

SOCIOMETRY AND THE CULTURAL ORDER

J. L. MORENO

Sociometric Institute, New York City

INTRODUCTION*

I have had the good fortune to develop three ideas. The first idea, a study of the godhead,¹ has remained cryptic and misapprehended. The second, a study of man called psychodrama, has aroused some hope that man can train his spontaneity to overcome many of his shortcomings. My third idea, the study of society called sociometry, has given the greatest promise that a measure can be developed for a deeper understanding of society and a key to the treatment of its ills. Many of my friends consider these three ideas one apart from the other. In my own mind, however, all the three ideas are of one piece. One has developed out of the other. The first idea initiates a cannon of the universe, the second a cannon of the individual, the third a cannon of human society. They give three examples of our cultural order, religion, drama and society. They present a set of opposite frameworks based on spontaneity, spontaneity training and sociometry, a trilogy upon which, as I envisaged, a new and more human cultural order can be established.

There is a European half to my literary existence which is practically unknown to the American scholar. They are acquainted only with the latter half which began with my book on the *Group Method* in 1931 and with *Who Shall Survive?* in 1934. *Who Shall Survive?*, which has become for many identical with the beginning of sociometry is actually the end of a development which began in spring, 1914, just before the outbreak of the first world war with my publication *Invitation to a Meeting*. The first European half of my writing existence lasted from 1914 to 1925. These publications are written in German and are the background if not the backbone of the second, "English" half of my work published in the United States. Most of my European writings² had one common aim: they were a systematic attack upon the framework of our cultural order. Mere analysis of the existing order of values, declaration of new values, seemed to me

*In order to clarify certain issues, throughout this article a number of literal quotations are made from my book *Who Shall Survive?, A New Approach to the Problem of Human Interrelations*, Nervous and Mental Disease Publishing Company, Washington, D. C., 1934. Unless otherwise stated the footnote quotations are from this book and the page numbers are added for further reference.

¹*The Words of The Father*, Beacon House Inc., 1941.

²Published by Gustav Kiepenheuer, Berlin.

futile intellectual gestures. My emphasis was upon the process of their realization itself, on methods which do not take the form of categoric imperatives, but which can be brought down to earth and can stand the test of living, to replace the present decaying forms by cultural and social institutions which are more durable and more adequately tailored for modern human needs. A new foundation of social science which is not only "exact," but based upon the actual relations between individuals themselves, was inevitable.

SOCIOMETRY, SCIENCE OF CULT

Sociometry has been attacked by some people who are ignorant of its basic work as a "cult." Psychodrama on the other hand has been called a "movement." I am usually attacked on both grounds, being the instigator of one as well as the other.

Cult is defined as: "The worship of a person or thing; devoted or extravagant homage or admiration."³ Science is defined as: "Knowledge gained and verified by exact observation and correct thinking, especially as methodically formulated and arranged in a rational system."⁴ A reader of *Who Shall Survive?* and *SOCIOMETRY* can hardly doubt that my concepts and methods meet better the requirements of a science than the meaning of a cult. Indeed, it can be argued that sociometry more than any other social methodology, has set out to do away with cultism.

But cultism can be due to homage to a doctrine, not only to a person or thing. There may be research cults, therapeutic cults, mathematical cults, political cults, the common principle being the sanctity of the doctrine. I never intended to give the impression that there is any concept, method or test in sociometry which is immutable, or that *Who Shall Survive?* is a sacred book. Such an attitude would be contrary to spontaneity theory, to my fight against the cultural conserve and the cultural stereotype, against books and all forms which are considered perfect, final and immutable. Sociometry has been—and should continue to be—a science in evolution, a process in continuous revision, revised by its very fields of application. The fear which comes from mixing the therapeutic and research aspects in sociometry to the disadvantage of the latter is unjustified. Sociometric therapy is useless and impractical unless it is based on scientific group analysis. On the other hand no science of the human group can ever develop unless it is tested on and used, by actual human beings. The training of most European born scholars is overloaded with the separation of the theoretical

³Funk & Wagnalls, *New Standard Dictionary*, 1935

⁴*Ibid.*

from the applied, and a careful reader will see that I obediently have always had an eye on systematics. But at this stage of sociometry we should watch against too much awe for theories, abstractions and generalizations although they may appear to be more scientific and far-reaching than a modest sociometric experiment in a classroom. Another remark which has a cultistic flavor is that about Moreno's sociometry, as if it were a territory which I own and which I have investigated exclusively. There cannot be a difference between Moreno sociometry and sociometry. Sociometry would have a triste prognosis if it should never develop beyond the inventions and discoveries which I have made.

There must be a deeper reason for the criticism. It is probably based on a suspicion which academic men have for any person who expounds a theory and at the same time takes active part in its promotion. Our cultural stereotype of the scientist is that of a man who rests in an armchair and thinks, or who works in a laboratory modestly hidden from the world. But I happen to be an active and fighting man besides being a worker. This is a misdemeanor against an old ethical precept—the saint ought not to be his own prophet, the being not his own agent, the scientist not his own promoter. He looks up from his work and becomes a towncrier, easily infested with the impurities of the marketplace. But there is no such sharp division between the two “roles.” After every phase of creativity comes a pause, the role of the producing person may then give place—for the moment—to the role of the agent.

It may well be that beneath the clamor against cultism there is a hidden fear of leadership. But the fear of cult should not lead to a denial of leadership. For the leadership process is an inherent part of social living, as borne out by every sociogram. The *non-leader* principle can be just as dangerous as the leader principle. Both are sociometrically unreal. They are extremes, the first leads to anarchy and chaos, the second to compulsion and rigidity.

UNITY OF THE HUMAN GROUP

I cannot better qualify today the significance of sociometry than by quoting the first words with which I introduced *Who Shall Survive?*⁵ “A true therapeutic procedure cannot have less an objective than the whole of mankind. But no adequate therapy can be prescribed as long as mankind is not a unity in some fashion and as long as its organization remains unknown. . . . A number of scant proofs have been uncovered which indicate that such a unity of mankind does exist. Its organization develops and

⁵P. 3. *Social and Organic Unity of Human Society.*

distributes itself in space according to a law of social gravity which seems to be valid for every kind of grouping irrespective of its membership. . . . These tendencies may become apparent on the surface in the relations of individuals or groups of individuals as affinities or disaffinities, as attractions and repulsions. These attractions and repulsions must be related to an index of biological, social and psychological facts, and this index must be detectable, these attractions and repulsions or their derivatives may have a near or distant effect not only upon the immediate participants in the relation, but also upon all other parts of that unity which we call mankind. The relation which exists between the different parts may disclose an order of relationships as highly differentiated as any order found in the rest of the universe."

This statement points out clearly the domain with which sociometry is to be identified and which it intends to explore. It has not arrived at this in an arbitrary manner but after having gathered sufficient evidence and proof that the human group has a characteristic inner organization which cannot be investigated to advantage unless all inter-individual factors are kept in and all *non-individual* factors are kept out. It does not go on with the job by merely proposing a new science of human relations⁶ (how it differs from a science of culture or from a science of history, etc.), and rendering lipservice to it. It goes to work with actual people, entering into actual communities, developing methods and procedures which can be used in actual situations in order to uncover what human relations really are.

The problem is not to determine by a general consensus what sociometry *is* but whether there is a territory, a domain of phenomena, characterized and held together by certain dynamic properties which separate this domain in toto from other domains, as a matter of systematic organization of findings, tools and hypotheses. The question is not whether it would not be so much nicer to throw all the eggs in one basket, and to call all sociology or at least all types of social measurement sociometry, but whether a simple way out is not a regression to the chaos in the social sciences which sociometry tried to overcome. The question is whether the study of inter-individual relations within the human group has brought forth sufficient evidence that there are certain causations in the inter-action of individuals which require careful delineation and demarcation of this special field of science. Progress in science is often made by spading up from a vast unproductive ground a certain specific ground which contains an especially fertile soil. The problem can be put also this way: is it of advantage, for

⁶Von Wiese, "Sociology," pp. 8-22, Oscar Piest, New York, 1941.

the purpose of systematic investigation of human inter-relations that all human inter-action phenomena are studied apart and without inter-mixture of extraneous factors?

It has been often said that in order to predict the inter-action between persons we must discover the principles and laws by which they operate. Sociometry has discovered some of these principles and laws. They have made it certain that the human group has a science-configuration of its own, developing its own causations, regularities and laws which operate with certain independence from extraneous factors comparative to causations, regularities and laws, for instance as in the case of biology. They suggest a unity or common core to all human societies, whatever the character of the culture by which it is dominated. If so, a systematic investigation of the human social structure is of the utmost significance. It is the primary task of the social sciences today, all other tasks being secondary, until these discoveries have been re-tested and verified. *Who Shall Survive?* is more often quoted than carefully read. Therefore I shall repeat here a number of these laws and hypotheses formulated by me on the basis of sociometric evidence.

1) *Sociogenetic Law*⁷

The human social structure develops from an undifferentiated form at the birth level to more and more highly differentiated configurations corresponding to the growth level of the participants. Parallel with the process of social differentiation, a differentiation of *socio-sexual* and *socio-racial* structure takes place within the group. The course of differentiation may differ from one culture to another, from a pre-literate society to a modern society, but a common core of relations and a parallel trend will be found in all of them.

2) *"Reality Test" of Social Configurations*

Human social structures formed by actual people have a characteristic type of organization which differs significantly from structures which are formed by "chance" or by imaginary individuals. This has been proven by experiment, statistical and mathematical analysis. It is the inter-action of the individuals which gives the group its social reality whatever the superindividual and non-human factors which surround them. Their influ-

⁷"Our survey of the development of spontaneous group organizations from year to year of age among children and adolescents appears to indicate the presence of a fundamental 'sociogenetic' law which may well be said to supplement the biogenetic law. Just as the higher animals have evolved from the simplest forms of life, so, it seems, the highest forms of group organization have evolved from the simple ones." P. 65.

ence is of course, not denied, but they cannot operate but via the individual participants. By this measure it is possible to determine the *degree* of reality of social configurations.⁸ Certain social configurations have a structure which places them nearer the chance level, other social configurations have a structure which places them nearer the optimum of cohesion.⁹ In accordance with this hypothesis a group of primates or a group of human infants should rank lower on the scale than for example a group of human adults. The socio-gravitational factor which operates between individuals, drawing them to form *more* positive or negative pair-relations, triangles, quadrangles, polygons, etc., than on chance, I have called "tele"¹⁰—derived from the Greek the meaning is "far" or "distant." It has no relation to "telos" which means the "end" or "purpose."

3) "Reality Test" of Cultural Configurations

A similar test¹¹ has been devised for cultural configurations. The basis for it is the range of roles (cultural atom) individuals have instead of their range of choices. The "choice" sociograms are replaced by "role" sociograms.¹² Role structures formed by "chance" or by imaginary indi-

⁸"It can be concluded that the larger the number of isolated structures in a group organization, the lower is the standard of its integration; that the larger the number of mutual attractions, the higher is the standard of the group's integration; that a large number of mutual attractions is a soil for the finer harmonies; that these harmonies become evident as more complex structures, as chains, triangles, squares, etc.; that, on the other hand, disorganization and disharmony are indicated by a great number of mutual repulsions and of attractions which are rejected." P. 108.

⁹Statistics of Social Configurations, *Sociometry*, Volume 1, part 2, 1938, pp. 372-373.

¹⁰"At a certain point man emancipated himself from the animal not only as a species but also as a *society*. And it is within this society that the most important 'social' organs of man develop," p. 158. "The attractions and repulsions, or the derivatives of these, between individuals, can thus be comprehended as surviving reflections, as a distant, a 'tele' effect of a socio-physiological mechanism. The origin of speech also cannot be comprehended without the assumption of a socio-physiological basis. The innumerable varieties of attractions and repulsions between individuals need a common denominator. A feeling is directed from one individual towards another. It has to be projected into distance. Just as we use the words teleperceptor, telencephalon, telephone, etc., to express action at distance, so to express the simplest unit of feeling transmitted from one individual towards another we use the term tele, 'distant.' The tele concept is introduced by us not for a convenience but due to the pressure of our analytical findings. The subject under investigation is not covered by any of the social and psychological sciences today and sociology is satisfied with the mass approach of a mass." P. 159.

¹¹Unpublished.

¹²See J. L. Moreno, "Psychodramatic Treatment of Marriage Problems," *Sociometry*, Volume 3, Number 1, 1940.

viduals show a type of organization which differs significantly from a role structure formed by actual individuals. Experiments with role emergence (on the psychodrama stage) may mark the beginning of a sociometrically oriented anthropology.

4) *Sociodynamic effect*¹³

Sociograms show a concentration of choice upon a few individuals which reduces by degrees the amount of choice expended towards the rest of the individuals. The contention is that this is a natural phenomenon found in all human groups regardless of their cultural determination. The contention is that the sociodynamic effect underlies the development of leadership and isolation. The further contention is that the sociodynamic effect is underlying unequal distribution of wealth and power. Therefore no fundamental change of our present economic system can be successfully tried and maintained unless some checks and balances are applied to the atomic units of human society.

5) *Social Atom the Smallest Functional Unit of the Human Group*

The human group consists of an intricate web of social atoms. This has been shown by experimental and statistical demonstration. Although there is *no* parallelism in the old organic sense, my early prediction that there are many types of groupings of social atoms, just as there are many types of physiological cells, has been recently confirmed.¹⁴ "Viewing the detailed structure of a community we see the concrete position of every individual in it, also, a nucleus of relations around every individual which is "thicker" around some individuals, "thinner" around others. This nucleus of relations is the smallest social structure in a community, a social atom. From the point of view of a descriptive sociometry, the social atom is a fact, not a concept, just as in anatomy the blood vessel system, for instance, is first of all a descriptive fact. It attained conceptual significance as soon as the study of the development of social atoms suggested that they have an important function in the formation of human society."¹⁵

¹³"We call this process of persistently leaving out a number of persons of a group the sociodynamic effect," p. 75. "This demonstrates what we may call the process of slowing down of interest, the cooling off of emotional expansiveness, the sociodynamic decline of interest. After a certain number of efforts the interest grows fatigued. It reaches extinction of interest in respect to a certain criterion, the sociodynamic limit of a person's expansion, its social entropy," p. 74. (The social spontaneity of an individual gradually fades out.)

¹⁴Helen H. Jennings, *Leadership and Isolation*, Longmans, Green & Co., 1943.

¹⁵See J. L. Moreno, "Sociometry in Relation to Other Social Sciences, *Sociometry*, Volume 1, part 1, 1937, p. 213.

6) *Psychological Currents and Networks*

I contend that psychological currents and networks can be disclosed by sociometric procedures and placed under direct or remote control. "Psychological currents consist of feelings of one group towards another. The current is not produced in each individual apart from the other of the group; it is not ready in everyone only to be added together to result in a sum, as for instance, anger which dominates each individual of the group to the end that the whole group becomes angry as a totality and each of its members equally angry. The contribution of each individual is unequal and the product is not necessarily identical with the single contributions. One or two individuals may contribute more towards determining what feeling is directing the current than the rest. But from the spontaneous interaction of such contrasting contributors currents result if all these contributions have the same direction, that is, if they are related to the same criterion."¹⁶ The existence of psycho-social networks has been demonstrated. They are the river-bed through which psychological currents flow. "The local district or neighborhood is only physically one unit. This analysis shows that it is broken up, not however, into small units, but into parts which have their corresponding parts in other districts and neighborhoods. The local districts are, so to speak, transversed by psychological currents which bind large groups of individuals into units together, irrespective of neighborhood, district, or borough distinctions. These networks are the kitchens of public opinion. It is through these channels that people affect, educate, or disintegrate one another. It is through these networks that suggestion is transmitted. In one part of a community a person has the reputation of honesty; in another part, of dishonesty. Whatever the actual facts may be, this reputation is due to two different networks in which two different opinions about him travel."¹⁷

7) *Law of Social Gravity*

I contend that the sociodynamic effect, the social atom groupings and the psycho-social network formations are manifestations of the same law—the law of social gravity. Another manifestation of this law is the discovery that the strength of social attachments between infants is based on the average distance separating them for an adequate length of time. "The

¹⁶*Who Shall Survive?*, pp. 251-252.

¹⁷Op. cit., pp. 264-265; see also, J. L. Moreno, "Foundations of Sociometry", *Sociometry*, Vol. IV, No. 1, pp. 28-31, 1941 (Sociometric Testings of Rumors). Charles P. Loomis and Dwight Davison, Jr., "Sociometrics and the Role of New Rural Communities", *Sociometry*, Vol. II, No. 1, 1939.

babies were placed in close proximity in the same room in which they were and had been living since birth. The objective of the study was to ascertain what types of structures appear earliest in the evaluation of groups during the first three years of life. The infant-to-infant relations were observed. The point was not whether the reactions of each individual were a really social response or not but primarily if group organization resulted from the cumulative effect of their interaction and what forms it took. The main lines of development may be summarized as follows: a stage of organic isolation from birth on, a group of isolated individuals each fully self-absorbed; a stage of horizontal differentiation of structure from about 20-28 weeks on, the babies begin to react towards each other, the factor of physical proximity and physical distance making respectively for psychological proximity or psychological distance, the "acquaintance" beginning with neighbors first, a horizontal differentiation of structure; a stage of vertical differentiation of structure from about 40-42 weeks on, one or another infant commands disproportionate attention shifting the distribution of emotion within the group from the horizontal to a vertical differentiation of structure, the group which had been up to this point equally "levelled," develops more prominent and less prominent members, a "top" and a "bottom." No one stage appears to function exclusively at any one level: there appears to be a "hangover."¹⁸ A similar analysis is made of free-ranging groups of primates¹⁹ in order to deduce the structure of their groupings. The relationship between physical and psychological proximity on the one hand and physical and psychological distance on the other hand made the use of the term "social gravity" meaningful. It is probable that there are many more manifestations of this law than the ones discovered to date. I contend that the true matrix underlying "the causes of inter-state migration"²⁰ and "the influence of a population at a distance"²¹ is to be found in the microscopic patterns of inter-personal relations described above. What population statistics reveal is a distant irradiation and reflection of the gravitational process

¹⁸*Who Shall Survive?*, pp. 23-24.

¹⁹Unpublished study by Dr. C. R. Carpenter, see also under Announcements in this issue.

²⁰"But a more thorough description and analysis can be made using 1128 sets of facts for 1128 pairs of states, and putting the facts for each pair into two ratios which are related to the attractive force exerted by one state upon the population of the other." E. L. Thorndike, "The Causes of Inter-State Migration," *Sociometry*, Volume 5, Number 4, November, 1942.

²¹"For certain purposes this ratio is a measure of the influence of the given population at a distance." John Q. Stewart, "A Measure of the Influence of Population at a Distance," *Sociometry*, Volume 5, Number 1, February, 1942.

drawing some individuals together and leaving others out. "What is of interest to us is the psychological currents behind these facts, instigating these movements of population. Sociometric evidence may disclose the attractions and repulsions between individuals and between groups and the motives behind these attractions and repulsions. It may indicate that the desire for migration is many times larger than the migration which becomes manifest and towards which parts of the country these potential migrations tend, that only the recognition of the restlessness prevailing in the depths of the population opens the way to a full understanding of migratory movements, and that the economic situation is often only the precipitating factor."²²

8) *Psycho-social Organization and Function of Groups*

It has been demonstrated that psycho-social organization of groups can be accurately determined quantitatively and structurally. It is directly related to the behavior of its membership. It is closely related to the function of leadership which changes its position and power as the structure changes.²³

The eight hypotheses presented above cannot be accepted or rejected as articles of faith. The problem is not whether all social scientists agree with me that there are a number of natural social laws, for instance, a sociogenetic law,²⁴ but that they investigate the matter by experiments of their own, so that we establish a consensus of scientific opinion. If these forms of causation operate within the human group they must be just as verifiable by other than sociometric methods. Existence of a sociogenetic law can be easily examined: Several parallel studies of the evolution of spontaneous grouping from birth level up to the ages of sixteen, one in an Indian village, another in a Russian collectivistic farm, a third among the Australian aborigines, should give comparable or contrary results with tested and re-tested sample studies in the United States. The same scientific attitude must be taken to all other hypotheses named above.

²²*Who Shall Survive?*, pp. 342-343. "The administration of the sociometric test to populations in problem areas, thus revealing the spontaneous trends and potential movements, may lay the ground for a procedure of *guided* migration. Such a procedure could not only unburden urban centers of a surplus of industrial population but also relieve areas from the accumulative effect of emotional tensions." *Op. cit.*, pp. 343-344.

²³See for further elaboration pp. 312-314 in this article.

²⁴Carl C. Taylor, "Discussion of Dr. Charles P. Loomis, paper on Informal Groupings in a Spanish-American Village," *Sociometry*, Volume 4, Number 1, February, 1941.

ONE-WAY AND TWO-WAY RELATIONS IN SOCIOMETRY

1) *The Concept of the Meeting*

There are several dividing lines between sociometric and non-sociometric methodology.

The first dividing line is the distinction between one-way and two-way relations within human social structures. Sociometry deals with all the two-way relations between individuals.²⁵ The one-way relation in itself, that is, separated from the actual or possible responses of other individuals, is outside of the sociometric domain. One million individuals, each treated as a separate monad, each the source of innumerable outgoing relations, add up to a *sum* of individuals, but they do not form a *unit* of people, a group in a sociometric sense. Individuals as isolated organic units plus their one-way projections are study objects of the psychological and the socio-psychological disciplines. They are outside of the sociometric domain. In this sense sociometry separates from its immediate range of research activities all psychology of the single individual, psychometry, psychoanalysis, and the so-called projection techniques. They are sub-fields of psychology. Individuals with their one-way relations and projections are sociometric study objects only if they are viewed and analyzed as fragments or *parts* of a total human social structure.

Stimulated by the occasion of this symposium I re-read my own first writing and discovered that my earliest formulation of this problem was by far the clearest and boldest I ever made. The title of the publication was "Invitation to a Meeting." Its theme was the dilemma of an author (every author) to communicate via a book with a reader (every reader) who is absent from the immediate situation. The disturbing factor was the non-presence of the "other," the socius, from active combat and communication. The remedy for this dilemma was "Invitation to a Meeting," or as I said later, to actualize a "zwischen-menschliche Beziehung"²⁶ or in translation, to consummate an inter-personal relationship. But the German "zwischen-menschlich" and the English "inter-personal" are anaemic notions compared with the living concept of "meeting." They are the end-product after many stages of intellectual distortions and bloodletting for

²⁵"The crucial point of our classification is to define an individual in relation to others, and in the case of groups, always a group in relation to other groups. This is sociometric classification. The approach was not a theoretical scheme but the product of empirical induction growing logically out of our initial precept to discover and control the psychological currents in a given community." P. 80.

²⁶*Die Gottheit als Autor* (The Godhead as Author), page 6, 1918.

the sake of a technical term useful in scientific language. But it is dangerous for scientific men to forget the origin of words, especially of the key words in their own scientific vocabulary. The modern fear of language (semanticism)—instead of compensating for itself by escape into less sensuous and less tangible logical symbols and algebraic formulas—may find a *saner* way out by turning every key word they use back to their *statu nascendi*. We have to watch our step: asceticism and exactitude are worthy aims but we may pay a too heavy price for them if they result in loss of spontaneity and in unproductivity of ideas.

“Meeting” means more than a vague inter-personal relation (*zwischenmenschliche Beziehung*). It means that two or more persons meet, but not only to face one another, but to live and experience each other, as actors each in his own right, not like a “professional” meeting (a case-worker or a physician or a participant observer and their subjects), but a meeting of two people. In a meeting the two persons are there in space, with all their strengths and all their weaknesses, two human actors seething with spontaneity, only partly conscious of their mutual aims. It became clear to me then as it is now to many sociometrists, that only people who meet one another can form a natural group and an actual society of human beings. It is people who meet one another who are the responsible and genuine founders of social living.

The second dividing line between sociometric and non-sociometric methodology is the division between one-way role and two-way role²⁷ relations. From the point of view of a psychoanalyst for instance, a one-way relationship is the cardinal feature of the psychoanalytic situation. There is only one person for whom the role is made to order, the patient. If he would stand up and assume the role of the analyst and fight with him, it would soon bring the meaning of the psychoanalytic situation to absurdity and to an end. But from the point of view of the meeting it would develop into something which is certainly more human and perhaps more salutary than a psychoanalytic situation—into a meeting between two people, each with his various roles and aspirations. It would develop into a dramatic encounter, a phenomenon which with some modifications I later called the psychodramatic situation.²⁸ Looking backward it is now clear that from the idea of the meeting, the conflict between author and reader, reader and listener, husband and wife, each in his “role,” it was only a

²⁷See *Sociometry*, Volume IV, Number 2, May 1941, pp. 213-214, and Volume III, Number 1, February 1940, pp. 17 and 20.

²⁸See *Sociometry*, Volume I, part 1, 1937, pp. 21 and 22, 72 and 74.

short step from putting them on a stage on which they can battle their relationship out, unhindered by the threats and anxieties of their real life situation. This is how the idea of the psychodrama was born.

2) *Spontaneity and the Concept of the Doll*

The third dividing line between sociometric and non-sociometric methodology is the emphasis in sociometry upon the *activated* relation between the individual components (members) to the structure and the function of the group, in other words, the emphasis upon their spontaneity and the warming up process between them. There is no durable structure of a group if it does not correspond to its functioning and no function can be adequate if it is not upheld by the initiative and enthusiasm of the individual members.

The idea of the meeting contained the seed of two concepts each at the opposite ends of a scale, the concept of spontaneity and the concept of the doll.²⁹ My reflections were as follows: if the reader is absent from the primary situation, the author can make of him a helpless target—best symbolized by a doll which is exposed to the aggressiveness of a child (it is obvious that in the pre-book era the forerunner of the author, the prophet, could not help but meet his friends or followers face to face). The same is in principle true about millions of radio listeners listening to an author. As in the case of readers, their counter-spontaneity is reduced to a minimum, their opportunity to counter with their own spontaneities is made difficult or impossible.³⁰ It becomes plausible how the idea of spontaneity, that fundamental notion in sociometry, has become sensitized in my mind to an irresistible degree. The doll became the symbol for all human beings who are deprived of their spontaneity or better, who are in a position of being unable to counter with it. Whereas the book had appeared as a representative of what I mean by cultural conserve, the doll, because of its intentional semblance to human beings or humanized animals, represented in “our culture” at least,³¹ a significant function of its sociopathology. Beings, who can be loved and hated in excess, and who cannot love or fight back,

²⁹See *Sociometry*, Volume IV, Number 2, May 1941, pp. 224-225, and Volume II, Number 2, May 1939, pp. 13-14.

³⁰These reflections, when they were originally made, had one principle aim, to clarify the author-reader, orator-listener relationship, etc. They did not intend to “do away” with orators and listeners, just as they did not intend to do away with cultural conserves, like books, etc., or to do away with machine-like beings, with dolls. The aim was to *surmount* the difficulties by new adjustments to them.

³¹There may have been many cultures without dolls in our sense.

who can be destroyed without murmur, in other words dolls are like individuals who have lost all their spontaneity. This *dead-aliveness* of the doll should become an earnest concern to parents and educators, as we are placing it not into a museum, but into the hands of our children. Dolls become their best comrades, memories to which they return in their adolescent phantasies. Toys such as dolls are inanimate objects and the child can create the roles of master and slave. The toys cannot fight back if and when the child exerts his physical strength by mishandling or destroying the toy. This is contrary to the very principles of democracy. The function of dolls in the early life of children must undergo a revision. I do not wish to warn against their discrete use. Their reckless application cannot be but harmful. Children get used to "easy" spontaneity. But the difficulty can be surmounted. Our homes and nursery schools should replace many of their doll equipments by auxiliary egos, real individuals, who take the "part" of dolls. The individuals portraying doll roles and fantastic situations are trained to reduce their own and permit the child a greater amount of spontaneity than in real situations, but behind the doll playing subject, there is a real, feeling person. The child will learn by the auxiliary ego technique what he cannot learn by the doll playing technique,—that there are limits to the extremes of love just as well as to the extremes of hate.³²

Sociometry would be meaningless and could not be applied to a society of dolls. Every individual doll is isolated from the other. They do not form a social structure. It cannot be explored because it does not exist. In a human society the opposite is true. Because every individual flows over with spontaneity, spontaneity flows between individuals. There is so much social structure that many essential parts cannot be seen. It cannot be explored but in the degree in which the spontaneous interest of its membership is aroused, and it cannot be changed but in the degree in which its participants coöperate in the project.

Organization and Function of Groups

A fourth dividing line between sociometric and non-sociometric methodology is the emphasis upon the psycho-social organization of the group and the way it functions. "Organization and function of a group appear to be closely related. If a home group has an organization which is extremely extroverted, that is, a majority of its members would prefer to live in other groups, the functioning of this home group suffers in its different aspects

³²See "Das Stegreiftheater," 1923, translated partly in *Sociometry*, Volume 4, Number 2, May, 1941 (The Philosophy of the Moment and the Spontaneity Theater).

proportionately and characteristically. We studied the various types of disturbances developing in home groups and ascertained to what definite form of group organization a definite aberration in function is potentially related. The same function in a cottage group, for instance, the executing of the necessary housework, is performed with differing efficiency according to the organization of the group, besides other factors. If the majority of the members attach their emotional interest mainly to individuals outside their group, this extroverted organization is a potential condition which may easily release disturbances of this function through lack of precision in work, superficiality of performance, tardiness, etc. If the organization is of the reverse type, introverted, and in addition many of the members reject each other, the same function may show a disturbance of a different nature, as friction and conflict between the members over its execution. On the other hand, an organization in which many members reject the housemother and at the same time attract one another, forming a network against the housemother, may release a different disturbance of the given function. As the accepting of directions from the housemother is essential to the work, out of this last mentioned type of organization frequently results regression in the work executed accompanied by open rebellion."³³

Psycho-social organization and the function of leadership is another factor in ". . . the influence which leader-individuals are able to exert in large groups. The distribution of power in large groups depends upon the intricate distribution of emotional currents. An individual who is in control and can steer the course of one of these currents can wield an immense potential influence out of all proportion to his immediate following."³⁴ A comparison of sociograms of freely and democratically organized groups with sociograms of autocratically organized groups shows important differences. In the autocratically organized group the "leaders" of the group are chosen by an outside authority and the spontaneous rising of the actual genuine leadership is suppressed. In the Hudson experiment the autocratic organizers were the superintendent and the housemother in each cottage. We compared the overt organization of each group established by rule of thumb with the hidden psychological organization revealed by the test. We saw that the position of the members differed greatly from one organization to the other. The actual leaders were inactive in one and came to the fore in the other. A girl who was in charge of the dormitory and feared because of her power, appeared in the spontaneous

³³*Who Shall Survive?*, pp. 97-98.

³⁴Op. cit., p. 100.

structure isolated and rejected. Another girl who was disliked by the house-mother and isolated by her from the rest appeared in the spontaneous structure as a group leader and a center of many attractions. "The social function of a girl for instance may be that of supervisor of the dormitory, but her psychological function may be that of a housemother pet who is rejected by the members of her group and isolated in it."³⁵ The number of imposed "leaders" are few and remain unchanged as long as the boss is in power, or they are changed more or less arbitrarily. In spontaneously and democratically organized groups the leadership process is set free to express itself. Far more individuals are given a chance to take part in the leadership process and far more have an opportunity to function in leadership positions for a certain time. The fact that a larger number of individuals can take part in the leadership process, makes the struggle for leadership in a democracy far more violent and extensive than in a regimented society. A fear of leadership may suggest checks and balances against leadership altogether—in the name of democracy.

Sociometric findings explain why there are often on the European continent schools in science, the arts and politics each with a strong leader on top. Feudal and autocratic societies encourage this type of structure. Strong leaders of more or less rigidly controlled groups of this kind cannot be easily unseated by spontaneous changes in the group. They maintain their power beyond the sociometric saturation point for their ruling. They provide good soil for cultism. On the North American continent the situation is quite different. A democratically minded society encourages the development of comparatively larger number of sects but leadership is weak, sub-leaders are preferred. Strong leadership does not develop so easily because it has more hindrances to overcome from within—many other egos in the group are pressing for their own leadership position, the group being more spontaneously structured.

Measurement

A fifth dividing line between sociometric and non-sociometric methodology is the emphasis on measurement. The empirical system of two-way relations introduced by sociometry marked a new phase in the development of the social sciences. Therefore methods for measuring two-way relations between individuals did not exist. They had to be invented in accord with requirements of the findings, as there was no model after which to pattern them. Methods of charting have been developed first. The earliest type was

³⁵*Who Shall Survive?*, p. 70.

a combination of an inter-personal and inter-action diagram.³⁶ The second type was the sociogram which can be adjusted to the charting of small groups as well as to that of large groups of individuals.³⁷ In a *primary* sociogram the emotional relations between *individuals* are depicted as revealed by a sociometric test. By means of *secondary* sociograms the two-way relations between *groups* can be charted. A group of individuals may indicate a trend of feeling towards another group of individuals and vice versa, and the second towards a third group of individuals and vice versa. If the primary sociograms of these inter-related groups are known, the analysis of each sociogram gives an index of the socio-atomic configuration of each group which they portray. Each index represents the emotional current dominating a group. A sociogram of these currents portrays the two-way relations of all the groups whose indices have been calculated. On the basis of secondary sociograms tertiary and quartary sociograms can be constructed, involving still larger groups and there is no limit to how far a sociogram can be differentiated so that it can meet the requirements of the smallest and the largest groups alike. The principle of sociogrammatic presentation is that no higher form of a sociogram can be drawn without being based on lower forms, all leading down to the primary sociograms.³⁸ Another notable form of tabulation is the sociometric use of the inter-relation matrix.³⁹ It may well be that the most important contribution to the measurement of two-way relations has been made by our development of a new form of statistics which is able to deal with the material in accord with its requirements—sociometric statistics or statistics of social configurations.⁴⁰

The approach to measurement in sociometry is still in its infancy. The

³⁶See *Das Stegreiftheater*, pp. 81-85, Berlin, 1923.

³⁷See *Application of the Group Method to Classification*, pp. 81-83, showing a number of simple sociograms. See also *Who Shall Survive?* showing primary and secondary sociograms.

³⁸See *Who Shall Survive?* for maps of emotional currents in a community.

³⁹The first inter-relation matrix tabulating *inter-personal relations* has been used in connection with the Hudson research, and shown by Jennings in her article on leadership. The inter-relation matrix presented by Dodd in his Syrian study tabulating the findings from a social distance test is not truly sociometric. However, Dodd has been rendering a great service to sociometric methodology by his further development of the inter-relation matrix, by his extensive study of *Who Shall Survive?*, his systematic analysis of every sociogram, every formula and every tabulation which led him to important theoretical conclusions. See Stuart C. Dodd, "The Interrelation Matrix," *Sociometry*, Volume 3, Number 1, 1940, p. 101, and by the same author, *Dimensions of Society*, Macmillan, 1941.

⁴⁰See "Statistics of Social Configurations," *Sociometry*, Volume 1, part 2, 1938, p. 342, J. L. Moreno and H. H. Jennings.

great interest which these new measurements have aroused is not due to their precision, as they are primitive compared with measurement in other sciences. It is due to the fact that an approach to the measurement of phenomena as inter-personal relations, inter-role relations, emotional currents, spontaneity and creativity is made, which have been considered in the past as outside of the domain of measurement, as phenomena of a higher, qualitative order.

SOCIOMETRIC METHOD

Historical Background of Sociometry

Sociometry started with an approach to a practical situation and a set of provisional principles. But as it traveled from place to place and as its application expanded, its methods had to be modified and its theories had to be revised. It is now in a similar position as the science of geography several centuries ago. There are still huge territories on the globe undiscovered and unexplored by sociometry.

It was during the first World War, between 1915 and 1918, that I witnessed the *statu nascendi* of a community⁴¹ near Vienna and was baffled by the mounting social difficulties within it. In a letter to the Department of the Interior of the Austro-Hungarian Empire I offered a remedy: reorganization of the community on the basis of sociometric analysis. Although visionary in language, the letter gave a bird's eye view of the future of sociometry. It opened up with a description of how a community can be sociometrically tested and its population reshuffled. Then it attempted to predict the evolution of sociometry in three phases, a period of experimentation and research with small groups, application of sociometry to problems of the nation, and to human society as a whole. The development was to be a gradual one and a beginning was to be made with small, simply organized and newly founded communities.

The principle which set sociometry into motion is the twin concept of spontaneity and creativity, not as abstractions but as a function in actual human beings and in their relationships. Applied to social phenomena it made clear that human beings do not behave like dolls, but are endowed in various degrees with initiative and spontaneity. The so-called social structure resulting from the inter-action of two thousand million individuals is not open to perception. It is not "given" like an immense visual configuration—for example like the geographical configuration of the globe, but it is every *moment* submerged and changed by inter-individual factors. It

⁴¹See *Who Shall Survive?*, pp. 17-20.

is in this point that the chief difference lies between sociometry and gestalt theory. Gestalt is not the "first" principle. The whole is not holier than the part. Gestalt is second to the "gestalter," its producer. There is a higher arbiter; a wider frame of reference than the principle of gestalt—the twin principle of creativity and spontaneity, the source of gestalts, of isolated parts as well as of wholes. If there is any primary principle in the mental and social universe, it is found in this twin concept which has its most tangible reality in the interplay between person and person, between person and work. The fact that the gestalt idea is the notion which guides gestalt research accounts for the shortcomings when applied to domains in which the gestalt plays a less important role. In the original contributions the gestalt idea was applied to psychological configurations like melody (Christian v. Ehrenfels) and to visual configurations (Max Wertheimer). Here the gestalts have the deceptive appearance of eternity, they are given, frozen, they have a "conserve" character. But when the gestalt idea moves from suitable fields into the study, for instance, of social phenomena, in other words, when they deal with social configurations, then they have to change their original guide and either openly or tacitly use sociometric concepts. Because now the gestalt is a function of the gestalter, social configurations function as groups of gestalters.

Terms and Definitions

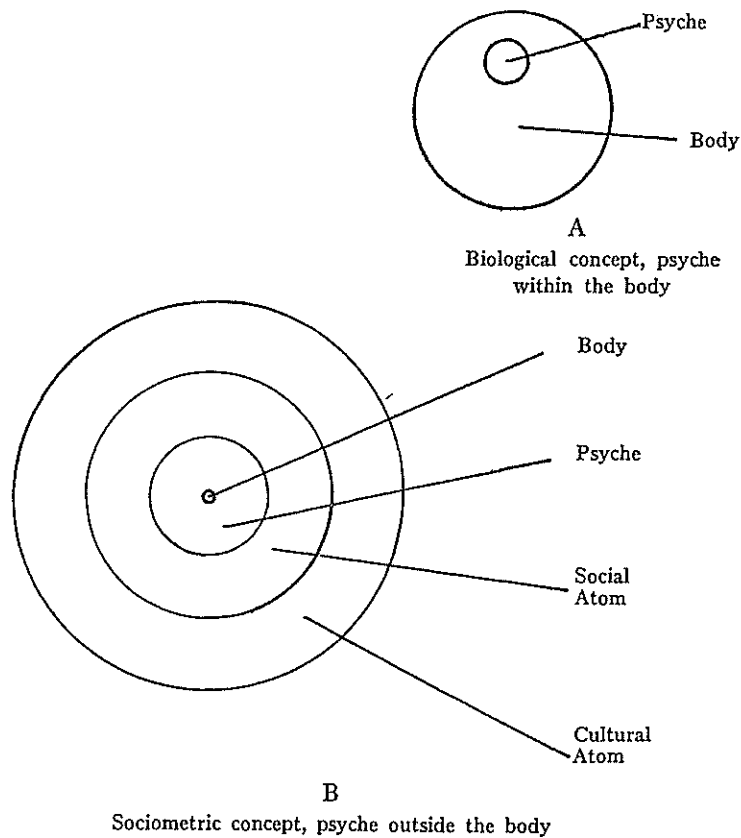
Sociometry, because of the unity of the human group, studies the human group as a totality. It studies every part with a view to the totality and the totality with a view to every part. Definitions have usually a short life, but the earliest definition of sociometry⁴² has quite well covered the different emphases of all active sociometrists. In the first part of the definition, however, a misunderstanding of the phrase "psychological properties" took place. The term psychological is used throughout *Who Shall Survive?* as meaning: relations between individuals and the cumulative effect of these relations. Sociometry as a science stands on two feet, according to the Latin-Greek derivation of the two parts of the term.⁴³ The one foot stands

⁴²See *Psychological Organization of Groups in the Community*, p. 1, Proceedings of the 57th Annual Session of the American Association on Mental Deficiency, Boston, 1933. Also *Who Shall Survive?*, p. 9.

⁴³It appears that the term sociometry is of my coinage. (See *Contemporary Sociological Theories*, Pitirim A. Sorokin, and article by the same author in this issue.) Coste never used the term sociometry, but spoke of sociometrika for the number of people as an index of their power, obviously in an entirely different sense. But even as to the word the difference in phrasing between sociometry and sociometrika is semantically significant. The change from psychological analysis to psychoanalysis marked for instance the formation of a significant term which made history.

on socius, and the other on metrum. Among the social scientists friendly to sociometry three trends can be discerned. There are some who stand on one foot, metrum. The all important thing for them is to *measure* social phenomena. What *kind* of social phenomena is secondary. There are others who stand on the other foot, socius. The all important thing for them is inter-individual relations and their structure. They ignore measurement. But they of course, measure without being conscious of it. Some degree of measurement begins automatically, with the simplest analysis of social phenomena. Then there is the group of true sociometrists. They stand on both feet, on socius and metrum alike. We should exclude from the domain of sociometry all studies of populations in which the individual parts are considered only in a summary, symbolic or mechanical fashion, as for instance, the studies of Thorndike²⁰ and Stewart.²¹ This does not exclude, however, that population research cannot be truly sociometric. It is to be expected that gradually methods will be developed by which the inter-individual core of populations will be dynamically interconnected with the statistical findings on its surface. Efforts in the direction of sociometric population research are under way. We should exclude from sociometry all public opinion research which is based upon the questioning of a number of individuals separate from each other, as for instance the studies of Gallup. This does not mean that public opinion research cannot be truly sociometric. It is to be expected that sociometric opinion polls based upon inter-personal influence in psycho-social networks would supplement or supplant present public opinion polls. Studies which deal with the measurement of social attitudes should be considered as falling outside of the field of sociometry, as for instance, some contributions of Chapin and Sewell. The prominent exponents of the population group, the public opinion group and the social attitude group may measure far more reliably, but *what* they measure is not sociometry. They have in common with sociometrists the emphasis on mensuration, but the socius aspect is as a rule neglected by them. For the population group the actual living structure of inter-individual relations does not come to expression except in a numerical form, an end phase, a dead end phase of the societal process. The socius aspect is somewhat considered by the public opinion group, actual individuals are approached, but as if each would live in a vacuum, as if there would be no connecting bridge between people, and as if public opinion could ever be tapped without touching the bridge which connects them. From the social attitude group some studies have come forth which in themselves are models of how measurement of social attitudes can be made, but they too do not measure what sociometry wants to measure. But

DIAGRAM I
THE PERSON



The biological picture of an individual places the psyche *within* the body (as an epi phenomenon). In the sociometric picture of the individual (person) the psyche appears as outside the body, the body is surrounded by the psyche and the psyche is surrounded by and interwoven into the social and cultural atoms.

"We are used to the notion that feelings emerge within the individual organism and that they become attached more strongly or more weakly to persons or things in the immediate environment. We have been in the habit of thinking not only that these totalities of feelings spring up from the individual organism exclusively, from one of its parts or from the organism as a whole, but that these physical and mental states after having emerged reside forever within this organism. The feeling relation to a person or an object has been called attachment or fixation but these attachments or fixations were considered purely, as individual projections. This was in accord with the materialistic concept of the individual organism, with its unity, and, we can perhaps say, with its microscopic independence. . . . This resistance against any attempt to break the sacred unity of the individual has one of its roots in the idea that feelings, emotions, ideas must reside in some structure within which it can emerge or

vanish, and within which it can function or disappear. These feelings, emotions and ideas 'leave' the organism; where then can they reside? When we found that social atoms and networks have a persistent structure and that they develop in a certain order we had extra individual structures—and probably there are many more to be discovered—in which this flow can reside.”

See *Sociometry*, Volume 1, part 2, pp. 213-214, 1938.

notwithstanding the basic difference between sociometry and the three groups just discussed—a difference of which a sociometrist should be continuously conscious—close collaboration with them is necessary and desirable. Lundberg⁴⁴ has given an example of how a sociometric technique can be fruitfully combined with Chapin's socio-economic scale in a research program.

The greatest need in the present stage of sociometry is emphasis on *material* knowledge. An illustration of what I mean by material knowledge is the biology of the human organism. Its anatomy, physiology, histology and chemistry, its origin and evolution, had to be developed before the relation between structure and function of every organ could be understood. As this process of investigation in the biological sciences made progress, finer and finer instruments were invented. But had the craving for material knowledge never existed, the instruments would not have been invented, or if invented by chance, they would have been ignored! Similarly, in sociometry we need to know more about the atomic structure of the human group and should not be more concerned about measurement than necessary for the work in progress. Genuine measurement grows hand in hand with growing material knowledge of the subject. Problems of measurement for instance, presented themselves to me when the first findings of sociometric and spontaneity testing required an accurate analysis in order to understand the results and to apply them to a practical situation. I had to invent some means by which the data would be so presented that I or anyone could learn something new about the dynamic structures of the group and their functions. The invention of the sociogram and the inter-personal diagram were imposed upon me by the situation in which the material placed me. It was the sociometric material and not "I" which made certain forms of charting and measurement indispensable. In the course of analysis a number of mathematical problems began to disturb me and—as I am not a mathematician—I went to statisticians⁴⁵ and mathematicians to work these

⁴⁴George A. Lundberg, "Social Attraction-Patterns in a Rural Village, *Sociometry*, Volume 1, part 1, 1937, p. 77, also *Foundations of Sociology*, Macmillan, New York, 1941.

⁴⁵Henry E. Garrett and Paul F. Lazarsfeld.

problems out. As my sociometric studies advanced, it was again the material—in the course of reading hundreds of sociograms I was struck by the great variety of structure—which gave me the idea for an experiment by which the degree of social reality of a structure could be measured. A new branch in statistics⁴⁶ was started with this experiment.⁴⁷ Although obviously superior to me in specialized skill, these problems and ideas did not present themselves to mathematicians. They had not preoccupied themselves with, and had not been inspired by this new field of investigation. This suggests that the specialist is, at least in certain sciences, of auxiliary value only until after the science is established. In this sense even the most ingenious theories of measurement are secondary to new discoveries. Dodd's S-theory for instance, even if it were true, is secondary to his own sociometric work, his contributions to methodology⁴⁸ and to analysis.

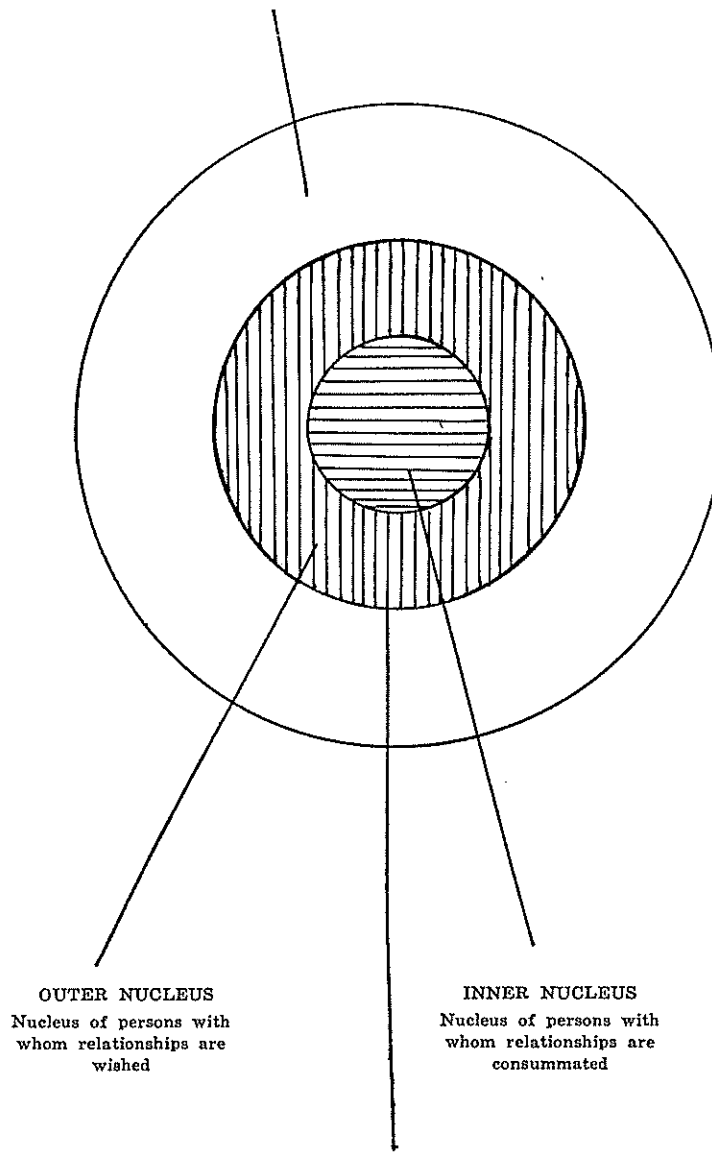
The term sociometry is to be reserved for the meaning which has been widely accepted and which I originally gave to it as a science (see diagram p. 325). The science of sociometry has two sub-fields, one on two-way relations, the other on measurement. The sub-field on measurement is further subdivided in (a) truly sociometric measurement which includes both the socius and the metrum aspect, and (b) social measurement which covers only the metrum aspect and leaves the socius aspect out. A "science" of social measurement is a misconception. It would result to be but a collection of measurements of more or less incompatible social phenomena which are thrown into the same basket because the findings are expressed in mensurational terms. There would be several "sciences" of social measurement, as many as there are different types of social phenomena. The systematic view presented here satisfies both contentions, that of the large group of sociometrists and that of the strict measurists. It should abate the fear of many sociometrists that one-sided emphasis on measurement could slow down the advance of actual sociometric work. On the other hand it meets for instance, Bain's, Chapin's and Sanderson's opinion that all forms of measurement should be considered as one block and should be assigned in toto to the sociometric section of the American Sociological Society. It meets also their opinion that the Sociometric Institute dedicate itself to the

⁴⁶Joan H. Criswell, Helen H. Jennings, J. L. Moreno, Mapheus Smith. J. L. Moreno and Helen Jennings, "Statistics of Social Configurations", *Sociometry*, Vol. I, No. 3-4, 1937.

⁴⁷See George A. Lundberg, *Social Research*, Longmans, Green & Co., New York, 1942.

⁴⁸See Stuart C. Dodd, "Induction, Deduction, and Causation," *Sociometry*, Volume 6, Number 2, p. 119, 1943.

ACQUAINTANCE VOLUME—Acquaintances which are without emotional meaning for the subject.



OUTER NUCLEUS
Nucleus of persons with
whom relationships are
wished

INNER NUCLEUS
Nucleus of persons with
whom relationships are
consummated

SOCIAL ATOM
Nucleus of persons emotionally related to the subject
(outer and inner nucleus)

study of *all* forms of social measurement. This is in accord with its original charter⁴⁹—in the differentiating sense, however, which I am giving to the relationship of sociometry to measurement. The sociometric section of the A.S.S. should present researches which deal with both sociometry proper and with its two sub-fields.⁵⁰ It is probable that in the course of time many present forms of social measurement will become obsolete and that the sociometric approach in measurement will be extended to the range of phenomena to which it can be applied. Then social measurement and sociometric measurement will mean one and the same thing. But even if this comes true, sociometry, the noun, should stand for the name of its science—all sociometric forms of measurement should figure as an undivided sub-field within it.⁵¹

The *policy* of the journal has been therefore to weld the three emphases within sociometry into a unity. Its policy in regard to accepting and refusing papers was decided largely by the actual situation within the field and was not fixed by its executive committee. The journal will continue this policy, however, with greater emphasis upon the role which sociometry is playing within a system of social sciences, as its core.

Tests and Procedures

The size of the human population approximates two billion individuals, but the number of inter-individual associations existing on earth at this moment must be many times larger—because in a sociometric sense a person belongs to many more small groups than the ones visible to the naked eye. Millions of small groups are continuously formed and dissolved. They give to the overt and tangible human society a deeply unconscious and complicated “infra” structure. It is difficult to uncover the latter because of its remoteness from immediate experience and because there is no strict separation between the infra and the overt structures. One is interwoven with the other. At times genuine inter-personal structures can be perceived on the surface, at other times they require extensive socio-microscopic study before they can be discovered. What gives every sociometrically defined

⁴⁹To William L. Moreno goes the distinction of founding the Sociometric Institute. It is due to his vision and energy that sociometry owes the existence of its first permanent organization.

⁵⁰It happens that the programs of the sociometric section in the three years since it is established, has been in fair accord with this view. Papers on sociometry proper, on the sociometric approach in measurement and on social measurement were combined.

⁵¹This view should make an end to the misunderstanding that there is a “wider” and a “narrower” view in sociometry. There are only different emphases within one field.

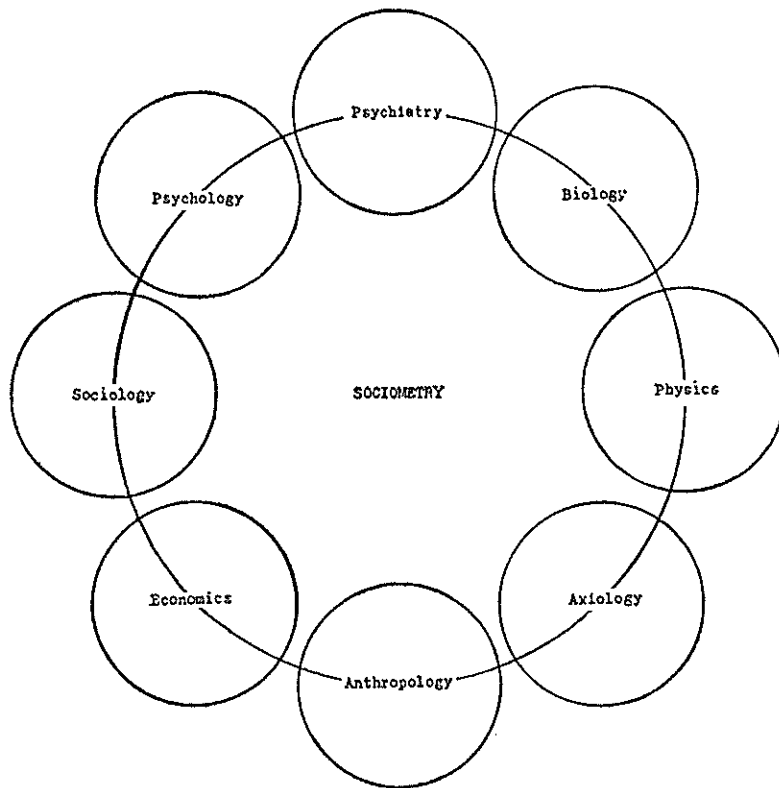
TABLE OF TERMS AND DEFINITIONS

| | |
|-------------------------|---|
| Person | An individual when considered as a social phenomenon, a crossing point of numerous socio-gravitational factors. (See Diagram 1.) |
| Socius | The associate, the companion, the other fellow. |
| Social Atom | The smallest social unit within the social group. Every person is positively or negatively related to an indefinite number of socii, who in turn may be related to him positively or negatively. Besides these two-way relations there are one-way relations observable. Some socii are related to the central person and unknown to him, and he may be related to some socii unknown to them. It is this total configuration which comprises the social atom. (See Diagram 2.) |
| Group | It is a dynamic interpenetration of a number of social atoms, as wholes, or in part only. The socio-atomic organization of a group cannot be separated from its cultural-atomic organization. The social and cultural atom are manifestations of the same social reality. |
| Community or Settlement | I. The surface structure consists of the inter-relations of its inhabitants in respect to (a) its basic groups (homes, workshops, etc.), (b) locality. II. The underlying (infra) structure consists of a large organization of socio-cultural atoms traversed in all its dimensions by emotional currents, psycho-social and socio-cultural networks. |

The term social atom is used for the smallest social unit within the human group. There may be a better term for this newly discovered phenomenon, but it seems to be better than socius. Dodd's plea for uniform terminology in all the sciences is praiseworthy but it does not seem to me that physics has a priority on the term atom. Previous to its use in physics atomos meant "any very small thing." The theory of the physical atom has changed many times since the time of Democritus. The present theory is not final and it may change again. It is of decisive importance in the selection of a term that it expresses meaningfully the phenomenon for which it stands. What I described as social atom appears to be the smallest social structure which has a function in the formation of the human group. It is not impossible that we will learn more about the meaning of atomic structure from sociometric studies than we ever learned from physics.

group its momentum is the *criterion*, the common motive which draws individuals together, spontaneously, for a certain end. That criterion may be at one time as fundamental as a search for home and shelter, as a need for food and sleep, as love and companionship, or as casual as a game of cards. The number of criteria on which groupings are continuously forming go into many thousands.

There are three groups of methods which have been used in sociometry, (a) observational methods, (b) operational methods and (c) action-methods. A number of misunderstandings, largely due to misquotations and incomplete readings of sociometric literature, has accumulated in the course of



SOCIOMETRY

Its Boundaries and Fields of Research
Primary Territory: The Human Group.
Secondary Territory: The Sub-human Groups.

years which I will take up one by one. A widely spread misconception for instance, is that inter-individual⁵² and inter-group relations play at times a *minor* role in social processes. There is—(according to sociometric findings)—no social phenomenon in which the inter-individual and the inter-group process is not at the core of the matter unless it ceases to be a social phenomenon. Another misunderstanding is that sociometry bases its conclusions on the study of “informal friendship patterns.”⁵³ As it happens, studies of friendship in the literal sense of the word have rarely been undertaken by sociometrists, largely because friendship as a criterion is for methodical reasons undesirable. It varies in definition from individual to individual, and it is often a fusion of several criteria.⁵⁴ Sociometric work has centered from the beginning upon testing all the basic collectives of which a community consists. It was particularly interested in such groups which are built around *strong* criteria, indeed, formal and institutional groups were the first and the most rewarding targets, homegroups, workgroups, schoolgroups, cultural groups.⁵⁵ Sociometry started out to enter into every social situation of which a community consists, from the simplest to the most complex, from the most formal to the most informal ones. This was and is the chief driving motive of its enterprise, however large the work yet undone may loom.

Another misunderstanding is that sociometry consists of a single test. As a matter of fact it has introduced *numerous* tests—among others, acquaintance test, sociometric test, spontaneity test, which are able to explore the core of inter-individual relations and supplement one another. But the

⁵²See Dwight Sanderson's discussion in this symposium on page 214.

⁵³See F. Stuart Chapin's "Trends in Sociometrics and Critique," *Sociometry*, Volume 3, No. 3, 1940, p. 245.

⁵⁴In *Who Shall Survive?* this point has been clearly formulated, see p. 16. "If therefore, the inhabitants of a community are asked whom they like or dislike in their community irrespective of any criterion this should not be called sociometric. These likes and dislikes being unrelated to a criterion are not analytically differentiated. Even if such a form of inquiry may at some age level produce similar results as the results gained through our procedure, it should not be called sociometric testing. It does not provide a systematic basis for sociometric research." It is probable that the idea that it is sufficient in a sociometric inquiry to ask to name one's most intimate friends in the community, has been brought about by George A. Lundberg's "Social Attraction Patterns in a Village," *Sociometry*, Volume 1, part 2, 1938, p. 375, as his paper has been widely read by sociologists. But Dr. Lundberg carried out his study in an "open" community. He was aware that the test was incomplete, he just asked as much as the situation permitted.

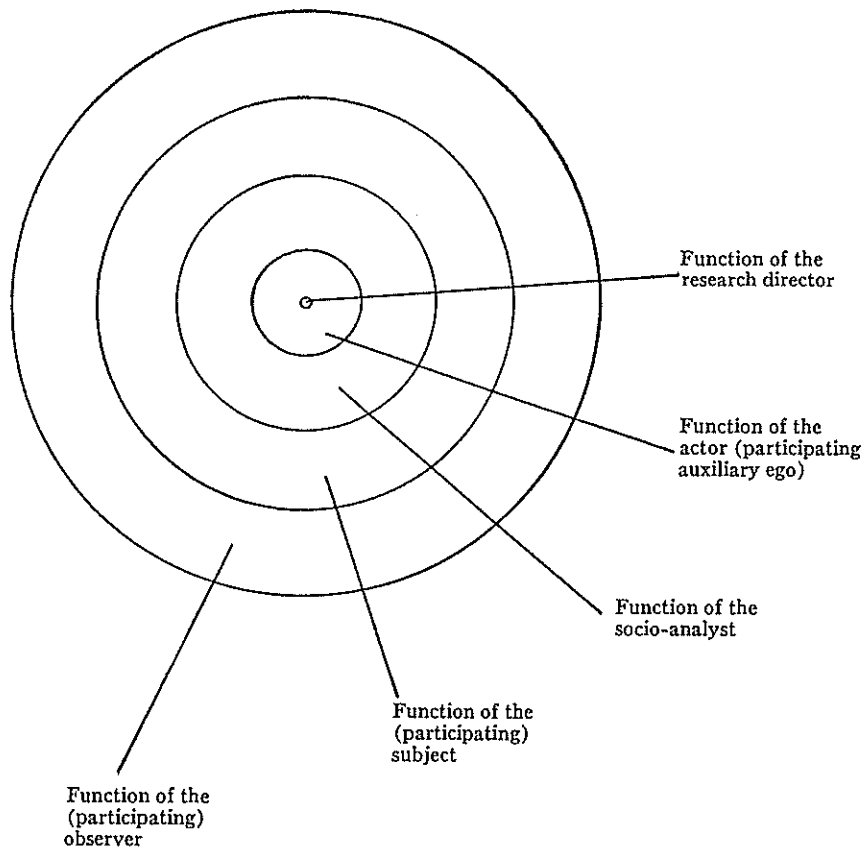
⁵⁵Op. cit., pp. 108-133.

theory of sociometric testing⁵⁰ is primary to the specific samples of procedures in themselves. The theory was so formulated that it should be possible for other investigators to develop similar tests in accord with a set of principles. The view that we sociometrists want to produce a test, which will do for social relations what the intelligence test has tried to accomplish for the measurement of intelligence, is erroneous. I have tried to forge a master key to many doors, to as many tests as the domain of social relations may require for its proper investigation. There are thousands of tests which need to be constructed and our theory of testing properly understood, should provide the *basis* for their development.

I will illustrate the application of the theory of sociometric testing by giving a sample. The requirements of a good sociometric test are: (a) that it reaches and measures two-way relations, (b) that the participants in the situation are drawn to one another by one or more criteria, (c) that a criterion is selected to which the participants are bound to respond, at the moment of the test, with a high degree of spontaneity, (d) that the subjects are *adequately motivated* so that their responses may be sincere, (e) that the criterion selected for testing is strong, enduring and definite and not weak, transitory and indefinite. Let us imagine that the problem is to determine the scientific status of the members of the American Sociological Society, and of members of other leading social science associations. One sociometric procedure would be to investigate *who is quoting whom*, to look up their written records, research papers, books, and so forth. This sociometric test is not a choice technique but a quotation test. It deviates in form from other tests I constructed. The scientists may not know one another face to face, they may know each other only by their recorded works. The sociometric investigator may not have to meet them, at least not in the first stage of the test. This test, although apparently cold and impersonal, fulfills the basic requirements. It considers two-way

⁵⁰"An instrument to measure the amount of organization shown by social groups," p. 11. "Three points are of methodological significance: First, every individual is included as a center of emotional response. Second, this is not an academic reaction. The individual is caught by an emotional interest for a certain practical end he wishes to realize and upon his knowledge that the tester has the authority to put this into practice. Third, the choice is always related to a definite criterion. In the first instance, the criterion is of studying in proximity, actually sitting beside the pupils chosen. In the second, the criterion is of living in proximity, actually within the same house. When this test was applied to work groups, the criterion was working in proximity, actually within the same work unit and collaborating in the function to be performed. Other criteria must be used according to the special function of any group under study," p. 14.

DIAGRAM OF THE SOCIAL INVESTIGATOR IN
PSYCHODRAMATIC RESEARCH



relations, quoting and being quoted, how often and by whom. Quotation is a strong criterion and should help to determine the status of scientists among the membership of scientific societies. Last but not least a great deal of spontaneity enters into the choice of quoting someone, or leaving others out from a "table of references." The investigator would be interested to determine among other things,—whether the subject quotes himself and how often, whether he is quoted by others, and whether he quotes others, positively or negatively; whether he quotes living authors or dead authors, or whether he quotes no one. The quoters and the quotees may be charted by means of sociograms of the scientific societies to which they belong. The sociograms may give clues to the degrees of cohesion between the members of a given society, the affinity or friction between two societies of a similar order. A second step of interviewing key individuals within the sociogram may give further clues to the motivation underlying the quotation and to what extent the quotation is not altogether spontaneous but to what extent distorted by social pressure.

There is practically no social situation which could not be picked at random and which could not be made the center of a significant sociometric project. The investigator has to enter the situation imaginatively, in full rapport with the imaginative trends of the individuals involved, without trying to copy slavishly models of sociometric testing, established by others. There is hardly a non-sociometric method which cannot be turned into a truly sociometric procedure.⁵⁷

Sociometry as a System

In the era of theory and qualitative analysis "system" was perhaps a luxury. In the era of sociometry system becomes a working necessity. In the philosophical era system was an individual matter. In the sociometric era research is by necessity a coöperative enterprise. Therefore the territory to be investigated cannot be arbitrarily determined as to its borderlines, divisions and subdivisions. It must be agreed upon by all the field workers and this is not only a matter of intellectual consensus. It is an objective matter because of the dynamic properties which the domain has

⁵⁷Instead of showing to children, white and colored, the picture of symbolic representatives in various situations (Eugene L. Horowitz and Ruth E. Horowitz, "Development of Social Attitudes in Children," *Sociometry*, Volume 1, part 2, 1938, p. 301) show them the photographs of actual children with whom they are associated, for instance, the photograph of the whole classroom group, of the whole playground group or in other social situations and let choose from them their associates. (The attitude picture test could provide supplementary information.) A projection picture test is changed into a sociometric picture test.

in difference from other domains. The workers must stick to the same terminology, the same language and this not because of a love for a special semantics, but because of the need for a mutual understanding in the course of an expedition in which they share similar dangers and risks. In the pre-sociometric era a certain anarchy in terms, concepts or hypotheses was tolerable because of the transitional state of social science. But with the advent of sociometry specific methods and techniques were constructed, specific aims and definite hypotheses were formulated and so the time when a singular mind crowded all the social knowledge of his time into a singular theory has passed and made place to a time where many singular minds are necessary to combine their efforts to produce a *magnus opus*.

The fear of system is a survival from the individualistic epoch, when it was a sign of greatness that a single man had to do the whole job. In the stage in which the social sciences are today, we have to become system conscious even if it hurts our vanity.

Sociometrists are becoming increasingly system conscious not because they are less spontaneous than the old individualists, but because genuine progress in sociometry requires coördinated effort and discipline, reducing egotistic arbitrariness to a minimum. System formation is not in all stages of a science's development of equal importance. It is unimportant and even hindering progress when a gold mine is suspected in a certain piece of land and searchers are sent out to test the ground. Many tests may then be used, individual ways may be more profitable than standardization and organization of effort. But once a gold mine is tapped, all hands must rush to that point until the new spot is channelized and under full control. After this phase is accomplished new aims may require new methods, and then again system formation may be a hindrance rather than a means to progress.

SOCIOMETRY AND AXIOLOGY

Function of the Psychodrama in Sociometry

My first book on spontaneity research⁵⁸ has a similar relation to the development of psychodrama as *Who Shall Survive?* to sociometry. It has marked the turn of two main issues in our psychological and sociological concepts which are still bitterly fought although twenty years have since passed. The turn went from verbal methods to action methods (in which the verbal aspect of behavior is *one* phenomenon only) and later from individual psychological methods to group methods (in which the individual behavior context is taken over but placed in a wider frame of reference).

⁵⁸*Das Stegreiftheater*, 1923.

In psychodramatic procedure action and group methods are at times combined, depending upon the field of application. The book anticipated furthermore the five dividing lines between sociometric and non-sociometric methodology: emphasis on two-way relations between individuals, on two-way relations between roles, the twin concept of spontaneity and creativity, the inter-dependence between function and psycho-social organization, and measurement.⁵⁹ It is amusing to think that the ancient Melpomene should come to the rescue of modern sociology. Of course she had to undergo a radical operation, so that psychodrama, her new offspring, might be well born. But the social investigator had dedicated himself for more than a century to one extreme, the state of passivity, of passive reception, symbolized in the spectator or observer methods. With the advent of sociometry more and more intensive co-experience with the participants in a social situation was demanded from the investigator and he had at last to swing to the other extreme, to the state of full, unlimited activity, to co-experience through action and inter-action, the drama, not the drama as a conventional cultural conserve, but the drama as an experiment in spontaneity research. The psychodrama is able to present the social process in its formative phases, in more dimensions, and more vividly than any other method known. Skillfully tapped, it can become the source of the most intimate knowledge of human relations and its greatest teacher. It added to the tools of the social investigator a new set of methods which can be summed up as *deep* action methods. The dramatic deep action methods are divided into two categories, (a) the psychodrama which deals with inter-personal relations and private ideologies, and (b) *sociodrama* which deals with inter-group relations and with collective ideologies.

"We consider roles and relationships between roles as the most significant development within any specific culture. The pattern of role relations around an individual as their focus is called his cultural atom. Every individual, just as he has a set of friends and a set of enemies,—a social atom—also has a range of roles facing a range of counter-roles. The tangible aspects of what is known as the 'ego' are the roles in which he operates." "A preliminary *norm* (of a role) indicating how most people would behave in a specific situation, was obtained. In this manner a frame of reference is established for this and for other roles. Every subject who comes for study acts in all the roles pertaining to him and his situation can be measured against the established norms which have been standardized with auxiliary egos (on the psychodrama stage). The spontaneous deviations

⁵⁹Das Stegreiftheater, pp. 42, 48, 49, 50, 51.

from the *norm* of a role which are shown by a subject can now be determined and measured."⁶⁰ Sociodramatic procedures are able to externalize and objectify cultural phenomena. An "axionormative"⁶¹ order as it functions within a social system and is used by its participants in evaluating each other and the system, can be portrayed, *tested* and measured. Among the most significant phenomena which recur in practically every psychodramatic session are cultural conserves and cultural stereotypes. The participants fall irresistibly into them, spontaneously as if by tacit understanding. The relationship between the conserve portion and the spontaneity portion within every cultural pattern has been one of the chief problems in spontaneity research.⁶²

Psychodrama—as well as sociodrama—provides all the trappings of a human society in miniature, the people in the audience represent public opinion, the world. The people on the stage represent the protagonists. The director is the research leader—behind his new mask of the director the old masks of the observer, of the analyst, of the participant group member and of the actor are hidden, but still functioning. He is himself a symbol of balanced action, orchestrating, integrating, synthesizing, melting all the participants into a group.

In the course of psychodramatic procedure a revision of the reality function within the social context is noticeable. Many of the social values indispensable in the community look unreal. Incidental and fragmentary events grow out of proportion and take their place. The old reality function

⁶⁰See J. L. Moreno, "Psychodramatic Treatment of Marriage Problems," *Sociometry*, Volume 3, Number 1, 1940.

⁶¹See Florian Znaniecki, "Sociometry and Sociology," p. 225 of this issue. Every sociometrist should read his brilliant and suggestive paper in this symposium. However, Znaniecki's criticism on my concepts, cultural conserve versus *statu nascendi* is not justified by my actual work. I have been not only conscious of the functional interdependence of spontaneity to the cultural conserves, but I have made it the focus of systematic study for the last twenty years. The "cliché" is also one of the great stumbling blocks in spontaneity training. I have given increased emphasis to the *statu nascendi* in societal processes because it has been entirely neglected by sociologists in the past. They have given it at best only theoretical acknowledgment and this rarely. See, "Psychodrama and Mental Catharsis," *Sociometry*, Vol. III, No. 3, 1940.

⁶²One of my first sociometric (or if one prefers, axiometric) scale constructions was a scale evaluating societal and cultural patterns. On one end of the scale were forms with a high degree of spontaneity with no conserve portion or a low degree of it, on the other end of the scale were forms with a high degree of conserve with no spontaneity or a low degree of it. Between the two extremes are placed the social and cultural patterns in which individuals function. See *Das Stegreiftheater*, pp. 37-40. See also "Creativity and the Cultural Conserve," *Sociometry*, Volume 2, Number 2, 1939, p. 1.

becomes an *unreality* function. At first sight it looks as if the psychodramatic function and the reality function would exclude one another. This is in fact only an outward appearance, the stage is not a stage in a theatrical sense, it is a social platform, the actors are not actors but actual people and they do not "act" but present their own selves.⁶³ The plots are not "plays" but their most innerfelt problems. After preliminary sessions the substitutes for people, the auxiliary egos, are often replaced by the actual personages. With them the tangible reality context of their problem in all its functions re-enters the scene. The reality function loses its autonomy, it becomes a "part" of the psychodramatic function in its wider sense of the word.

Objectifying the Social Investigator

A significant contribution has been made by psychodramatic methods to the concept of the social investigator. In observational methods the sociometric investigator is an observer or spectator, he tries to explore among other things, two-way relations, cohesion and disintegration of the group facing him. He tries to come closer and closer to the key individuals and to all individuals of the group, but he never becomes a part of it or identical with them. As soon as he becomes identical with them as a participant, he loses somewhat his function as spectator and the particular objectivity which goes with it. His research gain is that he can take part in an experience which he could never attain as an observer. The observers are no longer outside the group but hidden and integrated in the group, in this sense the function of the observer is never given up by the sociometric

⁶³Psychodrama has no relation to the so-called Stanislavski method. Improvisation in this method is supplementary to the aim of playing a great Romeo or a great King Lear. The element of spontaneity is here to serve the cultural conserve, to revitalize it. The method of improvisation, as a primary principle, to be developed systematically *in spite of* the conserve and the serving it consciously was outside of Stanislavski's domain. A careful reading of his book, *An Actor Prepares*, Theatre Arts Inc., New York, 1936, makes this point clear. He limited the factor of spontaneity to the re-activation of memories loaded with affect. This emphasis tied improvisation to a past experience instead of to the moment. But as we know it was the category of the moment which gave spontaneity work and the psychodrama its fundamental revision and direction. This emphasis upon memories loaded with affect brings Stanislavski in curious relation to Freud. Freud, too, tried to make his patient more spontaneous just as *Stanislavski tried to make his actors more spontaneous in the acting of conserved roles*. Like Stanislavski also Freud tried to evoke the actual experience of the subject but also he preferred intensive experiences of the past to the moment—for a different application however—to the treatment of mental disturbances. Although working in a different domain, Freud and Stanislavski are counterparts.

tester. The operational methods of the sociometrists are now combined with observational methods which receive a new slant. The investigator can shift from the role of the observer to the role of the participant, changing his function as the situation requires. The function of the observer is hidden in the nucleus of the participant investigator. In psychodramatic procedure the concept of the social investigator is further deepened, enlarged and objectified. The function of the observer as well as the function of the participant research leader are now hidden in the nucleus of the research actor (auxiliary ego) and research director. (The auxiliary ego can also be called a *participant* actor, analogous to participant observer.) The auxiliary ego represents in psychodramatic procedure an *absentee person* who is interlocked with the subject-actor in his actual life situation, portraying among other roles, the roles of his father, his mother, her husband, her child. In sociodramatic procedure it represents an *absentee type*, carriers of ideas or representatives of a certain culture, portraying among other roles the roles of a warrior, a priest, a medicine man. The auxiliary ego has two functions: to portray and to explore, in research; to portray and to guide, in therapy. The psychodramatic situation can be seen as an intensified interview situation in which the interviewer is composed of several individual components—the interview-director and his auxiliary egos. The interviewee is composed of the actual and symbolic roles which he brings to expression.

Sociometry and "Sociatry"

I expressly formulated or tacitly implied in the past the following differentiation in my terminology—distinction between research sociometry and applied sociometry, as a sub-field within the latter, with its connotations, sociatry, sociososis, sociotic⁶⁴—parallel to psychiatry—psychosis, psychotic. Differentiating between research spontaneity and therapeutic spontaneity, I designated both as sub-fields of psychodrama.

A nosological approach to the social process begins with its smallest functional entity, the social atom, just as a nosological approach in modern medicine begins with the cell. The social atom has a double role. It plays one role from the point of view of the individual, and another role from the point of view of the group. From the point of view of the individual the role of the social atom has been described as follows: "The *social atom* is that peculiar pattern of inter-personal relations which develops from the

⁶⁴See Stuart C. Dodd, "Sociometry, Delimited, Its Relation to Social Work, Sociology, and the Social Sciences," in this issue, p. 204, and *Who Shall Survive?*, p. 192.

time of human birth. It first contains mother and child. As time goes on, it adds from the persons who come into the child's orbit such persons as are unpleasant or pleasant to him, and vice versa, those to whom he is unpleasant or pleasant. Persons who do not leave any impression, positive or negative, remain outside of the social atom as mere acquaintances. The feeling which correlates two or more individuals has been called tele. The social atom is therefore a compound of the tele relationships of an individual. As positively or negatively charged persons may leave the individual's social atom and others may enter it, the social atom has a more or less ever-changing constellation."⁶⁵ From the point of view of the group the role of the social atom has been described as follows: "They have an important function in the formation of human society. . . . Whereas certain parts of these social atoms seem to remain buried between the individuals participating, certain parts link themselves with parts of other social atoms and these with parts of other social atoms again, forming complex chains of interrelations which are called, in terms of descriptive sociometry, psychological networks. The older and wider the network spreads the less significant seems to be the individual contribution toward it."⁶⁶ The social atom can be used therefore as a point of reference for nosological classifications, for both individual and group disturbances.⁶⁷ The group on the other hand, appears affected by a phenomenon which has been discovered to operate within the social atom, the tendency towards balance or towards imbalance of its emotional economy. "The imbalances within the social atom and their reflections upon the development of psychological currents and networks give social psychiatry a nosological basis and differentiates it as a discipline from psychiatry proper. Psychiatric concepts as neurosis and psychosis are not applicable to socio-atomic processes. A group of individuals may become *sociotic* and the syndrome producing this condition can be called a *sociosis*."⁶⁸ In treatment situations the theoretically significant distinction between social atom and cultural atom cannot be maintained. In social

⁶⁵See J. L. Moreno, "Psychodramatic Shock Therapy," *Sociometry*, Volume 2, Number 1, 1939, p. 3.

⁶⁶See J. L. Moreno, "Sociometry in Relation to Other Social Sciences," *Sociometry*, Volume 1, part 1, 1937, p. 213.

⁶⁷"The social atom patterns of normal persons of different ages have been studied and found to portray typical variation with development of age. Thus a frame of reference is given with which we can compare the changes within the social atom of individuals afflicted with mental disorders." See J. L. Moreno, "Psychodramatic Shock Therapy," *Sociometry*, Volume 2, Number 1, 1939, p. 29.

⁶⁸J. L. Moreno, *Who Shall Survive?*, p. 192.

reality there is but one atom.⁶⁹ Therefore, if it is found that the prevalence of a certain type of atom with given imbalances in a community is responsible for corresponding imbalances within the related psycho-social networks. The efforts of the sociometrist must be directed to prevent their emergence, to rectify them, or to "crush" *this* type of atom out of existence.

A growing number of sociotherapeutic procedures are now in development but as they are still in an experimental phase, there is confusion because of a lack of knowledge and lack of experience. The forms which I particularly advocated are: group therapy or group psychotherapy, therapeutic forms of psychodrama and sociodrama, spontaneity training, role training and leader training. One distinction may be helpful in the present period of transition until a well rounded system of social therapy has been organized. All group methods which do not base their therapeutic measures upon accurate knowledge of the structure of the group treated should be considered as incomplete and unscientific. The babel of confusion can be brought back to two sources, a treatment of the group *surface*, in form of social activities and mass suggestion with little or no knowledge of the structure-function relations within the group. The other source is that psychoanalysis, the dominating school in individual psychotherapy, is gradually entering the group field without being able to shake off some of their sacred principles which are blocking their progress in the new domain. But as knowledge of psycho-social organization in relation to function will spread, the dilettantes in group therapy will become rarer. As psychoanalysts become more spontaneous and more active, the function of psycho- and sociodrama will become plausible to them. As they turn more group minded, group structure will become just as natural a basis for their group work as the structure of the psyche is in their work with single individuals. It can be anticipated therefore, that when Cottrell and Gallagher will survey again in 1950 the development of the social sciences during the current decade, they will find a synthesis between the different school formations under way.⁷⁰

⁶⁹"From the point of view of the actual situation, the distinction between social and cultural atom is artificial. It is pertinent for construction purposes but it loses its significance within a living community. We must visualize the atom as a configuration of interpersonal relationships in which the attractions and repulsions existing between its constituent members are integrated with the many role relations which operate between them. Every individual in a social atom has a range of roles, and it is these roles which give to each attraction or repulsion its deeper and more differentiated meaning." See J. L. Moreno, "Foundations of Sociometry," *Sociometry*, Volume 4, Number 1, 1941, p. 15.

⁷⁰See Leonard S. Cottrell, Jr., and Ruth Gallagher, *Developments in Social Psychology*, 1930-1940, Beacon House Ins., 1940.

SOCIOMETRY AND GROUP PSYCHOTHERAPY

My book on group method⁷¹ has a similar relation to the development of group psychotherapy as my book on The Spontaneity Theatre to the development of psychodrama. As the practice of group psychotherapy is spreading more rapidly than knowledge would permit, my original expositions⁷² of term and concept might be recalled here.

To the one-way relations between individuals correspond *one-way therapies*, to the two-way relations between individuals, correspond *two-way therapies*. To the one-way role relations between individuals correspond one-way role therapies, to the two-way role relations correspond two-way role therapies. Individuals in group situations can be "active therapeutic agents"⁷³ for one another. This can be observed in the simplest group discussion as well as in the most complex psychodramatic meeting. "The groups function for themselves, and the therapeutic process streams through their mutual inter-relations."⁷³ The therapeutic agents function within the group and not from without. "Treatment is projected away from the clinic into real life situations and techniques for a proper procedure to be used *on the spot* developed. The leader is *within* the group, not a person outside."⁷⁴ The therapeutic agent must not be a psychiatrist or an educator, it can be *any* participating individual. "The therapeutic agent for the unmanageable child . . . not a psychiatrist or educator outside the group, but another

⁷¹J. L. Moreno, *Application of the Group Method to Classification*, Beacon House Inc., 1931.

⁷²There are many types of group treatment possible and the problem was to define their common features and the principle difference between all forms of group psychotherapy and all forms of individual psychotherapy (in psychodramatic procedure group psychotherapy forms an essential part but it operates within a *special* setting). Looking backward—the conference on the "Application of the Group Method to Classification" during the meeting of the American Psychiatric Association in Philadelphia, May 1932, assumes historical significance for the development of group psychotherapy. The late Dr. William A. White was moderator of the discussion which was based on my book on the subject. (See Report of the Conference published by the National Committee on Prisons and Prison Labor, New York, 1932). It is significant that the rapid development of both group psychotherapy and sociometry dates from that conference on. Trigant Burrow's approach to group analysis remained unproductive—at least for what has become to be known in the last twelve years as group psychotherapy and sociometry. His analysis was falsely called group analysis. Because what Burrow meant to cure was not the *group* but the *kind* (psychoanalysis).

⁷³Op. cit. pp. 60-61, section on "Group Therapy"; see also Floyd H. Allport, *Social Psychology*, 1924, pp. 9-10 (Biological Forms of the Group Fallacy).

⁷⁴Op. cit., p. 94.

child within the group."⁷⁶ Group therapies have been applied in the open community to various social situations, home situations, school situations, as well as to closed communities as prisons and reformatories. They can be applied to mental hospital situations in such a manner that "through the inter-action of one or more persons (other patients) who are so coordinated to the patient that the curative tendencies within him are strengthened and the disparaging tendencies within him checked . . . so that he may influence the members of his group in a similar manner."⁷⁶

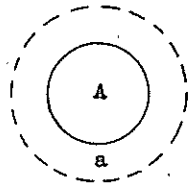
The sharp distinction between one-way and two-way therapies is important from the point of view of a system of social pathology. But even the therapist using the one-way approach must break with the rigid rule of doing all the treatment himself—as a one-man institution—which is, for instance, characteristic for the classic form of psychoanalysis. He, the directing agent, has often to engage helpers, auxiliary egos, who step in, substitute or replace him whenever it is required. The auxiliary ego technique has shown its usefulness in the treatment of many forms of social maladjustments and mental disorders, particularly in the treatment of children and psychotics. It is significant for the trends of our time that psychoanalysis begins to recognize the value of the auxiliary ego concept.⁷⁷

⁷⁶The greatest practical contribution to sociometry and group therapy has been made by educational sociometrists. The first report on sociometry in the classroom illustrated by sociograms was the "Analysis of Spontaneous Groupings within School Classes" by J. L. Moreno in collaboration with Helen H. Jennings and Richard Stockton; see *Application of the Group Method to Classification*, pp. 98-103, 1931. The researches carried out by Merl E. Bonney, Rose Cologne, Joan H. Criswell, Helen H. Jennings, Leona M. Kerstetter, N. Loeb, Florence B. Moreno, Mary L. Northway, Leslie D. Zeleny independently in Canada and the United States, give material confirmation of a sociogenetic law, in its broadest outlines. It suggests that the first stage of social isolation turns gradually into social differentiation of groupings of infants. The first traces of cooperative group behavior appears between two and four years, independent cooperative activities between six and seven at the end of the pre-socialized period. See *Who Shall Survive?*, pp. 33, 34, 38, also p. 303 in this issue. Chronological age is an inexact frame of reference. Social age and social quotient could replace it.

⁷⁶Op. cit., p. 97.

⁷⁷See Paul Federn, "Psychoanalysis of Psychoses", *Psychiatry Quarterly*, Volume 17, 1943, and *Bulletin for Psychodrama and Group Psychotherapy* in this issue, p. 344. See also, for the analysis of the auxiliary ego, J. L. Moreno, "Inter-personal Therapy and the Psychopathology of Inter-personal Relations", *Sociometry*, Volume 1, part 1, 1937. The same is true about the growing recognition of deep action methods. It should be of interest to future historians of psychotherapy to compare the development of psychodrama with psychoanalysis between 1920 and 1943. At a time when deep action methods were in full swing in my Stegreiftheater in Vienna (1921-1924), and my book on the subject appeared, the passive couch method was the rigorous

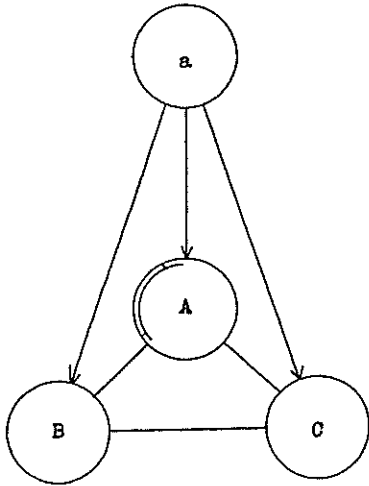
DIAGRAM OF THE THERAPIST
In Treatment Situations



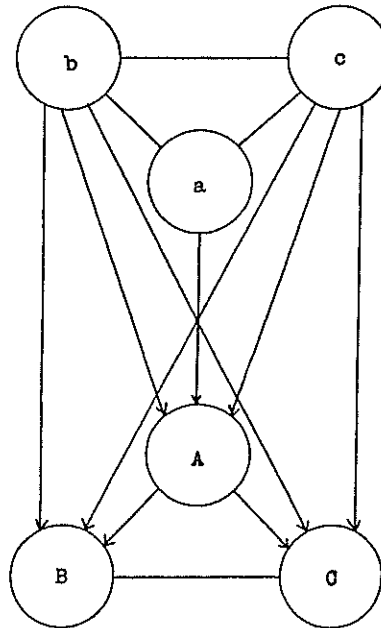
1) **SELF-THERAPY**
Therapist and patient
are the same person
a-A



2) **ONE-WAY THERAPY**
a—Therapist
A—Patient



3) **INTER-PERSONAL THERAPY**
a—Central or Chief Therapist.
A, B and C—Three persons contrib-
uting to an inter-personal neurosis.



4) **INTER-PERSONAL THERAPY**
a—Central or Chief Therapist.
b and c—Auxiliary therapists (egos).
A, B and C—Three persons contrib-
uting to an inter-personal neurosis.

Just as the therapist may consist of more than one person who administers treatment, also the patient may consist of more than one person on the receiving end, if the ailment involves two or more persons (see diagram of the Therapist). The therapist may be one person confronting in the treatment situation several individuals interlocked. He can treat them either independently in alternating sessions, in joint meetings, or in two phases, a phase of alternating sessions followed up later by a phase of joint meetings.⁷⁸ If the therapist is himself not one person but a director with a number of assistants confronting a number of individuals involved in the same conflict, the treatment situation begins to resemble more and more a psychodramatic situation out of which the deep action aspect is removed. There are treatment situations in use which are more complex but of the greatest usefulness when the number of participants is unlimited as in the group psychodrama,⁷⁹ and the audience so organized that its individual components are bound together by a common mental syndrome—although they may be socially total strangers to one another. Televised and filmed psychodrama promise a new form of group psychotherapy with nation-wide effect. Millions of individuals involved in the same problem can be treated at a distance by a sociodrama developed in a psychodramatic laboratory equipped for television broadcasting.⁸⁰ The urgent need for a therapy which can secure world-wide effects has been emphasized by me repeatedly and it is high time that the need is recognized by governmental agencies. The use of moving pictures, radio (and soon of television), by political organizations has produced world-wide emotional imbalances which must be counteracted by curative efforts of similarly huge proportions based upon unbiased, sociometric principles. But the therapeutic influence projected into distance must be combined with a sociometric approach to the groups in *situ*.⁸¹

rule among psychoanalysts. When Ferenczi permitted some of his patients to get up from the couch occasionally, and give expression to anxiety, he had to apologize for this transgression from the orthodox technique *soon after*. See Sandor Ferenczi, *Further Contributions to the Theory and Technique of Psychoanalysis*, Boni and Liveright, 1927. Deep action methods should not be confused with active analysis or a regression to pre-analytic educational and suggestion therapy.

⁷⁸See "Application of the Group Method to Classification", *Who Shall Survive?*, and "Inter-personal Therapy and the Psychopathology of Inter-personal Relations", *Sociometry*, Volume 1, part 1, 1937.

⁷⁹J. L. Moreno and Zerka Toeman, "The Group Approach in Psychodrama", *Sociometry*, Volume 5, Number 2, 1942.

⁸⁰See J. L. Moreno and John K. Fischel, "Spontaneity Procedures in Television Broadcasting with Special Emphasis on Inter-personal Relation Systems", *Sociometry*, Volume 5, Number 1, 1942.

⁸¹See "Comment by Read Bain", *Sociometry*, Volume 5, Number 2, 1942, p. xxxvii.

Political or other adverse influences in the local situation are able to *paralyze* and counteract any beneficial effect. The chief difficulty is, however, that the matrix of inter-individual relations does not produce automatically a smoothly functioning social surface. A simple illustration of this handicap is the placement of students in a dining room. "In a particular cottage of our training school live 28 girls. In their dining room are seven tables (each accommodates four people). The technique of placing them around these tables can take different forms. We may let them place themselves as they wish, and watch the result. A girl "A" seats herself at table 1; eight girls who are drawn to her try to place themselves at the same table. But table 1 can hold only three more. The result is a struggle and somebody has to interfere and arrange them in some arbitrary manner. A girl "B" runs to table 2, but nobody attempts to join her; thus three places at that table remain unused. The technique of letting the girls place themselves, we find, works out to be impracticable. It brings forth difficulties which enforce arbitrary, authoritative interference with their wishes, the opposite principle from the one which was intended, a free democratic individualistic process.

Another technique of placement is one applied strictly from the point of view of the supervisor of the dining room. She places them in such a fashion that they produce the least trouble to her without regard to the way in which the girls themselves feel about the placements. Or she picks for each of the seven tables a leader around whom she groups the rest without regard to the leader's feeling about them and without consideration of whether the "leader" is regarded by the girls as a "leader."⁸² This illustration shows plainly the contradictory and confusing character of the inter-personal matrix. It is not self-regulating adequately. It can be managed and mismanaged. It is, taken by itself, neither in favor of a democratic, autocratic, communistic or any other political process.⁸³ But any social order, if it wants to endure, has to take the deeper requirements of the group into account. "We have differentiated between the spontaneous, organic determinants of a psychological current, such as the feelings which arise from the individuals themselves, and the artificial or mechanical determinants, such as means which succeed to initiate or influence such

⁸²J. L. Moreno and Helen H. Jennings, "Advances in Sociometric Technique", *Sociometric Review*, 1936, p. 26.

⁸³J. L. Moreno, "Sociometry in Relation to Other Social Sciences", *Sociometry*, Volume 1, part 1, 1937, and Kurt Lewin and Ronald Lippitt, "An Experimental Approach to the Study of Autocracy and Democracy: A Preliminary Note", *Sociometry*, Volume 1, part 2, 1938.

feelings from without. The spontaneous determinants may produce a movement of a certain intensity, duration, and direction. The artificial or mechanical determinants may either accelerate or retard the intensity, duration, and direction, that is, accelerate or retard the development of a current. They may also excite a current to rise beyond its natural level to an unnatural intensity and prolong it beyond its natural duration. The groups in power in a community may be interested to, and often do, exert such influence. The tendency to interfere with the self-regulating mechanism of a current is a phenomenon which may be daily observed in a community. After a conflict between two gangs in a neighborhood has subsided, another group may be interested that this warfare continue and may devise methods to spread stories which materially contribute to extend it beyond its natural limit. Our knowledge of the networks by which a large population in a given geographical area is inter-connected suggests to how far an extent a group in power may be able to *degenerate* the development of psychological currents through the use of the modern technological methods for the dissemination of propaganda. We may not be able to command psychological currents but we may be able to extend, to accelerate, or to retard them,— in other words, to *denaturalize* their spontaneous unfoldment. A group in power may even attempt to produce psychological currents at *will*, synthetically. Such management of the networks and currents in a population is a most dangerous play and may produce greater disturbances in the depths than the momentary effects upon the surface at first may indicate.”⁸⁴ Since this has been written the nazi system of power has tried to produce in Germany a synthetic society and denaturalize spontaneous unfoldment. But according to sociometric evidence, a power system must decay from within sooner or later. It is not able to resist forever the upsurge of the spontaneous social psychological currents seething underneath the power system. The threat of a collapse of the power system is the greater, the larger the number of neighboring groups are which enjoy a higher degree of spontaneous unfoldment. The nazis were logical in their conclusions that they must spread their power over the entire globe in order that they save themselves from an early breakdown. As an isolated power system they could not exist for long. They could not create an independent Germanic culture if surrounded by cultures of a different and opposite order. The nazi system would be thrown from power by a revolution coming from within Germany itself, even if the allies should not succeed in winning the war. But even if a system like nazism could win a total victory and rule

⁸⁴*Who Shall Survive?*, pp. 349-350.

the globe, its existence in power would be under constant menace. It would have to make inner adjustments continuously to compensate the demands of the spontaneous social matrix and it would gradually lose its original character. In the course of time it would be a power system in name only, or be replaced by a regime which represents the actual social structure more adequately.

SOCIOMETRY AND THE CULTURAL ORDER

The sum total of all methods, procedures and tests of sociometry has a supreme aim, to explore, test and measure the present cultural order. Let us examine its structure first in the light of our twin concept spontaneity-conserve. I summarized the situation in *Who Shall Survive?* "At the beginning⁸⁵ of national cultures, the cultural forms, dance, music, drama, religion, custom, are improvised, created in the moment, but as the moments of inspiration pass man becomes more fascinated by the contents which have remained from the by-gone created acts, by their careful conservation and estimation of their value, than to keep on and to continue creating. It seemed to man a higher stage of culture to forsake the moment, its uncertainty and helplessness, and to struggle for contents, to select and idolize them, thus laying ground for our type of civilization, the civilization of the *conserve*. . . . The process beginning with inspired Dionysian acts, ended in a sacred content. This was not accidental. It was an intentional evolution. . . . It seems we experience today a similar case in Russia. . . . Their goal, however, is not the moment and with it in consequence the flexible spontaneous personality, but the mass man, the functional man, the man who can be *exchanged* and with it the repetition of a sacred political rite, a conserve, the revolution." The degree of spontaneous mobility, however, differs markedly between, let us say, the traditional life of a Hindu community, a farm community in Oklahoma, and New York Manhattan. The sacred tradition has become in communist Russia the works of Marx and Lenin, in nazi Germany a nordic bible, in India the life of Buddha, a democratic people revere the declaration of independence and the sermon on the mount. Only the contents change, the principle is in every case the same. The cultural behavior is unaltered. It is characterized by the sacrifice of the moment upon the altar of conserves. We could visualize a full reversal of this picture, although there is no historical precedent for it, a culture in which

⁸⁵There is no true "beginning," there is always a hangover from previous traditions, but there are flashes of novelty which give every revolutionary period an increased spontaneous mobility, and a changing pattern of role relations. See, *Who Shall Survive?*, chapter XIII. Spontaneous Evolution of Society, pp. 337-339.

the conserves are sacrificed before the altar of the moment. It would be the moment then, which becomes sacred.⁸⁶

Like the human societies which our cultural order brings forth, also its social revolutions follow a traditional pattern. At the start they contemplate a new *social moment*. They start with an increased spontaneous mobility of the participating individuals, and with dynamic changes in the psycho-social structures of the groups involved. But after a certain period of time the revolution resolves itself like a sky-rocket which consummates its speed, a decrease of its spontaneous mobility sets in, and a freezing up of the contents of the psycho-social structure with or without modifications.

The gain of revolutions is minimal compared to the effort expended, moreover the ends for which they are fought are rarely attained. Let us examine therefore, how their blueprints compare to the sociometric principles which are found to operate within psycho-social structures. Among the major revolutions which took place within the last century and a half, the American-French revolution produced a blueprint which was founded on a universal idealism, but it was made without knowledge of the factors operating in human inter-action. Mankind was a sum of individuals. The guarantee of freedom, equality and fraternity was believed capable of adjusting all social problems. The dynamics caused by inter-personal and inter-group relations did not play a part in their masterplan. The communist revolution led by Marx and later by Lenin made some changes in the blueprint. It narrowed the field of analysis to the economic question. Mankind was no longer considered a sum of individuals with equal rights and equal opportunities, as the American and French revolutions had declared. It was divided into two classes, the class of producers and the class of capitalistic owners. In establishing a single focus Marx was able to develop methodically a dialectic of action. He made two alterations in the blueprint. On one hand he divided society into the two social classes, on the other hand he reduced the importance of the single individual breaking up the revolution into two phases, the working class revolution and the individual psychological revolution, the latter to follow after the working class

⁸⁶Becker and Myers suggest the term sacred and secular, sacred to express societal inertia, secular, craving for the new. See Howard Becker and Robert C. Myers, "Sacred and Secular Aspects of Human Society," *Sociometry*, Volume 5, Number 3, p. 207. But the craving of the eternally new can become to its bearers just as sacred as the craving for the eternally recurrent. Phrasings which I am using, as spontaneous or emerging societies on one hand and conserved or stereotyped societies on the other hand, seem to me more appropriate than secular and sacred.

had been placed in power. Marx, spurred by his faith in historical determinism and unaware of the cumulative effect of inter-personal and inter-group processes, thought that they could wait a few centuries patiently, until the economic victory was won. In his concept of social classes Marx showed, however, a nearness to sociometric findings. He placed all individuals who work for wages without getting the full value of their labor, into one group. The fact of exploitation, he thought, must produce between them emotional ties. The "criterion" of economic slavery should weld them into one dynamic social force. He placed all individuals who used up the unearned surplus value into a second group, the capitalistic owners. However, the denotations of the class concept have been numerous and vague, as a half truth they produced confusion. The nazi revolution followed the communist example in further reducing the importance of the single individual and in dividing mankind into two racial classes. The division is in reality still more difficult to establish.

It is obvious that just as revolutions and wars, also their eternal counterparts, the post-revolutionary, post-war and peace-planning must be constructed in accord with the reality of human social structures. Sociometry has taught us to be pessimistic, critical of all enterprises which try to solve problems of human relations without the most intensive participation of the people involved, and the most intensive knowledge of their psycho-social living conditions. We have good reasons to fear that, like the revolutions and wars which produced them, the peace conferences and leagues of nations will result in skyrockets and end in failure.

Sociometry and the Cultural Order

J. L. Moreno

Sociometry, Vol. 6, No. 3 (Aug., 1943), 299-344.

Stable URL:

<http://links.jstor.org/sici?sici=0038-0431%28194308%296%3A3%3C299%3ASATCO%3E2.0.CO%3B2-R>

Sociometry is currently published by American Sociological Association.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/asa.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.

