

SOCIOMETRY AND SOCIATRY: THEORY - THERAPY

by

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Introduction

"A truly therapeutic procedure cannot have less an objective than the whole of mankind." (Moreno, 1953,3).

Sociometry is a synthesis of the Latin and Greek etymology, "socius" which means "collective" and "social" while "metrum" means "measure". Therefore, sociometry is a form of social measurement. Bain (1943, 212) suggests that "Sociometry is and probably will remain a generic term to describe all measurements of societal and interpersonal data." Moreno classified sociometry as "descriptive" or "dynamic". The former term connoting quantifiable facts and the latter suggesting "the effect of some parts upon others" (Moreno, 1953, 52). Growth and evolution have affected the identity of sociometry. It has changed from a mathematically quantifiable science to a methodology which is both a humanistic and existential interpersonal therapy. Initially, sociometry was separately referred to as an esoteric method for selecting combat flying partners during World War II (Zeleny, 1947, 424-431) and air crews in survival training (Levi, Torrance, Pletts, 1955) to the study of group structure, evaluating group changes, developing social relations, and for studying personality characteristics as they relate to status in groups (Northway, 1947, 6). Today, sociometry is synonymous with group process and/or group psychotherapy.

Sociometry is a systems theory and a dynamic approach in which the

parts determine the whole and the whole determines the parts. The "whole" or major collective of people subdivides into two discrete but inter-dependent units: the sociometric network and the social atom. The "part" or individual members are understood via their spontaneity, creativity, and cultural conserves. The sociometric method may affect changes at the individual level, the relationship (microsociological) level or the systemic (macrosociological) level.

Nature of Man*

Man according to Moreno can only be viewed and understood within his/her total context. Since man is dynamic rather than static in nature, he can best be understood in a context of actional criteria that are constantly changing.

Little did Charles Darwin guess that his volumes of The Origin of Species which he originally published in 1859 would be used by J.L. Moreno seventy-five years later to make a salient point to the United States Government about human inter-relations (Moreno, 1934). Borrowing from Darwin's biological term "Natural Selection" or Herbert Spencer's term, "Survival of the Fittest" (from whom Darwin borrowed) (Darwin, 1859,77), Moreno extrapolated a parallel theory about the future of mankind. In his book, Who Shall Survive?, Moreno poses a challenge to man, not with regard to an hostile natural environment as Darwin did, but from a context of an expanding and hostile urbanizing technological ambience. He warned

* "Man" in this paper is used in its literary generic context to connote both males and females.

his readers that "robots" can change man's nature such that man may become overly dependent upon material comfort and mechanization; thereby becoming a slave to the machine. If human beings do not become aware of this potential hazard we will be transformed into a species of conserved "rolebots". Those who adapt best will be those who retain their autonomy and human integrity through their spontaneity. According to Moreno, man's nature is mediated by his spontaneity and creativity. When the focus is toward the development of our inner resources of spontaneity and creativity, humankind stands to gain renewed sociometric cohesion that will lead to greater personal efficiency, effectiveness, heightened intimacies between people, and an expanding world of love.

Sociometric Network Development

Within all formal social collectives there exists psychological currents which informally create bonds between its members. Most organizations possess a formal protocol of line and staff relationships. It is generally pyramidal in structure; i.e., at the top is the chief and at the base of the pyramid are the "workers". In between are echelons of top and middle management and the seniority hierarchy of workers. There exists a formal chain of command of superordinates and subordinates dictating who speaks to whom and about what Because there is a necessity to talk about other issues and at differing levels of intimacy, lines or networks form that informally engender a means to engage relationships, frequently not specified by the formal organizational structure. These networks of psychological currents are sociometric networks. They are characterized as psychological currents principally because they are usually formed along

affective, i.e., emotional lines.

Whenever people aggregate they almost always begin a process of searching for someone with whom they would like to connect. In this partly conscious and unconscious quest, some people are selected as those with whom we would like to link, others are avoided or rejected, while others are deemed indifferent. Some people reciprocate our choices; others avert our eye contact; while the remainder neither choose nor reject. Some individuals receive and send a few choices; some send or receive many choices; again, a remainder may send and receive none at all.

So subtle is the process of developing new relationships, that often we are entirely unaware of the criteria we're using to make our choices and/or rejections. For example, we may be entering a situation where we know virtually no one. Yet within us is the voice that is saying, "With whom in this sea of strangers will I feel most safe?" "With whom in this group do I feel warmth?" "With whom in this gathering do I feel most threatened?" Each criterion catalyzes either a movement toward someone or a movement away.

Sometimes the criteria are not covert at all. For example a gym teacher may ask two captains to select two teams to play soccer. Imagine that each time the gym teacher begins a soccer game you are chosen last by one of the captains. You know that you were not chosen for your soccer acumen, rather you were chosen de facto - i.e., because everyone was required to play. Therefore, everyone was preordained to participate - like it or not! You also know that you're not feeling especially good about yourself in relationship to physical education class. However, like yourself or not, you must attend and participate. It is a fairly accurate prediction that

you'll do this: You will perhaps begin arriving at class late, especially after both teams are chosen. You might "forget" your gym shoes, or someone might have stolen them! Or you might report that you've been injured the hour before and can't take the chance of adding insult to injury. Then again, you might be arbitrarily assigned to a team and forced to play at which point you discover a peculiar penchant for becoming injured or nauseated whereupon you vomit conspicuously near your coach!

Your alienation at the onset of class is marked by your apparent invisibility. If each team had a restricted team roster of eleven members and you were number twenty-three, your alienation marks you in sociometric terminology, an "Isolate". You aren't choosing to play and no one really is competing for your profound skills. Isolation is tantamount to lon^eliness and if allowed to protract over a significant period of time, your self-confidence and self-esteem will wane. If you are permitted to remain isolated your behavior will become predictably dysfunctional and even exacerbate into deviant and disruptive symptomology. Another factor which might contribute to your pain once this pattern has been established is that your image (as a loser) may become generalized to all physical education (and/or academic classes) activities.

Changing the situation slightly, imagine yourself walking into physical education class and upon picking the two soccer teams each captain looks at you standing there all alone and says, "Oh no!" "We don't want you to play. You're a jinx!" Now the subtlety of ignoring you has been replaced by unkind candid invectives. Your sociometric position is called "Rejectee".

Beyond the isolates and rejectees in classrooms, hospital units, prisons, families and working environments, there are those individuals

who are highly chosen and act as magnets toward whom others gravitate. Called sociometric leaders and sociometric stars, these individuals possess several characteristics that engender their importance to others: 1) they have the highest levels of spontaneity; 2) they embody those norms most typical of their sociometric networks; 3) their ability to sense which people will select or gravitate to them is accurate; 4) the stars and leaders have a propensity to reciprocate with those who choose linkage with them; 5) they are usually the individuals who receive the highest number of positive attractions from others in the network; and 6) they tend to feel good about themselves and behave authentically and with concern about others.

Sociometric stars differ from sociometric leaders primarily along the dimension of criteria that constitute their *raison d'etre*. Stars usually emerge in a social system because of some characteristic that they value exposing and employing in the system plus the avowed need by the system to encourage the star's particular characteristic. Generally, in "mature" sociometric networks, i.e., a network with high cohesion and one that encourages differentiation among its members, there is an avenue for every person to emerge as a star according to the group's process and collective needs.

Leaders differ from stars in two central ways. Rather than becoming a magnet along one dimension or variable, leaders exhibit many vertical levels of sensitivity and many horizontal levels of spontaneity. For example, leaders may assume many roles within the collective all of which are seen as "the best" for the collective (horizontal). In addition the leader may be able to reach each individual at that person's level of

emotional and intellectual functioning. Leaders are able to fluctuate from extreme emotional intensity and intimacy to task related roles (vertical). Sociometric leaders are the most informally influential people in all collectives. Their power to persuade often exceeds that of the nominal leader (formal executive) of an organization.

Leaders, as well as stars, emerge by a reciprocal process of fitting into what the group requires or wants and by being validated by the collective. The collective determines the criteria by which stars and leaders emerge. Simultaneously stars and leaders cooperatively accept those criteria and use them as parameters for their behavior.

There are other variables operating in network development. Certain psychological currents are set into motion by certain emotional states and attitudes. Innocuous information that exists in the form of gossip, news, ideas and other factual matter which will not hurt the person reporting will pass through the network with relative ease and without resistance. However, when the information is secretive and parochial to limited subsets within the network, it will not filter through the network. The larger the network the more difficult it is to limit information. Generally, networks have central criteria that act as guidelines for the community. Within the central sociometric network, there exists peripheral networks based on sub-criteria, e.g., sexual interests, paired task interests, privately shared experiences, and activities considered subversive in the general community. Important to sociometric network understanding is: the larger the network, the larger the number of "dead links" (Moreno, 1953, 449) - that is, the number of emotional messages that are sent without being picked up by the intended receiver. Such break downs in communication are common

in larger communities but relatively negligible in small networks. Most of us when we were children played the game, "Telephone". Sitting in a circle, one person originated a message that is whispered to the person next to him/her, who in turn passed it on to the next person and so on around the circle. The final person usually amused the participating members by sharing the final message which contained elements of the original message plus some gross distortions. The larger the group, the greater the distortions.

Law of Social Gravitation

Group development usually follows consistent laws based on the principles of sociometry. For example, when strangers converge as in a classroom, a meeting, a party, or a bar, predictable patterns of behavior occur. The first principle is the Law of Social Gravitation. It states that most groups develop from simple relationship structures to more complex structures (sociogenetic law).

According to Moreno group formation begins with the Law of Social Gravitation. Individuals aggregate and frequently peruse the environment of other people and in moments make choices to go toward or away from other individuals. Calling upon past experiences, prototypes and stereotypes, attractions, repulsions, or neutral choices are acted upon. Since the necessary exigencies for spontaneity are not operational at the time of a group's status nascendi (the initial birth state of the group), the new arrivals are anxious and unable to confidently respond to the actual attributes of the others. Therefore, most people respond to what seems historically reliable, rather than existentially available. Familiar body

language, clothes, eye contact, facial expressions, etc., form the initial cues to which the relationships are initiated. Meeting one-to-one, each person follows normative rituals to transcend their anxious beginnings. Upon eavesdropping, one hears the following:

Joel: "Hi! My name's Joel." (extends hand)
Dan: "Hi! Mine's Dan." (shakes hands)
Joel: "Where are you from, Dan?"
Dan: "Denver. Where are you from, Joel?"
Joel: "Littleton. What do you do?"
Dan: "I'm a student at D.U."
Joel: "Hey, I hear D.U.'s a good school, Dan."
Dan: "Yeh, it's okay. What do you do, Joel?"
Joel: "I work at Southwest Agency as a technician."
Dan: "Do you know Jim Jones?"
Joel: "Sure, he works with me ..."

And so it continues; each testing the perception they had of the other and testing the potential sociometric bonding. Until the cautious rituals evolve sufficiently to determine whether the relationship will be pursued or extinguished this process will prevail and supercede any other tasks. It is a wise facilitator, teacher, group therapist, foreman or parent who respectfully encourages informal network time. Once initial contacts are successfully made, other linkages are melded into the original dyads. Triads, quadrads, etc., form and chains of social structures emerge. As the chains become more complex, the social criteria for each set of relationships also becomes more complex. Sameness of interest and expression expands into differentiation. One process, the process of transmission and communication draws the members together; the other, the process of differentiation draws

the group apart. These alternating rhythms of shrinkage and expansion suggest the presence of a Law of Social Gravitation (Moreno, 1953, 450-451).

Sociodynamic Effect - Sociodynamic Law

Another process that occurs with regularity as groups develop is called the Sociodynamic Effect: the unequal distribution of emotional volume within a group which predisposes the sociometrically rich (stars and leaders) to become richer and the sociometrically poor (isolates and near isolates) to become poorer. Stated another way, the addition of new members to a group does not equalize the distribution of choices so the people who received few attractions from group members receive a more proportionate ratio of choices. Instead, those already receiving a high volume of choices receive even more.

The Sociodynamic Law states that sociometric networks are in continuous dynamic flux. As members are permitted to individuate and as group cohesion increases, the nature of the impact from the group to the individuals and from the individuals to the group gains momentum. Change becomes the norm. Impermanence is tantamount to growth. Individuals are encouraged to share their spontaneity and creativity as gifts of the group and gifts to the group. The process of being in an ambience of spontaneity nurtures creativity and enables the members to individually and collectively feel powerful and experience high self esteem. Members do not feel "locked" into roles or slots within the sociometric network. Positions are mobile and freedom exercised by the process.

Social Atom

As the second major subdivision of Sociometry the concept of the

Social Atom is an integral structure within the Sociometric Network. The two work interdependently. Social atom was introduced by Moreno to mean the " 'smallest' unit of social relationships" (Moreno, 1960, 52); it incorporates an emotionally based relationship and is existential.* Social atoms continue to expand as we grow and provide a base of continuity within our world (Moreno, 1960, 53). People elect to develop social atom relationships in proportion to their spiritual, physical, social, emotional and intellectual needs. Because social atoms are usually reciprocated, both individuals are enhanced by the social atom. That is to say, for John to be able to spontaneously express his inner feelings of sexualness and love, he develops a relationship with Susan. She, too, knows that without an outlet for her feelings of love, she tends to shut down, emotionally. Since a basic tenet of intrapersonal dynamics suggests that the expressibility of one feeling influences the expression of other feelings. If one's love is shut down, one's joy, anger, sadness and sexualness will also be affected. Therefore, the theory underlying the social atom states that relationships are sought that permit emotional disclosure. One person becomes a catalyst for another's spontaneity. The more available we are to our emotions, the more we need and want a relationship as a context to express ourselves. John also has an intimate relationship with Jack and Judy with whom he has exclusive license to express his anger. With Donna, he expresses his sadness. Again, he may play racquet ball with Don and

*This author defines social atom as the smallest number of people an individual requires in order to be in "sociostasis" - social equilibrium.

totally enjoy himself. John may in this example, have a social atom of five. For him to be in sociostasis he will need to maintain a social atom of at least five people. Should his social atom fall below five people without one of the remaining members supplementing the function of the one that terminated, John will be moving into sociometric crisis, a state of decreasing spontaneity and increasing anxiety.

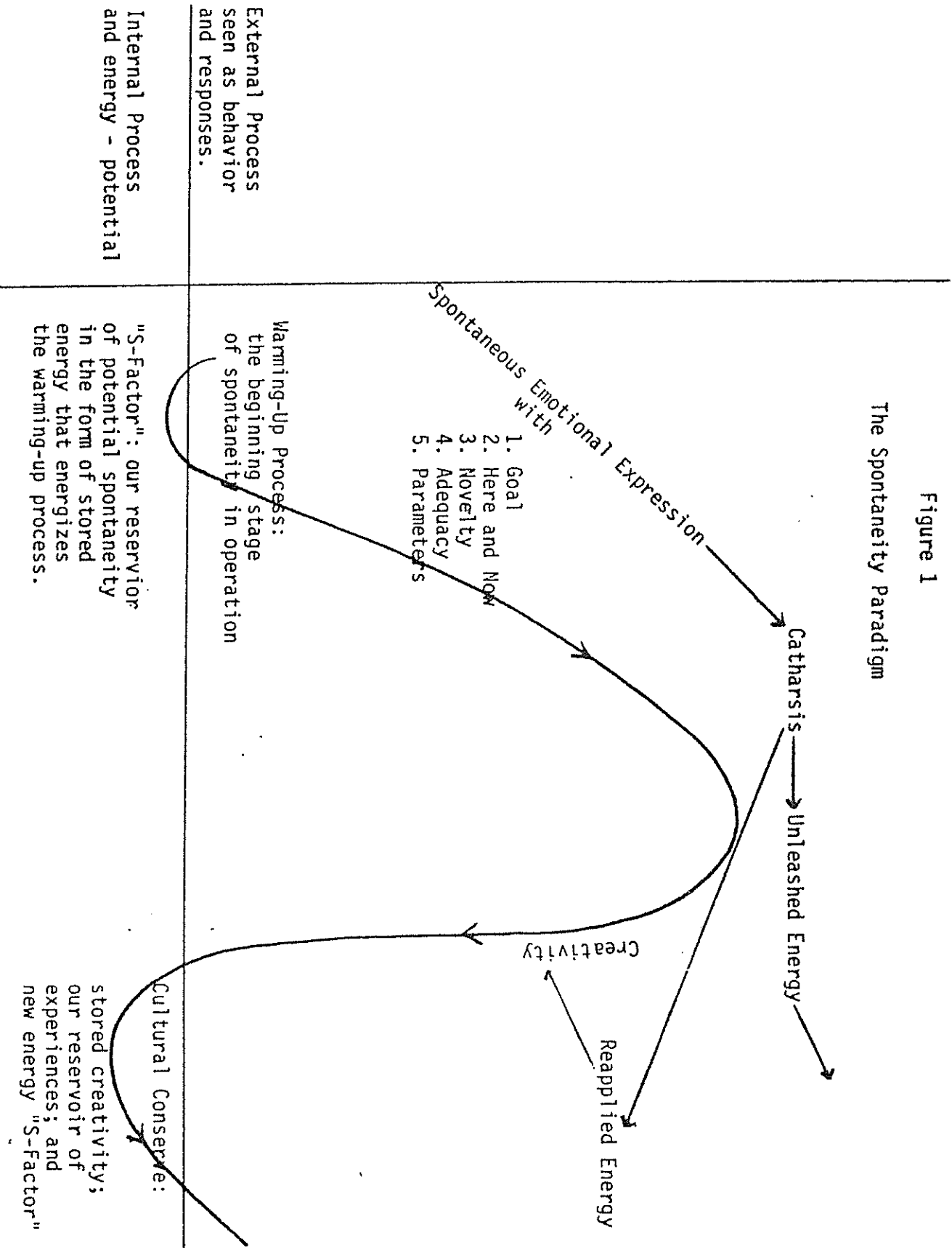
Imagine the situation of an elderly woman whose husband has retired and shortly after his retirement he develops cancer. Her social avenues have become restricted due to decreasing mobility, and the eventuating deaths of her peers and her husband. Attending religious services has become infrequent, social invitations have by necessity been deleted from her life. Added to her already attenuating relationships, devoting herself to her dying husband has cost her a great toll. Her social atom size has dwindled to one - her husband. Within eight weeks, he succumbs to his cancer; her social atom has become zero. In only a few short weeks, she, too, died. This phenomenon is predictable. Social atom death precedes physical death. Although dramatic, the same phenomenon may occur in a psychological sense. Failure, social ostracism, empty relationships, geographic relocations, lost jobs, and divorce are among other strategic losses that render individuals vulnerable and also precipitate anxiety and at it's empty extreme, death. Hollander (1974) describes the affect of social atom death on incarcerated felons convicted of drug related abuses.

Spontaneity - Creativity - Cultural Conserve

The following diagram depicts the relationship between spontaneity - creativity - cultural conserve (Hollander, 1978, 235).

Figure 1

The Spontaneity Paradigm



Spontaneity derives from the Latin, "sponte" meaning "free will". It exists in two forms, that which is an internal process (S-factor) and the external manifestation of feeling for and toward another person (Moreno 1970, 81). Spontaneity can be experienced as energy directed toward another person or their energy directed back. It can also be inferred from empirical behavior (Moreno, 1970, 81). It is inferred from the process by which a person warms up to engage in an act.

Every human act according to Moreno, is preceded by a warm up to that act, e.g., "eating, walking, sleeping, sexual intercourse, social communication, creativity, religious self realization and asceticism" (Moreno, 1953, 42). Each individual warms up to an act uniquely. The more complete the warm up, the more complete the act. Incomplete warm ups produce incomplete acts. Particular attention needs to be given to those processes which one person employs with another that may interrupt the warm up of the other and cut off his spontaneity. It is one of the most common phenomena between people which produces frustration and anxiety. Some examples are - direct interruptions during conversation, a child who pursues a parent during intense concentration, commercials during a television episode, being cut off while driving in traffic, finishing another's sentences, to name only a few.

"Spontaneity operates in the present, now and here; it propels the individual towards an adequate response to a new situation or a new response to an old situation." (Moreno, 1953, 42). Spontaneity is the catalyzer for creativity in this system.

Spontaneity catalyzes creativity. Man, the creator is in possession of

his power. He meets surprise with adequacy and novelty seeing each experience as a part of the process of what came before and what will come next. His creativity is both a production and a product. Each creative moment becomes a moment in time which can be stored and recorded. Moreno states that as creators of ourselves and co-creators of our culture and universe, we expand our culture of roles, values, beliefs, language, music, and art by preserving them. Books are the most abundant cultural conserves. Preserved within their bindings are the "canned" moments of past creativity. From these preserved records new pieces are extracted and synthesized with other pieces of cultural conserves. In a moment of spontaneity, creativity is kindled.

Relationships are co-creations built on the cultural conserves of stereotypes, prototypes, and roles. Sociometric networks are examples of cultural conserves that have formed; they generate cohesion that influences greater openness and spontaneity; and these networks consummate in the cycle of creativity. An endless cycle, the process of man's ontology is spontaneity, the warming up process, creativity, and the cultural conserve. Man's survival is a function of his spontaneity.

Theory of Roles

Unique to Moreno's theories is his paradigm of role development. Seeing man as always evolving Moreno describes three role structures which constitute his development. First, there are those roles that exist shortly after birth. Prelingual in nature, the infant expresses himself through sounds, gestures, and physiological actions. Because the primary activities of the infant are bodily oriented, Moreno calls these early roles Psychosomatic

Roles. It is through the child's actions that it's needs and satisfactions are inferred. Later, the child begins to imitate and test the environment. Pretending to be like another, the child role plays it's parents, siblings, pets, neighbors, etc., in an attempt to expand and discover its resources. Feeling into each role, expressing its spontaneity and interacting with the environment, the second role structure evolves. Moreno describes this as the Psychodramatic (psychological) Roles. During this period of development, the child develops emotionally; dreams; fantasizes; and begins to take on roles. It laughs, cries, fights, rebels, and begins to conserve certain aspects of expression. The child moves from role playing (spontaneity) to role taking (cultural conserves) in an experimental learning attempt. After stressing the physiological and psychological role development, Moreno sees the evolution of Social Roles - a combination of collective and individually prescribed patterns of interaction. The child moves from the psychodramatic role playing of "a mother"; "a father"; "an eagle"; "a clown"; "a monster"; to the social roles of "the mother"; "the father"; "the teacher"; etc.

Throughout life each of these role structures is employed. Body language, emotions, social constructs are integrated and alternating periods of role playing, role taking, and role creating are performed. It is not until all three role structures are developed is there a sense of self. "Role emergence is prior to the emergence of the self. Roles do not emerge from the self; but the self may emerge from roles." (Moreno, 1953, 76).

Sociatry

Acknowledging the parochialism of psychology, sociology, and psychiatry, Moreno saw the need to secularize and integrate all three human sciences.

Coining the term, Sociatry, Moreno offered an alternative. It meant "the science of social healing" (Moreno, 1960, 127). "Sociatry is remedial sociometry" (Moreno, 1960, 119). Reminding his readers that psychiatry relates to mental diseases of the individual, sociatry attempts to treat the pathology of normal society of inter-related individuals and groups. Sociatry is based on two hypotheses: 1) "The whole of human society develops in accord with definite laws"; 2) "A truly therapeutic procedure cannot have less an objective than the whole of mankind." (Moreno, 1960, 119)

Counseling or administering sociatric therapy employs spontaneity tests, situational tests, role playing tests, and sociometric tests (sociograms). The objective of each test is a bit different from the others. For example, the spontaneity test is interested in the amount of spontaneity of the actors. The situational test focuses on the patterns that develop in situations. The role playing test measures the range of roles and their structure. The sociometric test measures the sociometric network and social atom. In addition the sociogram reveals the cohesion of the group and the amount of "tele"* within the structure.

Figures 2, 3, 4, and 5 connote varying sociometric situations possessing different problems. Figure 2 displays a collective where the leaders and their followers have either been polarized along some set of criteria or have developmentally formed two co-existing criteria that bifurcate the collective. Sociometric cleavage within a group indicates conflicting

*Tele is the smallest unit of relationship. It is a feeling into the actual attributes of the other and is distinguished from transference and empathy. Generally, "tele" is reciprocal and is the cement which holds a group together. Finally, "tele" is a function of spontaneity.

interests and power blocks which will disrupt the progress of each subsystem. Sociatric intervention requires the identification of a criterion other than the ones operating to divide the collective. An alternative has the potential of uniting the collective along different lines. Another operation which a facilitating sociometrist might employ is to bring the two sociometric stars together to work out a solution for unity.

Figure 3 represents one central person toward whom the rest depend. Depending is high, reciprocity is non-existent. Every member surrounding the star is a near-isolate and can be anticipated to be feeling low spontaneity; low creativity; poor performance will probably be displayed; and anxiety will be running high. The star will probably feel very responsible for the others and overwhelmed by their pressure on him. Intervention requires the administration of a follow-up sociogram which needs to include several criteria for response thereby enabling a greater probability of choices for each member.

Figure 4 depicts a network with relatively high cohesion and five isolates. Productivity will predictably be impeded due to the energy drain caused by the isolates. Their behavior will be depressed and/or they may engender disruptive behavior as a manifestation of their pain and powerlessness. Sociatric intervention requires the linkage of the star and/or those people directly linked to the star to pair up or bond with the isolated members. As in the former examples, another alternative is to utilize a different criterion around which new choices may be generated.

Figure 5 shows an overload of rejectees. With the cohesion relatively low and the negative energy distributed throughout, in-fighting, clique

development, and scape goating is predictable. Remediation requires an expectation of potential rage. Therefore, strong autocratic (and supportive) leadership is necessary. The spontaneity will be low; parameters will be unclear; and the sociogenetic principles need to be employed, i.e., emotional bonding in dyads and self disclosure in small doses that encourage the development of support structures within the collective. As cohesion develops, the autocratic leadership posture may be relaxed and a more democratic style reemployed. As the cohesion increases the individual members will relax, become more spontaneous and creative, and feel their self esteem rise. As self esteem is rekindled, role creativity will expand such that individual and collective needs are met.

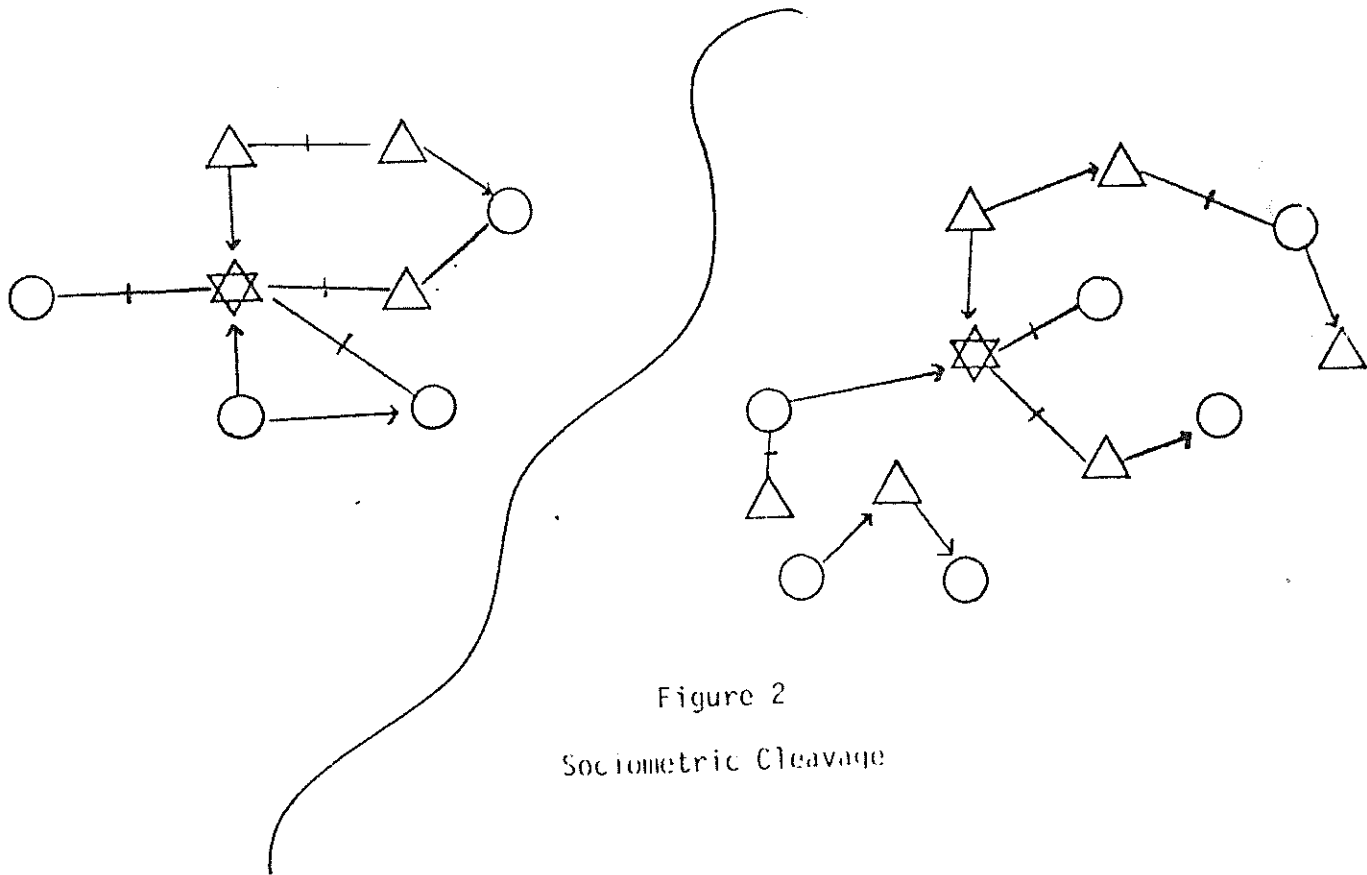


Figure 2
Sociometric Cleavage

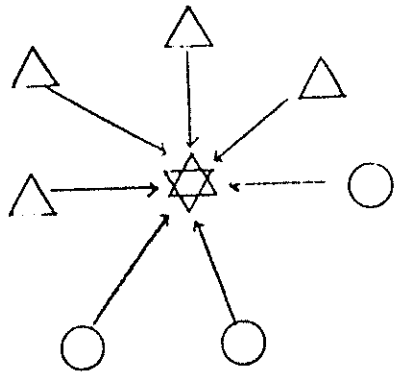


Figure 3
Leader Centered System

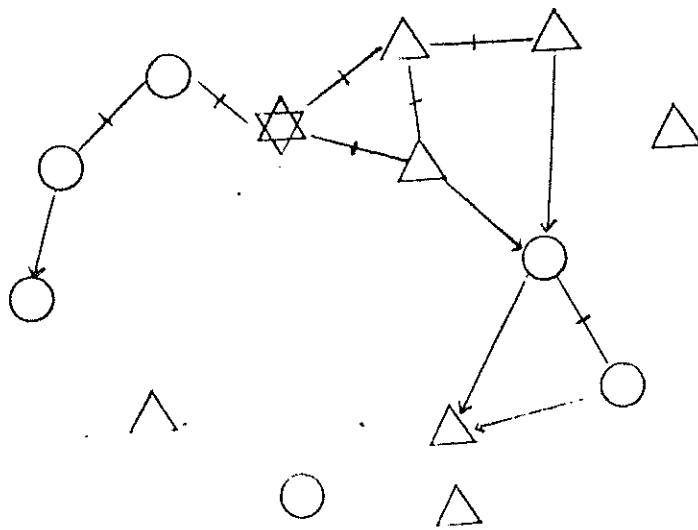


Figure 4
Culture with Isolates

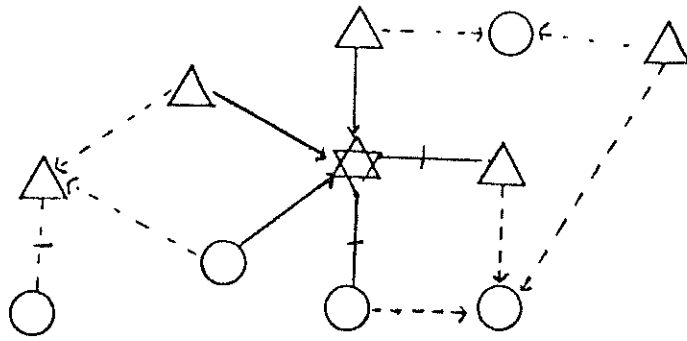


Figure 5
Rejecting System

In conclusion, the theory and practice of sociometry (and sociatry) subsumes interdependence: interdependence between individual with individual and individual with group. Each affects the other. The intrapersonal decompensations are reflected in the many symptomatology ubiquitous among society: drug abuse, alcoholism, mental illness, physical exacerbations, crime, delinquency, and accident proneness. These symptoms are seen as cries for help. They emanate from individuals who have lost their social atoms; have become isolated or rejected in a central collective or in several of their collectives and are left without recourse. Intervention is interpersonal and requires a socioanalysis of their sociometric crisis and an awareness that their spontaneity is diminished and needs renewal. Once integration is started, spontaneity returns and/or as the spontaneity is expressed, reentry into networks and social atoms becomes highly probable.

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