The concept of position in sociology.—The sociologist’s interest in human ecology is in man’s relation to other men as found in the definite and typical patterns which the population assumes in natural areas. In so far as social structure can be defined in terms of position, and social changes in terms of movement of the population, social phenomena are subject to mathematical measurement. The growth of a city is not a matter of mere aggregation of people, but involves changes in the central business district which are reflected in all parts of the city, the multiplication of professions and occupations, and incidental increase in land values, all of which are measurable in terms of mobility of the population. Social disorders, such as mob violence, may be measured in terms of movements of people and of social metabolism, or the assimilation of newcomers into the existing social order. Changes in social and economic status and degrees of personal success or failure are registered in changes of location of residence. Local geography and transportation divide the city into areas which come to have definite occupational and population groups, each of which has a certain rate of mobility. However, not all social phenomena can be measured in terms of location, position, and mobility, for the true unit of social interaction is not an unchanging individual but a changing attitude. Physical barriers are of importance only as they affect communication and contacts. Other factors which affect communication and complicate the problem of measurement are the individuality of social experiences and the inhibiting effect of self-consciousness. Nevertheless social relations are frequently correlated with spatial relations, and hence are in a degree measurable.

Some thirty years ago Professor Eugenius Warming, of Copenhagen, published a little volume entitled *Plant Communities (Plantesam fund)*. Warming’s observations called attention to the fact that different species of plants tend to form permanent groups, which he called communities. Plant communities, it turned out, exhibit a good many of the traits of living organisms. They come into existence gradually, pass through certain characteristic changes, and eventually are broken up and succeeded by other communities of a very different sort. These observations later become the point of departure for a series of investigations which have since become familiar under the title “Ecology.”

Ecology, in so far as it seeks to describe the actual distribution of plants and animals over the earth’s surface, is in some very real sense a geographical science. Human ecology, as the sociologists would like to use the term, is, however, not identical with geography, nor even with human geography. It is not man, but the community; not
man’s relation to the earth which he inhabits, but his relations to other men, that concerns us most.

Within the limits of every natural area the distribution of population tends to assume definite and typical patterns. Every local group exhibits a more or less definite constellation of the individual units that compose it. The form which this constellation takes, the position, in other words, of every individual in the community with reference to every other, so far as it can be described in general terms, constitutes what Durkheim and his school call the morphological aspect of society.¹

Human ecology, as sociologists conceive it, seeks to emphasize not so much geography as space. In society we not only live together, but at the same time we live apart, and human relations can always be reckoned, with more or less accuracy, in terms of distance. In so far as social structure can be defined in terms of position, social changes may be described in terms of movement; and society exhibits, in one of its aspects, characters that can be measured and described in mathematical formulas.

Local communities may be compared with reference to the areas which they occupy and with reference to the relative density of population distribution within those areas. Communities are not, however, mere population aggregates. Cities, particularly great cities, where the selection and segregation of the populations has gone farthest, display certain morphological characteristics which are not found in smaller population aggregates.

One of the incidents of size is diversity. Other things being equal, the larger community will have the wider division of labor. An examination a few years ago of the names of eminent persons listed in Who’s Who indicated that in one large city (Chicago) other occupations classed as professions. The number of professions requiring special and scientific training for their practice is an index and a measure of the intellectual life of the community. For the intellectual life of a community is measured not merely by the scholastic attainments of the average citizen, nor even by the communal intelligence-quotient, but by the extent to which rational methods have been applied to the solution of communal problems—health, industry, and social control, for example.

One reason why cities have always been the centers of intellectual life is that they have not only made possible, but have enforced, an individualization and a diversification of tasks. Only as every individual is permitted and compelled to focus his attention upon some small area of the common human experience, only as he learns to concentrate his efforts upon some small segment of the common task, can the vast co-operation which civilization demands be maintained.

¹ Geographers are probably not greatly interested in social morphology as such. On the other hand, sociologists are. Geographers, like historians, have been traditionally interested in the actual rather than the typical. Where are things actually located? What did actually happen? These are the questions that geography and history have sought to answer. See An Introduction to Geographical History, by M. Lucien Febre.
In an interesting and suggestive paper read before the American Sociological Society at its meeting in Washington in 1922, Professor Burgess sketched the processes involved in the growth of cities. The growth of cities has usually been described in terms of extensions of territory and increase in numbers. The city itself has been identified with an administrative area, the municipality; but the city, with which we are here concerned, is not a formal and administrative entity. It is rather a product of natural forces, extending its own boundaries more or less independently of the limits imposed upon it for political and administrative purposes. This has become to such an extent a recognized fact that in any thoroughgoing study of the city, either as an economic or a social unit, it has been found necessary to take account of natural, rather than official, city boundaries. Thus, in the city-planning studies of New York City, under the direction of the Russell Sage Foundation, New York City includes a territory of 5,500 square miles, including in that area something like one hundred minor administrative units, cities, and villages with a total population of 9,000,000.

We have thought of the growth of cities as taking place by a mere aggregation. But an increase in population at any point within the urban area is inevitably reflected and felt in every other part of the city. The extent to which such an increase of population in one part of the city is reflected in every other depends very largely upon the character of the local transportation system. Every extension and multiplication of the means of transportation connecting the periphery of the city with the center tends to bring more people to the central business district, and to bring them there oftener. This increases the congestion at the center; it increases, eventually, the height of office buildings and the values of the land on which these buildings stand. The influence of land values at the business center radiates from that point to every part of the city. If the growth at the center is rapid it increases the diameter of the area held for speculative purposes just outside the center. Property held for speculation is usually allowed to deteriorate. It easily assumes the character of a slum; that is to say, an area of casual and transient population, an area of dirt and disorder, “of missions and of lost souls.” These neglected and sometimes abandoned regions become the points of first settlement of immigrants. Here are located our ghettos, and sometimes our bohemias, our Greenwich Villages, where artists and radicals seek refuge from the fundamentalism and the Rotarianism, and, in general, the limitations and restrictions of a Philistine World. Every large city tends to have its Greenwich Village just as it has its Wall Street.

The growth of the city involves not merely the addition of numbers, but all the incidental changes and movements that are inevitable in the vast complexities of urban life. The growth of new regions, the multiplication of professions and occupations, the incidental increase in land values which urban expansion brings - all are involved in the processes of city growth, and can be measured in terms of changes of position of individuals with reference to other individuals, and to the community as a whole. Land values can be reckoned, for example, in terms of mobility of population. The highest land values exist at points where the largest number of people pass in the course of twenty-four hours.
The community, as distinguished from the individuals who compose it, has an indefinite life-span. We know that communities come into existence, expand and flourish for a time, and then decline. This is as true of human societies as it is of plant communities. We do not know with any precision as yet the rhythm of these changes. We do know that the community outlives the individuals who compose it. And this is one reason for the seemingly inevitable and perennial conflict between the interests of the individual and the community. This is one reason why it costs more to police a growing city than one which is stationary or declining.

Every new generation has to learn to accommodate itself to an order which is defined and maintained mainly by the older. Every society imposes some sort of discipline upon its members. Individuals grow up, are incorporated into the life of the community, and eventually drop out and disappear. But the community, with the moral order which it embodies, lives on. The life of the community therefore involves a kind of metabolism. It is constantly assimilating new individuals, and just as steadily, by death or otherwise, eliminating older ones. But assimilation is not a simple process, and, above all else, takes time.

The problem of assimilating the native-born is a very real one; it is the problem of the education of children in the homes and of adolescents in the schools. But the assimilation of adult migrants, finding for them places in the communal organization, is a more serious problem: it is the problem of adult education, which we have just in recent years begun to consider with any real sense of its importance.

There is another aspect of the situation which we have hardly considered. Communities whose population increase is due to the excess of births over deaths and communities whose increase is due to immigration exhibit important differences. Where growth is due to immigration, social change is of necessity more rapid and more profound. Land values, for one thing, increase more rapidly; the replacement of buildings and machinery, the movement of population, changes in occupation, increase in wealth, and reversals in social position proceed at a more rapid tempo. In general, society tends to approach conditions which are now recognized as characteristic of the frontier.

In a society in which great and rapid changes are in progress there is a greater need for public education of the sort that we ordinarily gain through the public press, through discussion and conversation. On the other hand, since personal observation and tradition, upon which common sense, as well as the more systematic investigations of science, is finally based, are not able to keep pace with changes in conditions, there occurs what has been described by Ogburn as the phenomenon of “cultural lag.” Our political knowledge and our common sense do not keep up with the actual changes that are taking place in our common life. The result is, perhaps, that as the public feels itself drifting, legislative enactments are multiplied, but actual control is decreased. Then, as the public realizes the futility of legislative enactments, there is a demand for more drastic action, which expresses itself in ill-
defined mass movements and, often, in mere mob violence. For example, the lynchings in the southern states and the race riots in the North.

So far as these disorders are in any sense related to movements of population—and recent studies of race riots and lynchings indicate that they are—the study of what we have described as social metabolism may furnish an index, if not an explanation, of the phenomenon of race riots.

One of the incidents of the growth of the community is the social selection and segregation of the population, and the creation, on the one hand, of natural social groups and on the other, of natural social areas. We have become aware of this process of segregation in the case of the immigrants, and particularly in the case of the so-called historical races, peoples who, whether immigrants or not, are distinguished by racial marks. The Chinatowns, the Little Sicilies, and the other so-called “ghettos” with which students of urban life are familiar are special types of a more general species of natural area which the conditions and tendencies of city life inevitably produce.

Such segregations of population as these take place, first, upon the basis of language and of culture, and second, upon the basis of race. Within these immigrant colonies and racial ghettos, however, other processes of selection inevitably take place which bring about segregation based upon vocational interests, upon intelligence, and personal ambition. The result is that the keener, the more energetic, and the more ambitious very soon emerge from their ghettos and immigrant colonies and move into an area of second immigrant settlement, or perhaps into a cosmopolitan area in which the members of several immigrant and racial groups meet and live side by side. More and more, as the ties of race, of language, and of culture are weakened, successful individuals move out and eventually find their places in business and in the professions among the older population group which has ceased to be identified with any language or racial group. The point is that change of occupation, personal success or failure—changes of economic and social status, in short tend to be registered in changes of location. The physical ecological organization of the community, in the long run, responds to and reflects the occupational and the cultural. Social selection and segregation, which create the natural groups, determine at the same time the natural areas of the city.

The modern city differs from the ancient in one important respect. The ancient city grew up around a fortress; the modern city has grown up around a market. The ancient city was the center of a region which was relatively self-sufficing. The goods that were produced were mainly for home consumption, and not for trade beyond the limits of the local community. The modern city, on the other hand, is likely to be the center of a region of very highly specialized production, with a corresponding widely extended trade area. Under these circumstances the main outlines of the modern city will be determined (1) by local geography and (2) by routes of transportation.
Local geography, modified by railways and other major means of transportation, all connecting, as they invariably do, with the larger industries, furnish the broad lines of the city plan. But these broad outlines are likely to be overlaid and modified by another and a different distribution of population and of institutions, of which the central retail shopping area is the center. Within this central downtown area itself certain forms of business, the shops, the hotels, theaters, wholesale houses, office buildings, and banks, all tend to fall into definite and characteristic patterns, as if the position of every form of business and building in the area were somehow fixed and determined by its relation to every other.

Out on the periphery of the city, again, industrial and residential suburbs, dormitory towns, and satellite cities seem to find, in some natural and inevitable manner, their predetermined places. Within the area bounded on the one hand by the central business district and on the other by the suburbs, the city tends to take the form of a series of concentric circles. These different regions, located at different relative distances from the center, are characterized by different degrees of mobility of the population.

The area of greatest mobility, i.e., of movement and change of population, is naturally the business center itself. Here are the hotels, the dwelling-places of the transients. Except for the few permanent dwellers in these hotels, the business center, which is the city par excellence, empties itself every night and fills itself every morning. Outside the city, in this narrower sense of the term, are the slums, the dwelling-places of the casuals. On the edge of the slums there are likely to be regions, already in process of being submerged, characterized as the “rooming-house areas,” the dwelling-places of bohemians, transient adventurers of all sorts, rind the unsettled young folk of both sexes. Beyond these are the apartment-house areas, the region of small families and delicatessen shops. Finally, out beyond all else, are the regions of duplex apartments and of single dwellings, where people still own their homes and raise children, as they do, to be sure, in the slums.

The typical urban community is actually much more complicated than this description indicates, and there are characteristic variations for different types and sizes of cities. The main point, however, is that everywhere the community tends to conform to some pattern, and this pattern invariably turns out to be a constellation of typical urban areas, all of which can be geographically located and spatially defined.

Natural areas are the habitats of natural groups. Every typical urban area is likely to contain a characteristic selection of the population of the community as a whole. In great cities the divergence in manners, in standards of living, and in general outlook on life in different urban areas is often astonishing. The difference in sex and age groups, perhaps the most significant indexes of social life, are strikingly divergent for different natural areas. There are regions in the city in which there are almost no children, areas occupied by the residential hotels, for example. There are regions where the number of children is relatively very high: in the slums, in the middle-class residential suburbs, to which the newly married usually graduate from their first
honeymoon apartments in the city. There are other areas occupied almost wholly by young unmarried people, boy and girl bachelors. There are regions where people almost never vote, except at national elections; regions where the divorce rate is higher than it is for any state in the Union, and other regions in the same city where there are almost no divorces. There are areas infested by boy gangs and the athletic and political clubs into which the members of these gangs or the gangs themselves frequently graduate. There are regions in which the suicide rate is excessive; regions in which there is, as recorded by statistics, an excessive amount of juvenile delinquency, and other regions in which there is almost none.

All this emphasizes the importance of location, position, and mobility as indexes for measuring, describing, and eventually explaining, social phenomena. Bergson has defined mobility as “just the idea of motion which we form when we think of it by itself, when, so to speak, from motion we abstract mobility.” Mobility measures social change and social disorganization, because social change almost always involves some incidental change of position in space, and all social change, even that which we describe as progress, involves some social disorganization. In the paper already referred to, Professor Burgess points out that various forms of social disorganization seem to be roughly correlated with changes in city life that can be measured in terms of ability. All this suggests a further speculation. Since so much that students of society are ordinarily interested in seems to be intimately related to position, distribution, and movements in space, it is not impossible that all we ordinarily conceive as social may eventually be construed and described in terms of space and the changes of position of the individuals within the limits of a natural area; that is to say, within the limits of an area of competitive co-operation. Under such interesting conditions as these all social phenomena might eventually become subject to measurement, and sociology would become actually what some persons have sought to make it, a branch of statistics.

Such a scheme of description and explanation of social phenomena, if it could be carried out without too great a simplification of the facts, would certainly be a happy solution of some of the fundamental logical and epistemological problems of sociology. Reduce all social relations to relations of space and it would be possible to apply to human relations the fundamental logic of the physical sciences. Social phenomena would be reduced to the elementary movements of individuals, just as physical phenomena, chemical action, and the qualities of matter, heat, sound, and electricity are reduced to the elementary movements of molecules and atoms. The difficulty is that in kinetic theories of matter, elements are assumed to remain unchanged. That is, of course, what we mean by element and elementary. Since the only changes that physical science reckons with are changes in space, all qualitative differences are reduced to quantitative differences, and so made subject to description in mathematical terms. In the case of human and social relations, on the other hand, the elementary units—that is to say, the individual men and women who enter into these different combinations—are notoriously subject to change. They are so far from representing homogeneous units that any thoroughgoing mathematical treatment of them seems impossible.
Society, as John Dewey has remarked, exists in and through communication, and communication involves not a translation of energies, such as seems to take place between individual social units, for example, in suggestion or imitation, two of the terms to which sociologists have at various times sought to reduce all social phenomena; but rather communication involves a transformation in the individuals who thus communicate. And this transformation goes on unceasingly with the accumulation of individual experiences in individual minds.

If human behavior could be reduced again, as some psychologists have sought to reduce it, to a few elementary instincts, the application of the kinetic theories of the physical sciences to the explanation of social life would be less difficult. But these instincts, even if they may be said to exist, are in constant process of change through the accumulation of memories and habits. And these changes are so great and continuous that to treat individual men and women as constant and homogeneous social units involves too great an abstraction. That is the reason why we are driven finally, in the explanation of human conduct and society, to psychology. In order to make comprehensible the changes which take place in society it is necessary to reckon with the changes which take place in the individual units of which society seems to be composed. The consequence is that the social element ceases to be the individual and becomes an attitude, the individual’s tendency to act. Not individuals, but attitudes, interact to maintain social organizations and to produce social changes.

This conception means that geographical barriers and physical distances are significant for sociology only when and where they define the conditions under which communication and social life are actually maintained. But human geography has been profoundly modified by human invention. The telegraph, telephone, newspaper, and radio, by converting the world into one vast whispering-gallery, have dissolved the distances and broken through the isolation which once separated races and people. New devices of communication are steadily multiplying, and incidentally complicating, social relations. The history of communication is, in a very real sense, the history of civilization. Language, writing, the printing press, the telegraph, telephone, and radio mark epochs in the history of mankind. But these, it needs to be said, would have lost most of their present significance if they had not been accompanied by an increasingly wider division of labor.

I have said that society exists in and through communication. By means of communication individuals share in a common experience and maintain a common life. It is because communication is fundamental to the existence of society that geography and all the other factors that limit or facilitate communication may be said to enter into its structure and organization at all. Under these circumstances the concept of position, of distance, and of mobility have come to have a new significance. Mobility is important as a sociological concept only in so far as it insures new social contact, and physical distance is significant for social relations only when it is possible to interpret it in terms of social distance.
The social organism—and that is one of the most fundamental and disconcerting things about it—is made up of units capable of locomotion. The fact that every individual is capable of movement in space insures him an experience that is private and peculiar to himself, and this experience, which the individual acquires in the course of his adventures in space, affords him, in so far as it is unique, a point of view for independent and individual action. It is the individual’s possession and consciousness of a unique experience, and his disposition to think and act in terms of it, that constitutes him finally a person.

The child, whose actions are determined mainly by its reflexes, has at first no such independence and no such individuality, and is, as a matter of fact, not a person. It is this diversity in the experiences of individual men that makes communication necessary and consensus possible. If we always responded in like manner to like stimulation there would not be, as far as I can see, any necessity for communication, nor any possibility of abstract and reflective thought. The demand for knowledge arises from the very necessity of checking up and funding these divergent individual experiences, and of reducing them to terms which make them intelligible to all of us. A rational mind is simply one that is capable of making its private impulses public and intelligible. It is the business of science to reduce the inarticulate expression of our personal feelings to a common universe of discourse, and to create out of our private experiences an objective and intelligible world.

We not only have, each of us, our private experiences, but we are acutely conscious of them, and much concerned to protect them from invasion and misinterpretation. Our self-consciousness is just our consciousness of these individual differences of experience, together with a sense of their ultimate incommunicability. This is the basis of all our reserves, personal and racial; the basis, also, of our opinions, attitudes, and prejudices. If we were quite certain that everyone was capable of taking us, and all that we regard as personal to us, at our own valuation; if, in other words, we were as naive as children, or if, on the other hand, we were all as suggestible and lacking in reserve as some hysterics, we should probably have neither persons nor society. For a certain isolation and a certain resistance to social influences and social suggestion is just as much a condition of sound personal existence as of a wholesome society. It is just as inconceivable that we should have persons without privacy as it is that we should have society without persons. It is evident, then, that space is not the only obstacle to communication, and that social distances cannot always be adequately measured in purely physical terms. The final obstacle to communication is self-consciousness.

What is the meaning of this self-consciousness, this reserve, this shyness, which we so frequently feel in the presence of stranger? It is certainly not always fear of physical violence. It is the fear that we will not make a good impression; the fear that we are not looking our best; that we shall not be able to live up to our conception of ourselves, and particularly, that we shall not be able to live up to the conception which we should like other persons to have of us. We experience this shyness in the presence of our own children. It is only before our most intimate friends that we are
able to relax wholly, and so be utterly undignified and at ease. It is only under such circumstances, if ever, that communication is complete and that the distances which separate individuals are entirely dissolved.

This world of communication and of “distances,” in which we all seek to maintain some sort of privacy, personal dignity, and poise, is a dynamic world, and has an order and a character quite its own. In this social and moral order the conception which each of us has of himself is limited by the conception which every other individual, in the same limited world of communication, has of himself, and of every other individual. The consequence is—and this is true of any society—every individual finds himself in a struggle for status: a struggle to preserve his personal prestige, his point of view, and his self-respect. He is able to maintain them, however, only to the extent that he can gain for himself the recognition of everyone else whose estimate seems important; that is to say, the estimate of everyone else who is in his set or in his society. From this struggle for status no philosophy of life has yet discovered a refuge. The individual who is not concerned about his status in some society is a hermit, even when his seclusion is a city crowd. The individual whose conception of himself is not at all determined by the conceptions that other persons have of him is probably insane.

Ultimately the society in which we live invariably turns out to be a moral order in which the individual’s position, as well as his conception of himself—which is the core of his personality—is determined by the attitudes of other individuals and by the standards which the group uphold. In such a society the individual becomes a person. A person is simply an individual who has somewhere, in some society, social status; but status turns out finally to be a matter of distance—social distance.

It is because geography, occupation, and all the other factors which determine the distribution of population determine so irresistibly and fatally the place, the group, and the associates with whom each one of us is bound to live that spacial relations come to have, for the study of society and human nature, the importance which they do.

It is because social relations are so frequently and so inevitably correlated with spatial relations; because physical distances so frequently are, or seem to be, the indexes of social distances, that statistics have any significance whatever for sociology. And this is true, finally, because it is only as social and psychical facts can be reduced to, or correlated with, spatial facts that they can be measured at all.