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# Diagrammatic assessment of family relationships

Two methods of diagramming family relationships offer
insights into complex family and community interactions
and facilitate the interviewing and intervention process

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Integrating new knowledge and conceptual
frameworks from the many sources that in-
form and support social work practice is a
long and arduous process. General systems
theory, which was introduced to social
workers over twenty years ago,[1] has been par-
ticularly difficult to assimilate because it is so
abstract. The distance is great between the
lofty principles enunciated by systems
theorists and the practical knowledge and
skill that guide the practitioner's work with
people, day by day. The field has made some
progress in utilizing systems concepts in
developing middle-range theory, in organiz-
ing practice models,[2] in extending and
clarifying the boundaries of the unit of atten-
tion,[3] and in prescribing general directions

for action.[4] Professionals in the field are now
at the point of attempting to translate con-
cepts from this middle-range theory into
specific and testable prescriptions for prac-
tice.

Particularly interesting is the potential a
systems orientation has for altering cognitive
styles and enabling practitioners to organize
and process increasingly complex systems of
variables.[5] The attempt here is to derive from
systems framework new conceptual models
that can enhance the practitioner's and the
client's perceptions of reality, thereby con-
tributing to competence and creative adapta-
tion in therapy.

Social workers, in attempting to under-
stand their traditional unit of attention—the
person in his total life space over time—are
faced with an overwhelming amount of data.
These data must be ordered, selected, and
arranged to reduce confusion and overload.
Edward Tolman has likened this mediating
process to a map room where intervening
cognitive charts shape data, lending mean-
ing and manageability to the influx of infor-
mation.[6] These cognitive patterns have

[1]Werner A. Lutz, *Concepts and Principles Underlying
Social Casework Practice: Social Work Practice in
Medical Care and Rehabilitation Settings,*
monograph 3 (Washington, D.C.: National
Association of Social Workers, 1956).

[2]Gordon Hearn, ed., *The General Systems Approach:
Contributions Toward an Wholistic Conception of
Social Work* (New York: Council on Social Work
Education, 1969).

[3]Carel B. Germain, "Social Study: Past and
Future," SOCIAL CASEWORK 49, no. 7 (July 1968):
403-9.

[4]Ann Hartman, "The Generic Stance in the Family
Agency," SOCIAL CASEWORK 55 (April 1974): 199-208.

[5]Ann Hartman, "To Think About the Unthinkable,"
SOCIAL CASEWORK 51 (October 1970):459-68.

[6]Quoted in Jerome S. Bruner, Jacqueline Goodnow,
and George A. Austin, *A Study of Thinking* (New
York: John Wiley and Sons, 1962), p. vii.

tremendous influence on how reality is perceived, but are not readily observed or easily changed. They are an ongoing and familiar part of the self and, as Frederick Duhl has pointed out, "that which is constantly experienced is neutral to awareness, being so immersed in the identity, so 'egosyntonic,' that it is rarely open to observation or challenge."[7] As social workers interact with their environment, these mediating cognitive processes so strongly imprint a particular view of reality that they may well be just as crucial as knowledge and values in determining professional decision making.

In dealing with almost continual information overload, cognitive processes tend to operate analytically: to partialize, to abstract parts from wholes, to reduce, and to simplify. Although this makes data more manageable, it does damage to the complexity inherent in reality. Ways of conceptualizing causation have tended to be particularly reductionist as reality is arranged in chains of simple cause and-effect reactions. Such linear views reflect the limitations of thought and language rather than the nature of the real world, where human events are the result of transactions among multiple variables.

An emphasis on identifying the roots of problematic conditions in tremendously complex situations has frequently pushed social workers into supporting simplistic explanations and into arguments over what is the cause and hence the cure. Since nineteenth century scientism found expression in Mary E. Richmond's *Social Diagnosis*,[8] the profession has struggled with the temptation to deal with this "radically untidy universe" through reductionist solutions growing out of reductionist assessments.[9]

If social workers are to avoid reductionism and scientism, if they are to translate a systems orientation into practice, they must learn to "think systems," or to develop within their own cognitive map rooms new and more complex ways of imprinting reality. They must then devise ways of using this view in specific interventive techniques and strategies.

As one learns to "think systems," one tends to move to the use of metaphor and to the use of visual models in order to get beyond the constraints of linear thought and language. Social workers have always been frustrated in writing psychosocial summaries—they find it not unlike the attempt to describe the action in a football game over the radio. In attempting to describe the complex system of transacting variables, the meaning and the nature of the integration of the variables and the totality of the events and action is lost. The use of metaphor in poetry and of two- and three-dimensional simulations in painting and sculpture demonstrate the integrative power of such approaches. Similar artistry can be used to expand the social worker's understanding of the nature of reality. Of many possibilities, two simple paper-and-pencil simulations have proved to be particularly useful, not only as assessment tools, but in interviewing, planning, and intervention.

One simulation is the ecological map or "eco-map," which was originally developed three years ago as an assessment tool to help workers in public child welfare practice examine the needs of families.[10] This tool pictures the family or the individual in the life space and has since been tested in a variety of settings with a wide range of clients. The second simulation is the genogram, which has been used by systems-oriented family therapists to chart intergenerational family

[7]Frederick Duhl, "Intervention, Therapy, and Change," in *General Systems Theory and Psychiatry*, ed. William Gray, Frederick Duhl, and Nicholas D. Rizzo (Boston: Little Brown and Co., 1969).

[8]Mary E. Richmond, *Social Diagnosis* (New York: Russell Sage Foundation, 1917).

[9]For a discussion of casework's relationship with science and scientism, see Carel B. Germain "Casework and Science: An Historical Encounter," in *Theories of Casework*, ed. Robert W. Roberts and Robert Nee (Chicago: University of Chicago Press, 1971).

history.[11] This tool has also been found to be highly adaptable for use with individuals or families in many different settings where it is important to understand the development of the family system through time.

## The ecological metaphor

The task of making general systems concepts operational and humane, of giving them flesh and blood meaning, presents a difficult challenge. Although "input," "throughput," "moving steady state," and "deviation amplifying feedback loops" are precise and useful concepts, they mean little to social workers if they are unrelated to a human context. Recently, there has been a growing effort to utilize the science of ecology as a metaphorical way of humanizing and integrating system concepts.[12] The science of ecology studies the delicate balance that exists between living things and their environments and the ways in which this mutuality may be enhanced and maintained.

In utilizing the ecological metaphor, it is clear that the salient human environment includes far more than air, water, food, spatial arrangements, and other aspects of the physical environment. Human environments also include networks of intimate human relationships. Further, over the centuries, human beings have erected elaborate social, economic, and political structures that they must sustain and through which their needs are met. People must maintain an adaptive mutuality with these intricate systems which are required for growth and self-realization.

An ecological metaphor can lead social workers to see the client not as an isolated entity for study, but as a part of a complex ecological system. Such a view helps them to focus on the sources of nurturance, stimulation, and support that must be available in the intimate and extended environment to

make possible growth and survival. It also leads to a consideration of the social, relational, and instrumental skills individuals must have to use possibilities in their environment and to cope with its demands.

## The eco-map

The eco-map is a simple paper-and-pencil simulation that has been developed as an assessment, planning, and interventive tool. It maps in a dynamic way the ecological system, the boundaries of which encompass the person or family in the life space. Included in the map are the major systems that are a part of the family's life and the nature of the family's relationship with the various systems. The eco-map portrays an overview of the family in their situation; it pictures the important nurturant or conflict-laden connections between the family and the world. It demonstrates the flow of resources, or the lacks and deprivations. This mapping procedure highlights the nature of the interfaces and points to conflicts to be mediated, bridges to be built, and resources to be sought and mobilized. Although all one needs is a piece of paper and a pencil, it saves time to have "empty" maps available. These maps can be worked on by an individual or a family.

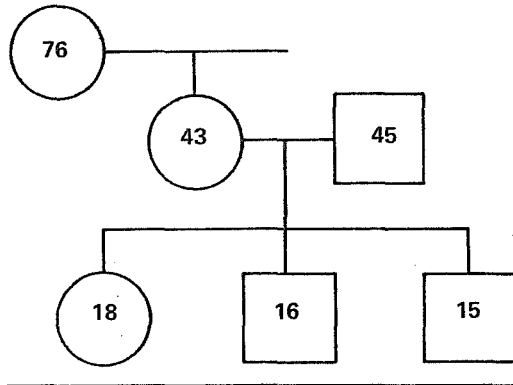### Instructions for drawing an eco-map

First the nuclear family system or household is drawn in a large circle at the map's center. It has been common practice in mapping families to use squares to depict males and circles to depict females. Relationships are indicated as in the traditional family tree or genetic chart. It is useful to put the person's age in the center of the circle or square. Thus, a circle with "80" in the center would represent an elderly woman.

Figure 1 (see page 468) represents a household consisting of a father, a mother, three children, and the wife's mother. The usefulness of this is demonstrated when one considers the number of words it would take to portray the facts thus represented. (The mapping of more complex nuclear family systems will be demonstrated in the discussion of genograms.)

[11] The genogram has been used extensively by systems-oriented family therapists. For example, see Philip J. Guerin and Eileen G. Pendagast, "Evaluation of Family System and Genogram," in *Family Therapy: Theory and Practice,* ed. Philip J. Guerin (New York: Halsted Press, 1976).
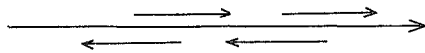
[12] Carel B. Germain, "An Ecological Perspective in Casework Practice," SOCIAL CASEWORK 54 (June 1973): 323-30.

Figure 1



After drawing the household in the large circle in the middle, add the connections between the family and the different parts of the environment. In the empty map (figure 2), some of the most common systems in the lives of most families have been labeled, such as work, extended family, recreation, health care, school, and so on. Other circles have been left undesignated so that the map can be individualized for different families.

Connections between the family and the various systems are indicated by drawing lines between the family and those systems. (See figure 3.) The nature of the connection can be expressed in the type of line drawn: A solid or thick line represents an important or strong connection and a dotted line a tenuous connection; jagged marks across the line represent a stressful or conflicted relationship. It is useful to indicate the direction of the flow of resources, energy, or interest by drawing arrows along the connecting lines:



In testing the eco-map, it has been found that the use of the three kinds of lines for conflicted, strong, and tenuous relationships is an efficient shorthand when the worker uses the eco-mapping procedure, without the family, as an analytic tool. However, when using the map as an interviewing tool, this code has often been felt to be too constraining. Workers have preferred to ask clients to describe the nature of the connection and will then qualify that connection by writing a

brief description along the connecting line.

Connections can be drawn to the family as a whole if they are intended to portray the total family systems relationship with some system in the environment. Other connections can be drawn between a particular individual in the family and an outside system when that person is the only one involved or different family members are involved with an outside system in different ways. This enables the map to highlight the contrasts in the way various family members are connected to the world.

It is easy to learn to plot the eco-map and it is important to become comfortable with the tool before using it with clients. A simple way to learn is to sketch out one's own eco-map. It is also useful to practice with friends. By then, one is generally ready to use it with clients.

*Uses of the eco-map*

No matter how the eco-map is used, its primary value is in its visual impact and its ability to organize and present concurrently not only a great deal of factual information but also the relationships between variables in a situation. Visual examination of the map has considerable impact on the way the worker and the client perceive the situation. The connections, the themes, and the quality of the family's life seem to jump off the page and this leads to a more holistic and integrative perception. The integrative value of visual experience was aptly expressed by one twelve-year-old client when he said, "Gee, I never saw myself like that before!"
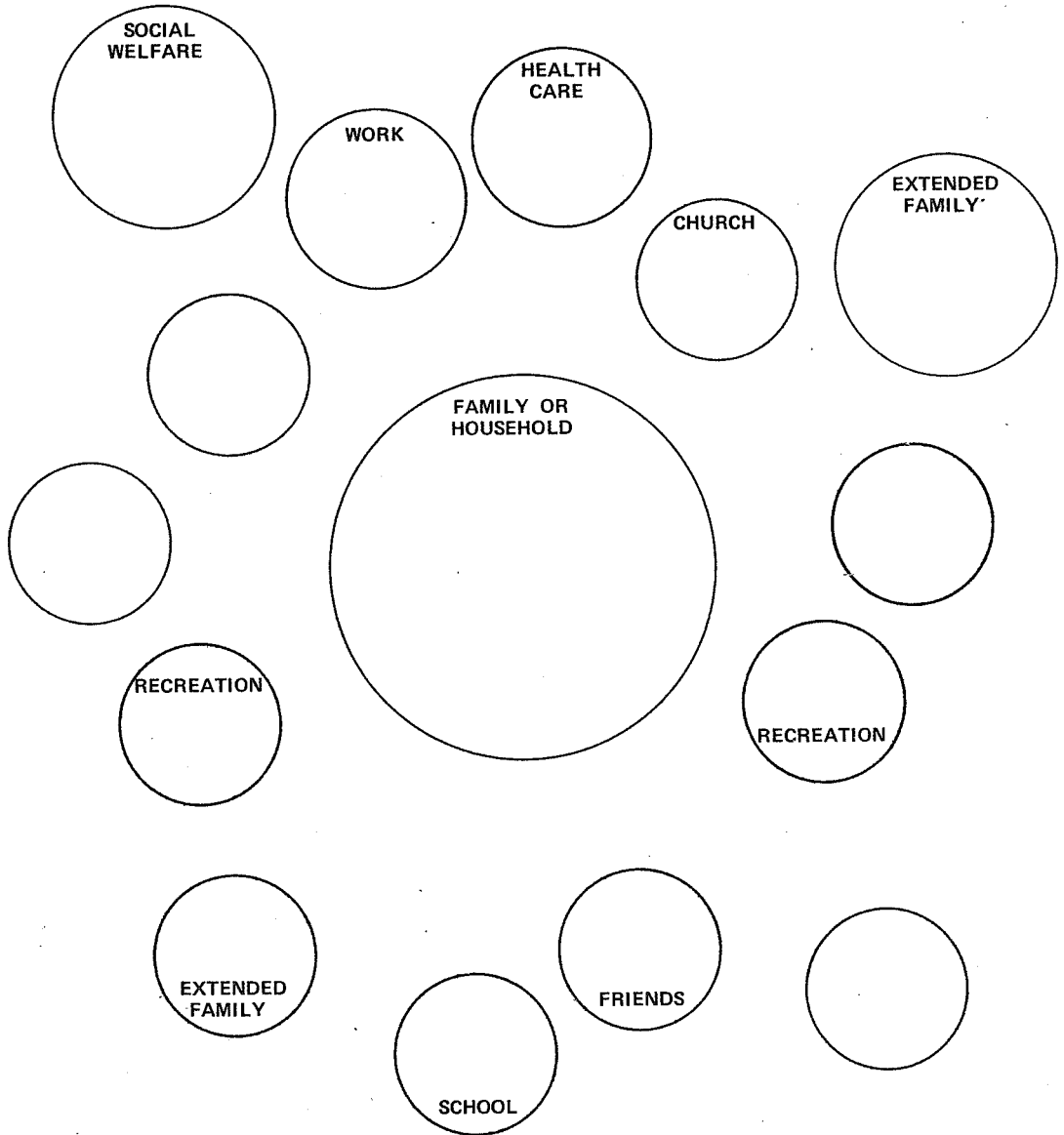
Initially, the eco-map was developed as a thinking tool for the worker. It was helpful in organizing material and in making an assessment. Sketching out an eco-map in the early stages of contact brought out salient areas of the family's life space that had not as yet been explored and suggested hypotheses for treatment. Before long, it became apparent that the eco-map would make a useful interviewing tool. Client and worker cooperated in picturing the client's life space. This led to much more active participation on the part of the client in the information-gathering and assessment process. The growing collaborative relationship between worker and client was often expressed in a change in seating

Figure 2

**ECO-MAP**

Name _____

Date _____

SOCIAL WELFARE

HEALTH CARE

WORK

CHURCH

EXTENDED FAMILY

FAMILY OR HOUSEHOLD

RECREATION

RECREATION

EXTENDED FAMILY

FRIENDS

SCHOOL

Fill in connections where they exist.
Indicate nature of connections with a descriptive word or by drawing different kinds of lines;
————— for strong, — — — — — for tenuous, ++++++ for stressful.
Draw arrows along lines to signify flow of energy, resources, etc. →→→
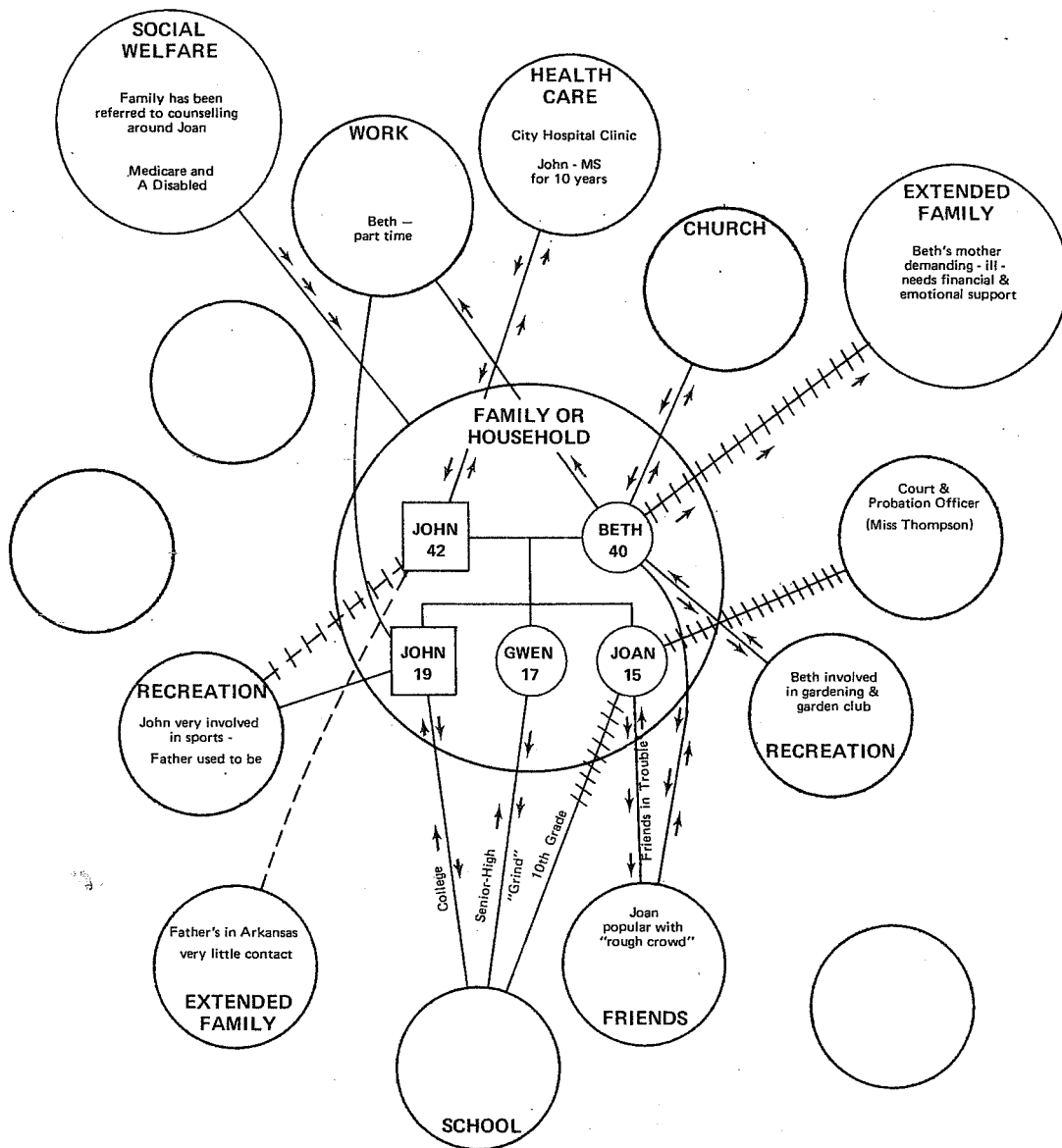Identify significant people and fill in empty circles as needed.

Figure 3

**ECO-MAP**

Name _____

Date _____



Fill in connections where they exist.
Indicate nature of connections with a descriptive word or by drawing different kinds of lines;
——————— for strong, — — — — — — for tenuous, ++++++ for stressful.
Draw arrows along lines to signify flow of energy, resources, etc. →→→
Identify significant people and fill in empty circles as needed.

arrangements as the two tended to sit shoulder-to-shoulder, working together on the joint project.

Sharing the eco-mapping process also led to increased understanding and acceptance of the self on the part of the client. For example, an almost empty eco-map helps the client objectify and share loneliness and isolation. An eco-map full of stressful relationships showing all of the arrows pointing away from the family may lead a father to say, "No wonder I feel drained, everything is going out and nothing is coming in!" The eco-map has been extensively tested with natural parents working toward the return of their placed children through the Temporary Foster Care Project of the Michigan Department of Social Services.[13] Foster care workers noted that parents who were generally angry and self-protective following placement of their children because of abuse or neglect were almost without exception engaged through the use of the map. Workers were aware of a dramatic decrease in defensiveness. The ecological perspective made it clear to parents that the worker was not searching for their inner defects but rather was interested in finding out what it was like to be in the clients' space, to walk in their shoes.

In working with the eco-map, clients have responded in some unanticipated ways. Although it was expected that they would gain a new perception by being able to step outside and look at themselves and their world, the emotional importance of the maps to the clients was a surprise. One mother demonstrated this early in the project by putting the eco-map up on her kitchen wall. In responding to clients' attachments to the maps, workers have regularly arranged to have them photocopied or have used pencil carbon so that clients may have a copy.

*Contracting and intervention*

The eco-map has also been a useful tool in planning and has had considerable impact on

intervention. Because it focuses attention on the client's relationship with his life space, interventions tend to be targeted on the interface, with both worker and client becoming active in initiating changes in the life space. Problematic conditions tend to be characterized as transactional and as a function of the many variables that combine to affect the quality of the individual's or the family's life.

In the Temporary Foster Care Project mentioned above, the worker and client moved quite naturally from the eco-map to a task-oriented contract.[14] They talked together about the changes that would be needed in the eco-map before the family could be reunited. They identified problem areas, resources needed, and potential strengths and planned what actions were needed to bring about change. Further, they established priorities and developed a contract describing the tasks to be undertaken by the worker and by the client.

The uses of the eco-map have multiplied in the hands of creative practitioners. For example, it has been used to portray the past and the future: In a rehabilitation program in a medical setting a social worker used eco-maps with clients to picture their world before their accident or illness; this helped clients to objectify what changes would be made in their lives following hospitalization. It helped them to mourn interests and activities that would have to be relinquished and also to recognize sources of support and gratification that would continue to be available. The mapping encouraged anticipatory planning and preparation for a new life, consideration of appropriate replacements for lost activities, and possible new resources to be tapped, all of which could expand the client's horizons. This technique was not only useful with the patient alone but was very helpful in conjoint work with disabled persons and their families.

Retrospective use of the map tends to highlight changes in a client's life space that

[13]See Gloria Thomas, "Final Report of the Temporary Foster Case Project," mimeograph (Lansing, Mich.: Division of Youth Services, Department of Social Services, 1978).

[14]The work of William Reid and Laura Epstein and their collaborators has been useful in this area. See William Reid and Laura Epstein, *Task Centered Practice* (New York: Columbia University Press, 1977).

could have precipitated current difficulties. When families and individuals seek help, a major question is always "Why has the client sought help now?" A review of the changes that have taken place in the previous months may well bring to light shifts of which the client was quite unaware.

### Recordkeeping and measurements of change

A complete eco-map deposited in a case record is a useful tool to present and record a case situation. Not only does it tend to keep the total situation clear for the worker, it can also serve as a means of communication to others should a staff member have to respond to a client in the absence of the regular worker. A crisis walk-in center where case responsibility is shared by a team to provide extended coverage uses the eco-map this way.

Finally, eco-maps can be used to evaluate outcomes and measure change. For example, a ten-year-old boy on a return visit to a school social worker asked for the map. He had made a new friend and wanted to put him on the map. The mother who had hung the map in the kitchen called her worker after two months of considerable activity on both their parts. She wanted to come into the office to plot another map so that she and the worker could look together at the changes. A comparison of eco-maps done at outset and at termination can help clients and workers measure the changes that have taken place. As such the maps can become an important device in maintaining accountability.

## The genogram

Families not only exist in space but also through time, and thus a second kind of simulation is needed to picture the development of this powerful relationship system. Not only is each individual immersed in the complex here-and-now life space, but each individual is also a part of a family saga, in an infinitely complicated human system which has developed over many generations and has transmitted powerful commands, role assignments, events, and patterns of living and relating down through the years. Each individual and each family is deeply implicated in this intergenerational family history.

Just as the eco-map can begin to portray and objectify the family in space, so can the genogram picture the family system through time, enabling an individual to step out of the system, examine it, and begin to gain a greater understanding of complex family dynamics as they have developed and as they affect the current situation.

### Instructions for drawing a genogram

A genogram is simply a family tree that includes more social data. It is a map of three, four, or more generations of a family which records genealogical relationships, major family events, occupations, losses, family migrations and dispersal, identifications and role assignments, and information about alignments and communication patterns. Again, all that is needed is paper and pencil. For most genograms, a rather large piece of paper is usually required. It is important for the genogram to be uncrowded and clear to make visual examination possible.

The skeleton of the genogram tends to follow the conventions of genetic and genealogical charts. As in the eco-map, a male is indicated by a square, a female by a circle, and if the sex of a person is unknown by a triangle. The latter symbol tends to be used, for example, when the client says, "I think there were seven children in my grandfather's family but I have no idea whether they were males or females." Or, "My mother lost a full-term baby five years before I was born, but I don't know what sex it was."

A marital pair is indicated by a line drawn from a square to a circle; it is useful to add the marital date, on the line. A married couple with offspring is shown as illustrated in figure 4. Offspring are generally entered ac-
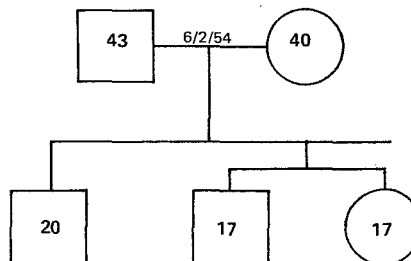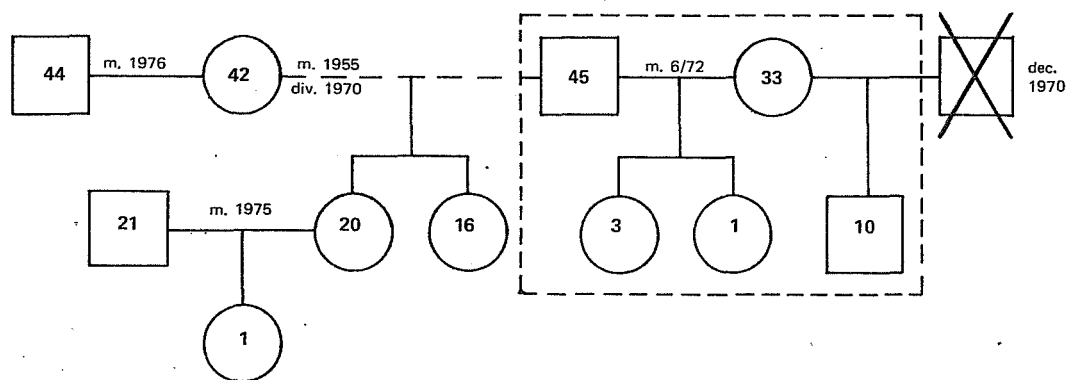
Figure 4

Figure 5



cording to age, starting with the oldest on the left. The family diagramed in figure 4 has an older son followed by a set of twins. A divorce is generally portrayed by a dotted line, and again, it is useful to include dates. (See figure 5.) A family member no longer living is generally indicated by drawing an "X" through the figure and giving the year of death. Thus, a complex, but not untypical, reconstituted family may be drawn as shown in figure 5.

It is useful to draw a dotted line around the family members who compose the household. Incidentally, such a family chart enables the worker to grasp who is who quickly in complicated reconstituted families.

With these basic building blocks, expanded horizontally to depict the contemporary generation of siblings and cousins and vertically to chart the generations through time, it is possible to chart any family, given sufficient paper, patience, and information. (See figure 6, page 474.) As one charts the skeletal structure of the family, it is also important to fill this out with the rich and varied data which portray the saga of the particular family being studied.
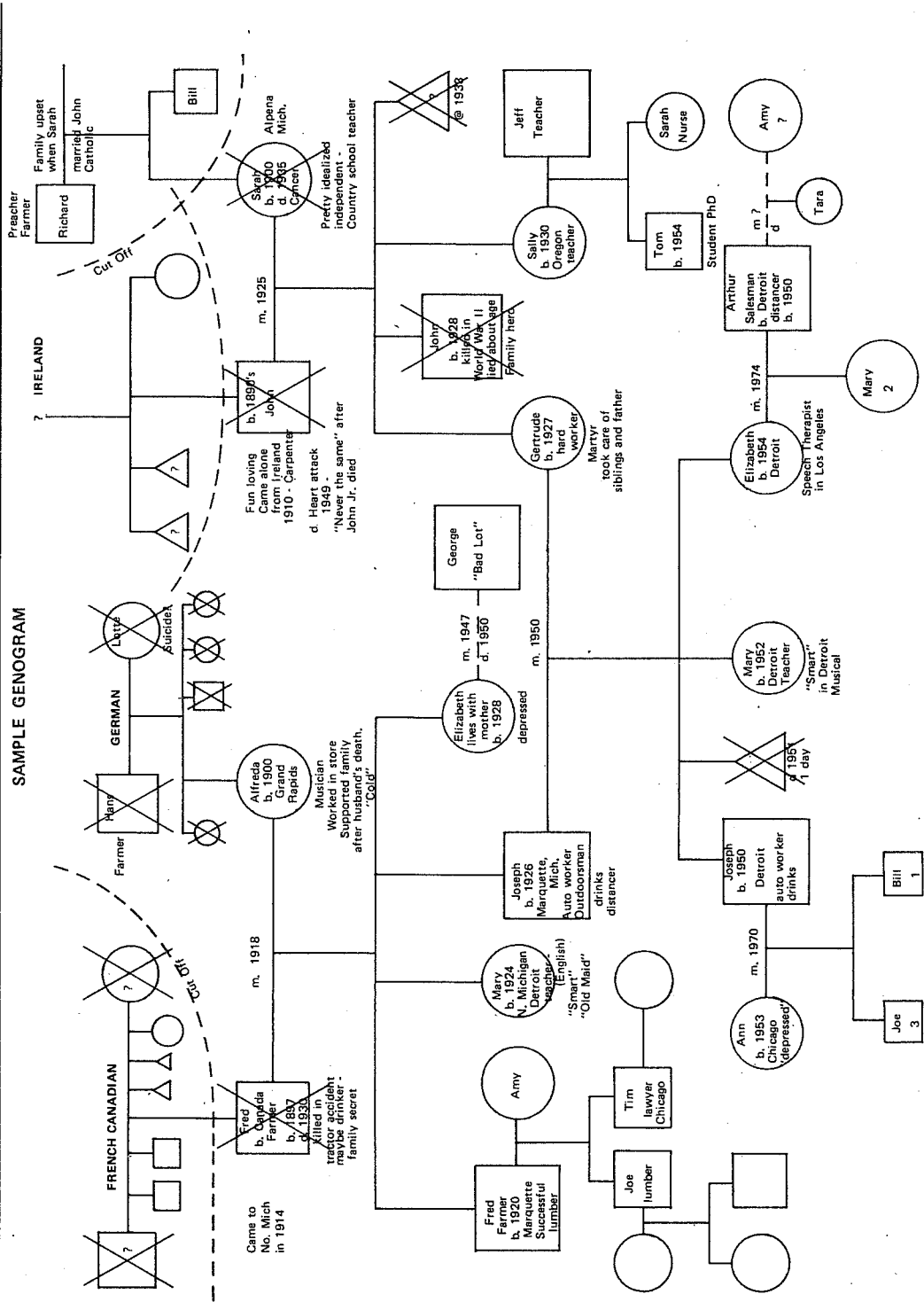
Many different kinds of information may be gathered. First and middle given names identify family members, indicate naming patterns, and bring identifications to the surface. In understanding where a client may fit into the family and what expectations and displacements may have affected the sense of self, a first step is to discover who, if anyone, the client was named after. Once this person

is identified, it is important to discover what he or she was like, what roles he or she carried, and, perhaps most salient, what the nature of the relationship was between the client's parents and this relative.

Sometimes meanings and connections are not obvious and emerge only through careful exploration. For example, in charting a genogram with a young man who was struggling with identity issues and a complex tie with his mother, naming patterns were being discussed. The client's name was Tony; his American soldier father had met his mother abroad and, immediately after their marriage, the couple had moved to the United States. The move and subsequent political events resulted in the wife's being completely cut off from her family. The client, their firstborn child, was born a year after the marriage. When asked whom he was named after, he replied, "I wasn't named after anyone in the family—I was named after St. Anthony—the patron of lost objects." The symbolic meaning of Anthony's name to his mother became dramatically apparent: Tony was named after everyone in his mother's family!

Dates of birth and dates of death record when members joined the family, their longevity, and family losses. Birth dates indicate the age of family members when important events occurred. They indicate how early or late in a marriage a child came and the age of the parents at the birth. In a sense, birth, marriage, and death dates mark the movement of the family through time. In

Figure 6



SAMPLE GENOGRAM

working with a client's genogram, it is helpful to discover all of the events that took place around his birth. Major losses experienced in the family around that time can be of particular significance. The tendency to use newborn family members as replacements for lost members seems almost universal and has even been institutionalized in some culturally proscribed naming patterns.

Birth dates also identify each individual's place in the sibship. This brings to the surface such potential roles as "older responsible," "firstborn son," or "baby." It is also relevant to discover who else in the family has occupied the same sibling position. Sibling position can be a powerful source of intergenerational identifications.

Place of birth and current place of residence mark the movement of the family through space. Such information charts the family's patterns of dispersal, bringing into focus major immigrations or migrations and periods of loss, change, and upheaval. Such information may also point to the fact that generations of a family have stayed within a fairly small radius except, perhaps, for a particular individual in each generation who moves away. If a client happens to be this generation's "wanderer," that could be a valuable piece of information.

Picturing the family's movement through space may communicate a good deal about family boundaries and norms concerning mobility. Is this a family that holds on or lets go? Further, the impact of world history on families often becomes evident as responses to war, persecution, westward migration, depression, industrialization, and even climatic or ecological changes are often seen in relocations.

Occupations of family members acquaint one with the interests and talents, the successes and failures, and the varied socioeconomic statuses that are found in most families. Occupational patterns may also point to identifications and can often portray family proscriptions and expectations.

Finally, facts about members' health and causes of death provide overall family health history and also may say something about the way clients see their own future. These predictions may well have some power of self-fulfillment.

This demographic data can take a worker a long way toward understanding the family system. However, gathering associations about family members can add to the richness of the portrayal. One can ask, "What word or two or what picture comes to mind when you think about this person?" These associations tend to tap another level of information about the family as the myths, role assignments, characterizations, or caricatures of family members come into the client's mind. Characterizations such as lazy, bossy, martyr, beautiful, caretaker, are likely to be offered, bringing forth reminiscences or stories that have become a part of the family biography and mythology.

Finally, certain aspects of the family's communication structure can be indicated. Parts of the family that have been cut off become quite obvious because the client generally has very little information about them. Cut-offs can be portrayed by drawing a fence where the cut-off exists whereas tight communication bonds can be demonstrated by drawing a line around portions of the family that form close linkages. It helps to keep things clear if a colored pencil is used to indicate communication linkages and cut-offs so as not to confuse these with the basic genealogical structure. Cut-offs are of particular significance as they are usually indicative of conflict, loss, and family secrets. Cut-offs generally develop to protect family members from pain and conflict, but they are usually indicators of unfinished business and may leave the person out of touch with important aspects of family and perhaps of self.

It is often found that a client doing a genogram will have considerable information about one section of the family, for example, the maternal grandmother's family, and almost none about other relatives. This uneven distribution of knowledge is significant in assessing communication and relationship patterns.

*Uses of the genogram*

The genogram is a classic tool for gathering and utilizing family data in any family oriented practice. No matter what the setting, if the individual is to be understood in the context of the total family system, the geno-

gram can portray that system and move worker and client toward an understanding of the impact of that system and its relevance to the issues at hand. In counseling regarding marital and parent-child conflict, the routes or prototypes of these conflicts may well emerge. The use of the genogram in conjoint marital counseling can increase empathy between the marital pair and help each to identify the old family issues that have been displaced in the marriage.

In working with the aging, the genogram is an invaluable tool in life review. Elderly people can reminisce and organize memories but also, in working with the genogram, can experience themselves as a central link between the past and the future. This process expresses continuity and the generative process and illustrates that, although the individual's life span may be brief, the family's life reaches back into the past and on into the future. One residence for the aging encourages staff to meet with family members to teach them how to build genograms and help their aged relatives reconnect with their family saga. This sharing of the genogram has been an important experience for both the aged person and the younger family members.

Genograms have also been used in child welfare agencies. As part of an adoptive home study, for example, the genogram may clarify why a couple experiences their family as incomplete and also brings to the surface considerations and plans concerning who an adopted child is intended to be. Charting a genogram with natural parents insures that, should family ties be legally severed, there will be a full family history available to the child in the future. One child care agency that regularly makes use of the genogram in adoption practice has found that often the experience of doing the genogram has been very meaningful to natural parents who see the process as giving something of themselves to the child. The issue of open adoption has yet to be settled but, in the interim, the genogram can gather and keep available the kind of information adopted children often want.

In a hospital setting, a genogram can be used to gather an expanded health history. Such a history provides information about patterns of illness and health in a family: for instance, a paternal grandmother may have died of heart disease at thirty-eight while the maternal grandmother lived an active life to age ninety-four. Further, patterns of illness as well as attitudes toward illness and ill people may appear.

## Summary

The eco-map and the genogram are paper and pencil simulations that can organize and objectify a tremendous amount of data about the family system in space and through time. Such objectivity and visual portrayal can lead to new insights and to altered perceptions, of the complexity of human systems. Such altered perceptions may point to new ways of bringing about change, ways that relate to the complexity of human existence.