and new horizons before they might have gotten there on their own. Trainees who are free to challenge allow trainers the opportunity to explore new questions and to keep their conceptual system open and evolving.

We have learned over the years the importance to trainees of our emphasis on play, pretend, and simulation. Such common metaphorical, yet very real, experiences became the pardonable excuses for dropping one's 'normal self' or 'ordinary, natural' roles, or 'proper' behavior, or core images of 'I'm not a person who...' while trying on something different. 'Affectation' of a role is expected, as each trainee tries metaphors of approximation.

What's in a Role? (Or, What's a Meta For?)

Multiple opportunities for verbal and paralinguistic metaphor and role enactment, while drawing on one's own experiences, analogically, permit one to reexamine whole system dances - the reciprocal and systemic interactions of which such roles are a part. One can re-explore and try on, as if it were the whole of one, many ways of being, and tuck them into the closet of one's mind, muscles and being, reintegrated. When next encountered, either in daily life or in one's work, such behaviors, such metaphors and roles already are familiar. When met again, these roles, positions, ideas, Images, feelings are known, and available to be called upon to offer information about the current context and the people in it. Such knowings, if not old friends, are at least acquaintances, and never again 'blind dates'. One can draw upon even minimal knowing to ask new questions. The
strange can be made familiar, with a place to fit.

Trainees become free in a funny kind of way. Role-taking and new metaphoring frees them from the literature of the field they are reading, where images and categories are set by others. Role-taking can be a place to underplay certain parts of self, or conversely, to develop unexplored, unexercised or held-back parts of self.

Curiously, though, one doesn't have to focus on developing such a part 'in' and 'of' self. For the role-playing has been 'triangled in' as a vehicle (the third party, which takes attention away from what is really going on inside the trainee). The trainee is 'just trying it on, thank you' so he/she can see how certain actions might evoke certain types of thoughts, or how a person might think and feel, in order to create certain actions. The trainee does not have to 'keep' any of it. Once such a role is debriefed, the momentary role-taking can be and is discarded, and one returns to one's 'I'. It is not serious. Or is it?

Yes, repeated ventures into drawing forth metaphors and roles are a serious matter indeed! The 'I' is changed into one who can enter into many different metaphors, many different roles, all of which call on, explore, expand and develop different aspects and capacities of the 'I-Eye', including the ability to 'see' multicentrically from all positions.

In drawing on one's nonlanguage experiences as well as verbal experiences, each trainee expands his/her range of metaphors and roles. This repertoire becomes, as it were, an entire 'resident company' housed in one person, who over time can move into any
metaphor of approximation to connect empathically with another person, to experience the world from that perspective. Additionally, one learns the process of approximating. Multiple approximations begin to foster ways of seeing that grasp images of interacting systems from each position, as well as from a view of the whole.

Thus the methodology of training, the repeated processes in which trainees are involved, become as much responsible for changing the way of thinking as the particular content and subject matter. As trainees draw on experiences in their own lives and families, as well as simulations outside their range of experience, there is a metamessage to the entire process: when one tries on or explores many phenomena, many roles, one has many 'diversity of instances in concept attainment' (Bruner, 1973). One tries many metaphors of identity approximation, organization, and operation.

For by playing with metaphors and roles as authentically as possible for the moment, before 'taking them off' and putting them aside, one finds out readily enough that there is no one right way to play a role, to see the whole, and no one right way to be. One begins to discover the complexity of fit that makes changing, evolving, living human systems. One realizes the interconnectedness of all parts: that who one is and how one behaves in which contexts seems to depend upon many factors. A new integrated way of thinking begins to develop from the inside out, which puts the trainee at the center of his turned around world of multicentric thinking.

When there is diversity of instances of concept attainment, which are linked, the trainee begins to think analogically.
As Bruner says:

It seems to be that the principal creative activity over and beyond the construction of abstracted coding systems is the combination of different systems into new and more general systems that permit additional prediction. It is perhaps because of this that, in Whitehead's picturesque phrase, progress in science seems to occur on the margin between fields. There is virtually no research available on this type of combinatorial creativity...(1973a).

Safety and competence in both the external and internal worlds derive from the ability to predict, to know that one can make the familiar strange and the strange familiar, and to know the conditions which make such sureness possible. Analogic and systemic thinking makes that ability to predict more plausible. In a world which changes so fast that the technology and the newest approach to training or working with people hits the market before the ink is yet dry on the proposal to study the outcome of the last approach tried, we have been using a similar and steady approach for some twelve years now.

While I would be hard put to claim that the type of research that Bruner had in mind when he wrote the above words has been done on the BFI methodology of training, I would like to share some information from the research on learning that was done early in our career, as part of a United Community Service grant in 1971-21.

This research found that contrary to normal expectations in such a study process, the learning curve of the Family Service Agency social workers went up markedly and stayed up after a year, following

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1 "Alcoholism: An Evaluation of Intervention Strategy in Family Agencies", Principal Investigator, Harold Demone, report by Herbert J. Hoffman and Ludmilla W. Hoffman, 1974. See also exercises in Chapter IX, originally designed for this program.
a 15-week, 30-hour training program based on training in the manner outlined in this book, as well as didactic input from experts in the field of alcoholism. While BFI was responsible for the curriculum and training processes, the research was done independently by the investigators.

Interestingly enough, the entire training program was conceptualized, from its inception, as an intervention strategy in agencies' patterns of avoiding working with alcoholics and their families.

The general topic of the training program was Family Process and Alcoholism. Workers' attitudes toward alcoholics and their families were pre-, during and post-tested. Workers were rated on the seeking out of such clients, and the numbers of such clients in their caseloads. Videotapes of pre-, during and post-training interviews were recorded and scored for worker attitude and systemic views. Results indicated that agency workers were actively seeking out more alcoholics and their families to work with, feeling more effective in their work, and attributing their change of attitude and competency to the training program. This trend increased rather than decreased as the months went by.

We were as delighted as the researcher was surprised with the results of this early research on BFI's method of training, for we began to realize then that we were raising and continue to create generic approaches, rather than teaching specific solutions.

Each major development in our training program has come from a 'switch of focus', in the discovery of a process en route to somewhere
else. Each such exploration expanded and continues to expand our personal, epistemic knowledge, as it also links to our more formal epistemology. Our discoveries took place from the 'inside out' meeting halfway those of others which were made from the 'outside in'.

How we actually live will always move at a faster pace and outstrip our research about how we live and give meaning. Thus we feel we must train people in category-making, in coding events in such ways that we, the trainers, do not restrict the categories. Else we train others in the questions we have already solved (and we all do that!) without providing them with the tools to approach and generate new solutions to questions as yet unasked, by us or them, or surfaced by the new contexts and conditions of living.

Again, I quote Bruner:

Let me in general propose this test as a measure of the adequacy of any set of instructional propositions - that once they are grasped, they permit the maximum reconstruction of material unknown to the reconstructor. (1973)

I would submit that we have found some ways to meet this test, and to explore generic education, in the process of educating generic systems thinkers.

And in the family therapy systems movement, Jay Haley is quoted as saying,

Our hope has been that those who teach will have students who surpass the teacher. This isn't happening in the family movement. How to create a social situation which
will create innovators? We do not yet know how to do this.2

I would propose that perhaps we have found some ways to answer Jay Haley's challenge.

And I invite you, the reader, to carry on the processes, adding your own imagery and inventions to those presented here and in so doing, to go beyond the information given in this work.

Let us continue.


Constantine, L.L. "Designed Experience: A Multiple, Goal-Directed


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Whitaker, see Napier


Analogue - a likeness, correspondence, parallel, correlate, or approximation of one structure, process, idea, or experience, to another. In training, as in life, the algebraic formula 'this is to this as that is to that,' expresses the concept of analogue.

Catalytic - an agent, process, or context that accelerates or facilitates changes in others. In chemistry, a catalytic agent is itself unaffected by the process. In the BFI training process, the agents are people affected in discrete and continuing, important ways, by new information, ideas and processes developed.

Designed Experience - also Structures for Spontaneity or Common Metaphors - those exercises, simulations and planned procedures which provide a common structure within which individuals interact. In so doing, each person's creativity, meanings, reflections, etc., come into play. Such experiential structures, when coupled with cognitive generalizations and frameworks, aid people in learning 'from the inside out'. Abstract concepts can be drawn from commonly experienced simulations and explorations.

Ecological systems - more than one co-evolving self-organizing system. William Gray, in his report to NIMH, 1979, states "Co-evolution is understandable as a necessary feature of the relationship between two or more self-organizing systems, such as living
creatures and parts of their environment, for the necessary reshaping of each to occur, to conserve and extend the necessary pattern match between the two, upon which their continued existence and the growth and development of each crucially depends.

"In ecological systems, regulation is by co-evolution, while in cybernetic systems it is the result of internalized control mechanisms."

Episteme - knowledge.

Epistemic - of or pertaining to knowledge, or the conditions for acquiring it. Paul MacLean uses this word to mean the subjective view of science and knowledge of the self, from the inside out.

Epistemology - According to the dictionary, epistemology refers to a branch of philosophy that investigates the origin, nature, methods and limits of human knowledge. In the field of family therapy, traced to the contributions of Gregory Bateson, 'Dick' Auerswald and Paul MacLean, epistemology has come to mean a formal world view, like a paradigm - a framework for thinking, for conceptualizing.

Equivalent - reciprocally and correspondingly differentiated and valued; not necessarily equal, as in same. For instance, a soccer ball for my son and a leotard for my daughter are equivalent gifts, given each one's interests. People can be equivalently new to different situations. Equivalency is based on respect and differentiation of individual skills, attributes, meanings and experiences. For the child, 'play' is equivalent to
adult 'work'.

**Ethos -** According to the dictionary, "1) Sociology: the fundamental character or spirit of a culture; the underlying sentiment that informs the beliefs, customs or practices of a group or society; dominant assumptions of a people or period. 2) The moral element in dramatic literature that determines a person's action rather than his/her thought or emotion." Each family has its own feel, ambience, ethos, which creates or is the bond of connection of each member to the whole.

**Hologram, Holographic -** used in this work both in its metaphorical value, of a three-dimensional image projected in space (Bentov, 1977), as well as in Pribram's and others' metaphor of the mind as hologram (Ferguson, 1978, Pribram, 1971). Essentially, without resorting to too much technology, a hologram is a photographic record containing all the information needed to reconstruct an entire three-dimensional image. What is recorded on the photographic plate are interference patterns of two light sources of laser beams, bouncing off an object. An exciting fact, to this author, is that if the photographic plate is broken, each bit or piece of the broken plate still contains all the information which can be used to reconstruct the entire image of the original, when 'transilluminated with a coherent light source' (Pribram, p. 147). This then becomes a wonderfully useful metaphor for organismic training in systems thinking.

**Implode -** to burst inward as opposed to explode, a bursting outward.

**Implosion -** the act of imploding, a bursting inward. Technological
advances have unleashed an information implosion. We now have minute by minute more information about more things, ideas and events than any of us can individually handle, or even care to know.

**Information Processing Styles** - in this context, refers not to computer technology, but to those particular individual approaches to perceiving, giving meaning, organizing, storing and outputting data and experience that each person has. This would include thinking in images, kinesthetically, or by nonlinguistic sounds as well as verbal modes.

**Integrated/Integration** - (of systems thinking) as used in this context, integration refers to those conceptual digestion and absorption processes by which some idea becomes part of a whole world view and can no longer be forgotten or isolated out, as flour in a cake cannot be isolated out, once baked.

**Meta** - According to the dictionary, a learned borrowing from Greek, meaning: after, along with, beyond, among, behind, and often denoting change. In the field of family systems therapy, again with recognition of Bateson's usage and influence - meta is used to mean 'about', as in *metacommunication*, a communication about communication, or *metalinguage*, any language or symbolic system used to discuss, describe or analyze another language or symbolic system. Bateson also used the prefix 'meta' to refer to a higher level of generalization.

**Multicentric** - the ability to see, conceptualize, from many positions and to know that they all exist simultaneously.
**Paradigm** - an example, pattern, in science and family systems, meaning a framework for thinking.

**Strange/Familiar** - a concept by W.J.J. Gordon (see bibliography) in which he proposes that learning is the process by which we make the Strange Familiar, while innovation is the process by which we make the Familiar Strange. Good teaching and therapy do both of these, and one could analyze any interventions by these concepts.

**Synesthetistic** - comes from the word *synesthesia* meaning a sensation produced in one modality when a stimulus is applied to another modality, as when the hearing of a certain sound induces the visualization of a certain color. I use it in this work in a similar manner, to mean sensory stimuli which are processed in varying ways along different sensory channels, simultaneously.