ECOLOGICAL VARIATIONS OF DEVIANCE

Lawrence John Redlinger
University of Michigan
October 1973
ECOLOGICAL VARIATIONS OF DEVIANCE

Lawrence John Redlinger
Department of Sociology
Center for Research on
Social Organization
University of Michigan

--This essay is respectfully dedicated to Professor A. L. Porterfield--

Acknowledgments

I would like to thank the following people for their timely assistance in the preparation of the manuscript: Ms. Debbie Polzin who typed major portions of the document; and Ms. Constance Gask, Ms. Diane Stephenson and Ms. Pam Hume who typed other portions. In addition, I would like to express my gratitude to Mrs. Margaret Grillot and Ms. Kathy Vargo for proofing the manuscript and Chris Korten for his fine reproduction work.

Finally, I would like to note that the section on pollution was completed with the assistance of Mr. Lester Feldman.
ECOLOGICAL VARIATIONS OF DEVIANCE

This essay is an attempt to relate a rather broad perspective to an equally broad substantive area. By perspective I refer to a way, or set of ways to see the world, Earth, as a whole and as a set of inter-relations that allow life to exist and adapt to ever changing conditions. To me all that is alive is conscious; consciousness and life energy are but two conceptualizations for the same process. The process that I refer to, though, has many expressions, and since Charles Darwin we have called these expressions forms (or in latin species). Put another way, the life energy manifests itself in a variety of species that offer a multiplicity of avenues for the expression of evolution (for a similar perspective see Mead, 1936; Shepard, 1969). These avenues are interconnected and interdependent; in fact, one could not exist without contributions from the others. Herbivores must be in relation to plants just as carnivores must be in relation to their prey. One cannot exist without the other. One species of the life process services the other, but the underlying process is the same. The whole of this inter-relation is sometimes called the web of life, and the web is in constant flux. You and I to continue to exist must continually adapt to meet the ever changing demands placed upon us as we are caught up in this web of life. [For a general introduction to the perspective of ecology see, for example, Allee et al., 1949; Odum, 1959]

Ecology is the label that we put on the incredibly vast array
of human endeavour aimed at studying this web of life. It is nominally defined as the study of the relationship between organisms or aggregates of organisms to their environments and as such is composed of many subfields (on the difference between nominal and real definitions see Bierstedt, 1959). Three major sub-divisions within Ecology are plant, animal, and human. In this essay it is the last of these which will primarily concern us (on the relation between the three see Hawley, 1950:3-74). Some scholars have argued that one cannot separate ecology into "fields" and in general they are correct since each of the units under study effect and interact on each other. But typically, and in practice, ecologists do cut up their world into these three sets of categories.

The reason we will concentrate on human ecology is that we are interested in relating the form and development of aggregates of humans to their conceptions of what in their world is deviance. Thus, we will not concern ourselves with deviations that are beyond human definition. Hawley (1950) defines human ecology as the study of the form and development of the community in human population. What human ecologists do, is to study the ways in which humans, as a species, as sets of discrete populations, and as social groups handle the ongoing process of environmental change and stability. Now one of the common observations amongst social scientists is that humans are social animals, and that humans have been social animals for as long as their form has been around. What this means, for us, is that the study of how humans cope with their environment must be a study of how humans socially organized handle their environment. Put in another manner, human ecologists study the social organization
of humans as they adapt to their environment and alter their environment, their successes and their failures (however measured), and importantly, the development of social institutions designed to meet the ongoing problems of species survival. It is the set of social institutions that constitute the primary structure of the social group under question. By Institutions I refer to the set of common responses that members of a particular community have to a particular problem (on this topic see Mead, 1934:260-328; Berger and Luckmann, 1967:47-92). These responses are usually associated with ongoing problems that the groups will have in meeting their survival requisites. Broadly speaking, institutions can be classified into those of the economy, recruitment-retention of members, educational, political, and religious. So human ecology is the study of these institutions, socially organized in time and space by the populations of humans under study.

One of the first features of human social organization that strikes the observer is its variability. The essential needs of a social group can be met in a variety of ways, and these ways are sometimes referred to as functional alternatives. For example, education and socialization of the young can be primarily carried out by the parents of the young, or by uncles, or even by others that are designated by the social organization to do so as in "teachers." In general, the more general or the greater the plasticity of the organisms under question, the greater the number of ways those organisms can organize to meet their needs. Humans make claims to be the most general, or to possess the greatest plasticity of all organisms currently living on the planet, and so it appears that they have
socially organized their institutions in vast numbers of ways. In fact, this is one way to differentiate human groups from one another—by the different ways in which they meet their ongoing survival problems. There are two additional points that we should keep in mind though, and that is (1) the social organizations that humans use are critically related to the nature of their habitat; and, (2) the human groups whose social organization is best suited for the exploitation of the resources of a given habitat usually becomes dominant.

When I say that the social organization of a given group is critically related to the nature of their habitat, I refer to the notion that the organization itself arises in response to the conditions under which it exists (see Duncan, 1964). Let me make this point a little clearer. Human social organization arises in an inter-related process to its habitat. Habitat refers to all the environmental factors which center about the dwelling place of the humans under question except other humans. The environment, totally for a single human would include in addition to habitat the relations that the human has with other humans around him. Likewise for a social group (eg., a gang) the environment would include both habitat and the sets of social relations that the group has with other groups (police). To place the causality of the process on the habitat is merely to place the causality variable on the larger whole since habitat appears to me to be a precondition to the existence of life at all. Through interaction with a habitat the form seeks to successfully meet its survival needs and for humans, this inter-relationship has lead to the development of various kinds of social organizations.
The notion that one social group can become dominant over both other organisms and other human groups simply conveys the power aspect of social organization. Hawley (1950) defines the dominant organism as the one which occupies a position of key importance such that other organisms are in subordinate positions. In human social organizations, especially when there are two distinct sets of organizations competing for the same habitat, the organization that has better equipment for exploitation of the resources of the habitat usually becomes the dominant. A simple example of this process is contained in the history of the American expansion across the great plains. When I use the term "better equipment" I refer to the material and the rules for use of the material the organization possesses. Sometimes this material is called technology (from tools).

There is, of course, a temporal dimension to the development of human social organization. The evolution of man is the evolution of consciousness. Before I said that, to me, all that was alive was conscious. Following this point, one can see the evolution of life as the evolution of consciousness. With man, this evolution took on social form; man, as consciousness, exists in a social organization, a social organization of consciousness. Mead (1936) among others claims that man's current development is only the evolutionary process grown self-conscious. Since I agree with this conception of the evolutionary process, you should be able to understand why I am compelled to delve into, if only briefly, the evolution of humans and their social organizations. We must keep in mind the historicity of social life; that is, we must remember that each of us has limited tenure of Earth, and that we shall be replaced by
others who will take-for-granted what is around them. When I say "take-for-granted" I refer to the set of beliefs, assumptions, labels, and rules that one accepts without question as one proceeds through one's life (see Schutz, 1971, vol. 1:74-77). People act as if the world they experience has always been the way it is, when in fact, the world as it is constructed now is quite different from the world in the past. It is in fact, the phenomenal nature of our existence that allows for this suspension of time. What I mean is that each of us has but a short time on the planet and of that time an even shorter set of remembrances. We are historical: born at a certain time in a certain place and destined to die certainly. We are not taught to question the basic categories and material of our social organization, we are taught how to work with them. Let me give you an example of what I refer to. The making of fire in the form of matches is a process that was developed less than 150 years ago; the automobile, the airplane, and many other inventions that now are in common use are products of the very recent past. Yet many of these tools are used by people as if they have been around for centuries. So let us take a look at the evolution of our form (species) and co-incident with this formal evolution the development of social organization.

Just about everyone who reads this essay knows that Charles Darwin is generally remembered for looking into the immense diversity of organic life, and trying to derive out of his study some principles which would account for the existence of some species and the extinction of others. It is not necessary for us to re-examine Darwin's evaluation but only to note that as a result of it,
and in addition, the studies of Lamarck, there occurred a revolution concerning the place of man in the web of life (which is sometimes called the ecosystem). In this case, the revolution was a change in the thoughts people had about how all of this got to be. In one sense, of course, revolution means to change one's way of seeing the world, and as a result of Darwin's treatise (and especially its acceptance by others) we now assume that we too, are part of the evolutionary process, that each of us is part of the evolutionary process. But since we are living now, we must rely on efforts of reconstruction of our past, and it is to this type of reconstruction that I now wish to direct our sense.

We will start at the beginning of the age we call the Pleistocene or about 1,750,000 years ago (see Buettner-Janush, 1966 131-155; as well as Duncan, 1964:45-61 for two sources; there are certainly many others). It is during this period of time that we have our first evidence of human-like creatures, labeled Australopithecines. The remains of these hominoids have been found in parts of Africa, and there is some indication that their range was more widespread. Three morphological properties of the Australopithecines interest us here: they were bipedal with an upright posture; they had a somewhat specialized hand which allowed them to make manipulations; and they had small braincases. Furthermore, the Australopithecines were tool-users and from all evidence available, it appears that they ate both vegetables and meat (Robinson, 1963: 386-403). An extension of this line of reasoning indicates that to kill a much larger prey than themselves some co-operation was necessary involving the rudiments of social organization accompanied by a sexual division
of labour. This last point is not too astounding since such a division of labour occurs in other social animals (e.g., wolves and baboons) especially when offspring are involved (DeVore and Washburn, 1963:335-367; see also Spuhler, 1959).

During the Pleistocene epoch, the evolution of "modern man" or Homo Sapiens occurred. This period was characterized by massive and enduring environmental change which both hindered and aided the dispersion of man across the continents. On the basis of a variety of data, one scholar places this dispersion at about 100,000 years ago (Caspari, 1967:276). And as Duncan (1964) succinctly points out, ..."the optimum condition for rapid evolution is a species population widely distributed over a diversity of environments and split into small local groups (demes) that are partially but not wholly isolated genetically one from the other." Whether caused by or co-incident with this spread, humans became polymorphic (i.e., having many forms or passing through many forms), and at least one scholar claims that the proper functioning of social organizations is dependent upon the ability to differentiate individuals which is of course, greatly aided by polymorphism (see Caspari, 1967:277). The point I am making is that the environmental factors which set our species in motion occurred prior to so-called modern man, even though modern man must still deal with these factors in some respects. Duncan (1964) states:

More to the point at hand, the genetic, social, and cultural changes accompanying the emergence of man represented ecological adaptions that, in total, produced a species with a distinctively human ecology.
If we the species characteristics of modern man as given, for purposes of post-Pleistocene ecological investigation, we must reckon with a creature having a number of attributes and capacities equipping it for a unique place in the ecosystem: (1) An anatomical structure that is generalized and versatile rather than specialized for particular kinds of defense or food-getting behavior; (2) a plasticity of behavior, with adaption being based largely on learning and experience; (3) the ability to communicate symbolically and to socialize experience through interindividual transmission; hence (4) a social pattern based on conventional or normative definitions of differentiated roles; (5) a cultural inheritance from pre-sapiens ancestors which, though meager in contrasts to the cultural apparatus of contemporary man, was at the outset of sapiens existence so highly developed and powerful a means of coping with life conditions as to render human life apart from culture unimaginable; and as a concomitant of all these; (6) the potentiality for indefinitely elaborating technical procedures, social forms, and cultural preoccupations (Hallowell, 1956; Oakley, 1954; Spuhler, 1959).

That is, human's culture, or the set of shared ways of doing and seeing things, became evolutionary and was overlayed on genetic evolution. The result is that the ecology of humans would occur largely on the basis of cultural evolution which is, in terms of the
overall evolutionary process, a new principle (see Duncan, 1964:48.)

Culture is, of course, reposited in the living social organizations of
human beings; it is "carried" by living beings and acted out in socially
organized settings. These human beings carry not only the artifacts
(material) but in addition, the arts (rules) by which the artifacts are
to be used. The overall process of a gradually evolving culture and
co-incident with this, an evolving mental process has been termed by
de Chardin (1959) noogenesis.

To recapitulate, the evolution of *Homo Sapiens* was directly and
profoundly influenced by the adoptions of *pre-sapiens* hominoids, but
overlayed on these primal beginnings is a cultural patterning that
includes tools and their rules (a technology) and other norms which
govern the actions of men. These rules of action, or rules which tell
us how-to-proceed pragmatically in the world, became the evolutionary
way that our species sought adaption. These socially shared complexes
of rules are called institutions, and as we have said before they arose
to meet the ongoing problems that the species has. Furthermore, through
the utilization of these complexes of tools and rules (which are only
extensions of men), the human being has furthered, changed and modified
his environment so that it is more man centered and artificial. This
last point is made clearer if one simply imagines what must have pre-
viously existed where each of the large urban centers now stand. Duncan
(1964) succinctly states these notions in terms of an "ecological com-
plex," in which a Population with some form of Organization encounters
an Environment using a specific Technology (P-O-E-T).
HUMAN ECOLOGY

The notion of applying an ecological perspective to the study of human beings first appeared in the early part of this century. Galpin (1915) analyzed an agrarian county in rural Wisconsin looking into how the families in that area went about their tasks. He was interested in such questions as where they shopped, what churches they went to, and what schools their children attended. On the basis of his data the claim was justified that "natural areas" exist for human society. But Galpin did not use the term "human ecology." This terminology was introduced by Robert E. Park a few years later while he was at the University of Chicago. Park (1915) saw the city as a natural phenomenon; that is, he believed the patterns to be the result of largely undesigned and unplanned events and uncontrollable forces that lead to a kind of "natural" organization. Natural for Park meant precisely the unplanned nature of the phenomenon rather than "unnatural" or planned purposively. Park (1915) further pointed to the tendency for similar kinds of interests to cluster together within the city so that the city became organized into areas of industry, commerce and residence. In addition, these areas persisted in time so that their characteristics became imposed upon those new members that moved into the areas. That is, the residents of the area may change but the area itself appeared to impose on newcomers a distinctive culture and organization to which they would have to adapt.

Under the rubric Human Ecology, Park included studies which would analyze the "forces at work within the limits of the urban community--within the limits of any natural area of human habitation, in fact--which tend to bring about an orderly and typical grouping of its
population and institutions (Park, 1952:14)." Furthermore, Park (1952) conceived of the city and the community as well as the region beyond that "as a kind of social organism," and under the guidance of Park, as well as Burgess and McKenzie, a research program was initiated into the social life of Chicago, Illinois. Many of the phenomena that were recommended for study are typically thought of by contemporary sociologists as deviant. For example, some of the studies done by the "Chicago School" used as their subject matter: hoboes (Anderson, 1923); youth gangs (Thrasher, 1936); family disorganization (Mowrer, 1927); suicides (Cavan, 1928); ghettoes (Wirth, 1928); and mental illness (Faris and Dunham, 1939) among others. Each of these studies was to have a historical impact on the nature of ecological research into deviant phenomena in the sense of serving as a baseline (as we shall see later when we look into the research on delinquency).

In addition, Burgess proposed a zonal diagram of how cities are organized; that is, how the various activities come to be distributed over their surface. Faris (1967) notes that "concentric zone theory" was intended by Burgess to be an ideal type, or a conceptual tool, rather than an accurate picture of the city of Chicago (on the use of ideal types in sociology see Martindale, 1959). This model contained a kind of bullseye pattern which had the central business district at the centre. Next there was a ring labelled the "zone of transition" which was an area that was being expanded into by businesses and contained more or less residents living under slum conditions followed by the "zone of workingmen's homes," a residential zone, and finally a commuter's zone with comfortable homes. These zones are built historically as the city grows, and as the city changes so do the zones: the
central business district grows outward pushing the zone of transition outward, and so on. In fact, of course, the eastern half of the concentric zones fell in Lake Michigan so that even the city that was used to construct the ideal model did not "fit" its dimensions. Sociologists since then have constructed several growth patterns for cities which include such models as the "sector" theory, and the multi-centered theory (see diagrams on next page). What is important for us to remember is that early studies of deviant phenomena were carried out under these conceptions, mostly in the city of Chicago (for an analysis of the contributions of the "Chicago School" see Faris, 1967).

I should note that the conceptions that these early researchers had of deviation is quite different than the one which we shall use in this essay. In general, they regarded deviation as pathological (see Matza, 1969), and the social organizations around deviant phenomena as "disorganized." That is, viewed from their way of life, and their historical placement in the social order, the ways that persons were living appeared disorganized, appeared as radical departures from the middle class norms and standards that the Chicago School took to be "organized."

There are several reasons for this, some of which we shall enumerate now and others that we shall discuss later when we look at traditional approaches to "delinquency." One reason for this view of disorganization was the propensity of these early ecologists to look for deviation in the "zone of transition." Thus, they focused on an area that itself was undergoing radical change both in the persons who lived there and also in the physical structure (habitat). In a very real sense they found what they were looking for. This "zone" had some characteristics that made it depart from middle class or traditional notions of
THREE GENERALIZATIONS OF THE INTERNAL STRUCTURE OF CITIES

DISTRICT
1. CENTRAL BUSINESS DISTRICT
2. WHOLESALE LIGHT MANUFACTURING
3. LOW-CLASS RESIDENTIAL
4. MEDIUM-CLASS RESIDENTIAL
5. HIGH-CLASS RESIDENTIAL
6. HEAVY MANUFACTURING
7. OUTLYING BUSINESS DISTRICT
8. RESIDENTIAL SUBURB
9. INDUSTRIAL SUBURB
10. COMMUTERS' ZONE

organization. For one, the owners of the dwellings rarely lived in the dwellings; in addition, they rarely made any repairs on the dwellings since they wished to minimize maintenance costs, for they were awaiting the push of the central business district out into their areas. Thus, the land had a high value while the dwellings themselves deteriorated. As a result the rents were low and into these areas moved most of the immigrants who came to staff the factories and other urban "opportunities." Through the zones in transition passed all sorts of persons who were "marginal" to the social organization. Now when I say marginal I mean that they did not have wealth and the consumate privileges that wealth brings; they did not in some cases even speak English; they did not have "American" values, and consequently they did not have American notions of social organization. Furthermore, since many of these people were immigrants, they were often disproportionately male which had some effect on the kinds of marriage arrangements that existed (see Mowrer, 1927). Indeed in the city of Chicago, such areas still exist as various kinds of organizations push their way out into the community (see Suttles, 1968), and sometimes these areas are typified as "slums."

As I said before, Park and the early researchers at Chicago saw that the people that moved into these various zones had a distinctive way of life imposed upon them. That is, they saw that the zone had reposited in it, in terms of artifacts (buildings, streets, etc.), characteristics that the newcomers had to adapt to in order to live. Naturally, in juxtaposition with the artifacts were the arts, or the cultural rules that enabled people to make do, and the early researchers saw how wave after wave of immigrants took on these values and patterns of action regardless of their racial or ethnic origins. This is a
critical point, for they saw how culture and resultant social patterns were reposited in the zones and were parts of everyday life for the residents that could not be ignored. To be blunt the survival conditions in the slum are radically different than those in the suburb, and thus one would expect the rules by which people live their lives would also be different. Since these early researchers used Social organizational variables as measures of the degree of organization and since they also used the dominant patterns of organization as "norms" (in the sense of normal) it is not too difficult to see how they could view what they saw as not only deviant and disorganized but also pathological.

This view was contributed to by their own placement within the community. Using ecological concepts like "invasion" and "succession" they likened the influx into Chicago to general ecological phenomena. Invasion here refers to the intrusion of a competing organism on some habitat of another organism, while succession, as these early human ecologists used the term, referred to the sequential use of a zone by discrete sets of persons or groups. The researchers largely were white and from backgrounds that did not allow them to see a pluralistic arrangement of people. Instead they used their own standards (which reflected the larger "organized" community's standards) to judge the ongoing activities of the immigrants and others who lived in the "disorganized" zones in transition. For example, McKenzie (1968) writing about invasions of urban areas during the 1920's and 1930's indicated that they result from either changes in the use of the land or changes in the type of occupant. He then classifies "invaders" into categories of desirable and undesirable, and then indicates that undesirable invaders usually make their point of entry into the community at the
points of greatest mobility (which are the zones in transition). As evidence for this process McKenzie states:

It is a common observation that foreign races and other undesirable invaders, with few exceptions, take up residence near the business center of the community or at other points of high mobility and low residence (McKenzie, 1968:15);

and "once established they gradually push their way out along business or transportation thoroughfares to the periphery of the community (McKenzie, 1968:15)." Thus, the early research reflected the values of the persons doing the researching which resulted among other things in their persistent looking for deviations among the immigrants, the poor, and others living in the "zones" that were in transition. This bias, as we shall see in later sections, misdirected research into "deviant phenomena" for several generations.

We should not, however, leave with such a harsh conclusion on their efforts, for they like each of us were/are men of their times. Their development of a perspective which emphasized the habitats, or physical structures that are imposed upon people lead to evidence which debunked the notions that immigrant groups committed crimes and lived the ways they did because they were biologically inferior (see Faris, 1967:60-63). The researchers emphasized that the abnormal behaviors of the residents were a consequence of the "disorganized" social patterns rather than a cause of it, and that given "organized" patterns to live with the abnormalcy was greatly reduced or disappeared. Furthermore, their emphasis on the subjective attributes of the persons should not be underestimated. That is, coupled with the imposed set of objective
conditions (habitat) there were social rules, norms, that the members learned and carried conceptually. Thus, the patterning of urban life was besides the patterning of objective conditions was in addition the patterning of subjective views of the world. That is, not only is wealth socially distributed across habitats and inhabitants of the area, but also values, rules and norms are also so distributed. In fact, it is only through these rules that we can come to judge the relative positions of the "objective" artifacts. This is a point we shall examine now in greater detail.

SOCIALIZATION, INSTITUTIONS AND SOCIAL ORGANIZATION

As long as we have inquired into humans we have seen that they are social, that is, that they band together to meet their common needs. We have previously indicated that this banding together has historic roots in the distant past and extends to species we consider to be "lower" on the evolutionary scale than ourselves. Previously, we noted that to survive, humans had to meet a set of ongoing needs, and we called these "requisites." Included in the category of requisites were such needs as recruitment and retention of an adequate supply of members, ways to educate or socialize these members, ways to feed and sustain them, ways to protect them, and finally ways to administer to their spiritual needs. We noted that groups have organized themselves in a variety of ways to meet these needs, until one has the mosaic of groups now on Earth. When there wasn't so much interaction between groups, study of their dimensions and organization was simpler, but now due to the "population implosions" in urban areas, as well as recent diffusions of cultural artifacts and in general widened communications, the task
has become increasingly more difficult. By population implosion I refer to the increasing concentration of heterogeneous people of the world on smaller and smaller proportions of the land so that they share the same life space and compete for the same or very similar resources. Sometimes scholars substitute the terms "urbanization" or "metropolitanization" for this phenomena (see Hauser, 1971:19). One has then, a mosaic that includes so-called stone age tribes to highly technologized collectivites with the later effecting the former moreso every day.

Each of these aggregates of people, though, must make sense of their environment in line with their ongoing survival needs, and often the sense that they make is codified into "institutions." We defined institutions as common responses to meet a particular set of common needs; we could have defined them as "social habits," since they are carried by humans, not singularly but as a group. Humans as a group approach their reality; humans as a group meet their ongoing problems. At first the "institutions" are literally made up. That is, at some point the institutions had some origin and in this origin we can see their arbitrary character. The persons who are in some ways responsible for meeting the survival needs find ways of doing so and these ways become group ways. For the originators of these ways, the ways are known to be arbitrary, made up, and it can be said that the ways possess a "transparency." By transparency I mean that they are known to be made up and thus the persons know they can easily change them if they should so desire. They know that the actions do not need to be performed just in the form they have set them up but could be performed in other ways. Furthermore, as they perform these actions, they tend to become routine. The actions in becoming routinized become social habits:
the ways that things are done. Now these ways of action, or ways of doing, have attached to them in an intimate relationship ways of seeing. The "objective" actions of the person are based upon some set of "subjective" typifications that the person uses to render the world into a meaningful and workable place. So that the "institutions" not only are composed of actions but also sets of "typifications" or categories by which one sees the environment.

The categories for seeing the world are usually codified into a language which we shall define as a system of vocalized signs (Berger and Luckmann, 1967:36). Each aggregate of humans that acts together to solve their ongoing survival problems has a language which they use to categorize the world about them into meaningful parts. These categories are social in that they are shared by the participants and each participant has a knowledge about what each category refers to, and thus allows members who have not yet experienced a part of the world to "know" about it. In this sense language is the repository of the knowledge of the people allowing for the transformation of meaning from one member to another. Institutions consist then not only of routinized actions but also routinized language categories. For example, we have divided our world into such categories as "plants" (meaning in some sense those organic aspects that are immobile, planted, fixed), and animals. We have further divided these plants and animals in terms of their utility to us in meeting our ongoing needs so that we have "crops" and "weeds" on one hand and "livestock" and "pests" on the other.

Now in the beginning, we pointed out these designations are made up and known to be made up; that is, known to be arbitrary. However, these ways of doing and seeing are passed on to succeeding generations
of humans, they tend to take on a life of their own. That is, they are passed on to humans that do not know that the categories and actions are arbitrary. They become in the course of generation after generation taken-for-granted as the ways things are seen and done. The language categories are necessary to "see" the world as those elders see it; to not see in the same or similar ways would be a violation of what now are taken to be the rules. These ways of seeing and doing are legitimated (justified) not only by the fact that each and every member uses them but also by the threat of sanctions against those who dare not to do so. That is, what once was arbitrary becomes regarded as real, not made up at all but given as "existing." The routines become the ways in which things are done; the language categories the ways in which things are seen (for a longer discussion of these ideas see Mead, 1934; Berger and Luckmann, 1967; Holzner, 1968). Furthermore, humans "objectify" their definitions by arranging reality, by creating structures external to themselves that will have a long tenure, perhaps longer than themselves on Earth. Architecture, the art of constructing buildings, is also the art of social control in the sense that the makers allow access and exit only in certain places, and in fact, by the nature of the structure prevent alternative uses for the land where the building stands. Humans externalize their conceptions by transforming matter into "objects" and then throw these objectifications back on to the next generation as if they are real and have been from time immemorial.

The acceptance of these "institutions" or ways of seeing and doing is furthered by the nature of our species. Each one of us is born into the world helpless and must depend upon others of our kind to care for us and importantly TEACH us how to care for ourselves. In many if
not all cases, what is taught is institutionalized conduct, or sets of arbitrary rules for proceeding. Let me give you an example. Every person who reads this essay at one time in their lives routinely "shit in their pants." Moreover, I am confident, most of you do not do so now and do not remember the specific procedures that you were put through in order to stop. Without a doubt, if you are Americans, you routinely defecate in a specially designed place that has specially designed fixtures. To be sure, these fixtures have been modified over the years, but the essential conception of where and under what conditions one defecates have been passed on to succeeding generations. Again, the very language that I use, and the fact that you can make sense of it attests to the "institutionalization" of that language. Moreover, if we look into the economic institution, one is told that one must "be" something which entails "doing" somethings. Let's say you want to be a doctor, a physician. You must then learn to see and do as doctors see and do; otherwise, the persons who are seen by the aggregate as doctors will deny that you are one of them. That is, they will not legitimize (license) your activity and seeing (see Hughes, 1958). This becomes easier to understand when one finds oneself in another place with human aggregates that have totally other systems of seeing and doing. Being a doctor can then mean fundamentally different doings and seeings. If one is Chinese, or Japanese, or African the meanings and their activities could be very different from what Americans routinely do. In one aggregate you may be required to exorcise spirits if you are a doctor while in another you may be required to cut open another of your kind and remove some of his parts. Each of these activities is seen as "right"
in their respective contexts; each is viewed as a "legitimate" way of proceeding.

The sum total of institutionalized ways of seeing and doing constitute the social organization of the population. One cannot exist without the other; social organization consists of both external and internal components the interaction of which allows for "meaning" in our worlds. If you remember back to the notion of an ecological complex (P-O-E-T), you will see that three of the four variables are human productions (P-O-T). That is, there is some population (aggregate of humans) that has some form of organization (which is social) that employs some form of tool use. These tools have attached to them a set of rules or procedures on "how to" use them; when they do not the persons either must discover "how to" or reject the tools since they cannot proceed in solving their ongoing problems. Language provides a way to pass on the instructions, or ways of doing and seeing, and because of the codification of language in concepts, language categories and the reality they construct can be carried easily. By "carried" I mean both in word form, printed and conceptually in one's head, so to speak. This knowledge on how to proceed constitutes the elemental knowledge of the population and allows them to not only proceed individually but also integrate their activities so that a collective order results.

The social organization becomes more complex when there occurs a division of labour (see Durkheim, 1964). The total knowledge of the social organization is cut up into parts that become specialized and carried by discrete individuals within the social organization. This division of labour results in "special realities" carried by persons located in different parts of the social organization. That is, as a
result of this division of labour (labour literally meaning activity), people located in different parts of the social organization do and see the world differently than persons not so located. Moreover, these special locations are reflected in the "objectified" portions of the social organization in the forms of rewards so that a system of invi-
dious distinctions arises in the allocation of goods and services. These distinctions can be made on a variety of criteria by the social organization such as the race of the persons, their level of training, the importance of the knowledge they carry to the organization, ability, or membership in a political party (see Davis and Moore, 1945 for example). As the division of labour becomes more and more complex, the numbers of special realities increase, as does the potential for social conflict. The potential for social conflict increases because practitioners of special realities may have as their subject very similar or even the same set of objects or people, and because of their special realities have conflicting recipes on how to proceed. Of course, a complex division of labour (like the one existing in America) prosupposes an high economic surplus and in addition usually an urban social organiza-

This development of pluralism, or the increasing numbers of special realities, conditioned by a economic surplus and urbanism (population implosion) accelerates not only the potential for conflict, but also breakdowns traditional definitions of reality (ways to see and do the world). This should be obvious, for if aggregates of people sharing special realities seen and do the world differently, then it will be increasingly more difficult to get them to agree on one overall version of the world. Under such conditions one finds the rise of a
political overlay of coercive control that claims the right to define
the paramount legal reality, or what is to ultimately be. When there
is high agreement between the various practitioners with the activities
and definitions of the political sector, we have the condition of
consensus whereas when there is widespread disagreement one has conflict
which of course heightens the possibilities for coercive control
(on this point see Gamson, 1968).

The matter is complicated even further by a complexification of
each institutional special reality into smaller and smaller units of
special realities. That is, the division of labour becomes more and
more specialized so that even within institutional complexes aggregates
share realities that are discrepant from other practitioners within that
same institution. One need only look at the education, legal, or
economic systems to find such complexifications. This type of pluralism
then does not allow for widespread consensus on what is real; that is, it
does not allow for unified ways of doing and seeing the world.
Moreover, such a complex division of labour is subversive to any
unifying definition by consensus (except where there is some
recognized external threat to the entire structure as in the case of
World Wars). Thus, the political sector of the system itself must
rely more so on coercive measures. In many instances (e.g., Germany,
France and Italy), this had lead to the emergence of national police
systems which allow for a consolidation of political power (i.e., the
ability to enforce a definition of reality) and growth of the
political sector (see Bayley, 1971). Moreover, due to this increased
complexification, many of the rules which govern the lives of
aggregates are no longer part of the political legal system, or the
political overlay, but rules developed by particular institutions.
Thus, it is quite possible for institutional conflict since the rules on "how to proceed" in one institutional complex can be in direct contradiction to those of the political overlay. Moreover, it is quite possible for units within institutions to have rules that are in direct contradiction to those of other parts of the institution, and such cases become ones of jurisdiction, or relative social power.

In terms of deviance, such mechanisms of social control become increasingly complex so that deviation from one set of proscriptions can in fact be conformity to another. Moreover, the potential for deviation is increased by the fact that the institutionalized programs on "how to proceed" were set up for the participants and the participants did not participate in the making of the rules. On this point Berger and Luckmann (1967) state:

Deviance from the institutionally "programmed" courses of action becomes likely once the institutions have become realities divorced from their original relevance in the concrete social processes from which they arose. To put this more simply, it is more likely that one will deviate from programs set up for one by others than from programs that one has helped establish oneself. The new generation posits a problem of compliance, and its socialization into the institutional order requires the establishment of sanctions. The institutions must and do claim authority over the individual, independently of the subjective meanings he may attach to any particular situation.
The priority of the institutional definitions of situations must be consistently maintained over individual temptations at redefinition. The children must be "taught to behave" and, once taught, must be "kept in line." So, of course, must the adults. The more conduct is institutionalized, the more predictable and thus the more controlled it becomes. If socialization into the institutions has been effective, outright coercive measurers can be applied economically and selectively. Most of the time, conduct will occur "spontaneously" within the institutionally set channels. The more, on the level of meaning, conduct is taken for granted, the more possible alternatives to the institutional "programs" will recede, and the more predictable and controlled conduct will be.

As you can now understand the complexification of the social organization has lead to complexifications of reality and increasing ambiguity on what constitutes a deviation. Yet, as we shall see within all this change, there has been some stability in what individuals and aggregates of individuals regard as deviance. It is to this problem that we now turn.
THE NATURE OF DEVIANCE

There are many ways in which to define deviance and naturally the definitions that have been employed vary historically. As we pointed out previously, early human ecologists saw deviance as something pathological, as a kind of disease that was inhabiting the social organism. This view of deviance means that one must have some ways of telling what is "health" and what is pathology; that is, some set of rules that indicate what a healthy social organization looks like. Sometimes such definitions rely on a kind of medical interpretation that states that deviance is some untenable (i.e., pathological) condition that if it persists will "cause" the organism to die. Deviance in this view is a kind of cancer eating away on the social organism (see Matza, 1969: 41-66), and corrective procedures need be taken immediately in order to insure that the social body does not "die." Given the complexity of the social organism, though, it becomes difficult to distinguish between pathology and diversity; that is, it becomes difficult to accurately access what is an untenable condition and a tenable one. A tenable change could be for the overall betterment of the social organism, yet still be a departure from the rules of health. For example, much of the medical research that was done in the early days of "medical science" was done on corpses that were illegally obtained by grave robbing. Grave robbing was viewed as deviant; yet, the outcomes from these grave robbings are now viewed as "advances." Again, many of the "innovations" that have lead to betterment of human life have been departures from the rules that were the current definitions of health and were viewed at their onset
as deviations (see Dubin, 1959). Thus, it seems to me that defining deviance as pathology does not allow for all those behaviors that violate the "healthy rules" but do not lead to untenable conditions. Moreover, it is now quite difficult to achieve consensus on what constitutes "health," given the complexification of views.

Another definition of deviance is essentially statistical. Deviance is something which varies too far from some sort of average, or mean. Remember now that "average," and "mean" are but labels for "norm" and "normal". This viewpoint allows for two kinds of violations those which are pathological and those which are innovative, but still one must have some notion of what the "mean" is. Furthermore, the mean is itself established by statistical procedures (procedures I might add that are part of a special reality system employed by a small part of the population) that may be removed from the everyday notions of the participants. It is not common for people to think of their heroes as deviants; yet according to this definition, heroes are deviants. This definition appears to me to be too far removed from the concerns of everyday life where in fact deviance is established.

However, it does nominally yield a definition of deviance that we should explore more fully. That is, provided that one can establish the norms, deviance is some departure from those norms.

A third view of deviance, one that is related to a statistical notion, defines deviance as a failure to obey the rules. All that is required is that we know the rules, then we can see if the entity or organism under question has failed to do so (see Glaser, 1971:1). This definition comes closest to allowing us maximum range in studying deviance, provided that we can specify the rules in any given
sequence of behaviors. And basically, this is the crux of the problem since a given set of acts, attributes or behaviors may simultaneously in conformity with one set of rules held by one aggregate and deviate from the rules of another aggregate. This is, of course, not a problem where the rules are agreed upon, or where the aggregates have achieved a high consensus. But as we noted earlier, in pluralistic social organizations this is not usually the case. Moreover, what the rules are has historically varied so that what is deviant is historically rooted in both time and space.

These problems lead us to the definition of deviance that we shall employ in this essay. But before I state this definition I want to note that deviance is a higher order concept; that is, it is not a concept routinely employed by the majority of participants in a social organization. Usually, the participants have more specific terms for things, attributes, acts and people that they see as violating their rules. When we use the term deviant we are summing all their special categories under our "higher" or more general category. This is arbitrary on our part, but for us to proceed we must do so, for we, too, are caught up in the flow of interaction and must codify our experiences. Deviance from my point of view has four components:

1) there is some socially constructed and arbitrary rule or rules;
2) there is some thing, person, act or attribute that is seen by living actors who carry these rules as departing from them;
3) these living actors apply their definition of reality (which includes their notions
of deviance) to the thing, person, act or attribute; and

4) because of their relative social power they can successfully make their definition apply and enforce their sanctions.

Deviance, from this point of view, requires that the person, thing, act or attribute be in interaction with the human aggregate doing the labelling. Thus, for example, if a person driving an automobile runs a red light, smashes into another car and runs down a pedestrian, but does not get caught his behavior cannot be labelled by us as deviant. Certainly we may believe his behavior was deviant, but the absence of a more powerful element to make such a definition apply allows his own version to be paramount. (It is quite possible that the person, overwhelmed by his internalized notions of deviance would turn himself in and thereby validate our own conceptions of deviance. But as long as he does not do so, and he is not apprehended by some other who is more powerful, his version of reality would apply.) With this definition of deviance, then it is the relative social power, or the ability to enforce ones definition of reality that is crucial. The act, attribute, thing, or person is not inherently deviant but the deviance arises out of the interaction between the
entity being labelled deviant and the aggregate doing the labelling.\footnote{This definition is quite close to others employed by Erikson (1966), Becker (1963), Tannenbaum, (1951), Lemert (1951), Kitsuse (1962), and Vold (1958). On the notion of "crime," Vold (1958) states: If criminal behavior, by and large, is the normal behavior of normally responding individuals in situations defined as undesirable, illegal, and therefore criminal, then the basic problem is one of social and political organizations and the established values or definitions of what may, and may not, be permitted. Crime, in this sense, is political behavior and the criminal becomes in fact a member of a "minority group" without sufficient public support to dominate and control the police power of the state.} Furthermore, it focuses on the relative potentials of social power that can be mustered to support the definitions employed. Moreover, aggregates possessing greater amounts of social power can also direct attention towards the deviances they define and see in other aggregates and thus away from their own violations of the norms they enforce (on this point see Thio (1973; and Liazos, (1972).

Preceding, we noted that the human group that was best suited for the exploitation of the resources of a given habitat usually became the dominant group. This ecological conception of dominance and the notions of social power we are employing here have much in common. As two human ecologists note, indeed, there are striking formal similarities...
between the very concept of "power" and that of "dominance" which, in general ecology, is treated as a subcategory of symbiotic relation between dissimilar functions and is ordinarily given a species referent. Both concepts point to the ability of one cluster of activities or niches to set the conditions under which others must function.

(Duncan and Schnore, 1961: 319)

We must remember, of course, that overlayed across institutional rules of conduct, there is a political set of rules that are enforced by the coercive arm of the state, namely the police. When the police (or for that matter the national guard) occupy a habitat, they are usually successful in enforcing their definitions of reality. But when these groups are not present, institutional codes of conduct are usually used to designate deviants, and there are special persons within the institutional structure whose task it is do so.²

The arguments concerning the ability to apply and enforce the

---

²Sometimes, of course, there are various tools employed to survey the groups under question. One finds these devices in stores in the forms of "timeclocks"—designed to insure workers are "on time", cameras—to insure shoplifters are seen, etc. This is again the employment of technology to exploit the resources of the habitat.
definition of deviant, of course, works in reverse. Groups that have high quantums of social power are usually more successful in resisting the deviant appellation. As Hawley (1963) has noted, "every social act is an exercise of power, every social relationship is a power equation, and every social group or system is an organization of power. Accordingly, it is possible to transpose any system of social relationships into terms of potential or active power. Perhaps such a transposition is nothing more than the substitution of one terminology for another."

It is beyond the scope of this essay to treat the various dimensions of social power and their relative distribution through any social organization. But we must briefly look at some of the correlates as they effect the labelling of things, acts, attributes, and persons as deviant. Power can be seen as a composite of variables that include: physical force; social position; social wealth; and social knowledge. The first of these needs little explanation. If I am standing over you with a submachine gun aimed at your temple and make it clear that if you do not do as I wish I shall end your fragile existence, you are probably going to do as I say (unless of course you chose not to exist). The effects of social position are similar. If say I am the headman of a village, the license of that social position designates that I must decide who is deviant. Since the entire village, with the possible exception of the deviant agrees that this is the way things are done, I possess a large quantum of power. Thirdly if I possess a large amount of social wealth, however this is socially defined, I have the ability to influence designation of deviance. In American society, wealth is measured in terms of capital which is common-sensically
converted into money. It can also refer to land ownership. One should note that there is a considerable degree of overlap between the possession of wealth and the possession of social position since, at least in America, high social positions tend to be rewarded with relatively high social wealth. The last category, social knowledge, has power attached by the fact that I may be the only one to know. That is, I am the only person on one of a select groups of people who know how to solve a particular problem, that know the answers. Surely the knowledge brings with it the power to define which components of the answer are deviant. Quinney (1970) argues that the greater the amount of social distance between an aggregate and those who possess power, the greater the probability that the aggregate will be labelled deviant. Social distance refers to the numbers of "ways of seeing and doing" that an aggregate has in common with another group. Thus, if you are seeing and doing radically different from those in power, you have a high probability of being labelled deviant -- provided that you are caught.

Positions of power within institutional structure provide the occupant with the power to define which acts, actions, attributes and persons are deviant. In some cases, there is a pre-existing body of rules and procedures which govern these designations so that the occupant cannot define reality as he pleases, but in others the occupant has no guidelines. In many cases, other members of these institutional structures accept, and take-for-granted the license granted the occupant of the power position. When this is the case, there is also usually high agreement between the members of the
institution and the power holder as to what is deviant, and conversely, what is normal.

Let me give you an example in terms of the biotic community, or that part of the planet that is not human but alive. In many cases the major definitions of what animals and plants are deviant is accepted and taken-for-granted by the populace; when they are not there is a potential for social conflict. Variations in the social organization of a population can lead to some flora and fauna being defined as deviant and appropriately sanctioned. True, the designations are made on the basis of criteria, but one must remember that the criteria are generated by the same organization that is making the designation of deviance. Let me caution that the designations of selective plants and animals as deviant does not have to be rational nor logical, for there can be equally as dangerous groups that are not designated as deviant. Usually the designation of deviant carries with it some set of sanctions which can lead to a great reduction in the numbers of the fauna and or flora and in some cases extinction. A casual listing of such "deviant" biotic life includes for Americans: the opium poppy; marijuana of the cannibis sativa variety; wolves; and coyotes. In the case of the poppy, the American social organization pays wealth to other social organizations to influence their members not to grow it (even though in their particular organization, they might have other uses for it such as cooking oil). The same is true for marijuana (even though the American organization grows its own for "experimental" purposes). Wolves and coyotes have a "bounty" or reward on "their heads" which promotes their killing. ORGANISMS THAT ARE BEST SUITED FOR THE EXPLOITATION OF THE RESOURCES OF A GIVEN HABITAT BECOME THE
DOMINANT GROUP. In the case of all the above mentioned flora and fauna this has meant a restriction in range and numbers as well as influence.

We have not included those plants and animals that both were in competition with humans for land use, and in addition were found to have some "value." Take for example the plains buffalo which was the staple in the diet of the plains indian (another "organism" viewed as deviant). The slaughter of the buffalo was necessary from the viewpoint of the social organization for the farming of the land. I will not comment on the systematic destruction of the American Indian except to say that their social organization could not match the exploitative capacities of the early Americans, nor in fact were they designed to. Furthermore, within the definitional system of the early white American social organization, the majority view was that the indian was not to be seen as human. The removal of the buffalo from the plains, of course, helped the removal of the plains indian. The buffalo was used not for its food value, but for its "hide" much in the same way humans utilize seals and alligators.

On the other hand, some flora and fauna will be directly supported by a social organization. Many of these will be food products, but not all. For example, americans consume enormous amounts of coffee and directly support the pro-existence of the coffee plant.
Technically, the coffee plant does not produce a food, but a stimulating drug. In fact, while the use of this drug is quite acceptable and even fashionable, very little research has been done on it to determine its effects on humans since it is in large doses toxic. "Food" plants and animals will have little trouble surviving, but surely their behaviors will be directly controlled by humans. In fact, humans even selectively breed these animals to produce certain qualities. Likewise, dogs are selectively bred although not for food but for their qualities such as friendliness, gentleness or ferocity (in other organizations of humans dog is routinely used as food).

3 A closer look at the ritualized use of coffee in America yields insight into the centrality of the drug for Americans. They have, for instance, "coffee breaks" (ritualized self initiation of drugs), "coffee shops" (or drug dispensing places), "coffee tables", "coffee cakes," as well as a special kind of cream, "coffee cream," that has a lower butterfat than whipping cream.

4 Not to belabour the issue, but merely to point out the complexity of it, some plants and animals previously supported by the organization may lose this support. This can occur for several reasons such as innovations of better food sources, discovery of "bad effects" or loss of social knowledge. In the last case, an example that comes to mind concerns the use of medicinal plants. Both the pharmaceutical industry and the medical profession do not encourage the use of medicinal plants (herbs), but routinely recommend pills of various sorts which contain ingredients that in some cases one could make in one's garden. For example, heliotrope (which is not illegal to grow) contains valeric acid a mild tranquillizer, yet neither the medical persons I know nor the drug industry, nor in fact most people know this.
To get back to the point of this example, social organizations especially institutional elements within them routinely define portions of the biotic community as undesirable and seek to regulate, prohibit, destroy or otherwise control these flora and fauna. The undesirable elements are viewed as such from the reference frames of the organization which routinely codify the deviants as "pests" and "weeds." Most if not all of these definitions and actions are taken-for-granted by large segments of Americans. What we have said concerning the biotic community in general, can also be applied to human beings. Powerful positions in institutional structures allow for varying definitions of the "value" of human beings and in addition what in their existence, acts, or attributes constitutes deviation. Let me add one brief example before we turn to a related issue. At birth, the attending physician can make routine designations about the normalcy of the infant. In a small percentage of cases the infant is born with capabilities that are viewed as "abnormalcy." I refer here to infants born with both sets of sex organs, for example. The designation of abnormalcy is immediately followed by "corrective surgery" which the infant is obviously powerless to dispute. Even at
birth, the categories of the social organization are applied by the institutional representatives with the license to do so.\(^5\)

Returning to our definition of deviance for the moment, let us consider how sociologist could define certain areas out of the range of deviation. Let me be clear in saying that I have not singled out any one sociologist, but merely chose an recent alternative definition to indicate how definitionally reality can be structured. This definition is taken from a prominent text on the subject written by an eminent scholar, Dr. Clinard. Clinard (1968) defines deviance as "only those deviations in which behavior is in a disapproved direction, and of sufficient degree to exceed the tolerance limit of the community," and indicates that under this definition one would include such behaviors as homosexuality, delinquency, crime, suicide, marital and family adjustment, discrimination against minority groups, and to

\(^5\)A recent interview with a presenter of a "freak side show" from a "circus" indicated that he had to go to "under-developed" nations to obtain his personnel. The reason being that where-ever industrialization and its attendant advances in medicine were instituted, the number of "freaks" declined. Thus, his personnel were advertised as being from 48 different nations. This person also indicated that he was eager to travel to Germany where the "thalidomide babies" would be growing up, for because they would have to make a living he was sure he would be able to sign some of them up. In this last case, the freaks were socially created not only by definition but by action.
some degree problems of old age (Clinard, 1968: 28). He distinguishes
between these and some "social problems" that he claims are not
products of social behavior, and thus pigeon-holed outside the
relevance structure of his study. He states:

Deviant behavior and social problems are
not necessarily the same thing. Not all social
problems are instances of deviant behavior. For
example, soil erosion, flood damage, and forest
destruction have for decades been considered as
social problems. Yet these problems can hardly
be considered as instances of deviant behavior.
To be sure, soil erosion may exemplify a
variation from ideal standards of soil productivity;
yet this variation is not a consequence of social
behavior. The same could be applied to social
problems involving disease or physical handicaps,
such as cancer, heart disease, blindness, and
crippling, as well as urban smog and traffic
problems. Such conditions, when dealt with
in textbooks on "social problems," are
completely in order. It is only suggested
here that they are not instances of deviant
behavior within the definition stated above.
(Clinard, 1968: 29).
In one set of statements, Dr. Clinard excludes areas of \textit{social behavior} as if they were not. That is, he does not ask to what degree does human social behavior produce these phenomena, but defines them as "natural" outcomes.

With our definition of deviance which involves some set of rules carried by living actors and applied to persons, acts, attributes or things by a set of persons who have the power to enforce those definitions we would not define, for example soil erosion as a non-deviant phenomenon. Indeed, this is one "problem" that there are competing definitions on; prompting us to ask instead: to what degree is forest destruction, soil erosion, flood damage, heart disease, and traffic problems a product of the social patterning of human beings? Since each of these outcomes is viewed by Clinard as departures from a set of rules, one would think he might be tempted to look at some empirical data on these issues. Moreover, there are "powerful people" namely the federal government in America that defines forest destruction as deviant as has at least in legal codes sanctions available to penalize human actors involved. For example, there are statutes covering the willful destruction of forests by the setting of fires. Likewise, there are federal standards for the cutting of timber. Each of these areas constitutes a place where deviance could occur. In fact, there is some evidence that forest destruction in some respects is a direct product of lumber company efforts to heighten productivity (even though from our point of view this cannot be seen as deviation since they have not yet been caught and sanctioned—being as they are part of the institutional arrangement of the economy). One of the reasons they have not been caught, according to one observer, is that the
government trusts them to provide accurate figures on their operations (see Haley, 1971: 1, 20-23).

Thus, we would consider any area of human endeavouring as areas for potential deviation and ask empirically what, when, how and why persons, things, acts, or attributes were selected as deviants or not selected. This consideration goes hand in hand with the analysis of the distribution of relative social power and the ability of some aggregates of humans to successfully resist the appellation of deviance.

HISTORICAL CONSIDERATIONS

Since I do not wish to make it look like the socially powerful only enforce those rules which they find it to their benefit to enforce, I wish to consider some historical dimensions of deviance. There are behaviors that have had widespread consensus, historically, as deviant behaviors. These sets of definitions have endured not only temporally but also spatially; that is, they have existed for long periods of time and in varied social organizations. For initial data, I will use a classic study done by Sorokin and Timasheff (1937). 6

6 This study appears in the second volume of Sorokin's epic work Social and Cultural Dynamics. This work was published in four volumes during the period of 1937 to 1941. The student who is interested but not a zealot is instructed to the later (1957) one volume abridged edition. In re-counting Sorokin's work here I have done I am sure some injustice to his schema, and for this I am sorry since his is a most sublime achievement. The reader who wishes to explore this schema is instructed initially to the later abridged edition (Sorokin, 1957: 1-52), or for the zealous volume one of the larger earlier edition.
On a broad theoretical scale, Sorokin was concerned with the enormous fluctuations in human's definitions of reality and the resulting organizations of their behavior. Sorokin (1937, 1941) argued that the systems of doing and seeing the world, the systems by which the nature of the good, the bad, and the ugly, as well as the nature of freedom, tyranny, and the self, and all other culturally defined rules, were relative and varied historically. He argued that what was considered to be "true" was relative to the system of seeing that "truth" was grounded, or located in, and he undertook a massive effort to back up his argument as well as delimit what he saw to be essential types of cultural forms.

It is necessary for our purposes to briefly look at his major overriding schema which includes three major types of reality construction: the ideational; the sensate; and the idealistic (see Sorokin, 1937; 1941; 1947). I wish to emphasize that Sorokin saw the world as relative and viewed each of these systems as total and distinct systems of truth (what is), cognition, and knowledge (ways to see and know what is). He believed that how you saw the world, structured what you saw and that there were some basic principles to each social organization's seeing. The first major type of reality construction was the ideational where reality was defined as not material but other-worldly or eternal. Human's needs were seen as largely spiritual, and control needed to be over one's Self rather than external matters. Material needs are met to be sure, but barely in comparison to other reality systems. Furthermore, moral codes are based on absolute and transcendent values and are believed to be everlasting and rarely changing. Control over one's Self is seen
as the way to salvation. The second type of reality is the sensate in which the "real world" is located as material and empirical, and human's needs are seen to be material. To meet their needs, human's modify the external world, or the environment. In this reality system moral codes are more relativistic and some degree utilitarian. Sorokin saw this type as fitting the American social reality system as well as "western" reality system in general (Sorokin, 1941: 775-779; as well as other places in these four volumes). Concerning the social values of a sensate culture, "a regime professing Sensate ideals will approve anything that increases the sum total of Sensate enjoyment; and that leads to man's control over nature and over other men, as the means of satisfying ever-expanding needs. (Sorokin, 1937, vol. I: 95)."

Therefore, it is quite comprehensible that the striving for wealth is inevitably one of the main activities of such a culture, that wealth is the standard by which almost all other values are judged, that it is, in fact, the supreme value of values. Pecuniary value thus becomes the measuring stick of scientific, artistic, moral, and other values. Those who are excellent moneymakers are the leaders of such a society. Those who are wealthy are its aristocracy. They are simultaneously public leaders, high priests, moral examples, kings who ennoble others, the Four Hundred which is envied, if not deeply esteemed. Under these conditions, writers, artists, scientists, ministers, public officials, and men of the
professional classes hope and act mainly to write a "best seller," to obtain the best-paying position, to have the highest scale of remuneration, and so on. (Sorokin, 1937, vol. I: 95-96).

The third broad type of seeing and thus doing Sorokin labelled "idealistic," which is more or less a synthesis of the ideational and the sensate in that both types of realities are represented (Sorokin, 1937, vol. I: 55-101). In this respect, some social theorists besides Sorokin have indicated that this is an "evolutionary state" that social organizations will evolve to in such a manner that the Earth will have a single paradigm for reality (see de Chardin, 1959).

Within this broad perspective, Sorokin, with the help of Timasheff (1937, vol. 2: 523-632), looked into the fluctuations in the criminal law using historical data from France, Italy, Germany, Austria, and Russia. He finds that while definitions are quite relative and immensely diverse, there are a common set of proscriptions that endure across space (countries) and time (history). Sorokin ranks these definitions along a continuum of "super" right to "super" wrong: the worst possible crimes with the worst possible punishments form the baseline of super wrong; followed by felonies; misdemeanors; and finally, behavior which is viewed as wrong and undesirable but is not punished by the criminal law. On the other hand, right behavior is that behavior that is expected from any ordinary member of a social organization. "Beyond it lie the fields of behavior more qualified, nobler, more heroic and saintly and sublime - the 'superright' recommended and praised but not demanded, and left entirely to the good will of the members (Sorokin, 1937, vol. 2: 523-524)." As a measure of the moral codes, he uses official
codes of conduct, or the criminal law, even though he notes:

There is no doubt that such an "official code" does not reflect the totality of the real imperative-attributive convictions of the members of the society perfectly. There always is some discrepancy between the situation as it is depicted in the "official law" and in the psychosocial mentality of the members of the society. And the discrepancy is the greater, the quicker the socioethical life of the society changes. As the official laws cannot be changed incessantly, so to speak, while the social life is changing constantly, the discrepancy is inevitable. (Sorokin, 1937, vol. 2: 526).

That is, the social life of any social organization appears to change faster than the criminal codes except, of course, in earlier times when there was not rapid social change induced by a rapid population increase and the industrial revolution. The data from these five European countries is examined from their earliest codifications to the present (which was the early 20th century when Sorokin wrote this volume.) The questions under consideration are which behavioral proscriptions fluctuate from being criminal at one point in time to not being so at another in each of the countries, and which laws are added as each country progresses historically toward the present? Furthermore, Sorokin (1937) wishes to ascertain which of these laws has had changes in punishment (sanctions) attached to it which would indicate variation in the perceived severity of the offense. He
finds that: murder; assault; feticide; slander; theft; robbery; swindle; rape; counterfeiting of money; false denunciation; attempts against the supreme organs of the State; and treason are laws which have been on the books since the earliest periods of European history studied (which includes a time period from about the 13th century up to 1937). In addition, he found perjury; adultery; polygamy; property damage; and kidnapping a woman against her will to have been almost always on the books, but at some points they were not. Moving on, he classified those behaviors which qualified as criminal only in modern times which included: blackmail; creation of the danger of infection with venereal disease; electoral forgery; and economic exploitation of prostitutes. In this isn't enough, he further classified those behaviors which have been considered sometimes criminal and sometimes not, and these include: suicide; atheism; heresy; sorcery; contact with Jews; secret marriage; and tobacco smoking. Finally, he includes those behaviors which have only sporadically been prohibited (i.e., have not been criminal for prolonged periods of time and in fact drop in and out of the criminal category from time to time) and these are: homosexuality; incest; fornication; sodomy with animals; blasphemy; strike of employees; and lockout (Sorokin, 1937, vol. 2: 576-579).

In terms of the overall severity of punishment, Sorokin (1937) indicates that so-called "barbaric times" were in fact the mildest; then the severity of punishment begins to increase through the medieval period and still more (with the exception of France) in the period of growth of the national monarchies (Sorokin, 1937, vol. 2: 585). One of the major reasons for the increase in the severity of punishment was, of course, the consolidation of the national state.
which required severe sanctions on those who did not wish to be consolidated. The trend toward increases in punitivity continues through the 15th and 16th centuries but by the end of the 17th century, punitivity begins to decline and continues to do so through the ending of the 19th century. However, post World War One periods in Germany, Austria, and Russia show increases in severity (coupled, perhaps, with the various revolutions that went on in these nations). He concludes that "we must drop our habitual idea that the evolution of criminal law and penology shows a perpetual trend toward more and more human and milder treatment of criminals" (Sorokin, 1937, vol. 2: 585).  

Turning to parallel issues, Sorokin (1937) wishes to examine the overall increases or decreases in punishment as applied to the social organization's living members. That is, variations in the codes themselves do not reflect the degree to which these codes were applied to masses of the citizenry. A convenient way of conceptualizing this issue is to use an "ideal type," (see Martindale, 1959, for example) and construct a four-fold paradigm indicating the relations between

---

Sorokin also indicates that notions that some nations are more lenient and more humanitarian than others is another misconception. His data indicate that indeed and in fact, they are all about the same (see Sorokin, 1937, vol. 2: 593).
the law as statute and the law as action. What we find, then, are instances where there are a large number of codes but they may not be applied to the persons they pertain to; conversely one can have a situation in which there are relatively few laws yet they are enforced thoroughly, etc. For Sorokin (1937), adequate data did not exist, but his study lead him to hypothesize:

Each time when, in a given social group, the ethico-juridical heterogeneity and antagonism of its members increases - whatever may be the reasons for such an increase - the amount as well as the severity of punishment imposed by one part of the group upon the other tends to increase; and, other conditions being equal, the greater the heterogeneity and antagonism, the greater is the increase." (Sorokin, 1937, vol. 2; 595).

---Figure 1 About Here---

8 Among legal scholars there was historically some argument as to what actually constituted "the law." Was it the set of codes written down, or was it the law that was routinely enforced upon the population. In our conception of the law, one which I think Sorokin shared, the law is both of these and the product is one of interaction. That is, the law as enacted forms partially the basis for application and action by the coercive arm of the state.
FIGURE I

LAW AS ACTION
(degrees of enforcement)

LAW AS STATUTE
(numbers of codes)

HIGH

HIGH

LOW

LOW
Translating, we can see that he is saying that the greater the discrepancy between the law and the moral beliefs of the members of a social organization, the higher the probability of a greater percentage of the social organization being labelled criminal, and the greater the probability that the punishment attached will be more severe than previously. (This is a very similar statement to the one which we made before concerning the amount of "social distance" between those with power to label and those who have a potential to be labelled.) In terms of general cultural disruption, an increase in heterogeneity leading to an increase in antagonism "means an increase of splitting, shattering, and falling into pieces of the network of social relationships and of the system of sociocultural values of a given society (Sorokin, 1937, vol. 2: 596)." Note that these remarks have direct import for sensate social organizations where reality is already viewed as relative, and particularly for social organizations that are pluralistic; that is, ones that already have a diversity of ways of seeing and doing. Put another way, when everyone knows their place, and does not protest this place, the social organization is more orderly, more institutionalized. Conversely, when members are not happy with the present arrangements and the numbers of members unhappy reaches a large percentage, there is potential for revolution. "Viewed from this standpoint, any deep revolution in a given society is the period when the ethicojuridical homogeneity of the society is broken and replaced by a greatly increased heterogeneity and antagonism," and "the deeper and more radical the revolution is, the larger the scale" [i.e., the larger the numbers of person incarcerated with more severe sentences] (Sorokin, 1937, vol. 2: 599). Of course, what is said of political
revolutions may also be said of other forms of social crisis since we are looking at "institutional" crises (such as religious, economic, and familistic). Moreover, the most profound and deepest changes would occur when the entire social organization attempted a shift from one reality system (e.g., sensate) to another (e.g. Ideational) (see Sorokin, 1937, vol. 2: 609; Sorokin, 1937, vol. 3: 383-506).9

We can state this in another manner. When the levels of antagonism are small, violations reflect themselves in terms of "crimes", but as

---

9 Again and again, Sorokin indicates findings which relate to rapidly changing, large scale, urban social organizations. For example, in discussing internal disturbances, he states, "other conditions being equal, during the periods when the existing culture, or the system of social relationships, or both, undergo a rapid transformation, the internal disturbances in the respective societies increase; when they are strong and crystallized, the internal disturbances tend to decrease and stay at a low level (Sorokin, 1937, vol. 3: 499)." That is, it is not urbanization proper, but the RATE OF CHANGE IN THE CULTURAL RULES AND/OR SOCIAL INTERACTIONS that lead to disturbances which among other things result in higher rates of deviation. To be sure these relationships are quite complicated; Woodrow (1971) indicates that as interaction frequencies increase there is a corresponding increase in the level of violence although the relationship is not clear. For another perspective on the relationship between urbanization, and crime see Lodhi and Tilly (1973). On the relationship between organizational variables and revolution see Stinchcombe (1965: especially 169-180).
the levels of violation substantially increase, violations may take on
the forms of riot, revolt, and revolution (Sorokin, 1937, vol. 2: 622). There is, of course, a fundamental difference between the kind and
organization of consciousness that goes with commission of individual
criminal acts, and the kind and organization of collective consciousness
that is necessary for a revolutionary movement. However, this is not
to say that the potential is not there especially when large numbers
of persons begin to experience losses in either resources of personal
freedom (on this point see Lodhi and Tilly, 1973; and Tilly, 1973;
another perspective can be gleaned from Cleaver, 1968).

To summarize, through-out the history of nations there are
behaviors that are continuously proscribed in a wide variety of countries,
but in addition there is wide variation from time to time and country to
country for a plethora of other actions. The most stable criminal
proscriptions are those of murder; treason; rape; robbery; feticide;
false denunciation; slander; as well as theft and swindle. Other crimes
have been on and off the statutes as the political regime and as the
sentiments of the populace change. Likewise, the severity of the
sanctions applied to these crimes has varied, as well as the degrees to
which they have been applied to the population. In general, the
severity of punishment has been decreasing in the recent past with the
exceptions of post-World War One, Germany, Austria, and Russia. This
relationship is tempered by the degree of breakdown in cultural and
social interaction structures as well as the degree of discrepancy
between the morals of the citizenry and the criminal codes of the state.
The larger the discrepancies between the values of the populace and
those enforced by the state the greater the probability of large scale
crime especially in the forms of riot and revolution.
A more recent study, using a different kind of method and most certainly more time specific is one carried out by Simmons (1965). Using a technique known as "quota sampling" (which insures variation in the sample in terms of age, sex, race, religion, occupation, and area of residence), Simmons asked open-ended questions of 180 subjects concerning what they thought was "deviant." He received 1,154 responses from these people that included 252 different acts and persons as deviant (Simmons, 1965: 223-224). The most frequent responses were: homosexuals (49% of the respondents); drug addicts (47%); alcoholics (46%); prostitutes (27%); and murders (22%). However, in addition to these common responses there were an incredibly wide-range of acts and persons regarded as deviant. Some of these include: juvenile delinquents (13%); mentally ill (12%); perverts (12%); communists (10%); atheists (10%); political extremists (10%); and liars, democrats, career women, the retired, movie stars, prudes, pacifists, priests, conservatives, psychiatrists, junior executives, girls who wear make-up, and know-it-all professors (for which no percentages were given) (see Simmons, 1965: 224). He concludes, on the basis of this data,

The range of items mentioned seems to defy content analysis; that is, the items do not seem to have any characteristics in common except that they are regarded as deviant by someone. Thus, there may be only one sense in which all deviants are alike: very simply, the fact that some social audience regards them and treats them as deviant (emphasis is Simmons, 1965: 225).
Simmons (1965) then carried three other pilot studies to ascertain what stereotypes conceptions had of certain types of deviants. One study used beatniks, marijuana smokers, adulterers, and homosexuals as examples and 89 students enrolled in a social problems course were asked to list characteristics they thought these people possessed. On the basis of the traits listed, Simmons (1965) administered another questionnaire to 134 respondents selected on the basis of quota sampling asking them to choose from a list of words those words which typified most closely the following: homosexuals, adulterers, marijuana smokers, beatniks, and political radicals. (See Table 1).

Table 1 About Here

Simmons (1965) indicates that the only characteristic that respondents saw the five types as having in common was irresponsible-lacking self control. Otherwise, each type has its own distinctive cluster of characteristics. He concludes that "the data lend preliminary support to the contention that discernable stereotypes of at least several kinds do exist in our society and that there is a fair amount of agreement on the content of these stereotypes (Simmons, 1965: 229)."

We do not know to what degree these stereotypes are based upon officially generated data that is passed on through the media to the citizenry, and I think this is not a crucial point to our overall analysis. The fact that there is some agreement (consensus) tempers the relativistic and radical position that the laws reflect only the interests of the powerful. Both the historical data from Sorokin (1937), and the Simmons (1965) data would indicate that not only are
TABLE 1

TRAITS ENCIRCLED AS DESCRIPTIVELY MOST IMPORTANT
FOR EACH OF THE FIVE DEVIANT GROUPS

N = 134

<table>
<thead>
<tr>
<th>Marijuana smokers</th>
<th>%</th>
<th>Beatniks</th>
<th>%</th>
<th>Adulterers</th>
<th>%</th>
<th>Homosexuals</th>
<th>%</th>
<th>Political Radical</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looking for kicks</td>
<td>39</td>
<td>Sloppy</td>
<td>57</td>
<td>Immoral</td>
<td>41</td>
<td>Sexually abnormal</td>
<td>72</td>
<td>Ambitious</td>
<td>61</td>
</tr>
<tr>
<td>Escapist</td>
<td>32</td>
<td>Non-conformist</td>
<td>46</td>
<td>Promiscuous</td>
<td>36</td>
<td>Pervered</td>
<td>52</td>
<td>Aggressive</td>
<td>47</td>
</tr>
<tr>
<td>Insecure</td>
<td>49</td>
<td>Escapist</td>
<td>32</td>
<td>Insecure</td>
<td>34</td>
<td>Mentally Ill</td>
<td>40</td>
<td>Stubborn</td>
<td>32</td>
</tr>
<tr>
<td>Lacking self-control</td>
<td>41</td>
<td>Immature</td>
<td>28</td>
<td>Lonely</td>
<td>32</td>
<td>Maladjusted</td>
<td>40</td>
<td>Non-conformist</td>
<td>32</td>
</tr>
<tr>
<td>Frustrated</td>
<td>34</td>
<td>Individualistic</td>
<td>27</td>
<td>Sinful</td>
<td>31</td>
<td>Effeminate</td>
<td>29</td>
<td>Impulsive</td>
<td>28</td>
</tr>
<tr>
<td>Excitement seeking</td>
<td>29</td>
<td>Lazy</td>
<td>27</td>
<td>Self-interested</td>
<td>29</td>
<td>Lonely</td>
<td>22</td>
<td>Dangerous</td>
<td>28</td>
</tr>
<tr>
<td>Nervous</td>
<td>26</td>
<td>Insecure</td>
<td>26</td>
<td>Lacking self-control</td>
<td>28</td>
<td>Insecure</td>
<td>21</td>
<td>Individualistic</td>
<td>26</td>
</tr>
<tr>
<td>Maladjusted</td>
<td>24</td>
<td>Irresponsible</td>
<td>20</td>
<td>Passionate</td>
<td>24</td>
<td>Immoral</td>
<td>16</td>
<td>Self-interested</td>
<td>23</td>
</tr>
<tr>
<td>Lonely</td>
<td>22</td>
<td>Self-interested</td>
<td>18</td>
<td>Irresponsible</td>
<td>22</td>
<td>Repulsive</td>
<td>14</td>
<td>Intelligent</td>
<td>22</td>
</tr>
<tr>
<td>Immature</td>
<td>21</td>
<td>False lives</td>
<td>16</td>
<td>Frustrated</td>
<td>21</td>
<td>Frustrated</td>
<td>14</td>
<td>Irresponsible</td>
<td>21</td>
</tr>
<tr>
<td>Weakminded</td>
<td>17</td>
<td>Artistic</td>
<td>16</td>
<td>Immature</td>
<td>16</td>
<td>Weakminded</td>
<td>12</td>
<td>Conceived</td>
<td>13</td>
</tr>
<tr>
<td>Irresponsible</td>
<td>13</td>
<td>Maladjusted</td>
<td>14</td>
<td>Sensual</td>
<td>14</td>
<td>Lacking self-control</td>
<td>12</td>
<td>Imaginative</td>
<td>14</td>
</tr>
<tr>
<td>Mentally Ill</td>
<td>13</td>
<td>Harmless</td>
<td>13</td>
<td>Over-sexed</td>
<td>13</td>
<td>Sensual</td>
<td>11</td>
<td>Excitement-seeking</td>
<td>9</td>
</tr>
<tr>
<td>Pleasure-loving</td>
<td>11</td>
<td>Imaginative</td>
<td>12</td>
<td>Sexually abnormal</td>
<td>12</td>
<td>Secretive</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dangerous</td>
<td>11</td>
<td>Lonely</td>
<td>11</td>
<td>Pleasure-loving</td>
<td>12</td>
<td>Over-sexed</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

their laws that have over time proscribed certain behaviors, but in addition, for some laws during singular periods of time, there is a fair amount of consensus on the characteristics of violators. The findings Simmons (1965) reports for marijuana smokers are especially interesting in light of the rise in arrest rates for this behavior during the middle and late sixties (co-incident with anti-war protests and the rise of the so-called "counter-culture"), and the widespread acceptance of this behavior on college campuses in specific and youth in general (on this point see for example, Blum and Associates, 1969; National Commission on Marihuana and Drug Abuse, 1972; Johnson, 1973). To some degree, the actions of the government both in terms of statute law and enforcement could have, in terms of Sorokin's model, directly contributed to the alienation of youth from the rest of the social organization, and the development of the so-called counter-culture. Moreover, the steady rise, as documented by various studies (see for example Johnson, 1973; Henley and Adams, 1973) would indicate the present enforcement is inadequate and perhaps, this is ultimately fortuitous for the social organization. It is not our purpose here to engage in a polemic concerning the relative merits of the illegalization-legalization of marijuana issue, but merely to point out that it is one area where public opinion has rapidly changed, and in addition, one area that tends to support Sorokin's model. That is, during the highest arrest periods for marijuana use, (coupled with some other policies which both users and sympathizers disliked [e.g. the police action in Vietnam; the selective service system's draft] as well as a general emulation of artists and musicians) there existed an active attempt to build a counter-culture, or active resistance by a minority.
In summary then, there are data that indicate stability in the definition of some things, acts, attributes and persons as deviant. Most often these definitions are centered around either willful acts against persons (murder, robbery, feticide, slander, swindle) or overt acts against the state (counterfeiting of money, treason). There are also a plethora of other acts, types of persons and things that are at one point in time considered deviation and at another not so considered. In terms of contemporary America, there appears to be a wide range of behavior considered by a variety of social groups to be deviant (pluralism in definition), some of which are discrepant from the official legal codes and conceptions. However, for some of the proscribed acts, there exists a fair amount of consensus on the characteristics of, and the degree to which some acts, attributes, things and people are deviant.

ECOLOGICAL PATTERNS OF DEVIATION

Habitats impose upon organisms within them a specific set of conditions that the organisms must adapt to if they are going to continue to exist. This existence can be at subsistence level or at a level where subsistence is not the major problem. For human populations, we saw earlier, the problem of survival is met in a socially organized and collective manner. For subsistence not to be a major problem, the social organization must have ways of producing an economic surplus. In the beginnings, we assume, a favorable habitat is necessary for such a surplus. That is, a habitat that is climatically and physiographically favorable appears to be a prerequisite for the initial development of an economic surplus (on this point see for example Radin, 1953: 20-36). Once some form of economic surplus is
sustained, there can develop wealth, or the accumulation of valued goods, as well as the use of these goods for expansion of the population. Populations can expand in two ways: in total land area occupied and in numbers. Usually they do both of these together; that is, the economic surplus allows for both territorial expansion and an increase in numbers. When the numbers in a population increase there is a resulting increase in the complexity of the social organization and a division of labor.

For social organizations that have a very limited economic surplus on none at all, a failure in the physical conditions (habitat) results in the whole aggregate suffering the consequences. Obviously, for social organizations that have an economic surplus, this may not be the case.

Now as we pointed out before, social organizations possessing an economic surplus are usually more complex than those that do not possess such a surplus. This surplus allows for the accumulation of wealth in such a manner that some members of the aggregate have greater amounts than others. This can occur through, for example, having land which has higher productivity. In any case, when the physical environment fails or becomes inadequate, not all members of the social organization suffer, but only those who do not have an adequate accumulation of economic surplus. Furthermore, the complexification of the social organization leads to a greater numbers of rules many of which concern the possession of wealth, of the units of economic surplus. So whereas the aggregates that have little surplus experience their world similarly, those with surplus do not, and their social organizations, in the nature of the complexity and diversity, reflect this difference. Durkheim (1964) labelled these two broad types of social organizations "mechanical" and "organic." Briefly, a mechanical social organization
is one based on the likeness of the member's experiences which bind them collectively together; the organic type, on the other hand, is based on a differentiation of experience, a segmenting of reality, in short a division of labor (see Durkheim, 1964: 70-229). In the mechanical type of socially organized aggregates, there are less rules than in the organic type, and thus less opportunity to violate the rules. In a mechanical type of organization, a violation of the rules is a violation of the collective conscience (or unified world view) of the aggregate, whereas violations in organic types are not.

Earlier, we looked at this very same issue in terms of the complexification of institutions, the rise of special realities and the irony that one can obey one law, yet violate another at the same time. We noted that because of the differentiation of reality and the rule that helps us constitute it, there developed a political overlay of rules that govern behaviors and jurisdictional precedence. These rules were enforced by the coercive arm of the state. In addition, they are supported by those members of the social organization that believe them to be right, and, or, believe that the rules work. In most instances, in complexified social organizations that have a diversified division of labor, we noted, there arose a set of invidious distinctions that served to regulate the flow of the economic surplus to individual members or groups within the aggregate. This surplus is usually expressed in terms of a money system, and the regulation is in terms of payment for labor. Those who receive large payment for their labor usually believe in the rules system that enables them to receive these rewards. Put another way, those who profit most by the system are its most active supporters (on this point see Rytina, Form, and Pease, 1970: 703-716).
The division of labor is also a division of rewards for that labor, and the invidious structuring of these economic rewards directly effects the spatial patterning of the social organization. Likewise, in effecting the spatial patterning of the organization it directly effects which groups within the aggregate get to live in the most favorable habitats, specifically, and environments in general. Put another way, the economic reward system, which is based upon some specific sets of rules about who gets how much directly effects which parts of the complex social organization get differentially exposed to undesirable habitats. The more undesirable a habitat is, the riskier it is, and the higher the probability of harm. Weber (1946) described the specific subset of the aggregate similarly exposed to the same or similar life chances by virtue of an economic distribution of rewards, and opportunities for rewards as social classes. In addition, Weber (1946) like Marx (1962), fully recognized the implications of this formulation. Social classes have similar life chances, live in similar habitats, experience similar environments because they occupy very similar places in the process of production. One's place in the process of production, or the division of labor places an effective limitation on the amount of competition one can engage in for desirable habitats. Those who possess a highly valued place in the organization of labor have better chances for desirable habitats.

Let me caution that the above formulation works primarily only for those social organizations that Sorokin (1937) termed sensate, or based upon material values. Weber (1958) made the same essential conclusion: only in social organizations designed to materially exploit the habitat via their economic institution and through use of
a complex technology develop living patterns on the basis of this institution. Note that the material outcomes from the invidious division of rewards via the division of labor (as expressed in money) set the upper limits on where one can live and how one can live. One can always live in more undesirable habitats if one so desires, but never better than one can afford.

Possession of accumulations of wealth also enables specific sets of the aggregate to impose its definitions of reality on those who do not possess wealth. Not only can they impose their goals (accumulation of wealth, status and prestige) but they can also set the socially correct ways to achieve this wealth. This is because wealth is equated with social power, or dominance, and as we noted before social power is a critical variable in the definition of reality in general and deviance in specific. Merton (1957) recognized the implications of these formulations for the nature of deviation and expressed them in a reference frame of socially desired goals and socially approved means. Merton (1957) argued quite correctly that in the United States emphasis on monetary success is the dominant theme and that this theme placed stresses differentially on those located in the various sections of what he calls the "social structure." A social structure is quite similar to what we have termed social organization except that it is a more static conception: stop the social organization in time, examine it and you will find a structural arrangement of positions rewarded invidiously. Simply stated, those who already have access to the means to attain wealth have a better chance of doing so. One's chances of doing so are greatly enhanced if one is already placed in the upper or middle echelons of that system; whereas one's chances for failure are
greater, the lower down on the rewards system one finds oneself. In addition, Merton (1957) notes that there is a disjuncture between officially sponsored goals and officially available means. That is, the goals are readily available to all (and desirable if one wishes a modicum of individual freedom in one's life), but the means are not. The means are, simply, more available to those in the middle and upper stratas. As a result, the lower social classes face more severe adaption problems and thus commit more deviations (see Merton, 1957: 131-194). 10

Remember earlier that we said the early human ecologists that looked into deviation looked first and foremost at the "zones in transition." One must understand that they too saw the essential relationships between the economic influencing of the spatial patterns of life, and the implications of these patterns. The zones in transition were those that had low rents largely due to an influence

10Merton (1957) provides a set of options by which the individual confronted with these problems can resolve them. This set of options was elaborated by others (see Dubin, 1959; Cloward and Ohlin, 1960; Harary, 1966) and misconceived by them as a paradigm explaining the nature of deviation. The broad categories of adaption are: retreatism (rejection of both means and ends); ritualism (leveling off of aspirations and being content with less); innovation (acceptance of ends, but substitution of means-usually deviant); rebellion (rejection of both means and ends but substitution of new means and ends).
of forces. Those forces were the expansion of the central business district out into the zone in transition, which lead to increasing the land values but decreasing the values of the structures currently standing on the land. These structures were allowed to deteriorate by their owners who were going to sell their land to the expanding businesses. In addition, there were other zones like these that have undesirable qualities much for the same reasons. That is, immediately surrounding large industrial complexes were zones that had very similar properties, low rents, deteriorated housing, but potential high land value. It was into these areas the lower social classes moved and lived and tried their best to achieve the American dream of accumulated capital. That is, in the competition between aggregates for the most desirable habitats, the poor lose and are relegated to the "badlands." In cities, there can be little doubt that the zones in transition are the badlands, and that the poor are dominated by those who have a greater economic surplus at their disposal.

The undesirability of the zone in transition as a habitat comes from its characteristics which besides deteriorated housing, include overcrowded living conditions, low economic surplus, and interaction patterns of persons who must live and adapt to these conditions. Roach (1967) in a provocative theory, argues that the basic need deprivation of the lower classes leads to their impaired mental functioning and thus to higher rates of deviation. The deviation would include variances on intelligence tests as well as increased rates of violence, mental illness, and crime (see Roach, 1967: 294-314).

Both the Merton (1957) and the Roach (1967) formulations utilize as data "official statistics," or data generated by the coercive arm
of the state, namely the police. This fact has important implications for judging the veracity of their assertions. Kitsuse and Cicourel (1963) in a study of how these statistics are generated indicate that the statistics reflect on official "crime" and that unofficially the statistics, especially their rates for each social class, appear differently. Cicourel (1968) in discussing this study indicates that suburban police are more likely to not arrest children from their areas for acts which are definitely law breaking, but that children from lower income families would get arrested for these very same acts. Thus there is a question concerning the accuracy of the official statistics as a correct picture of the law breaking behavior of the people. One must realize that the very same set of economic and social forces that indicate "who is successful" and who is not operate in the arrests procedure of the police. Other sociologists, as we shall see, realized this point and began collecting their own data on these phenomena. As we shall see there appears to be a bias in the arrest procedure; moreover, there appears to be a bias in the reporting procedure. Moreover, in terms of some kinds of deviations, for example suicide, there is a lack of consistency in definition such that a wide variety of acts are grouped under such a heading (see Douglas, 1967). In addition, the laws, as we have seen are generated by those who have social power and in this social organization, with its focus on private accumulation of wealth, they are most likely to institute and enforce laws that involved crimes against property (for a similar viewpoint see Douglas, 1971: 79-132). Thus, it is difficult to accept unconditionally research findings based upon official statistics.
Even in light of our definition of deviance, it appears as if those who are caught are differentially treated and thus the rates reflected in the official statistics are not accurate rates of apprehended deviants. But it is quite difficult to say at this point in time, how inaccurate the picture is. A definition of deviation that involved only rule breaking behavior would certainly have to reject official statistics since there is a large amount of evidence to indicate that those who break rules are largely never caught. This is especially the case for middle and upper class people who commit occupational crimes; that is, crimes such as employee theft (Dalton, 1959: 194-217). Another example comes from Cameron's (1964) study of shoplifters. Cameron (1964) indicates that only a small proportion of the offenders caught by store detectives are turned over to the police, and this proportion is biased in terms of its sampling; that is, middle class white women are released while a disproportionate number of juveniles and Blacks are turned over to the police. The point is that much more of this kind of rule violating behavior occurs than is officially recorded, and that the relative social power of persons breaking the rules has something to do with its toleration.
ECOLOGICAL ZONES AND DEVIATION

The social organizations of human beings are patterned across both space and time, and an examination of this patterning reveals that distinct and discrete sets of characteristics cluster together. By characteristics, I refer to the subjective categories and their externalizations in artifacts that each social organization utilizes. If one can for the moment picture this planet called Earth, spinning about the "sun", out in space, one can see each cluster of humans is grounded here now. Grounded in the very real sense that both you and I are part of the planet; it could not be otherwise. We are in relation to the habitat that we occupy here now. By here now I refer to both the space/time coordinates of your being. Obviously, as one pictures the planet spinning out in space around its sun, one can see that "here now" for each of us is quite relative. As I sleep, many other humans are awake and moving about: picture these waves of human activity in coordination with the light of the sun. Each set of people has a discrete set of characteristics that they have imposed upon them and carry with them; that is, they have a habitat that they must adapt to and they have the cultural mechanisms that they utilize as tools in adaption. At the very foundations of the tools of adaption are conceptions of "what is" both space and time.

Time is cut up into zones, and this makes "it" quite relative. In the United States, there are at least four discrete time zones so that events happen at different times for people collected in each zone. It was only very recently that time was zoned into these coordinates, and indeed, the United States' way of "telling time" is quite different from other cultures that have other calendars and divisions for the alterations.
of dark-to-light-to-dark-to-light, etc. Less than 100 years ago in the United States, people set their "timepieces" by a local time, so there was a "San Francisco time", a "New York time", a "Boston time" and so on and so forth. This wasn't a problem when the size of the division of labor was smaller, but as the United States sought to consolidate its economic infrastructure it became necessary to arbitrarily make up a new system of time, and as I said this occurred less than 100 hundred years ago. The problem became most acute for the railroads, each of which was operating on its own special time system such that coordination of trains from different roads were missing each other by several hours even though each train was "on time." [This does not even consider the fact that trains were of several shapes and sizes yielding a variety of track sizes so that one line would end and another begin: this too was "standardized" so that the infrastructure could be consolidated.] Around 1870 a Canadian named Fleming and an American, Charles Dowd, developed a system quite similar to the one which we use today. They cut up the planet into 24 continuous time zones, starting from a place called Greenwich (which was arbitrarily chosen). Using the number of degrees in a circle (360°), they divided these degrees by 24 (the number of time zones they wished, which of course, is also the number of hours in a single day) and they arrived at intervals of 15° longitude for the beginning and end of each zone. Each set of places within each zone would have the same time, but as one moved from one zone to another time would change in quantums of one hour. The debate over this system went on for about ten to fifteen years before the railroads [one of the major integrative aspects of the economic infrastructure] adopted the system; this system if of course, the common one known to each American and used by them in their
daily doings.

There were several modifications in this time system that had our Earth divided into 24 continuous zones. One of these is the international date line, an arbitrary place 12 hours away from Greenwich where the days change, in such a way that one can slip back and forth between days in a matter of moments! Another adjustment came when Europeans decided they wanted some adjustments which came in the form of East European and West European time zones. Likewise, there are peculiarities to each social organization such that one has "daylight saving time" - a arbitrary shifting of the arbitrary rules to "save daylight". This device is usually favored by urban populations who must work on scheduled, bureaucratic time and want some "day light" to do leisure, while agricultural communities usually do not favor this time change.

In terms of deviation, one must be aware of what the time means in relation to the phenomena that one is looking at. [There are of course, kinds of time that we have not mentioned that affect changes on Earth. Some of these are "atomic time" which is the time set up on a periodic table of elements; lunar time which has effects on the currents of the oceans; "rotational time" which is a time that varies due to the elliptical orbit of the Earth about the Sun; and of course, a special reality system of time used in celestial mechanics known as ephemeris time.] All systems of time have as their components some sense of duration and recurrence; duration is measured in terms of recurrence; that is, things recur and one marks off arbitrary units that indicate the duration of that recurrence. Let me give you an example. Durkheim (1951) noted, in his classic study of suicide, that there were temporal variations in the suicide rates (a suicide rate is computed on the basis of the numbers of people doing it divided by the total numbers
of people. Durkheim (1951) looked at suicide in France, Prussia, Bavaria Saxony, Denmark, Sweden, Switzerland, Norway, Belgium, England, Ireland, and Italy and found that almost without exception the rates of suicide are highest in the time periods marked off as March to August. Moreover, the time period known to us as summer (June through August) has the highest suicide rate without exception (see Durkheim, 1951: 107). If one takes instead of these seasonal variations, monthly variations, one finds in all European countries: "Beginning with January inclusive, the incidence of suicide increases regularly from month to month until about June and regularly decreases from that time to the end of the year (Durkheim, 1951: 111)." But Durkheim did not stop here, for upon closer analysis, the "time" factor yields a measure of the average length of the day (day here meaning the light part of the 24 hour period as opposed to night or the dark part), and as the amount of daylight increases so does the rate of suicide. This periodicity or receiving fluctuations of the suicide rate endured through time. Year after year Durkheim (1951) found similar patterns, and on the basis of this data, concluded that the longer the day the higher the suicide rate, for the longer the day is the more intense human interaction is [as a corollary: the more intense human interaction is the more social demands placed upon the organism, and, the more social demands placed upon the organism, the higher the rates of suicide]. Thus, time as a measurement indicates a recurring and enduring pattern for suicide.

Another way of stating the reference of persons to time is to say that PEOPLE DO DAYS. Here I use "days" in the sense of 24 hour periods, and people manage, because of their "timing" to do some days similarly and some differently. The way people get to do their days is greatly
effected not only by the temporal aspect of organization, but by other social variables such as age, sex, race, religion, and so on. For example, where I currently live, there is a system that I will label "university time," and this system effects the business cycle of the merchants in the area since it effects the students who comprise nearly a third of the residents when school is in session. When the regular sessions of school end, and most of the students vacate the city, the profit margins of the stores drop characteristically. The businesses, thus, must make their profits while school is in session. Likewise, this time also effects the rates of burglaries and bicycle thefts. Thus, there is a timing to various kinds of deviations and the timing of these deviations has something to do with the "universities time system." There are, of course, many other examples such as the timing of accidents on the highways; the rise of traffic violations by timing; and the timing of traffic congestions and pollution in urban areas.

The patternings of human social organization also vary by "space." Actually the separation of space and time is an abstraction of the highest order in that, in practico, space and time are inextricably connected. The boundaries of space, like those of time are socially defined and are subjectively known to the members of any social organization. Like time, these boundaries are externalized into such arbitrary symbols as "borders", "property lines," and places in general. A simple definition of place is: place is space with rules. Like the variations of deviation across time, deviations vary across space, and the reasons should be obvious. The rules by which one discerns what is deviation vary across space and since these rules are relative to the persons carrying them, the amount, kinds, and rates of deviation likewise vary.
Earlier, I noted that human ecologists studying deviation focused on "zones of transition," as places where deviation was most frequent. They noted that these zones had a particular patterning to them that manifested itself in both artifact and art. This led them to conceive of these zones as "ecologically patterned." Put another way, human social organization is ecologically patterned into space/time zones in which deviation, like all other human activities, varies according to the social matrix, or clusters of characteristics carried by the living actors inhabiting the zones. Furthermore, these zones can be described in terms of their distinctive characteristics [these descriptions are always in terms of socially defined characteristics], and these distinctive characteristics are always comparative. They are comparative in the sense that every frame of reference makes relative distinctions on the basis of the elements within its defined purview. For example, a "slum" is relative to those elements that it is compared to such that "slums" in America are slums only when compared to other American habitats. To be sure all zones labeled as slums have overcrowded dwellings that are deteriorating inhabited by people who have very small shares of the economic surplus. In addition, the humans inhabiting slums have distinctive socially organized habits that include among other things a lack of interest in education and poor health. This last point can be illustrated using a study done on the ecologically distribution of dental health (Talbert, 1962). Using the socio-economic class structure as it is patterned over the city, and in addition, utilizing visual examinations of the dental conditions of elementary and junior high school students in Fort Worth, Texas, Talbert (1962) found that
the lower the socio-economic class of the student, the poorer the condition of the student's teeth. This is, of course, spatially patterned so that poorer persons, living in slums, have poorer teeth (and health in general). Their health and their living conditions are both directly related to their relative position in the distribution of the economic surplus.

Before when I said that a slum in America would be defined as a slum only when compared to other American habitats, I was referring to the nature of slums Earthwise. A comparison of a slum in Chicago, for example, with the slums in Rio de Janerio, or Bombay, or Calcutta would leave one thinking that slum dwellers in Chicago did not live in slums at all but in relatively good conditions since they have limited amounts of heating, running water, and even electricity (on these points see: Seeley, 1959; Hunter, 1964; Clinard, 1966). These distinctions apply, in addition, to what would constitute a desirable habitat in each area under consideration. An area contains a number of ecological zones which are differentiated by their environments. Remember that an environment is composed of a habitat, or the physical features surrounding the organism, and the set of social relations in which that organism is implicated (this definition is derived from Duncan and Schnore, 1961). Thus, human social organizations and components of these organizations are differentially patterned across ecological zones on the basis of their competition for desirable environments.

Human ecologists can be heuristically divided into two groups on the basis of the scale of their unit of analysis. A unit of analysis can be as small as an individual [and even in psychology, a part of an individual] or as large as the population of the world (on the former see for example,
Maslow, 1968; while on the latter see Frejka, 1973). For human ecology, the units of analysis can be entire populations and their social organizations, or aggregates, groups or parts of groups within a population. As an analytical device, one can label those who study entire populations as macroecologists and those who have as their unit of analysis groups within populations microecologists. The ecological complex (P-O-E-T) is a formulation of macroecology (see for example, Ogburn, 1951 and Duncan and Schnore, 1961), and we have seen this formulation is a useful frame of reference for looking at the complex patternings of human social organizations. Now when I say that this distinction is analytical, I mean only that, in practico, the distinction becomes quite blurred especially when one considers that a microecologist can have 5 to 500 million people as a unit of analysis. For example, Farley's (1970; 1971) studies have as their unit of analysis the totality of Blacks within the United States. These studies in conjunction with Duncan's (1969) utilizing a similar unit and Blau and Duncan's (1967) study of the "occupational structure" (a portion, a very important portion of the social organization) yield important data on how just being (an attribute) Black in the United States penalizes one in the competition for equal shares of the economic surplus. In general, macroecologists also dispense with utilizing the subjective interpretations of the organisms they study simply because it is almost an impossible task to ascertain the subjective valuations of 300 million people; microecologists, on the other hand, include these valuations (depending of the unit of analysis) in their interpretations of their data.
It should be obvious to you that the study of deviance is necessarily microecological since deviation depends upon some social organization and always occurs within the rules context of that organization. This would not be true, though, if one includes under the study of deviation, war. War is that form of human interaction where entire populations declare other entire populations as "deviant" and seek to utilize vast portions of their social organizations via technology to sanction the deviants. The study of war as deviation, then, would necessarily be macroecological. However, in this essay I will not deal with war as deviance mostly because of the space limitations imposed upon me. Indeed, these space limitations will further delimit our focus to the analysis of certain forms of deviation, and their attendant rules structure sanctions, as they vary by ecological zones in the United States. In some instances, data from other nations will be brought in (as in the suicide example previously) but in general, I will focus upon areas within the United States.

The distribution of deviation varies by ecological zones just as does another major component, social power. One cannot, given our definition of deviation, separate these two components. Within each and every ecological zone, when one looks at deviation one must also look at the social distribution of power as it is manifested in either land ownership, physical strength, social status, social wealth, social knowledge and, or, technology. This last variable includes, for example, the fact that a powerful person or group usually has the superior technology allowing it to exploit the habitat moreso and thereby become the dominant organism or group. As I noted earlier, social power can be derived from the political overlay (the legal codes and their coercive
arm of enforcement) or social power can be derived from other institutions within the social organization (e.g. the structural arrangements, of the suburban family yield usually to the "mother" the larger amounts of social power; or, college officials who can on the basis of grades dismiss [ban] persons from universities). One must keep in mind that the institutions themselves are segregated into discrete units so that the educational institution, for instance, is manifested variably in each ecological zone such that its doings may be greatly influenced by the characteristics of the zone. What I have in mind is the variation in the degree to which students in the education institution must be controlled. Obviously, the degree of control necessary for college students is from the point of view of those doing the controlling, seen as less than the degree necessary for elementary and junior high students. Moreover, within junior high schools, the degree of control varies as to the ecological location of the school. Schools that are servicing the lower socio-economic classes, in general, are more coercive than those serving the higher socio-economic classes[largely because there appears to be a greater amount of violence and conflict within schools located in or near, and servicing the inhabitants of, zones of transition].

Social power, however, can be even more phenomenal than institutions, and any analysis of deviation must take this aspect into account. Police can be only at one place at one time, and all other violations that take "place" in other areas cannot be detected. Similarly, a group of teenage youth that labels a person "queer" and stomps him can utilize their social power only at that place/time. In this instance, their power is manifest in the collective definition that they have of the
"queer" and the sheer amount of biomass they can muster to support that definition. But if, say, the youth are about to stomp this person they have labelled, and the police appear, there could be a power reversal provided that the police do not share and condone the youths' definition. That is, when any violation occurs one of the variables leading to the labelling of the violation as deviant is the presence of some powerful others to whom the violation is visible.

A further distinction can be made in terms of the right to occupy a zone and the total time of occupation as contributors to the relative amounts of social power each inhabitant possesses. The right to occupy a zone refers to persons, like the police, who have authorized license as the most powerful agent (usually too, they have a superior technology available to them). However, when they are not present in the zone, the paramount power is relegated to others (who possess components of social power). One of these components is of course, physical strength as measured in both biomass and energy; another is social wealth; still another social knowledge. In the last case, for example, the length of time of occupation in a zone yields greater knowledge of the rules by which the inhabitants deal with their habitat and each other, and thus yields superior knowledge which yields greater social power. One example of this occurs in prisons where the turnover among correctional officers is so great that the inmates (who are there for much longer periods of time) have control of the everyday doings of their cellblocks (see, Wheeler, 1966; for other examples, see Lipset, 1952; and Redlinger, 1970).
Moreover, we can distinguish how a very similar sets of behaviors performed in two or more different zones become "normal" in one and deviant in another. I will label ecological zones in which violations can routinely occur with a very low probability of apprehension and sanction as "zones of liberation" (from the violator's perspective). In a zone of liberation, the violators enjoy an immunity that they would not otherwise. Let me give you an example of what I mean. Marijuana smokers who are at outdoor rock n' roll concerts where there are, lets say, 50,000 other people sympathetic to or engaged in a similar violation of the law (the political overlay), usually are not sanctioned EVEN WHEN THE POLICE ARE PRESENT. Explanations of this occurrence might emphasize the biomass potential of the smokers as making them more powerful than the momentary manifestation of the political overlay (the police). In addition, the police may desire to "keep order" rather than "enforce the law" and view the lack of enforcement as necessary to keeping the peace. That is, too much enforcement and one might have 50,000 persons engaged in a riot. Thus, the zone becomes liberated from the political overlay and the "normal" patterns of behavior become those of the violators. This same analysis can be applied to gay bars, middle class swingers, gambling parlors, and a host of other places.

We can carry our analysis of ecological zones in terms of deviation even further by looking at the opportunities for deviation. That is, the opportunities for deviation vary ecologically. For example, traffic accidents rarely occur in the middle of baseball fields; high sticking in a hockey match rarely occurs in equatorial Africa. In terms of burglary, armed robbery and other such violations, Boggs (1965) states:
Environmental opportunities for crime vary from neighborhood to neighborhood. Depending on the activities pursued in different sections of the city, the availability of such targets as safes, cash registers, dispensing machines, people and their possessions varies in amount and kind. These differing environmental opportunities should be reflected in the occurrence rates.

Cloward and Ohlin (1960) make a similar observation in attempting to account for the rise and decline of various types of delinquent subcultures, as did Sutherland (1937). Specifically, just as legitimate opportunities are selectively available to persons so likewise are illicit opportunities, and each person occupies a position in relation to the relative availability of both licit and illicit opportunities (see Cloward and Ohlin, 1960: 144-160).

Another dimension that we can and should include in analysis of the ecological patterns of deviation is the degree to which the zone is public or private. Stated in terms of visibility, the more public a zone is the more visible are the actions in that zone. The more visible any set of actions are the greater the probability that some other is going to label these actions. The greater the visibility of a violation of the specifically enforced rules in the zone is the greater the probability the violation will be labelled as deviant. Thus, behaviors that are violations and public, other things being equal, are more likely to be labelled deviant. The other things being equal are variables such as the numbers of persons in the zone doing the act (see previous example), the presence of powerful others in the zone (see above),
the relative social power of the violator, etc.

For the purposes of this essay, and given the space limitations imposed upon me, I will focus primarily, upon the United States and furthermore, on six categories of deviation within this country. Our analysis of these deviations, in terms of social power, will force upon us a focus on the economic infrastructure as a major contributor to the production of deviation. The reason for this is to be found in the dominance of this institution on the lives of the organisms living within the boundaries of the country. As Sorokin (1937) and Merton (1957) correctly noted, social wealth is directly related to social power in America and obviously this is related to American's materialistic orientation to reality. It is unfortunate for us, that many of the earlier ecologists of deviance did not utilize the reference frame explicated above, but used other frames of reference in analyzing deviation in America. Whenever possible, I will interpret their data in terms of our reference frame, but as we shall see, in some cases this becomes quite difficult. In such cases, I will not distort their data and findings into our frame of reference, but indicate how they went about doing their work, and some of the implications of their doing.

The categories of deviation that I have chosen to examine (besides those already alluded to in earlier examples) are: juvenile delinquency; narcotics addiction; discrimination; occupation and white-collar deviations; and the effects of population density and pollution. The first two of these categories are by far the most analyzed categories from the ecological perspective, and have associated with this analysis a history that dates back to the "Chicago School" studies that I spoke about earlier. I have chosen these examples because they reflect the
traditional ways of analysis, and the problems that arise from these ways. In both of the sections on Juvenile Delinquency and Narcotics Addiction I will indicate the findings of ecologists of deviation and then, give examples of the interaction patterns of the inhabitants that lead to the generation of the deviant appellation. As we shall see, there are power related variables in the application of the appellation, and I will try, without doing violation to their methods and findings, to contextualize these within the reference frame developed in the foregoing pages. In terms of discrimination, I will examine the data on the utilization of racial variables to assign positions invidiously within the economic infrastructure, and shall give two examples: one dealing with the placement in legitimate occupations and the other dealing with placement in illicit occupations (on the relative positions of persons in relation to licit and illicit opportunities). In the consideration of occupational and white collar deviations, the primary focus will be on deviations from the proscriptions surrounding work activity rather than activities such as sexual encounters between secretaries and businessmen. Again this is due to the relative dominance of the economic infrastructure on the everyday lives of the organisms we are studying and in addition, the relation between this institution and amounts of social power. The last two categories, however, depart somewhat from these rules of choice. The first, population density, is currently being promulgated as an explanation for ecological variations of deviance, and of course, the density of the population in any ecological zone is related to the relative amounts of space the organism can effectively defend via competition. In this respect, those who possess large amounts of the economic surplus usually also
possess large amounts, or have access to large amounts of space, and thus, their population density is less than those who are socially poor. The last section concerns pollution, which is a direct result of two inter-related variables: population and technology. Yet, here I can be faulted for choosing a category THAT IS NOT DEVIAN'T BUT IN FACT NORMAL. That is, POLLUTION IS NORMAL even though in many instances, there are legal statutes against it. Pollution, as we shall see, is socially patterned so that some groups in the social organization are more polluted than others; that is, pollution like all other human productions varies by ecological zones and clusters with variables that either lead to or mitigate the application of the deviant appellation, and thus, the application of sanctions. With these considerations in mind, I hope you will turn to the following sections and let me pilot the way on the basis of how I see.
Definitions of juvenile delinquency are extremely broad and empower various officials with a considerable amount of discretion in apprehension. Some of the "offenses" which can result in apprehension are: truancy; disobeying parents; and a category for youth who are in danger of leading immoral lives (sometimes known as "predelinquency"). Sutherland and Cressey (1966) offer the definition from the state of Illinois as a reasonable example of what constitutes delinquency:

A delinquent child is any male who while under the age of 17 years, or any female child who while under the age of 18 years, violates any law of this state; or is incorrigible, or knowingly associates with thieves, vicious or immoral persons; or without just cause and without the consent of its parents, guardian or custodian absents itself from its home or place of abode, or is growing up in idleness or crime; or knowingly frequents a house of ill repute or knowingly frequents any policy shop or place where any gambling device is operated; or frequents any saloon or dram-shop where intoxicating liquors are sold; or patronizes or visits any public pool room or bucket shop or wanders about the streets in the night time without being on any lawful business or lawful occupation; or habitually wanders about any railroad yards or tracks or jumps
or attempts to jump onto any moving train; or enters any car or engine without lawful authority; or uses vile, obscene, vulgar, or indecent language in any public place or about any school house; or is guilty of indecent or lascivious conduct.

As one can see, such a definition empowers officials with a tremendous amount of discretion. Nevertheless, this incredible latitude in definition has not stopped sociologists from looking at the various correlates of "delinquency."

Overwhelmingly, research findings for the last fifty years point to a relationship between low socio-economic position, race, ethnicity and delinquency, but as we shall see the relationship between these factors is quite complex and complicated. The research into delinquency began in the United States with members of the "Chicago School", specifically, Clifford Shaw (1929). Shaw studied the ecological distribution of adult offenders and juvenile delinquents in the city of Chicago and found them to be associated with deteriorated housing, declining population, and social organization (Shaw, 1929: 202-206; for a more intimate look at Chicago delinquent life see Thrasher, 1936). Prior to Shaw's (1929) findings, McKenzie (1925) another one of the "Chicago School" had observed that social organization resulted when a city's economic base is weakened. In addition, changes in the transportation system, land usage, and deterioration of existing structures would result in population shifts and precipitate social unrest. While each of these variables appear to interact as McKenzie (1925) predicted for cities in general, they definitely interact in this manner for certain
ecological areas within cities. More often than not, the ecological areas that have such conditions are also those areas where the lower socio-economic classes reside. Hawley (1950) following in footsteps of the Chicago tradition describes these areas, as we did earlier, as having high land values, but low rents with the buildings left to deteriorate as the business district of the city gradually pushes outward. In the early period of delinquency research when Shaw (1929) was researching the problem, various ethnic groups inhabited these zones. At this point in time, the migration of Blacks out of the south was not in full swing so the "slums" were occupied by the late immigrant arrivals to the "new world." However, as each new group came, the earlier arrivals moved out of this area and away from the city's center. Earlier, we quoted McKenzie (1968) on this process that entails the earlier immigrant group moving out of the center of the city toward the periphery via the routes of transportation. What was most intriguing was that as these groups could afford to they moved out of these "zones", and consequently their rates of delinquency declined. Wirth (1928) in his research on the ghetto came to essentially the same conclusions. Ghettos, wherever located, are similar in structure being "manifestation[s] of humans nature and a specific social order (Wirth, 1928: 287)."

Approximately ten years after the Shaw (1929) study, Faris and Dunham (1939) undertook a study of the ecological distribution of mental illness, crime and drug addiction. Their findings were quite similar to those of Shaw (1929). Specifically, high rates of illness and disorganization were associated with "apartment-hotel and hotel areas" and "zones of transition" (Faris and Dunham, 1939: 119-123; 218-219; also see Hayner (1936) on hotel life in Chicago).
Studies done by other researchers done at different times and in other cities support the linkages between slum conditions, low socio-economic class and delinquency as found by the early Chicago research. Shaw and McKay (1931) analyzed data from the cities of Birmingham, Chicago, Cleveland, Denver, Philadelphia, Richmond, and Seattle, and found high associations between delinquency (as recorded in official statistics) and "zones of transition" that were located adjacent to the central business district and heavy industrial areas. Furthermore, in all of these cities, as the distance away from the center of the city increased characteristically, the rates of delinquency decreased. Corresponding to this were the levels of socio-economic class; that is, the greater the distance one travelled from the center of the city the higher the socio-economic class and the lower the rates of delinquency (for a detailed report of this phenomena see Shaw and McKay, 1931).

Lind (1930) drawing on an analysis of official crime and delinquency data for the city of Honolulu came to similar conclusions as did Hayner (1946) for Mexico City, and Schmid (1960a; 1960b) for Seattle in the 1950's.

Lander (1954) working on data for Baltimore found juvenile delinquency related to conditions of social disorganization. Using official statistics and census data, he concluded that high rates of delinquency were correlated with percentages of non-white per census tract, and the percentage of homes that were not owner occupied (i.e., rentals). Bordua (1958-1959) attempted to replicate Lander's study using data from Detroit and found delinquency to be associated with low levels of education, low percentages of owner occupied dwellings, and high percentages of dwellings that were overcrowded. Polk (1957-1958)
in analyzing delinquency data for the city of San Diego concluded that the percentage of non-whites was the strongest single predictor of delinquency (coupled with non-white status were low socio-economic class, low levels of education, etc.) Bates (1959) working with data for the city of St. Louis found that "all the elements which proved significantly related to delinquency in Baltimore were found to be significantly related to delinquency in St. Louis," Chilton (1964) compared his data on delinquency in Indianapolis with Lander's data from Baltimore and Bordua's from Detroit and found delinquency related to poor housing, transiency, and low socio-economic class. Shannon's (1964) study of delinquency in Madison, Wisconsin reveals a similar pattern: the lower the overall socio-economic class of an area, the higher the rates of delinquency. Finally, Seaman's (1965) study of delinquency in the city of Fort Worth, Texas indicates the same type of finding: low socio-economic class, distance from the center of the city, and percentage non-whites are all associated with high rates of delinquency.

To summarize then, high rates of delinquency appear to be associated with several factors which are deteriorating or substandard housing that is renter occupied; overcrowded conditions; high rates of transiency; and low socio-economic class. These all result in additional correlations between delinquency and "zones of transition" located adjacent to business or heavy industrial areas, and high percentages of families that are on relief. Lastly, all the foregoing conditions appear to be more prevalent amongst minorities especially Blacks, who currently occupy those areas of the city. The only exception to this pattern in the published delinquency literature is found in Hayner's (1933) study of Seattle where a Japanese enclave, located in the
deteriorated sections of that city had exceptionally low delinquency rates due to the strength of their cultural ties.

In interpreting these findings, though, some sensitivity is necessary for the following reasons. As we noted before, the category of "delinquency" includes a multiplicity of offenses grouped together. Specific offense analysis indicates that juveniles from the lower socio-economic classes commit more crimes that are "economic" or geared toward producing money, but that juvenile delinquency may be much more evenly distributed across the social organization (see for example Porterfield, 1943; Wallerstein and Wyle, 1947). A socio-economic class and racial breakdown of delinquency data indicates that lower class boys and particularly Blacks are more likely to be involved in crimes such as robbery, assault, loitering, and disorderly conduct; however, Blacks are significantly underrepresented in other delinquent categories like liquor violations, auto-theft, and vandalism (see Nye, Short and Olson, 1967; Chilton, 1967). In fact, specific offense analysis of auto-theft data for the city of Detroit (the Motor City) indicates that this offense is a "favored group" delinquency. Juveniles who steal autos are much more likely to come from all-white neighborhoods, where they live in uncrowded conditions, where one parent works (not both or neither), and where the homes are not deteriorating; that is, from areas that are primarily middle class (see Wattenberg and Balistrieri, 1952: 575-579).

Secondly, most of the ecological studies of delinquency utilize court records, police and, or, other official records that reflect accurately only "official delinquency," rather than delinquency in general. If you will remember, we discussed this issue earlier with
reference to Merton's (1957) schema explaining why people deviate from
the cultural goals and means to achieve the goals (for a thorough
discussion of the use of official statistics for delinquency see Sellin
and Wolfgang, 1964; also see Cicourel, 1968). Official statistics are
compiled by authorities on the basis of their contacts with juveniles
and, as we shall indicate shortly, contacts between police and juveniles
occur differentially and selectively within the social organization.
However, there have been other studies of delinquency that did not
utilize officially labelled populations of juveniles, but instead,
researchers ask youth about their law-breaking using the procedure of
the "anonymous questionnaire." This procedure allows the juvenile to
indicate the amount of rule breaking that he or she has engaged in, much
of which is not sanctioned (see, Porterfield, 1946; Murphy, Shirley and
Witmer, 1946; Dentler and Monroe, 1961; Clark and Wenninger, 1962). One
of the drawbacks of this procedure is that it relies on the truthful and
accurate reporting of the juvenile and, in addition, it may be that the
juvenile will not report more serious offenses. Nevertheless, the
findings from such studies indicate general support for the relationship
between socio-economic class and delinquency; however, such studies
also qualify this association in noting the importance of the type of
community the juvenile resides in. For example, rural farm youth
commit delinquent acts that would not be seen as serious such as liquor
violations, roudiness, and trespassing but do not engage in destruction
of property, theft or assault. On the whole, rural youth appear to
commit less crime than urban youth, but again, within urban areas youths
commit crime variably. Cities that contain high percentages of industrialized areas seem to be more prone to high delinquency rates (Clark
Thus, closer analysis indicates that not only low socio-economic class and the conditions that are resultant from being in this class, but in addition, the type of community, its organization, plays a significant part in the distribution of delinquency.

In the previous paragraph, I indicated that there was evidence that encounters between officials and juveniles were selective and differential, and as a result some juveniles are more likely to be exposed to being labelled deviant for the acts they perform. This selectivity is in part a result of a self-fulfilling prophecy on the part of the police.

On the whole, urban crime and delinquency rates appear to be higher than rural rates, with the only exceptions being murder, rape and larceny. In general, then the greater the population density, the larger the delinquency rate. However, this statement is an oversimplification since both crime and delinquency rates vary by, not only, urban-rural dimensions but also by size of city and region of the country. For example, the rates of rape and criminal homicide for rural areas are higher than those for small cities (a small city is one having less than 25,000 population. In terms of rural urban differences in delinquency and crime, it appears than urban delinquency simply steals more. For example, robberies are fourteen times more common in larger cities than in rural areas and in these same areas burglaries are the highest (see, Korn and Mc Corkle, 1963: p 18-23; Knudten, 1970: 73-76; Gibbons, 1968: 99-101; Haskell and Yablonsky, 1970: 38-42;).
themselves. One of the early Chicago theorists, W.I. Thomas (1923) believed that "definitions of the situation" should be the central focus of sociology precisely because when persons define situations as real, they are real in their consequences. This is a very similar conception to our earlier concerning the nature of social reality: it is arbitrary but once you believe it to be the way "it" is, "it" indeed appears that way. Merton (1957) among others realized the elegance and importance of this postulation:

The first part of the theorem provides an unceasing reminder that men respond not only to the objective features of a situation, but also, and at times primarily, to the meaning this situation has for them. And once they have assigned some meaning to the situation, their consequent behavior and some of the consequences of that behavior are determined by the ascribed meaning (Merton, 1957: 421-422).

In terms of the police, patrolmen are assigned "beats" or scheduled routinized runs that cover selected zones of the city, and the assignment of beats reflects the ideas that the police have about where crime will occur. The past data on crime that the police have serves as a basis for assignment so that police usually are assigned differentially to "high crime" areas - usually zones of transition, and, or, lower class areas. The police are aware that they do this, but because they must proceed (as must we all) and because they are positive that crimes occur moreso in these areas, there appear to be a greater number
Secondly, as Piliavin and Briar (1964) report, police officers when they come into contact with juveniles have a variety of discretionary procedures that they can follow. They can simply release the juvenile after asking him or her a few questions; or they can release the juvenile after questioning and file an "unofficial" (i.e., meaning that the juvenile has no official record with authorities) contact report. More severe is an "official reprimand" which involves taking the juvenile into custody and releasing him or her to parents or guardian; they can invoke a citation for juvenile court of the youth; and finally, they can arrest the juvenile and confine him to a juvenile detention center. The last three of these actions entails an "official record" for the youth in question (Piliavin and Briar, 1964: 206-214).

Furthermore, while it is departmental policy to arrest and confine all juveniles that commit a misdemeanor or felony, in practice such considerations as the youth's age, prior criminal record and attitude might alter the actions taken by patrolmen (Piliavin and Briar, 1964: 206-214). Discretionary policies like these have their basis in both official and unofficial police policy. Officially it was recognized that each youth had to be dealt with on an individual basis, while unofficially discretion was rationalized on the basis that strict enforcement would overcrowd the courts and detention facilities, and lead to an increased crime rate which might bring community criticism down on the police (see Piliavin and Briar, 1964).

When in actual contact with a youth, officers must access on the basis of their interactions with the juvenile which of the discretionary procedures to invoke. That is, they must decide on the basis of the
"cues" given off by the juvenile, which way to define the situation. Piliavin and Brair (1964) indicate that juveniles that possessed the wrong set of characteristics were given the most severe dispositions: if the youth "looked like" he belonged to a gang, he had a higher probability of being arrested. In addition, the youth's demeanor was a critical variable in which disposition was utilized. If the youth was uncooperative with the police, more often than not he was arrested whereas cooperative behavior was rewarded with lesser sanctions. On the basis of their observations of police in actual encounters with juveniles, Piliavin and Brair (1964) report that "cooperative behavior" included respect for the officers, being fearful of sanctions and contrite about their infractions; in fact, the officers appeared to have developed a stereotype of what a "committed delinquent" looked like. Skolnick (1967) reports a strikingly similar finding in his research on police: officers have a stereotype construction of the "symbolic assailant" which they "fit" (i.e., use to define the situation) onto suspects. Thus, youth who "fit" the stereotype are much more likely to be stopped and questioned. In fact, the stereotype was constructed on the basis of the crime statistics (the same data that lead to differential assignment of officers), on again on the basis of these data police assumed that youth from high crime areas committed more crime. Thus, the self fulfilling prophecy of using past statistics to both assign police and construct a stereotyped notion of the "committed delinquent" lead departments to concentrate their efforts more frequently in zones inhabited by lower class persons (besides Piliavin and Brair, 1964; see La Fane 1964; Goldman, 1970: 156-161; and Cicourel, 1968).
On the basis of what we know about how official data is constructed, then it becomes difficult to discern if lower class youth actually break more laws. However, as you should by now remember, our definition of deviance indicates that breaking the law is not enough to be labelled deviant. To be labelled deviant, or in this case delinquent, there must be some person or groups that has a larger amount of social power than the person about to be labelled and they must enforce their standards upon that person. Thus, in terms of these criteria, lower class youth are, more often, for the reasons we indicated above, unsuccessful in maintaining their definitions of their conduct and are more often assigned the status of deviant.

EXAMPLE: LIFE ON THE STREET, THE CASE OF THE CORNER BOY

As we have noted running through an area are a multiplicity of ecological zones; some of these zones are used by private individuals, and sometimes families. In others, though, the space is defined as being "open to the public." However, being open to the public can itself have selective meaning; for example, establishments that deal liquor may be open to the public, but the public that they are open to is defined by official agencies, and thus limited to "authorized clientele." Any business done in this zone that does not involve authorized clientele can be potentially labelled as deviant and in some instances criminal. Still there are other zones that are "for public use" and these are usually the most accessible and visible zones. One of these zones is the "street."

The street as an ecological zone has been analyzed reasonably well in sociological literature, although most of that literature is
centered on lower class street society. One possible reason for this selective reporting is that the lower social classes, and especially marginals within those classes like juveniles do not have the monetary power it takes to have access to private territory (for example, see Whyte, 1961; Liebow, 1967; Suttles, 1968; Sutter, 1969; Stinchcombe, 1963).

In the United States, "streets" are usually paved roads that run within a city and are primarily for vehicle traffic - automobiles, trucks, buses and "street cars." This, of course, is not true for other places on Earth, for in some areas streets are designed for foot traffic. Many of these streets were built prior to the invention of the gasoline engine and the auto (on this point see the delightful volume written by Rudofsky, 1969). "The street" in our usage here, refers to a peculiar kind of social aggregation that springs up and around, and within, larger natural areas. "Life on the street," or the asphalt jungle, is seen to be harder, nastier and dirtier than living like other people do in house and apartments. Some of the people who live on the street are certainly seen as deviant (e.g., winos, derelicts, runaways, and transients) by both the citizenry and the police. Still others who reside in and around the street view the police as the "deviants." Yet all utilize the street, and thus it is a zone, par excellence, where there can occur conflicting definitions of reality.

Many kinds of activities take place on the street, some of which are "businesses." These businesses can be divided into those that are "legal" or sanction by the state; and those that are not. Legitimate businesses usually advertise publicly their where-abouts, while illicit businesses simply must be "known" to their clientele. Their advertisements are not as ostentatious as legal sellers, but nevertheless,
there are definite signaling devices and cues that they emanate attracting buyers who are "hip" to what is going on. For example, street sellers of heroin have a special way of 'holding' their commodities that experienced users can 'spot' and thus 'score' (see Redlinger, 1969: 61).

One of the many kinds of people that utilize the street is the corner boy (see Whyte, 1961; Suttles, 1968; Liebow, 1967). This designation has been used to refer to both young boys and men that "hang-out" on the corner, near the intersections of streets. Sometimes these collectivities adopt a 'name' and become viewed as 'gangs', but more often than not they are loose collections of young men who live in and around the area. These collectivities of youths have the tendency to personalize public space. Unlike adults and middle class youth who have access to some private space, these youths do not. By private space, I refer to space in which the rules enforced and sanctioned are rules made up by people who inhabit the space with the general exclusion of persons like the police. Private space is space that you control the access to, in most cases, and of the many examples that come to mind two are: one's residence and "private clubs". Other spaces, of course, are places where certain activities are supposed to take place and have gatekeepers who enforce rules (e.g. bars, bowling alleys, gyms, health spas, botanical gardens, etc.). To be sure, in many of these instances,

12 Gams and other collections of youth not only inhabit street corners but other public space as well. It is not infrequent for a gang to locate its hang-out, and thus personalize, part of a public park. For an example of this see Suttles (1968: 99-118).
the private social reality that is practiced by the occupants in discrepant from official reality (e.g. middle class swingers and their orgies). All of these people not only have some license to have this space but also their space is ENCLOSED which, as we noted earlier, is one of the properties of ecological zones. Thus, their activities are less visible, and less prone to come to the attention of more powerful others. (Of course, at such places as "massage parlors" where one can often get more than a massage, "word" gets around and the private social definition can become quite fragile when the police show up.)

The corner boys are persons who do not have enclosed, private space, but they do seek to make their exposed corner their own private space. To do so, they must seek to enforce a set of special definitions both on themselves and on others who would otherwise regard it as a street corner. Frequently, their fragile definitions are challenged by the police, or others such as the businesses in front of which they locate.\(^\text{13}\) That is, the boys see the corner as their "territory," and in fact, along with other groups have social maps of the area designating where territories are. Thus, in many instances the boys will defend their corner as if it was private space and in fact will behave likewise. Many activities that middle class adolescents, or at least adolescents

\(^\text{13}\) Cheech and Chong (1972) two young comics on their "Big Bambu" album (Ode Records, sp 77014, 1972) do a routine on this very point where a fellow gets up every morning, goes down and hangs out in front of the drugstore. He does this for days upon days upon days until he gets a job keeping people from hanging out in front of the drugstore!
that have access to enclosed private space engaged in, are engaged in
by the gangs on their corners, at their hang-outs in their territory.
For example, activities such as poker games, drinking wines and beer,
arguing, and sometimes lovemaking are considered appropriate. Youths
with money can afford to perform many of these activities inside some
dwelling even if that dwelling is nothing more than a portable structure
like a car. The corner boys in some cases earn their living off of the
street, for by hanging out they learn the traffic patterns and thus can
construct probable targets for economic gain. That is, they can learn
when deliveries of goods are made and the routines the deliverer and
receiver engage in. This provides them with data on how goods can be
"liberated" from legal channels and out to their own use. Still other
street youths engage in minor shoplifting to enhance their income while
still others are "connections" to sources of information and material
from other illicit scenes.

As part of a project on juveniles Werthman and Piliavin (1967)
studied the patterns of interaction among corner boys. They astutely
point out that when one is at the corner, or turf, one must know how
to hang out (Werthman and Piliavin, 1967: 56-98). That is to be a
corner boy one must know how to look, act and dress and who to watch
out for. In addition, one must learn how to defend the unenclosed
space from incursions of outsiders. Since some of the time spent
hanging-out on the corner involves waiting, the youth are likely to
develop routines that enable them to wait. Waiting, in this particular
aggregation must be 'cool' and 'tough' so that routines must take on
other contextual gestures; yet, ironically, the waiting is done as if
in a private space (albeit unenclosed). As one might expect, corner
boys wait in similar ways. Similar both to other corner boys and to others in their general area: they have simply moved their waiting into an unenclosed public space. Thus, "A good deal of time is also spent combing hair in front of store windows and dancing to rock and roll (often without a partner and without music) as if completely absorbed in the privacy of a bedroom. (Werthman and Piliavin 1967: 59)."

The important aspect to keep in mind is that the boys act as if they are in their own private space, doing what people do in such space. Thus, when one waits especially for "something to happen" one desires to look right. In addition, if one were in such a space and had music available, one would be listening to such music. In fact, corner boys in some areas of the country's urban areas do in fact have music available and listen to it out of portable radios.

For all of this "socially constructed reality" of privacy, the boys must defend their turf, and with it the definitions they put on it. Private enclosed spaces usually have restricted access; in addition, the access may be "authorized". That is, a person desiring access must have the right "credentials" which usually is a cluster of material artifacts physical characteristics, and rules-of-conduct. For example, entrance to a bar or place where liquor is dealt may be denied to persons whose appearance makes them suspicious. In this private, enclosed, but regulated zone, either gatekeepers at the access point to the place, or workers within the place must act as enforcers of the authorized rules-of-conduct. Thus, appearance must be verified by a cluster of material artifacts typified in America, as identification
In specific, this identification can take the form of varying artifacts, but most included are such items as a **drivers license** (which may or may not have a picture on it, and which may or may not be 'fake'), **voters registration** and student identification if in a "college town." In some instances, questions drawn from the data on the cards may be asked of the person, but such procedure appears to occur only when suspicion is at its highest level. In contrast, some persons who are in un-authorized categories acquire access to the zone either through bogus constructions of identity or by 'knowing' someone dominant in the zone (for some insight into territorial defense and the identification gambit in bars see, Cavan, 1966: 226-233). The corner boys, however, having no enclosure with limited access must adopt other procedures in defense of turf. Since they have no authorized sanction to privacy, they must seek to have their specific social reality accepted by outsiders. At their disposal are such tactics as embarrassment, threat of harm, and violence.

In fact, however, many of the users of the street and its attendant pathways and 'sidewalks' are themselves regulars in the area, and many of them acknowledge the boys reality, or at least do not attempt to impose definition of their own. (Werthman and Piliavin, 1967: 59-60). After all, they simply desire passage through with the minimum expenditure of energy. Their acknowledgement may take their form of friendly gestures such as smiling at the boys, or in some circumstances ignoring the boys. Others, however, not so well known to the boys arose various techniques of territorial defense which obviously require a modification of their activity. One such defense is described by Werthman and Piliavin (1967) in this way:
Gang members communicate their claims on the hangout by calling an abrupt halt to verbal interchange in such a way as to suggest that a legitimate setting for private conversation has been rudely intruded upon. The members then begin to stare, and out of the hostile silence may come a wisecrack or a taunt. The boys are usually willing to accept a noticeable increase in walking pace and lowered eyes as sufficient implicit apology.

Another defense that is intimidating occurs when a member places his organism in the path of the passerby and refuses to move. He and his fellows constitute a social group that is obvious to the passerby and they enforce the refusal with their collectivity. In some instances, the boys may then extract a "toll" for safe passage, in others the passerby simply walks around the boy. In any case, these actions are designed to defend the socially constructed reality of the boys; sometimes at the expense of those who violate their space (see Werthman and Piliavin, 1967: 59-60).

There are two kinds of outsiders that are especially treated. One of these is the police while the other is members of other gangs. In terms of other gangs, what the reactions of the boys are depends upon the relational conditions between the two gangs. If gangs are friendly, then acknowledgment may come in the form of camaraderie; however, more often than not, gang members do not individually hand out with other gang members. When gangs members meet, they usually do so in groups and sometimes they are not on friendly terms. Thus,
there is a potential for violence. Many gangs view fighting as an honorable task that wins status benefits to both the individual and the gang - view which is quite discrepant from the perspective of the police (see Suttles, 1968: 99-118; 142-143; Spergel, 1964: 29-62; Short and Strodtbeck, 1968: 246-255; and Werthman and Piliavin, 1967: 61-63).

The police, as a matter of their official capacity, view the street and its surrounding turf as areas of concern, and furthermore, believe that they have the final authority over what is to occur there. Their position is curious, though, since in addition to enforcing the law they must keep the peace. In order to keep the peace, officers sometimes allow corner boys to break the law in the forms of gambling and liquor violations at the public hang-out. Since, however, the police keep the hang-out under surveillance, they can when they desire "shake" it down. The officers believe that they had the ultimate right to the space and this may be all that is involved in the "shake-down," or they may be looking for suspects that "fit" descriptions constructed from data offered by the victims, complainants or witnesses. In the case of arrogating their rights to the corner, Werthman and Piliavin (1967) report that Chicago police, when annoyed by the behavior of the corner boys at their hang-out, will say "gi' me that corner!"

Within their patrol area, police are very likely to make distinctions between neighborhoods that are troublesome and those that are not; that is, some areas are seen as having a very low commitment to the 'law' while other areas are viewed oppositely. In addition, the police have notions about where the corner boys should be hanging out and where they should not: for example, the boys should not be milling about near delivery entrances to stores, or for that matter customer
entrances. Any boy inhabiting these areas without legitimate reasons is "out of place," and thus subject to suspicion (see Werthman and Piliavin, 1967: 75-76; 82).

As we have previously mentioned, when the police come into contact with the corner boy (the suspect), the attitude of the suspect is crucial to the outcome of the interaction. This attitude is inferred by the police from the "suspect's" behavior and appearance during the interaction. The greater the degree of conformity between the suspect's appearance and the constructed suspect, the higher the probability of arrest. Moreover, if the youth's behavior is uncooperative, the probability increases. In fact, according to Piliavin and Briar (1964; see also Goldman, 1970; and Werthman and Piliavin, 1967: 74) juvenile officers report that "the demeanor of apprehended juveniles was a major determinant of their decisions for 50-60 per cent of the juvenile cases they processed."

Once a person becomes known to the police, they cannot escape being under surveillance. Whenever crimes or disturbances occur in the area, officers are likely to stop and interrogate these people, for from the officer's point of view these people are very likely to have committed the crime. With juvenile boys, becoming known to the police, and being uncooperative while being questioned eventually results in an arrest even if only for "suspicion" (see on this point, Matza, 1969: 181-196 and Werthman and Piliavin, 1967: 91).

Much of this conflict over definitions of proper modes of conduct might not take place if the actions of both parties, the boys and the police, were not so visible. However, because of the ecological arrangements that result from the competitions for space, this is not
the case. And given that these arrangements persist through time, zones such as the street with its typical interaction patterns are sustained, and the patterns are passed on to others who believe that they too must be and do as those who taught them.

In summary, it appears to me that in fact, lower class delinquents do commit more crimes of an "economic nature", and given the invidious division of the economic surplus, as well as the culturally prescribed goals of success, one should not take such a finding as outlandish. For all the bias of reporting, consistently the data indicate that lower class juveniles break the law as concerns crimes for economic gain, and moreover are caught more often. But as we have tried to indicate, much of their activity might be otherwise if they were not distributed into low reward positions within the social organization. Indeed, it appears that the current economic reward system ironically promotes certain types of property crimes for money. This is not to argue that changes in the rewards system would eradicate all crimes, but certainly it might reduce the amounts of crimes. Indeed, elimination of discrimination from the economic selection procedure might allow for a better allocation of rewards to those who desire them. By discrimination, I refer to the differential allocation of rewards and opportunities for rewards on the basis of race or ethnicity rather than actual achievement. Like all socially organized practices, discrimination has generational effect, that is it persists through time so that those initially discriminated against continue to be discriminated against. And although discrimination is illegal, now, in the United States, evidence remains that it is practiced on a widespread basis (see for example, the excellent study by Blau and Duncan, 1967).
A NOTE ON DISCRIMINATION AND THE STRUCTURING OF REWARDS

Evidence mounts that throughout the United States, discrimination results in an invidious distribution of rewards and the opportunities for rewards such that racial groups like Blacks and ethnic groups like Mexican-Americans are left to occupy the lower echelons of the economic institutional structure which results in these groups receiving smaller shares of economic surplus. This, in turn, results in small shares of social power and as we have indicated, the smaller one's amount of social power, coupled with a large amount of social distance from those with power leaves one more open to be labelled deviant." These hypotheses may seem to some ideological but, let me assure you that many researchers have indicated that such is the case, and these researchers have looked through many kinds of methodologies. Besides, large-scale occupational data (Blau and Duncan, 1967) and criminal data (as we indicated in the section on juvenile delinquency), one can also look to sociometric data. Specifically, Moreno (1953) indicates:

The lower the sociometric status of individuals
the more are they exposed to injury from powerful members and cliques of the group.

By Moreno's (1953) definition, a sociometric status is derived from the number of times an individual has been chosen, rejected or ignored by other individuals.
Deviance, as we have tried to indicate, is the resulting label from an unsuccessful defense of one's acts, and, or attributes. In terms of the "poor" in general, Harrington (1963) indicates:

...the real explanation of why the poor are where they are is that they made the mistake of being born to the wrong parents, in the wrong section of the country, in the wrong industry, or in the wrong racial or ethnic group. Once that mistake has been made, they could have been paragons of will and morality, but most of them would never even have had a chance to get out of the other America.

To Harrington (1963), the "other America" was that section of the social organization that had allocated to it those occupations and role positions that had as reward very limited amounts of the economic surplus, which of course includes "deviant" roles and statuses.

Thus, poverty becomes, in many instances, as with the early Chicago human ecologists an explanation for deviation (on this point see, Matza, 1966; Matza, 1969). That discrimination is an operative condition leading to invidious distinction is again indicated by Duncan (1969). On the basis of analysis of United States census data, he indicates that for the income differentials between Blacks and "Whites"...

"we are still unable, conceptually, to close the gap in incomes, except by reference to some putative mechanism of income discrimination. At least one-third of the income gap arises because Negro and white men in the same line of work, with the same amount of formal schooling, with equal ability, from families of the same size and same socio-economic
level, simply do not draw the same wages and salaries." (Duncan, 1969: 108).

A much more sophisticated analysis by Blau and Duncan (1967) indicates quite similar conclusions. Blacks, even educated Blacks simply are given a lesser share of the rewards for their work than whites who are similarly educated and employed (see Blau and Duncan, 1967: 204-205; 211-212; 222-226; and 405-407).

In terms of lower class persons, especially minorities, who desire very similar goals to others within the social organization, these forms of discrimination can lead to alternative means being employed. As you might remember, Merton (1957) typified this kind of adaption to a structure of discrimination in the allocation of opportunities and rewards, innovation. Cloward (1959) indicates that as a result of the allocative process within the social organization, there are not only differentials in the allocation of legitimate opportunities but also illegitimate ones. Specifically, in the lower classes, there are a larger number of illegitimate means offered to secure larger shares of the economic surplus (see Cloward, 1959: 164-176; see also Cloward and Ohlin, 1960). These differentials in the allocative process appear to be historical and enduring. One researcher of these phenomena argue that once a person makes it in illegal channels, he seeks next to legitimate his behavior and his status:

...it is clear that in the major northern urban centers there was a distinct ethnic sequence in the modes of obtaining illicit wealth, and that... provided considerable leverage for the growth of political influence as well. A substantial
number of Italian judges sitting on the bench in New York today are indebted in one fashion or another to Costello; so too are many Italian district leaders... And the motive in establishing Italian political prestige in New York was generous rather than scheming for personal advantage. For Costello it was largely a case of ethnic pride. As in earlier American eras, organized illegality became a stepladder of social ascent. (Bell, 1953: 151).

Furthermore, illicit structures of opportunity like licit ones, have invidious rewards systems such that only a few persons "survive," and Bell (1953) indicates those who do survive try "passing" into the legitimate portions of the social organization:

The early Italian gangsters were hoodlums...
Those who survived learned to adapt... They learned to dress conservatively. Their homes are in respectable suburbs. They sent their children to good schools and had sought to avoid publicity. (Bell: 1953, 151).

There are, of course, many other examples of this kind of ethnic innovation that generationally has lead to legitimacy. It is quite plausible, then, to see that the distribution of economic surplus cross-cuts the dimensions of legal-illegal and that as the level of rewards for each position or set of positions increase the absolute number of these positions decrease. That is, as there are relatively few legitimate positions within the social organization that are
rewarded with extremely high portions of the economic surplus, so too, are there few, and perhaps fewer such positions in the illegitimate portions.

There is some indication, though, that the sequential passing of various minority groups through these illicit channels may be at an end. As Schelling (1967) has indicated, "a good many economic and business principles that operate in the 'upperworld' must, with suitable modification operate in the underworld as well...". In terms of the differential access to high positions within the illegitimate opportunity structures, one is lead to hypothesize that Blacks will suffer here also from discriminatory practices, and perhaps, not have access at all to high positions within the illicit rewards hierarchy.

For example, Lindesmith (1965) indicates that in northern urban areas, Blacks have been excluded from managerial positions in the illicit drug business. Cloward and Ohlin (1960) indicate that political and racket structures in the Black communities of New York City are dominated by Jews and Italians, but they believe that the "likelihood is great that the Negro will eventually win his struggle for control of the rackets and for a greater voice in urban politics," but they do not indicate how this is to occur. In legitimate channels, Blacks like others have recourse to using the federal government to enforce the laws against persons or groups discriminating, but in illicit channels use of the "law" is limited. Baron (1968) in his analysis of the powerlessness of Blacks in Chicago indicates that "thirty years ago, gambling was one of the few areas in which Negroes held power in Chicago. Today Negroes have lost even this" (see Booker, 1964: 175). Moreover, the fact that Blacks must utilize illicit channels is only
greater support for the argument that they are discriminated against.

While I doubt that Blacks, throughout the United States are denied access to high positions within the illegitimate hierarchy of rewards, I do know that in some cities this is the case. The following data are taken from a study that I did of the heroin distribution system in San Antonio, Texas (see Redlinger, 1969). These data were collected using both interviews with hospitalized addicts and interviews with addicts and persons involved in heroin selling. In addition, there were interviews with police officers and local social workers. These data were supplemented using observational methods; that is, I watched in person how the allocation process worked, both in terms of availability of high quality heroin and in terms of the allocation of renumeration.

In San Antonio, the heroin distribution system is dominated by Mexican-Americans, but this has not always been so. During the 1950's the colony of heroin users in the city began to rapidly increase. This increase was one of the effects stemming from the end of World War II (on this point see, Lindesmith, 1965). Prior to this period, the drug using colony appeared to be well integrated. As two "old time" knowledgeable informants told me:

In those days, see, we knew each other and we guarded our secret [drug use]. We knew each other -- now man there are so many. (q: were there any Blacks users or dealers back then?)

Sure man, there were some pretty big dealers.

Back in the fifties, early fifties; addicts knew each other and we didn't make no god
damn differences, between races; addicts were addicts. There were gringos ["whites" or Anglos] and Negroes too, (q: Negroes and gringos?) Yea, there were Negroes and gringos usin' and dealin' then, but we knew them; we knew everyone then.

From my data, it appears that as late as 1954, there were Blacks who might be considered "big dealers." A big dealer was a person who bought and sold kilograms (2.2 pounds) of heroin. A nephew of one such man describes the market as follows:

I would go with my father and uncle to [border city]. He [the uncle] would give the money to a runner who would go over [to Mexico] and get the stuff. You gave him the money and he brought it back; it was that simple. He would buy a kilo or so.

With the rapid spread of heroin use, not only in San Antonio, but in other major urban areas, came the onslaught on congressional hearings. In 1955, federal congressional hearings were held in San Antonio (as well as other cities) and they were televised. As a result, many of the narcotics dealers in the city were subpoenaed and eventually sent to prison. A local narcotics agent described it this way to me:

You see, when Daniel came he subpoenaed all the police, narcotics agents, pushers, and users he could get his hands on and he got enough stuff [evidence] to send all of the really big dealers up for quite a time.
We had a user law then too. We could get a
guy for use of, habituated to, addicted to,
potentially abuser, you know, and send him to
the hospital. We were really putting the heat
on. This continued until about 1959-60 when
the enforcement tapered off a bit. Then they
found the user law in California unconstitu-
tional and we lost ours too.

The hearings (which resulted in the 1956 narcotics control act) and
subsequent enforcement had the effect of destroying the traditional lines
of distribution; that is, destroying the American side of the distribu-
tion process. Mexican importers were largely left untouched, but they
reduced their sales to persons that were "suspect." Since many of the
big dealers were now in "heat" many smaller dealers and users were
driving down to Mexico to get the "stuff" themselves. A long time
user-dealer described the scene to me in this manner:

Well, Price Daniel had this hearing and lots of
big dealers were fingered. There was a real
panic on and guys started going to Mexico and
getting it for themselves; I mean guys would go
down and buy grams! ... Guys were not buying in
town but were making connections with guys in
Mexico. ...

But guys were buying in grams because all the
big money was busted by Daniel.

Prior to this time, trips to the border for small dealers were not
worth the time/effort, but now they were. By and large, the new small
dealers were Mexican-Americans and the process of occupational exclusion had begun. One of the reasons for this was that Mexican importers were now suspicious of "outsiders." Another more important reason stems from the fact that young Black addicts bought their drugs almost exclusively from Black dealers - dealers who were now inoperative. Thus, these addicts were left without a source of supply, and in addition, contacts with importers.

Moreover, a contributing factor was the ecological patterning of segregation in the city which left Anglos, Blacks and Mexican-Americans largely living in enclaves. These enclaves competed with each other economically and Blacks became viewed as an economic threat to many Mexican-Americans. The lack of associational contact between young Blacks and Mexican-Americans was replaced in some instances by physical combat - largely for control of territory.

This separation was further aided by the equal rights movement which Blacks participated in vigorously. Many Mexican-Americans believed that Blacks were given more than equal treatment and this of course helped raise the levels of animosity. Certainly, many of the rights that are denied Blacks are also denied Mexican-Americans but the Mexican-American enclave had the advantages of not only having a large community but in addition, a country very close by.

It was during this period that stereotyped images of Blacks began making their appearances in the narcotics subculture. Likewise, the Mexican-Americans had stereotyped images of Anglos whom they now did not trust. From my data, it appears that users in the 1940's did not feel these animosities toward Black and Anglo users, but by 1960 the stereotype, "all Negroes are snitches" was well integrated into the
drug using subculture. A "snitch" is a person who tells police about your operation and thus aids them in arresting you. Anglos too were typified as snitches. Thus, by 1960, dealers no longer believed that they could trust Anglos or Blacks, and it appears as if this stereotype was shared by Mexican suppliers. Thus for Blacks the process of exclusion was completed, as it was for Anglos, but in the later case, in general, more opportunities are available. That is, being an Anglo grants one a greater share of the opportunities for gaining a greater share of the economic surplus. Oddly enough, the exclusion of Blacks from positions in the drug subculture as a result of legislative and enforcement decisions is quite similar to the exclusion of Blacks in the 1820-1860 period from legitimate artisan positions with the exception being that one set of occupations is illegal while the others are legal (see Wade, 1968: 345-350).

Because of the nature of the socially organized structure for opportunities that in turn regulate the flow of rewards, minorities in general, and Blacks in particular appear to be delegated to the lower echelons of the economic infrastructure. This means that their labor (literally work activity) is worth less and thus they are forced via the competition for goods and services into those zones of the city that are overcrowded, deteriorating and in transition. In these areas, the socially organized human activity appears to be in conflict with officially enforced definitions of reality. Not only their normative behavior, but also their relative lack of social power appears to doubly expose them to discrimination one of the results of which is achievement of the deviant status more often. One must remember that being a prisoner, mental
patient or delinquent are positions within the economic infrastructure of activity; it is what someone does, and for doing it they usually get minimally fed, clothed and housed, but are not granted any share in the economic surplus. Being poor is not much better except that one still has a share in the opportunities for reward, albeit a limited range.\footnote{This range, of course, includes such positions as unemployed and welfare recipient. In addition, being a organism in this type of environment (habitat plus the relationships) differentially exposes one toward being murdered. That is, the average murderer is a non-white, between the ages of 20 to 24, who lives in slum or near slum areas. The average victim is a bit older, (25-29 yrs. old) but has the quite similar characteristics. In these zones, most often it is your close friends who kill you (see Wolfgang, 1958; Henry and Short, 1959).} These conditions definitely contribute to the maintenance of slum conditions and their attendant behavioral patterns which conflict with officially prescribed behavior.
NARCOTICS ADDICTION

In general, the variables usually associated with narcotics addiction are similar or identical to those most usually associated with delinquency. In fact, during the days of the "Chicago School" the researchers that studied delinquency were the same ones that studied narcotics addiction. As we noted earlier, the Chicago School anchored their conceptions of the social world ecologically; that is, every cultural artifact, and every cultural art happened in a place, locale, a habitat. Thus, relationally speaking each event had specific social and cultural correlates, and in addition, habitat correlates. The social (people doing the social organization) and the cultural (rules of action, art and artifact) were said to be "products" of the locale in specific or zone in general. In terms of narcotics addiction, research findings for the last forty years indicate that addiction is usually related to low socio-economic status, and the conditions that are resultant from such status. Furthermore, due to ecological clustering and segregation, one usually finds not one, but a set of people living in the same or similar areas carrying similar traits. Thus, narcotics addicts and merchandisers (those who carry the cluster of traits in question) are usually found concentrated in certain ecological zones, and these zones are most frequently associated with low socio-economic status.

Faris and Dunham, (1939) publishing their findings in 1939, found addiction related to boardinghouse areas and zones of transition. Two years earlier, Dai (1937) analyzed addiction data for the city of Chicago and indicates that:
...while the majority of Chicago's drug addicts were white, the Negro addicts have more than twice the incidence of Negroes in the general population, and addicts of other races about seven times the incidence of other races in the general population, most of the latter being Chinese.

However, with the beginning of World War Two, this association diminished to insignificance. The lack of association was explained by the modifications of population, goods and services because of the war. Young urban males (who were then the most frequent users) were recruited into the army; international smuggling was disrupted; legitimate markets also opened up as a demand for opiates by nations at war increased; and consequently, there was a decline both in users and the supplies available for use. (see Redlinger, 1969; Lindesmith, 1965; Lindesmith 1947) After the end of the war, there was no immediate rise in the use of narcotics, but then in the late forties and early fifties officials became concerned due to rising arrest rates and heightened use by young people (Lindesmith, 1965; VII-VIII). In 1957, Finestone (1957) reported the findings from an ecological study of addiction for Chicago; he noted that areas with very low income levels were also characterized by high concentrations of heroin users. In that same year, Clausen (1957) indicated that "Negro users now constitute a substantial majority of those users known to official sources in Chicago." (see also Clausen, 1961).
In 1964, Chein and his associates published a definitive work on heroin addiction in New York City. Utilizing census tract data for selected boroughs, they found narcotics addiction associated with areas that had a high percentage of people unemployed (relative to other areas); a high percentage of people poorly educated; a high percentage of people living in overcrowded conditions; a high degree of disrupted living conditions (such as father absent or mother absent families, high divorce rates, etc); and a high percentage of people that are "non-white." (Chein et al., 1964: 47-77). In addition, Chein and his associates found addiction related to delinquency, but they dismissed the relationship as spurious. A spurious relationship occurs when the association of two variables is conditioned by their relationship with some third variable that is actually the causal agent. If the third variable is not present, there is not a relationship between the first two. Following this line of reasoning Chein, et. al., (1964) argued that areas with high rates of delinquency did not necessarily have to have high rates of narcotics addiction. In fact, their data indicated that some areas characterized by high rates of narcotics addiction had very low delinquency rates, and vice versa some high delinquency areas have very low addiction rates; adding to the confusion were those areas where the findings are mixed. Both addiction and delinquency, however, were related to a poorly educated set of people living in overcrowded dwellings who were underemployed or unemployed, and at that point in time were also non-white (Chein, et. al., 1964: 61-64). Three years later, Chein (1967) reported on more recent data for New York City, obtained essentially the same
results, and explained them in a similar manner. He concluded that "the incidence of illicit narcotics use on the contemporary scene is associated with the distribution of conditions of human misery (Chein, 1967: 54.)"

Still more recently, Redlinger and Michel (1970) and Redlinger, Bates, and Dubeck (1969) reported of heroin and opiate addiction for San Antonio, Texas. Using census data and local addresses of addicts obtained through both official and unofficial sources, both studies found that addiction was related to high levels of unemployment, low levels of income, overcrowded housing conditions, low levels of education, and ethnic status (Redlinger and Michel, 1970: 219-229; Redlinger, Bates and Dubeck: 1969). In San Antonio, however, the relationship between non-whites and addiction was not upheld, and Redlinger and Michel (1970; see also Redlinger, 1969) argued that the lack of relationship was due to exclusion of non-whites from the distribution process.

Additional data on the social organizational conditions that underly addiction was provided by DeFleur, Ball and Snarr (1969). Using data derived from hospital records, they argue that the "employability" of the addict prior to his addiction and in general his social status prior to the onset of drug use are critical variables in rehabilitation. Addicts that have low socio-economic status appear then to be more prone to relapse and more prone to have to commit crimes for a living (see DeFleur, Ball, and Snarr, 1969: 225-234). Similar findings resulted from a study of New York slum youth done by Glaser, Lander, and Abbott (1971). This study was an intensive look at a New York city slum block comparing addict and non-addict siblings. They found that involvement in illicit opportunities
set the stage at an early age for unemployability and this promoted a
criminal life pattern which usually involved incarceration, and
barriers to legitimate careers (Glaser, Lander, and Abbott, 1971:
519-521.) That is, the conditions of the slum along with the
availability of illicit means for gaining rewards promotes adaptive
patterns which involve narcotics use, sale and addiction. Associated
with these conditions are those of the population that lives in slums:
namely, low levels of education, income and occupation coupled with
overcrowded and deteriorating dwellings.

The relationship between urban areas of high narcotics use, low
socio-economic status and ethnic status appears to be a regional one.
John Ball (1965) indicates that in the United States, two patterns of
addiction appear. Indeed, one pattern is quite similar to the findings
reported previously: young urban males who live in "zones of transition"
and obtain their chemicals via illicit channels. However, the other
pattern consists of middle aged southern whites who use morphine or
paregoric and obtain them via legal or quasi-legal means. (see Ball,
1965: 203-211). Bates (1966) noted a similar pattern with regard to
Negro addicts and white addicts. Negro addicts are usually young and
reside in large metropolitan areas that are usually situated in the
northern parts of our country. Even when the addicts are Southern and
Negro they are much more likely to be from large cities. White
addicts, however, in the south are chiefly from rural areas and are
older than urban addicts (see Bates, 1966: 61-67). The white
rural addicts are "leftovers" from a previous era in which opium and
its derivatives are sold commonplace as over the counter drugs.
Others are users who learn of these drugs from their friends, and
because of the nature of southern life and rural life in general these addicts are able to support their addictions.

There are of course, urban "drugstore" addicts, but their numbers relative to the total number of addicts in the population is quite small. These two types of narcotics users typify the changing nature of addiction, and perhaps the changing nature of the distribution process.

Prior to legislation in the earlier parts of this century, opium and its byproducts were available from druggists, and sold routinely over the counter. Their appearance was in every form: smoking opium, cough medicines; elixirs; and refined morphine. When such chemicals were readily available, there was a quite different pattern of addiction for the population. For one thing, a larger percentage of the user population was in rural areas, as was the larger portion of the United States population at that time; the users were more than likely white but they might come from any of the social classes. Still, even in early accounts the use of opiates is linked with social dereliction.

One of the earliest studies is Marshall's (1878) on opium and opium derivative use in Michigan. Marshall surveyed druggists and physicians in the Michigan area to detect the incidence of opium use. While his sampling of the Michigan area is not complete (for example, Detroit was not surveyed) it does yield a glimpse of the opium use picture. Marshall (1878) began his report only on the large numbers of opium-eaters that resided in and around North Lansing, Michigan, but the State Board of Health requested that he extend his study. Marshall (1878) then surveyed ninety-six cities, villages and townships
in the State. He did not or could not elicit data from larger urban areas such as Detroit and Grand Rapids. In every city, village and township surveyed, Marshall found cases of opium-eaters who, on the average, consumed an ounce of opium per week. The majority of opium eaters and users of derivatives were women (803 or 61% of Marshall's sample), and usually the women began use in order to cure various ailments. Some of the most common reports were opium use to cure neuralgia, rheumatism, diarrhea, asthma, bronchitis, consumption, palsy, fractures, and diseases peculiar to women [e.g. premenstrual cramping] (Marshall, 1878: 63-73).

While Marshall's (1878) may not be valid for more than the cities, villages, and towns surveyed, it appears that Michigan use patterns were not that unique. Brown (1966), writing in 1915 about enforcement of the Tennessee anti-narcotics act noted a quite similar pattern of rural areas and small towns. As we mentioned earlier, prior to the federal legislation and subsequent enforcement of the Harrison Narcotics Act, the use of opiates was quite common and they were easily obtained. The discovery of morphine and later heroin occurred without complete knowledge of their addicting properties; thus, physicians dispensed them routinely and perhaps carelessly (see Lindesmith, 1965: 129; O'Donnell and Ball, 1966: 2). Furthermore, with the introduction of the hypodermic needle in the 1860's as a way of administering the drug, the effect of the drug was greatly enhanced as, of course, were the dangers. Oddly enough, officials at first believed that heroin administered in this fashion was not addicting; even more unbelievable, yet true, officials saw heroin as a cure for morphine addiction (Lindesmith, 1965: 129-130; O'Donnell and Ball, 1966: 2; Blum, 1970: 53).
Adding to the availability of opiates was the fact that many of the patent medicines sold during the late 1800's and early 1900's contained copious amounts of opium or opium derivatives. Average households, might very well have bottles of such medicines on the shelves. For example, Mrs. Winslow's soothing-syrup, which contained on the average 3/4 grain of opium, was routinely given to children to relieve discomfort and approximately 750,000 to 1,000,000 bottles were sold annually. For the adult there were such remedies as McMunn's Elixir (an opium extract mostly), Dover's Powder, and paregoric [this does not even include the numerous "remedies" bottled as cures for the opium habit itself. Marshall (1878) reports that chemical analysis of the cures indicated that they all contained opium].

In the early nineteen hundreds, both local and federal legislation resulted in controls upon both the manufacture and use of patent medicines, as well as the importation of smoking opium (Lindesmith, 1965: 130-131). In the years that followed, various states added regulatory statutes, and in 1914, the federal government passed the Harrison Narcotics Act which established basic regulations for opium and its derivatives. The manner in which this act was enforced and subsequent legislation and enforcement patterns altered the organization and distribution process of opiates. Legitimate, albeit intensely profit-oriented industries were replaced with illicit dealers; instead of a legitimate market, a "black market" developed. Of course, these changes also effected changes in the ecological patterning of addiction. Lindesmith (1965) writing about cross-cultural comparisons succinctly sums up the connection between legislation and enforcement patterns and the ecological structure of addiction; and although he is
writing about cross-cultural references, he makes it clear that his analysis can be applied to American policies which existed at two different time periods.

From a knowledge of the demographic characteristics of a nation's addicts it is usually a simple matter to infer what that nation's policies are, and vice versa. Thus if there are relatively many addicts and they are overwhelmingly young urban males from the lower classes and the slums, one may infer that the control system is one of prohibition and punishment, as in the United States, and that the habit is being spread through underworld association between addicts and nonaddicts. On the other hand, when the addicts are older, so that few are under thirty, for example, and when they are rather evenly distributed by classes, by sex, and in rural and urban communities, one may usually conclude with confidence that addicts are handled as medical cases and are recruited primarily through the therapeutic use of drugs. In this case it is also usually true that the number of addicts in proportion to population is comparatively low and that addicts from the medical and allied professions constitute a large percentage of the total. In
1960, to cite two examples, Britain reported that 63 of 437 addicts were connected with the medical profession and West Germany that more than 850 of 4,334 in that country were so connected.

Medical recruitment accounted for the largest proportion of new addicts in the United States during the nineteenth century, as it also does today in most European countries where addicts are supplied with drugs by doctors. (Lindesmith, 1965: 129).

Thus the recent patterns found in urban centers by Chein (1964; 1967), Redlinger & Michel (1970) and others is a recent result of the changes in the legal status of opiates and the enforcement patterns that follow from such status. These changes were recognized by scholars at least fifty years ago. For example, Brown (1966) writing in 1915 about enforcement of the Tennessee Anti-Narcotics Act noted that addicts whose legitimate supply of opiates was cut off, would simply find other means to obtain the drugs; he found this to be true because of the withdrawal distress that usually accompanies narcotics addiction.

It follows from this condition of affairs, that the sudden general stoppage of the sale of the drug except on prescription would certainly result in great suffering to the indigent class of addicts, possibly in many deaths, and certainly in driving the traffic into channels outside the law. (Brown, 1966: 35).
Furthermore, he had already found the beginnings of the metropolitan patterns of addiction amongst younger males in Tennessee. He argued that young men used the drug as a means of "dissipation" (Brown, 1966: 43).

It is for this purpose chiefly used by inhalation, a quill or joint of cane being inserted into the nostril, the other end of which is thrust in the powdered drug held in the palm of the left hand. The use may begin for the relief of such minor troubles as headaches, fatigue, etc., especially by young people who work. In this instance, the tendency of the drug addict to admit to others to his joys is very pronounced, with at times the additional incentive that the addict spreading the habit may act as a salesman of the product. The largest number of its users, aside from the inhabitants of the segregated districts, we have found to be youngsters from 15 to 25 years of age. Under present conditions, it is almost a certainty that, in large cities, in every place where a number of boys and young men are employed together there will be a certain amount of heroin addiction. (Brown, 1966: 44).
Lichtenstein (1966) writing about narcotics addiction amongst prisoners in City Prison, Manhattan noted that the majority of users were young males rather than women. The women that did use opiates obtained them for similar reasons to Marshall's (1878) sample, but the males were divided in use patterns. Some males did utilize the drug for relief from physical discomfort and other therapeutic reasons; in these instances persons might obtain their drugs from physicians who either did not know or did not tell the patient about addiction. But these cases were quite small relative to his total sample the vast majority of which were "induced by friends to take a 'sniff' of the drug, which is variously termed 'happy dust', 'snow', etc." (Lichtenstein, 1966: 24). However, at that time, the addicts were not predominantly Black, but Chinese which relative to the general population and to social power was still a minority.

O'Donnell (1967) found similarities for Kentucky during the years previous to and right after the federal legislation against opiate use. Based on a follow-up study of addicts who had been "treated" at the federal narcotics hospital in Lexington, Kentucky from its opening in 1935 to 1959 (266 white addicts), O'Donnell found no existence of a criminal subculture prior to the federal legislation. The users were scattered roughly in proportion to the population across the state and came from all social classes, including socially successful and prominent people (O'Donnell, 1967: 76). These users were at least evenly split between women and men and they started using opiates in fashions similar to the users studied by Marshall (O'Donnell, 1967: 76-77).
After the passage of the Harrison Act (on this point see Suarez, 1969) and other legislation both in the state and without, the patterns of user and addiction changed for Kentucky. For one thing, there was a decrease in the numbers of users due possibly to the new difficulties in obtaining the drug, public stigma for users, and the illegality of such behavior (O'Donnell, 1967: 77-78). Gradually from the years after the act (1914-1929) the ratio of male to female addicts increase until in 1930 the ratio was 3 males to 1 female. It is during this period that O'Donnell (1967) finds evidence for the development of a subculture. Users of opiates were no longer scattered geographically, but clustered in certain cities, and towns. They were brought together both because they faced similar problems and because of the necessary connection to their connection. "Access to drugs was possible only for those who lived where a physician dispensed drugs freely, or where older addicts could introduce new ones to drugs (O'Donnell, 1967: 78)."

Thus, the problem that each and every addict faced was maintaining a supply of opiates, and as a result there was heightened interaction between addicts leading to exchanges of both material and information. When drugs were in short supply, they could be obtained from others. Information could be traded on where and how drugs could be obtained. Skills which before had been unnecessary were now needed, and could be transmitted from one addict to another. These included criminal skills: how to commit burglaries or forge pre-
scriptions; how to administer narcotics by the intravenous route; how to process paregoric so
the residue could be injected; and how to 'make' doctors. Addicts could support each other in the attitudes and values needed to maintain addiction in the face of mounting public disapproval. (O'Donnell, 1967: 78-79).

However, during the war years supplies of narcotics diminished perceptibly, as did the number of physicians willing to prescribe opiates. Thus, in Kentucky, the numbers of white addicts and the subculture they created began declining (O'Donnell, 1967: 80-82). In the years that followed the war, O'Donnell found that for whites, at least, the subculture did not persist, partially for economic reasons. That is, heroin cannot be sold where there are no buyers, and in Kentucky during the war years the numbers of white addicts had declined. [Please note that O'Donnell's study does not include black or other minority addicts. In O'Donnell's data there is indication that blacks did maintain a network of supply although this network maintained black addicts only. (see O'Donnell, 1967: 80-81)]

From all of the data available, then, it appears that federal legislation that allowed certain kinds of regulations and prohibitions lead to the establishment of an illicit network of supply. Furthermore, it appears that use of illicit opiates became concentrated amongst young, urban males from marginal areas (zones in transition). In addition, the legislation and its enforcement patterns, by raising the costs of drugs, appear to have stimulated additional crimes. These crimes are committed in order to obtain drugs, or money for drugs.
This last point in fact needs to be amplified. Dai (1937) found that among 1047 addicts he studied, 81 percent had no criminal record prior to addiction. Pescor (1943) analyzed the files of 1036 addicts hospitalized at the federal hospital at Lexington and found that three-fourths of the sample had no record of criminality prior to their use of opiates, but that after opiate use began eighty-six percent became involved in crime (Pescor, 1943: 25).

O'Donnell (1966) in a follow-up study of 266 white addicts in Kentucky, hospitalized at the Lexington hospital, made similar conclusions. However, O'Donnell also indicates that the relationship may be changing. While his study showed that crime usually followed addiction, it also indicated a relationship between year that addicts began use and their criminality. Specifically, "the more recent the year of addiction, the more likely are the men to have a criminal record before their addiction, (O'Donnell, 1966: 377)." This relationship is conditioned by the age of the user. As we noted previously, the age of opiate users has been declining since the passage of the Harrison Act. O'Donnell (1966) found that the younger the user was at the onset of his opiate use the more likely he was to have already engaged in criminal acts. He concludes that "addicts with a stable legal source of narcotics were unlikely to acquire a criminal record, while those who bought most of their drugs on the illicit market were likely to acquire one. (O'Donnell, 1966: 385)" The kinds of crimes that addicts commit are most often crimes that are designed to produce income such as burglary, robbery, and shoplifting (as well as prostitution amongst women), and there is very little evidence that crimes against persons increase as a result of addiction (O'Donnell, 1966: 381), (see also Lindesmith, 1947: 192).
As human social organization is placed ecologically into interaction zones, various parts of that organization are designated to be the bearers (i.e., carriers) of highly regulated materials. They may bear such material as a result of illicitly arrogating the right to, or they can be assigned the right by the authorities currently in power. In the latter case, one finds, in reference to opiates, sets of persons who have a legitimate right to dispense them. In fact, this dispensing may be viewed as a necessary part of their occupation. As a result there are persons who have contact with opiates daily and thus have a ready availability. Two such occupations are those of the nurse and physician, and each profession indicates percentagewise a high number of drug users in contrast to other professions (see, for example, Pescor, 1942, Popular, 1969, Bloomquist, 1958, Winick, 1961). Prior to the federal legislation, as we have noted, it was not uncommon for physicians to dispense opiates and opiate derivatives to their patients for a variety of illness, ailments and infirmities. Moreover, during this period it was not uncommon for the physicians themselves to use such products. However, during the last forty years the numbers of physicians addicted to drugs may have decreased although there are no reliable data to indicate that this is the case. Winick (1961) estimates that the number of physicians that become addicted every year is equal to the number of medical students graduating from a medical school for any given year. Furthermore, estimates of physician addiction run as high as one per 100 doctors as contrasted to one addict per three thousand in the general population (Winick, 1961: 174). It appears that because of the availability, and because of the potential high stress of the occupation that addiction to drugs for
doctors is an occupational hazard. Pescor's (1947) study of physician addicts indicated that they began using opiates or their derivatives for relief of painful conditions, which sometimes were chronic disorders.

Winick (1961) interviewed 98 physicians who either had been or were currently addicted to opiates; unlike Pescor's study, which utilized hospital records, Winick obtained his sample through "a variety of non-law-enforcement sources" (Winick, 1961: 175). In contrast to the usually portrayed addict who is of no service to the community, Winick found that these physician addicts were typically "more successful than the average, in terms of income, honorific and institutional affiliations, and general professional activity (Winick, 1961: 176)." While street addicts' usually injected intravenously diluted drugs, physicians usually use Demerol (meperidine) that is not diluted; in a small number of cases, physicians use dilaudid and morphine (Winick, 1961: 176, 178).

The doctors indicated that they most often used opiates because of overwork, physical ailments, marital problems, self-concept and levels of aspiration. In Winick's sample, almost all of the doctors that complained of overwork were from "lower class homes in communities of under 250,000, and practiced in big cities" (Winick, 1961: 179). That is they appeared to be persons who as a result of becoming a physician were upwardly mobile. These doctors felt depressed from their work loads as well as fatigued, and found that the drugs alleviated these feelings. In terms of doctor's physical ailments that were seen as related to their drug use, almost all of these disorders were gastro-intestinal, (e.g. ulcerations) chronic, and the physicians treated themselves (Winick, 1961: 180). Doctors who used opiates and
had marital problems reported that their wives were to aggressive and driving as well as other kinds of dissatisfactions (Winick, 1961: 180). In terms of these physician addicts 'self-concept' about one third were surprised that they could actually have become addicted to drugs. Winick states, "Their professional familiarity with the effects of drugs appears to have provided a rationale for their semi-magical belief that the drugs would somehow have a different effect on them than they had on non-physicians (Winick, 1961: 180)." Finally, about a fourth of Winick's sample felt disaffected from the medical profession, and disagreed with the profession. These doctors, though, also had records of considerable achievement in medicine (Winick, 1961: 180). Other reasons for opiate or opiate derivative use given by the physicians were the drug effect itself, alcohol problems, insomnia, and age. Some physicians believed that the drugs made them work better because they felt good (Winick, 1961: 181); others utilized opiates as a way of handling their problems with alcohol (which most had learned to drink during their medical school days). The physicians reporting drug use for insomnia were also likely to be disaffected from the profession and in addition, had marital difficulty (Winick, 1961: 181). Finally, a very small percentage of doctors used opiates due to their age coupled with heavy work demands (Winick, 1961: 181-182). One should note, that except for the category of overwork, many of the doctors' reasons are also reasons given by non-physician addicts for their first use (see Lindesmith, 1947; Redlinger 1969).
Social Organizational Status and Variations in Enforcement

How the official standards against the addictive use of opiate and their derivatives are applied varies by the ecological zone in which enforcement takes place. As we have pointed out previously, the zone not only contains the objective action patterns, but in addition, subjective evaluations of the worth of the individuals involved. The manner in which the anti-narcotics laws are enforced on physicians differs greatly from the enforcement of such laws on street users of illicit drugs, and reflects the variations of enforcement on the basis of these evaluations. As with other apprehensions, users of high status appear to be treated with less physical coercion. Winick (1961) reports that every physician-user caught could be charged with a crime, yet for his sample, only one was formally charged and a few arrested. Physician addicts, in general, are sanctioned by having their practices revoked, but in Winick's sample, only eight had their license to practice revoked, while most of the others were put on "probation." There is not a single report of coercion or physical abuse by arresting officers (Winick, 1961: 177). Unlike addicts who must obtain their drugs from illicit sources, physicians have a narcotics stamp which allows them direct access to high quality drugs. However, these stamps also closely regulate the amounts of narcotics a physician can use since all use under the stamp can be scrutinized by officials...Thus physicians must be slightly sneaky in maintaining their habits.
The physicians exhibited considerable ingenuity in obtaining drugs illegally. The most frequent method was to write prescriptions in a real or imaginary patient's name and use the drugs themselves. Others would give a patient a fraction of a dose and keep the rest for themselves (Winick, 1961: 177).

Still others might resort to getting drugs from a friendly pharmacist without prescription, or they might get drugs from their hospitals by 'forgetting' their prescription pads (Winick, 1961: 177). Sooner or later these methods arouse suspicion and the offender is confronted with the evidence. However, instead of busting down his door with a search warrant (which in this case is quite unnecessary given the nature of the evidence [i.e., discrepancies in the prescriptions, or excessive narcotics use via the narcotics stamp]), the physician is usually confronted with his use. Winick (1961) reports that most doctors are relieved to be caught, and none tried to deny use after apprehension (Winick, 1961: 178).

Eighty-nine per cent of the physicians interviewed remained in the community in which they had been practicing, after being apprehended. There was practically no publicity about any of the cases. Where the physician had to leave his practice, he generally turned the practice over to a colleague and resumed it upon his return. (Winick, 1961: 178).
The narcotics enforcement pattern, however, for "street users" is quite different. Before I describe this to you, we must first make a distinction between the enforcement patterns that are designed to infiltrate higher echelons of the market and patterns that are designed to apprehend and arrest everyday users of illicit heroin. This distinction is analytical, since in the everyday workings of the market structure, one process flows into the other. But first let's consider how agents go about dealing with the street user.

Prior to 1962, in some areas of the country, just being an opiate user was illegal, and agents were thus empowered to stop and search suspects for telltale indications of heroin use. Thus, they could ask the suspect, "let's see your arms," and go even farther in searching his person. Part of the philosophy behind these practices was to "get the users off the streets." When the users are not using they are not committing crimes to get money, and furthermore, the market will dry up. While there is not a large amount of data indicating the overall success of such an enforcement pattern, in at least one city, San Antonio, Texas, this policy resulted in the creation of a market for heroin in the county jail (Redlinger, 1969: 137).

Now being an addict isn't illegal, but possession of opiates, and sale of opiates (unless you are licensed, meaning unless you are a doctor, pharmacist, or approved researcher) is quite illegal. Even so, police routinely "arrest" addicts and detain them in jail until they either obtain information on others in the market or must release after the passage of the detention period. If the person is a user he will experience acute withdrawal during this time and thus, it will be easier to obtain information from him in this weakened state.
Police routinely work at creating "informants" so that they can arrest peddlers (see Skolnick, 1967: 143-149; Lindesmith, 1956: 36). They will apprehend the user and charge him with suspicion [this is quite similar to enforcement tactics used on juveniles as we saw earlier] or better yet they can catch him with "stuff." The latter may involve illegal search and seizures. Skolnick (1967) who studied narcotics officers describes how he and agents "apprehended" some addict/informants:

One of the state agents recognized a car that seemed to be Archie's, which of course suggested that Archie was either in his room or nearby. Three state agents stayed outside while two of the state agents, the Cedarville vice control man, Sergeant Harris and I entered the hotel.

Inside the hotel, the chief state agent approached the desk clerk and asked whether Archie was in the hotel. The clerk said he thought he was, but that he might well be in another (Dominick's) room. Three policemen and I went to Dominick's room on the third floor, and two went to Archie's secondfloor room with a key they obtained from the clerk. Approaching Dominick's room on tiptoe, we heard several men's voices. One policeman suggested that somebody ought to go upstairs and tell the other policemen that Dominick's
room was occupied. I volunteered, because I wanted to see what the other policemen were doing in the meantime.

When I arrived they were searching Archie's room. (I relayed the message to the policemen upstairs.) The room served as a painting studio for Archie, and most of the space was crammed with paints, bottles, and canvasses at different stages of completion in an apparently haphazard disarray. The officers, who by my observation were skilled at searching without changing the appearance of the room, had been looking mainly through drawers. They rearranged a little they had upset and the three of us went downstairs.

Legally, the police are not permitted to enter a room and make a search without a warrant, except "incident" to an arrest of some person in the room. Thus, they cannot search an empty room without a warrant, even if they see marihuana on the table through a window. In California, unless a search has some reasonable relationship to an arrest, it becomes an unlawful exploratory search. The practice of making an unlawful exploratory search of the room of a suspected criminal is, so far as I could tell on several occasions, accepted by both the Westville police and the state police. As one policeman commented:
"Of course, it's not exactly legal to take a peek beforehand. It's not one of the things you usually talk about as a police technique. But if you find something, you back off and figure out how you can do it legal. And if you don't find anything, you don't have to waste a lot of time."

The policeman does not feel legally constrained in conducting an exploratory examination of suspicious premises. Even less does he feel morally at fault in conducting a prior search of a known addict's room for narcotics.

...the policeman countenances his unlawful exploration by pointing to the difficulties of his job and asserting that his activity has no adverse effect upon the person whose property is unlawfully searched, provided that person is not a criminal. Thus, the policeman typically alleges that unless he conducts unlawful searches, for example, dangerous addicts might escape capture, furthermore, he maintains that innocent persons have no cause for complaint.

When the group reassembled, it was decided to break into Dominick's room, but without kicking the door in. The following strategy was used: one of the Cedarville vice control men knocked on Dominick's door, and said, "Phone," imitating the Spanish accent of the desk clerk.
inside the door, Dominick said, "What?" and the officer repeated, "Phone." Dominick opened the door slightly, and as he did, several policemen pushed inside.

At this point, it was important for the narcotics officer to keep talking in a friendly, calm tone. "Well, hello, Archie," Sergeant Harris said, "just relax and everybody stay where they are and everything is going to be okay." Archie and Dominick began to protest that they hadn't done anything wrong, and it wasn't nice of the police to "just come busting into" the room this way.

The denial of guilt in this case was important for the police because it implied that the suspect would not mind having his arms examined. Had the suspect refused to answer, and ordered the police out in the absence of a warrant, the police would again have been on shaky legal ground. So far, their suspicion of Archie was based on a reliable informant's word that Archie probably had some "stuff," since he was a friend of an addict who, the informant had heard, was "dealing." This vague, hearsay information was also insufficient legally to establish probable cause for a frisk and an examination of his body. What the policeman required was a tactic to circumvent the legal restrictions.
By denying his guilt, the suspect gives the policeman an opening wedge. He can say, as Sergeant Harris did, "Okay, Archie, you know it's my job to check you out," simultaneously grabbing Archie's arm and pulling up the shirtsleeve. Before Archie had an opportunity to emit the words suggested by the look of protest on his face, the Sergeant had his fingers on a pair of tiny red "marks" in the crook of the elbow. By finding the marks in the way he had, the Sergeant had introduced new elements into the legal situation. First, he could reasonably claim that Archie had "volunteered" to show his arms and that no physical coercion was used. More important, from the Sergeant's point of view, by finding marks, he had established reasonable cause for arresting Archie as a man "under the influence" of narcotics. In addition, the legality of the arrest further established a basis for a thorough search, after the exploratory "peek," although it is arguable whether the means of entry would be upheld by an appellate court.

We might ask why the suspect did not assert his legal rights and demand a search warrant as soon as the door was opened. There were several reasons. First, he was physically coerced (albeit by indirection, since no actual violence was used). Five physically well-constituted,
armed men (plus one middle-sized unarmed professor) broke in unexpectedly and stood around with no-nonsense looks on their faces. At that moment, it would have taken an act of heroism to order them out.

Second, these men did represent authority. To a certain extent, the suspect must interpret the policeman's behavior as being proper, for the policeman represents the state. His very being conveys an impression of legitimacy to this type of addict, an occupant of a cheap hotel room, a user of narcotics, a struggling painter. In addition to being surprised and upset, the suspect may not be entirely aware of his legal rights, and the police in this situation did not advise him of his rights.

Furthermore, Archie was, after all, a known addict and had previous experiences with the police. Consequently, there was on his part an anticipation of future encounters. If he acted like a "wise-guy" this time (by ordering the police to leave), he could have "the book thrown at him" the next. One narcotics detective reported that no known addict had ever refused him permission to make an examination for "marks," even though there was no legal justification for a search. I have seen a detective pull to the curb and ask a man how things are going, adding,
"You wouldn't happen to be dirty, would you?"
The detective may look, or just wish the man well and leave.

Finally, there is for the suspect in a room, as for the man stopped by the police on the street, the genuine possibility of innocence combined with the mildness of the request. The police are, after all, making a seemingly innocuous request, permission to glance at the crook of an elbow. Objectively, its fulfillment demands no more exertion than the common courtesy of giving a match or the correct time to a stranger. In a nonlegal context, it might almost be insulting to refuse. In the situation however, we might think the insulted party would be the suspect; it is far more degrading to be suspected of being an addict than to be asked for a match. But for the already convicted user, most of the stigma has already been manifested. Having once been proved culpable, the suspect can hardly claim to be shocked by the suspicion of use. All of the factors combine to impede assertion of legal rights. Furthermore if the addict is innocent, the police leave, with the suspect disturbed but not substantially harmed. (Skolnick, 1967: 144-147)
As I am sure Skolnick (1967) knows, such friendly searches are not always the case. Officers often do use force in eliciting information from addicts and often do not clean up after a search that leaves an apartment disorderly (see Redlinger, 1969). Recently, in a suburb outside of St. Louis, Missouri, narcotics agents operating on a "tip" broke into the homes of persons that were not only innocent of use or sales, but in addition persons whose beliefs directly support the enforcement of laws against addicts. In these cases, the agents were dressed like "hippies", broke down the doors to the homes, did not show their badges, and threatened the people by putting loaded pistols to their heads. They had the wrong houses, and although raids on innocents are usually rare, the practices used by the agents, from my knowledge, are not.

Thus, in both the instances of delinquency and narcotics addiction, control agents appear to be less abusive and physically coercive with middle class persons. In addition, as we have seen they are also more likely to be more lenient in charging these persons with offenses. (Cameron (1964), of course, reports similar results in her study of shoplifters.) In the case of narcotics addiction, there appear to be reasons for this variation in that officers sometimes perceive themselves to be in greater danger when apprehending users and especially dealers. One can only speculate if this "definition of the situation" justifies the use of the types of physical coercion that are an integral part of the narcotics enforcement pattern.
Additional Considerations

The illegalization of opiates and their derivatives, as we have noted, changed the nature of the user. Not only was the user now viewed as an abuser (legally speaking) but also the characteristics of the user changed and became both sex and class related. Specifically, a larger proportion of males engage in the use of and illicit trafficking of opiates, and most of these males are usually from the lower social classes. Previously, a larger proportion of females would use such compounds, but when the legal status of the drug changed, their patterns of use did also. This change was essentially one resultant from the changes wrought by legislation and enforcement rather than changes in the use of sedatives by women in general. That is, women could no longer obtain opiates from their physicians largely because of the physicians unwillingness to prescribe the drug. However, there are indications that physicians shifted their medication efforts to other products. It would be appropriate to say that more often than not women obtain their sedatives and psycho-active drugs from their physicians than from illicit drug dealers. These factors have important implications for the differential mortality rate amongst the lower class. It appears that because of these resultant patterns, life becomes a great risk for males who wish to use opiates, but not so for females.

Parry (1968) utilizing a national survey found that twenty-five per cent of the population sampled had used sedatives, tranquilizers and or stimulants within a year prior to being interviewed, and almost one-half had ever used such drugs. Women were more likely to have used such drugs; whites more likely than blacks, and Jews more likely than Protestants and Catholics. Differences in social class factors were
found to be of little significance (Let me note here that the separation of the social class variables from racial variables is purely arbitrary and that one certainly appears to me to effect the other).

Manheimer, Mellinger and Balter (1968) in sampling California residents, found that women were twice as likely to have used and to be frequent psychotherapeutic drug users than men. Cooperstock (1971) using a stratified sampling of retail pharmacies and all hospital outpatient pharmacies in Toronto, found that such drugs accounted for the bulk of the prescriptions. That is, sedatives, antidepressants, tranquilizers, and hypnotics accounted for 84% of the prescriptions. (The remaining sixteen per cent were for stimulant type drugs.) Cooperstock (1971) notes that

One of the most striking findings from the Toronto study is related to the sex of the recipient of the prescription. Sixty-nine per cent of all prescriptions issued were written for women. This finding was not unique to Toronto. Levine (1969) reports that 67 per cent of a sample of mood modifying prescriptions in the United States went to women. (Cooperstock, 1971: 239-240).

Further evidence comes from interviews done with 99 Los Angeles women who "were for the most part white, married, English-speaking, and over 30 years of age (Linn & Davis, 1971: 332)." Linn & Davis (1971) indicate that social class background variables were not associated with being a user of psychotherapeutic drugs, but that religious affiliation appears to have some effect. Jewish women had the
highest rates of use, followed by Protestants and lastly Catholics. This drug use was also related to marital problems (which would trigger depression, etc.) and related to "chronic health problems (Linn & Davis; 1971: 335-337). These researchers do not, however indicate what kind of health problems the sample had, but one can, I think, safely assume that they are not significantly different than those other women had at an earlier time in U.S. history. Thus, it appears that the changes in the narcotics enforcement pattern left a class bias as well as a sex bias in the nature of drugs used. With legitimate users of opiates, there was no apparent class bias in users, but with illicit opiates the vast majority of users appear to come from the lower social classes (discounting doctors who because of their privileged access have the opportunities to become addicted immediately available). Thus the effects of the law enforcement have been to create a profitable market for illicit chemicals amongst the lower class; chemicals that are dealt to the lower classes by members of their own class. Whereas the users of legitimate opiates were largely women, illicit users are now largely men, usually young men. The enforcement has pushed a marked with poor quality control, and instability onto the lower classes. Furthermore, the illegality of owning the accountenments of the illicit culture (the fix and point) has furthered the probability of disease amongst these people, in general and especially amongst the addicts (see Howard & Borges, 1970). Women, rather than stopping the use of drugs for their illnesses continued to use legally obtained drugs from physicians to solve their problems.
OCCUPATIONAL AND WHITE-COLLAR DEVIANCE

Deviation, as I have defined it, involves not only an arbitrary set of rules and some violation of those rules, but in addition, some set of socially powerful persons (and/or groups) who have an interest in labelling the violations as deviant and applying sanctions. Furthermore, I have argued that much of the deviation found in the lower socio-economic classes stems from their undesirable position in the invidious distribution of rewards and this position forces them to live in undesirable habitats. The habitats that I refer to have been termed, "zones of transition," but in general include slums and near-slums. Persons in these areas engage in deviations, primarily, to obtain a larger share of the economic surplus. Indirectly, deviation such as homicide, which is most prevalent in these zones stems from the nature of existence, the patterning of relationships inherent in such zones. This nature of existence is a direct result from the relative absence of any accumulation of economic surplus.

I have further argued that positions in the social organization crosscut the legal-illegal dimension. That is, while some occupations are entirely illegal, others simply are legitimate and engage in illegal practices. Moreover, I have argued that it is insightful to view positions such as prisoner, mental patient, and narcotics addict as lower echelon positions in the economic infrastructure. To be sure, there are personal reasons persons end up in these positions, but overall, the economic infrastructure coupled with its emphasis on productivity and the invidious division of rewards largely influences who gets to be what, when, and how much they receive for what they do. These influences are dominant influences in every person's existence, and the influence
is not only in terms of material but, also, coded into notions of "responsibility" which are attached to every position.

Notions of "responsibility" as well as notions about what constitutes a deviance (and the rules which define such things) vary by ecological zones. Each zone has both a general set and a specific set of characteristics: generally, there are rules of conduct which are applied by the political overlay and enforced by one of the branches of the state; specifically, there are institutional rules, and occupational rules of conduct which are enforced by the occupations and institutions concerned. The degree of enforcement is one variable in the rates of deviation found in different positions within the social organization; another is the type of enforcement — both of which vary by ecological zones. Degree of enforcement refers to the absolute number of apprehensions made relative to the amounts of violations occurring, whereas the type of enforcement refers to the severity of the sanctions applied. In the latter case, application of a monetary fine in contrast to imprisonment could be seen as a less severe sanction. In each zone, one can ask "who has the social power, and to what degree is social power concentrated?" The more social power is concentrated, the greater the probability that the concentration enforces its own definitions of reality. On the other hand, the diffuseness of power would lead to a pluralistic condition and a multiplicity of definitions.

This last condition leads us to consider that the rules system under which one must perform one's economic activity (labor) can be at variance with the political overlay. Since the rules system which is the dominant (meaning the one which sets the conditions for action) is this economic rules system, one might expect that conformity to it
could be deviation from the rules of the political overlay. Within the institutional system whose rules one is conforming to, then, one would not be seen as deviant; however, from the perspective of the political overlay one would be seen so. (This is a similar condition to the one which we observed between the corner boys and the police: in conforming to the expectations of their peers, they violate the rules the police enforce.) Moreover, because many institutions and their representative organizations have a license and mandate to practice their trades, they are regarded as legitimate, both by their own conceptions and by the conceptions of the political overlay. They would not consider their own violations of the larger rules as deviance. Furthermore, given the low levels of surveillance for most respectable occupations, many violations might go undetected. Of course, how many violations do occur and are undetected is quite difficult to tell, and for our purposes — namely the consideration of deviance — irrelevant. However, a percentage of such violations are detected and sanctioned. Occupational deviance, then, are deviations a "respectable" person commits in connection with their economic activity (see Sutherland, 1940; Quinney, 1964; and Becker, 1968). And in terms of their relative danger to the social organization, Sutherland and Cressy (1966) indicate "these white collar criminals, however, are by far the most dangerous to society of any type of criminal from the point of view of effects on private property and social institutions." Yet, most of the persons committing such actions do not see themselves as deviants, and in fact neither does the community in which they participate. For this reason, Becker (1968) labels this type of deviation "conventional," in that it is taken for granted by the community, and the institutions in which
committed against persons who have less social power than those doing the violation (Sutherland, 1940; Sutherland, 1949). Moreover, when white-collar violators are caught they are more likely to be sanctioned by, first, institutional codes (e.g., the American Medical Association) and second by civil, rather than criminal law (see Sutherland, 1949: 247-253). Furthermore, they are regarded by their communities as "respectable" and thus less likely to suffer the full consequence of being labelled deviant.

There is one further consideration and that concerns the socio-economic class of the violator. Under the rubric of occupational deviations, some researchers have included such diverse types as gasoline station operators, and corporation executives (see Clinard, 1952). For our purposes we will define occupational deviation as deviance associated with one's occupation and reserve "white-collar" deviance to refer to those persons in the upper social strata who commit occupational deviance (this distinction is made by others, for example, Clinard, 1968: 269).

The first set of violations I will consider are those which Bloch and Geis (1967) have categorized as committed by independents and independent professionals. One common form of this violation is the "rake-off," and is practiced most often by retailers, restaurant operators, and other small businessmen. It is a most effective practice in businesses where there is spoilage of stock, and thus a continuous loss of inventory as in the produce business or grocery business. The rake-off works something like this: the person either utilizes the stock to feed himself, family, and help as part of an informal agreement with them, and, or, he rakes some of the daily earnings "off the top"
it is carried on are essential to the interests of the social organization.

Over thirty years ago, Sutherland (1940) one of the greatest criminologists called attention to these problems. He states that "the criminal statistics show unequivocally that crime, as popularly conceived and officially measured, has a high incidence in the lower class and a low incidence in the upper class," and that these statistics were so obviously biased as to make the theories based on them fallacious (Sutherland, 1940: 1-12). Becker (1968) almost thirty years later notes that Sutherland's (1940) admonition was "duly acknowledged, argued over, and effectively forgotten in the years that followed." While, this may be an over-statement, it is nevertheless close to the truth. Occupational deviations receive differential treatment in not only enforcement, and type of sanctions applied, but, also, in the theories used to explain why people commit such violations. When we examined the differential enforcement of the narcotics laws, we saw how physicians were subjected to less coercion, rarely went to prison, and rarely lost their practices. As we shall see, these procedures also apply to high status others who routinely violate the laws and perhaps, even more so for corporations.

Bloch and Geis (1967) divide occupational deviation into three broad types: those white-collar violations committed by independent professionals (e.g., physicians, lawyers); those committed by employees against employers, or corporations (e.g., embezzlement, employee theft); and those committed by corporations themselves (e.g., collusion, industrial espionage). And for our purposes, it will be useful to follow their typology and examine some examples from each category. One should keep in mind that in many cases, these violations are
without reporting them to the Internal Revenue Service (which in these cases is the coercive arm of the state). For example, let's say you are in the retail flower business. It is quite possible for you to have stock that spoils; it is also possible for you to make sales of flowers that are, in accounting, "spoiled" but in actuality are not. Thus, the income derived from these sales need not be reported; some florists manage as much as twenty dollars a day this way during their peak seasons; yet, to my knowledge none have ever been caught and none see themselves as deviant. In fact, they view this practice (the ones that engage in it) as wise business, and view the government with contempt (Sutherland notes that this same view is held by corporation executives who violate the antitrust laws, see Sutherland, 1949: 217-220). We could, of course, use the restaurant business as an example since many of the same practices occur there. By the very anonymity of the practice and lack of surveillance, such violations go largely undetected.

Physicians, not all physicians mind you, engage in illegal practices and only a minor percentage are caught. When they are, usually, they are merely charged with malpractice and lose their licenses, 16

---

16 The data for these observations come from two sets of study that I did. One set was done while I was a graduate student at Northwestern University at which time I studied the operations of retail florists under direction of Howard S. Becker. The second set of data comes from portions of a later study carried out in another topic; during this study I happened on to the same practices of rake-off.
but rarely are they sanctioned beyond that (as in going to prison). The most frequent white-collar offenses for physicians are fee-splitting and issuing illegal prescriptions for narcotics, amphetamines, and other regulated drugs. In the case of fee-splitting, Sutherland (1940) reports that the practice involves sending a patient to a surgeon who will charge the most and kick-back to the referring physician a percentage of the fee. Although illegal, Sutherland (1940; 1949) reports that two thirds of the physicians in New York City engage in this practice. In the second case, physicians issue prescriptions to addicts or to persons who desire them without any examination, or without any actual ailment on the part of the person. Narcotic addicts usually know the names of some of these physicians where "you just walk in, man, and pay him five dollars and he gives you a script." In some cases, these physicians also enter into agreements with pharmacists. Quinney (1967) studied the prescription violations of retail pharmacists, and found their violations were directly related to making a quick and easy profit.

Lawyers are another interesting example in that they have a wide range of opportunities for violations. One common violation is to secure testimony from witnesses that is perjured and treat it as truth. Another form of violation occurs when lawyers misappropriate finds from receiverships they are entrusted with. Finally, and probably the most frequently apprehended of their violations is ambulance chasing. This practice involves following an ambulance to the scene of an accident and becoming the "victims" attorney whether the "victim" is injured or not. The result is that in many instances, a case is made and the lawyer receives a fee for fraudulent claims. When lawyers are caught engaging in this practice, they are most often sanctioned via
institutional controls (disbarment) rather than criminally prosecuted (see Carlin, 1966).

The second broad category of occupational violations concerns those of employees against their employers. Dalton (1959), for example, describes how employees take various kinds of material from employers and usually are not sanctioned. When they are sanctioned, it is usually by "corporate punishment" or the privately enforced institutional norms. We can include within this category employee "shoplifting," which, I am sure, accounts for a large share of the lifting that goes on. In the restaurant business this form of violation involves pilfering food from the kitchen and in some cases runs into hundreds of dollars.

Within this category we can include embezzlement. Cressey (1953) studied 133 persons apprehended and imprisoned for embezzlement. In this case, persons must occupy positions of trust, or positions in which they have access to the funds of the company (e.g. banktellers). Secondly, they must have some knowledge about how one goes about taking money without being suspected. The number of embezzlers caught seems to be quite small in relation to the probable numbers of offenses. Banks, of course, are not the only places where embezzlement can occur. Managers of firms, such as food chains, have ample opportunity to falsify records and pocket a percentage of the incoming revenue. It is, perhaps, for these reasons that persons who handle other people's money are usually required to be bonded.

Another example, and I suspect, by far the most common kind of employee thefts are those which involve fraud. Sutherland and Cressey (1966) claim that fraud "is the most prevalent crime in America." One example which they give are stock brokers and bankers who sell
securities that they know will soon be worthless, but unload them on unsuspecting others (Sutherland and Cressey, 1966: 45). These practices can involve, and in many instances do involve fraud by employees against the government. In Detroit, top officials and their employees of a private agency stole "thousands of dollars in federal money" by "altering bank checks and falsifying model cities records" (Neubacher 1973: 1a). This program was supposed to furnish loans to small businessmen in a model cities neighborhood (a nine square mile area of Detroit), and was administered by a private agency called "Friends of Economic Development" (see Neubacher, 1973). The "friends" prepared phony invoices and other documents to support loans to companies that did not exist. When the checks for those companies appeared the employees either cashed them themselves or had friends cash them, and kept the money for their own use. In other instances, friends of the administrators would falsify business addresses as being within the model cities area when in fact they were not. They would then receive loans. One example of how this was accomplished is a bogus clothing store that did not exist. The employees claimed the store had been burglarized and needed an emergency loan to pay suppliers for goods. Bogus invoices were drawn up and sent in. When the checks for payment to the clothing suppliers came in, the Friends of Economic Development added a name to the check so that it was payable to the clothing store or the name that they added which in this case was a real person. The real person would then go to the bank show his identification and cash the check. When the cancelled checks returned from the bank the name was taken off of the check and a photocopy was sent into the model cities program as evidence the check had been cashed, which of course,
they believed. Gradually the truth became known as bank documents indicated conflicting reports with the photocopied accounts.

There are several reasons why employee fraud can occur. One is the sheer size or scale of the agencies involved. Franchise businesses or government programs are geographically diverse and the costs of daily on-site surveillance would be prohibitive. Furthermore, there is little assurance that on-site surveillance would work, and not be corrupted. Thus, firms have tendencies to rely on accounting systems, and because of these two conditions, fraud is more easily engaged in. Furthermore, surveillance even when it is centralized (e.g., at a main entrance gate) can become routine. In the case of engineer's pilfering plans from their companies, Johnstone (1966) writing in an edited volume, Business Intelligence and Espionage, observes:

Nothing inhibits an engineer from taking a set of drawings more than the thought that he will probably be caught by a gate guard. In most companies, however, the gate guards become unmotivated. Their search for pilfering becomes a boring routine which results in an ineffective search. One major aerospace firm has, inside its buildings, key-card access areas where the installation of doors and their controls costs hundreds of dollars per door. Loss of employees' time and inconvenience due to key-card opening doors also may be assessed as a cost factor. Close watch is being kept on visitors to the area; yet, at the main guard gate, the only form of
inspection for a person carrying a box, brief-case or bundle is to say, "nothing classified," and he is waved through. Such erratic attention so often seen is one sign of an inadequately planned security program (Johnstone, 1966: 110)

Johnstone (1966) recommends that firms utilize private investigators in uncovering such pilfering. Another reason why such actions are carried out in the rationale that the company, or agency gets more than its fair share of the rewards. These rationales seem quite similar to the ones describes by Sykes and Matza (1957) in their study of delinquency. These techniques are: denial of personal responsibility (I was told to, or forced to do it); denial of harm (no one is going to be hurt by this); denial of victim (the company was out to get me so I got them first); and condemning the condemners (they had it coming; they steal from everyone). Again, the nature of the invidious distinctions in the rewards system, coupled with aspirations amongst employees to "have more" material create conditions where fraud and embezzlement are viewed as legitimate ways to attain such wealth (on this point see Cressey, 1953). These reasons can be summarized under the notion that the way the market is structured invites certain forms of devious activities. That is, the ways in which the socially organized economic institutions go about their daily affairs allows for both independent and professional, and employee deviations. This notion is a fortiori for the third type of occupational deviance, namely those violations committed by corporations. Indeed, because corporate deviations are so widespread and involve such large amounts of material wealth I shall give several examples involving sanctioned corporations.
Sutherland (1949) undertook the classic study of corporate deviations and published these under the title *White Collar Crime*. He analyzes the criminal records of seventy of the largest American Corporations with regard to their violations of patents, trade-mark and copyright laws, restraint of trade, rebates, misrepresentation in advertising, unfair labor practices, financial manipulations, and (at that time) war crimes. By the late 1940's these top corporations had 980 commission or court decisions rendered against them. Sixty percent of these corporations were recidivists or multiple offenders with an average offense record of four convictions each. Perhaps even more astounding, 42.8% began their initial operations illegally (see Sutherland, 1949: 23-25).

These corporations committed crimes against: competitors, stockholders; investors; inventors; their own employees; consumers; and the federal government. However, most of the cases were tried in civil courts. Sutherland (1949) goes on to demonstrate that these acts were consistent with corporate policy, and deliberate. Had these corporations been individuals, they would have been declared habitual criminals and imprisoned for extensive periods of time. He concludes, on the basis of this data that illegal behavior is much more extensive than the data indicate, that the businessman who violates the laws designed to regulate business does not lose status among his peers since the violation of the legal codes is not necessarily a violation of the business codes, and that businessmen generally express contempt for government regulations and the persons that enforce them because they get in the way of business (Sutherland, 1949: 218-220).

A case which illustrates the willful and blatant nature of business deviation, one which has been analyzed rather fully, is that
of "the incredible electrical conspiracy," or the antitrust cases against the heavy electrical equipment industry (See Geis, 1970: Smith, 1961a; 1961b). This example was termed by the federal judge presiding over the case, as "the most serious violations of the antitrust laws since the time of their passage at the turn of the century" (Geis, 1970: 170). Yet, both Smith (1961a) and the New York Times (quoted in Geis, 1970) describe the defendants as typical middle class men dressed in ivy league suits. Smith's (1961a) account is even more telling: "as a group, they looked like just what they were: well-groomed corporation executives in ivy league suits...". They were not, mind you, conceived of as criminals. They were in court to be sentenced for collusion in fixing prices for approximately ten years on equipment valued at $1,750,000,000 annually. Some of the corporations involved were: General Electric; Westinghouse; Allis-Chalmers; Allen-Bradley Co.; and Foster Wheeler. In general, General Electric and Westinghouse were given the major share of the blame. But of course, the corporations themselves, huge numbers of persons could not be wholly sent to prison. Let us look at one segment of the collusion as illustration (Smith's 1961a, 1961b account is a fascinating reading).

Within General Electric's executive staff, there were apparently two schools of thought on how to run a business: one believed that you competed with your opponents, while the other held that competition was ridiculous, and one should simply get together with one's competitors and decide what prices should be (Smith, 1961a). By and large, the second school of thought was predominant, and there structural reasons for this. Leonard and Weber (1970) correctly point out that the market structure, "that is, the economic power available to certain
corporations in concentrated industries - may generate criminal conduct". Furthermore, they suggest that price-fixing on this scale, with such a total effect cannot succeed unless two economic conditions exist:

1. The industry was concentrated with the bulk of output in the hands of a few producers who could easily get together; and

2. Demand for the product or products was price inelastic, that is, the buyers of heavy electrical equipment (in this case utilities) would not reduce purchases if prices were increased (Leonard and Weber, 1970: 409).

Thus, because of the market structure, or what we have termed the social organization of the economic infrastructure, it was possible for a few manufacturers to conspire and fix prices. Actually, it was possible for a few men within each corporation to do this, and these positions within the corporation were all quite similar. These men were all in positions where, if they did not "perform" (i.e., make a larger profit and have a larger share of the market), they would lose their jobs. Yet, the top executives appeared not to want price-fixing (at least that was their official position). However, both the existence of the market situation and the pressure for individual performance set up a conspiracy of the highest proportions.

These men devised ingenious schemes to hide their actions from not only the government but company lawyers, and included such practices as falsifying destinations, destroying correspondence and writing and calling messages in code. In fact, some of the codes were so resourceful
that even a government cryptographer could not figure them out. One code operated on the "phases of the moon" so that every two weeks the members of the conspiracy would know how to bid, high or low, so that the correct member would win. (see Smith, 1961a; 1961b). So successful were the various conspiracies that it was not until the Tennessee Valley Authority complained to the federal government that it was getting the exact same bids from all these firms that the government became suspicious.

As a result of intensive investigation, the government managed to collect indictments against most of the major conspirators. The most remarkable aspect of the case was that it was tried in criminal court, and almost as remarkable some of the conspirators actually had to serve prison terms, while their corporations were fined. The fines ranged from $437,500.00 for General Electric ($372,500.00 for Westinghouse) to $7,500.00 for smaller corporations like the Carrier Corporation. Smith (1961a) writing in Fortune Magazine about the case, typifies the court scene and the effects of the prison terms:

By midafternoon of that first day E.R. Jung, Clark Controller vice president, was ashen under a thirty-day prison sentence and a $2,000 fine. Gray-haired Westinghouse Vice President J.H. Chiles Jr., vestryman of St. John's Episcopal Church in Sharon, Pennsylvania, got thirty days in prison, a $2,000 fine; his colleague, Sales Manager Charles I. Mauntel, veteran of thirty-nine years with the corporation, faced thirty days and a $1,000 fine; Ginn of G.E. (indicted in two conspiracies), thirty days and a $12,500
fine; G.E. Divisional Manager Lewis Burger, thirty days plus a $2,000 fine; G.E. Vice President George Burens, $4,000 and thirty days. "There goes my whole life," said this veteran of forty years with G. E., waving his arm distractedly as he waited to telephone his wife. "Who's going to want to hire a jailbird? What am I going to tell my children?"

Sutherland (1949) long before this case noted that businessmen had contempt for the government, and as one would expect these outcomes left a very small indentation. Specifically, the defendants felt as if they were arrested and indicted for what every businessman does. Moreover, as Smith (1961b) pointed out, "This attitude becomes particularly disturbing when one considers that most of the men who pleaded guilty in Judge Ganey's court (to say nothing of the scores given immunity for testifying before the grand juries) are back at their old positions, holding down key sales and marketing jobs."

Another interesting set of market conditions that are strikingly similar to those described above exist in the American automobile industry. Whereas in 1921, there were 81 auto-makers, there are only 4 major makers today and one, American Motors, has a very small percentage of the market. Thus, in Detroit, it is very common to hear of the automakers referred to as "the big three." Leonard and Weber (1970) in their study of the "criminogenic market forces" in the auto market indicate that there is extremely high seller concentration; very high profits and tremendous market power. In addition, the "big three" have tremendous power over their distributors, or the fellows that sell you your automobiles (on this point see Leonard and
As Leonard and Weber (1970) observe, the manufacturers of the autos almost all the time own the land, and much of the facilities that the dealers use; moreover, the agreement that the dealer operates under is one set up and controlled by the manufacturer (on this point also see Macaulay, 1966). This has several implications for the kinds of products that are sold and especially their quality. A quota of sales is set for the dealer by the manufacturer that must be met if the franchise is to be maintained, and if it is not met, the franchise can be cancelled in a period extending from thirty to ninety days. Leonard and Weber (1970) comment that "dealers are therefore pressured to be sales-oriented and to adopt the manufacturer's position that service is 'a necessary evil'."

In addition, the number of dealers has declined in the last few years (from 43,000 in 1954 to 27,800 in 1968) and with this decline the dealer's share of the automobile service market has also declined from 43% to 32% (see Leonard and Weber, 1970: 413). Add to this the facts that the number of automobiles is increasing faster than the numbers of mechanics, and a quota system for the mechanics that do work for dealers, and one has a set of conditions which produce faulty automobiles being delivered to customers (Leonard and Weber, 1970: 413-424).

In dealing automobiles under these conditions, the dealers and the mechanics that service them are under considerable amounts of pressure in the form of loss of job (work activity). Therefore, many of them engage in occupational deviances as adoptions to these conditions. Leonard and Weber (1970) refer to this situation as "coerced crime, since it results from the coercion of strong corporations whose officers can utilize the concentrated market power of their
companies to bend dealer and mechanic to serve company objectives."
Since the manufacturers are primarily interested in selling new cars
(on which they make their largest profit percentage), they put pressures
on the dealers to not only make their quotas, but surpass them.
Leonard and Weber (1970) indicate that this results in dealer losses
on new cars which are made up in repairs by charging excessive prices
and induces them to make bogus repairs. Another way prices are raised
is to claim that more labor is involved, than really is, so that the
customer pays for two hours of labor instead of the 30 minutes that the
work actually took (Leonard and Weber, 1970: 415-418). In addition to
these conditions, there is the warranty sham. This procedure involves
telling the new car owner that the repairs he needs done are not
covered by the warranty which means that he will have to pay for them.
Also because of the time involved, many dealers will take a car for
its "six month" free inspection, keep it a day, without ever looking
at it. Leonard and Weber (1970) indicate, that in addition to these
practices,

the manufacturers played still one more
game with dealers and car buyers. At least one
of the Big Three introduced a system of com-
petition among its regions on the basis of which
it could award promotions, bonuses, and prizes,
part of the competition being to determine which
region could underspend its warranty budget (set
at so many dollars per car over a given period)
by the largest possible percentage. To win out,
a region had to hold down its warranty costs by
every means possible, including the denial of borderline claims, refusing service, and various tactics. Obviously such a system vitiated the spirit of the warranty and established an additional incentive for unethical behavior on the part of dealers. (Leonard and Weber, 1970: 420).

There are a number of other examples that I could use to show that violations of the laws are fairly widespread amongst the "white-collar" occupations and occupations in general. One need only think back to the payola scandals in the record business during the 1950's and need only to look at the "drugola" scandals developing in that same business now. That is, record companies were apparently supplying numerous members of recording groups as well as individual artists with drugs and other delights. But the point is: when powerful persons such as those who worked for the electrical companies are caught and labelled deviant by the political overlay, they are not regarded as deviant and subjected to the same stigma as poorer people. In actuality, the sanctions applied are not as severe which leads me to venture that their relative social power, as evidenced by the socio-economic status, plays an influential part in the mitigating of stigma and sanction. Indeed, as the automakers case illuminates, in many instances the victims of these practices are persons who are less socially powerful than the victimizers (in contrast to the poor who usually try to victimize people with the same amount or greater amounts of social power).
Before I turn to considering two related phenomena, namely the effects of population density on the production of human deviance and the "normal" phenomena of pollution, I would like to make a brief comment on the political overlay's case known as "Watergate." In light of the data presented above, you can understand how I am not stunned nor amazed by the data of Watergate. Indeed, the use of electronic eavesdropping equipment is on a much wider scale in business than one would suspect (see on this point, Netolicky, 1966), so it seems natural to me that such equipment would be used by men who were trying to gain control, and maintain control of the United States. After all, control of the United States means control, roughly, of 38% of the Earth's total resources. Moreover, the attitude of several of the Watergate defendants is quite similar to the attitude of American businessmen caught price-fixing; they do, after all, have some knowledge of just how much wire-tapping and other espionage is routinely carried out. In a recent edition of a magazine, *Society*, there are comments from leading social scientists on the Watergate case. Among the writers are Schneier (1972), Weidenbaum (1973), Marcuse (1973), Sola Pool (1973), Nisbet (1973), and Umpleby (1973). Each scholar in his own way indicates his own vision of what Watergate means. Umpleby (1973) gets closest to saying what appears to be the case: the use of electronic bugging equipment is a "normal" operation and has been for several years ever since, in fact, it was developed as a technology. Remember, the group which can best exploit its habitat usually ends up the dominant group and, sets the conditions under which others must live. Likewise, the use of knowledge gained from bugging to distort information flows has been a common practice ever since the technology was put into use.
(see for example Greene, 1966; Netolicky, 1966). As Umpleby (1973) correctly observes, many if not most social scientists do not understand the social technology utilized in such measures. For example, anyone that has used tapes for retrieval of data should know that by waiting five seconds or so between responses, one can add to the tape enough words so that the whole nature of the conversation would change; in this case, the "tapes" controversy is not one at all, for I am sure that whatever the Nixon tapes might have indicated cannot now be known.

Marcuse (1973) takes a critical stance toward capitalism as the ultimate culprit. He views the economic infrastructure as essentially corrupt and states,

It seems that it [capitalism] cannot function, cannot grow any more without the use of illegal, illegitimate means, without the practice of violence in the various branches of the material and intellectual culture (Marcuse, 1973: 23).

Moreover, Marcuse (1973) I think correctly sees that the essential distinction between "organized crime", meaning the Mafia, and oligopolistic conspiratorial functioning is blurring. I do not think one has to be a Marxist to see this, for the data, from Sutherland's (1949) analysis to the present has been available. Moreover, the fact that many of the legitimate corporations are planetary in scope may in fact make their power more resilient and potent than one might expect. But, I think it wholly dogmatic of Marcuse to claim that bugging and wire-tapping are illegitimate when they are in fact not completely covered by the law and in many instances are grey areas where the interpretation is not clear. This is especially the case
given the delicate issues of just what constitutes national security. After all, as Sorokin (1937) has shown by his analysis of western legal codes, the state seeks first and foremost to protect itself, and if in fact, businesses are utilizing advanced technology to eavesdrop, the state in order to protect itself from its own constituency must also utilize these tactics. This brings up a related point. For years, ecologists who I consider apologists, have used the argument that technology is neutral inspite of the fact that all human consciousness acts with intention. Technology always has some set of rules attached to it and some set of relevances that directs products toward certain goals and away from others. To see the tool without the tool maker and user is in my opinion folly.

Sola Pool's (1973) comments are also enlightening in that the analysis is comparative. What are the relationships between the McCarthy hearings of the fifties and Watergate? Moreover, why has the role of the mass media changed from insisting as it did in the fifties for concrete evidence, to now playing the role of advocate? Might we not be better off seeing the conflict as one between major institutions? And if we take this view might not the struggle resulting be seen as only one gambit in a play for power? I agree with Sola Pool (1973) that very little good social science is being done on the Watergate issue, and that social scientists are quite busy moralizing about the issue. Likewise, upon viewing the issue it appears as if the political overlay and the economic infrastructure has become overburdened even at their most highest levels. At the lower levels, we have known for years that they were functioning by the use of rules that violated the essence of the original system. Take for example, plea bargaining
which effectively denies the defendant a fair trial for his alleged crime (on this point see Newman, 1956; Sudnow, 1965; and Rosett, 1967). In terms of bureaucracies social scientists have long known that they could not function on the formal procedures they set up and that they have been circumventing these procedures for years (see, Blau, 1956). Furthermore, as Liebereson (1971) indicates the very Senate committees that are supposed to watch spending and wisely investing dollars are in fact committees of senators from the very states that have vested interests in those areas. For example, The House Agriculture Subcommittee on Tobacco is a seven member committee that has six members from the tobacco producing states; The Minerals and Fuels Committee is "loaded with senators from states with relatively large segments of the labor force engaged in these extractive industries" (Liebereson, 1971: 579-580). Likewise, the Senate Armed Services Committee has a disproportionately high membership from States that would stand to lose when arms are cut-back, and in contrast "the small Subcommittee on International Organization and Disarmament Affairs is disproportionately composed of senators from states that stand to gain through a military cutback" (Liebereson, 1971: 580-581). My point being that in this context, it is difficult for me to view Watergate as abnormal, rather it is much more useful to see it as part of the political process as it really exists and as it is practiced by living human beings. Naturally, these practices effect the division of labor and the division of rewards within the social organization, and thus have some effects on who gets what, and when. These effects, I have argued are directly related to the spatial patterning of human aggregates into habitats seen as more or less desirable in terms of the life chances they offer their inhabitants.
The population of human beings on planet Earth has been increasing steadily for several generations and this increase has alarmed many scholars perhaps because too many people could effectively nullify the positive aspects of living and threaten the survival of entire nations. A current estimate of the numbers of people living on the planet is 3.6 billion but even as I write this figure it is surely increasing since there are currently more people being born than dying. This increase is sometimes termed a natural increase even though it is made possible by social technology. Prior to the advances in medical technology that eventually lead to a decline in the infant mortality rate specifically, and in general a decline in the death rate, the human population of the planet did not appear to be increasing, and most certainly was not increasing at the rate that it is today. One scholar places estimates of the Earth's population, historically at these levels: in the year 1820, there were one billion people living on the planet; in the year 1930, there were two billion people living on the planet; in the year 1965 there were three billion people living on the planet (see Thomlinson, 1965: 10). To achieve the one billion persons in the year 1820, it took mankind "hundreds of thousands of years," whereas to achieve the increment of two more billion mankind only took 145 years (Thomlinson, 1965: 10). This increase in the population places a great deal of strain on the rest of the ecosystem as well as on the humans that have to live in the more crowded areas of the planet. Thomlinson (1965) estimates that in just 17 years from now (1990), there will be five billion people living on Earth. This is a slightly conservative estimate based upon the idea that the birth rate is not going to increase and the death rate is
not going to decrease. One scholar looking at various models (population forecasts) indicates:

One begins with the fact that a continuation of the present growth rate (not to mention an increase in the rate) would bring the population of the world close to seven billion around the year 2000, 14 billion in the 2040's and 28 billion in the 2070's. (Frejka, 1973: 15)

Projecting the population of the planet is a very difficult task given the ever changing nature of human social organizations as well as the instability of habitats, and naturally as the variables in the formulae used are changed, the estimate will change (see, for an example of ways to compute forecasts, Petersen 1966: 272-305). The two major components of a forecast, barring a thermo-nuclear war and mass famines, are fertility and mortality. There is every indication that the mortality or death rate is going to continue to decline so that people will be living longer, and the fertility rate for the planet, Earth, has been rising steadily. Given these two trends, one scholar using variable inputs into forecast formulae indicates that the estimate of 14 billion in the year 2040 could be off by some 14 billion persons (see Frejka, 1973: 21). Likewise, if other variables are plugged in with variable rates, the estimates could be exceedingly high, but there is fairly good indication that 7 billion people by the year 2000 is not too far off (if again, the Earth is not subject to some form of major catastrophe).

Naturally, like all social productions, the increase in population does not occur uniformly across planet Earth but selectively. Nor are the increments that are selectively added distributed uniformly within the areas where they occur. Frejka (1973) correctly indicates that South
Asia, Africa, and Latin America have very high potentials for rapid increases in population which would effect the distribution of the world's population considerably. For example, with rapid increases in the populations of these areas, the relative distribution, percentagewise would shift in such a way that while the population of the United States would increase absolutely, the relative percentage of the population living in the United States would decrease.

The differential growth of a population will have varied effects on the social organization of that population depending upon its habitat and the technology available to exploit that habitat. In general, as we noted earlier, with every population increase there is a complexification of the numbers of positions available in the infrastructure: stated another way, the more people there are, the more people there are to be. If however, there is not an increase in the available food supply, a rapid increase in population can have extensive destructive effects on the social organization of that population. The effects of population growth on social organizations possessing an "advanced" technology (one which allows a high level of habitat exploitation) will obviously, then be different than the effects on not so advanced social organizations. In some of the high population growth areas, the rapid rise in the population actually nullifies the advances made by the introduction of advanced methods so that even improvements in the exploitative power of that social organization does not result in any appreciable gains in the levels of living, and in some areas, the overall effect has been a decline in the levels of living (see Hauser, 1971:24). Population increases cannot but induce changes in the social organization of the population and just as importantly, the entire
biotic community upon which man depends for sustenance. Hauser (1971) indicates that for technologically advanced social organizations the effects of an increase should not be immediately apparent, and should not threaten the survival of that aggregate immediately. That is not to say, that within a population that has an invidious distinction in the distribution of the economic surplus, there will not be survival problems for aggregates who possess relatively small amounts of that surplus. As we noted before, Durkheim (1964) and Radin (1953) both indicate that such an outcome is possible, and in fact, in the United States during the depression in the 1930's some portions of the population faced starvation.

In the United States, one of the major manifestations of the population increase came after the second World War, and is labelled the "baby boom." This tremendous increase in the number of children is historically linked to general population increases, but the magnitude of the increase as well as its duration was far greater than before (see Easterlin, 1961). In general, the decision to have children is related to the business cycle which during post-World War II was on the upswing. For whatever reasons, there was a tremendous input of infants into the social organization, with consequent changes. Hauser (1971) argues that the baby boom caused a general decline in the quality of American life, and there are some rationales for this assertion. For example, as the boom passed through the educational institution there occurred almost overnight greatly increased pressures on facilities and personnel that were not equipped to handle the increase. Suddenly, there was a shortage of teachers; suddenly there were increased control problems. The shifting of personnel into these institutions naturally
lagged behind the boom in such a manner that when the boom passed, there was a surplus of teachers. As the boom moved through each echelon of the education institution there appeared shortages, and as it passes there appear surpluses with naturally disruptive effects on the individuals who are part of that surplus (and unemployed).

In addition, the demographic composition of the population changed; that is, the population overall suddenly became younger. One of the effects of this change will not be felt until the boom enters fully the economic infrastructure and begins competing for their shares of the economic surplus. There is likely to be heightened competition and, in addition, the economic institution will not be able to absorb all of these people which might effect itself in heightened unemployment rates. As one might expect, the minorities that were already at a disadvantage in competition will be more so when the boom arrives. (Hauser, 1971:24-25, agrees on this point.) I believe this is true even when the political overlay is geared toward quota systems for these minorities since there simply are not enough positions available. One effect of this has been increasing numbers of minorities joining the army and armed services in general.

Hauser (1971) argues that another effect of the boom was to increase the rates of delinquency and crime. Delinquency as we noted, is an age specific offense category, and one might suspect that an absolute increase in the numbers of youth would effect the rates of delinquency—especially if the legitimate opportunity structure is already overburdened. One possible manifestation of this intensification of competition is the increasing numbers of persons dropping out of the competition and utilizing drugs as adaptive mechanisms. I do not just
refer to the use of illicit drugs, but to the increased drug use in general among United States adults. With heightened competition, one would suspect that greater numbers of persons would resort to stimulating drugs as adaptive mechanisms to keep up in the competition for shares of the economic surplus. Likewise, persons wishing to reduce the amounts of interaction strain (due to increased social demands) would resort to various adaptive drugs that would remove them from the reality of everyday life. Drugs, especially drugs like heroin, various barbiturates, and alcohol have a deadening effect on the receptors of the central nervous system and thus effect a removal from the "hustle and bustle" of the increasing competitive struggle for share of the decreasing economic surplus. Likewise, there is every indication that such an intensification in interaction frequency would reflect increased social demands upon the organisms in question and in turn raise the suicide rate (see Durkheim as discussed previously). This is intensified by the advent of electricity which allows the numbers of "day light" hours to be vastly increased. Likewise, there will probably be increases in the homicide rates since there is some correlation between interaction frequencies and the level of violence (see for example Woodrow, 1971). One must remember that an absolute number of persons added to the social organization selectively will increase perhaps all the rates. That is, as a corollary to the notion that 'the more people there are, the more people there are to be' every category will increase and thus there will be more people assigned to the victim status; there will be more people mentally ill; there will be more people (especially old people and teenagers) who will voluntarily take their own lives, etc.

The increasing violations of the political overlay and the
apparent inability of current control efforts to curtail these increasing levels will perhaps, lead to expansions in the numbers of laws, enforcement of laws, and increase in the severity of the sanctions applied.

[The reader is referred back to the discussion of Sorokin's (1937) work in previous pages.] No doubt, increased enforcement efforts will be aimed at persons committing crimes against property and crimes committed to obtain illicitly shares of the economic surplus, and therefore lead to greater numbers of persons from the lower socio-economic classes being labelled deviant. This effect may be heightened by the plea bargaining system already in operation through much of the judicial system. This negotiation of pleas is an informal set of rules made up so that an already overburdened judicial system could continue to function. When plea bargaining breaks down the courts cannot function as evidenced by the draft evasion cases during the late sixties. When each draft evader demanded a jury trial, the ability of the court system to function was greatly impaired, and consequently in many urban areas the numbers of cases dismissed increased.

There is perhaps one more effect that should be mentioned now. The advent of the birth control techniques such as the "pill," IUD, and other forms, as well as the increase in the cost of living appears to be leveling off the birth rates for the United States. This leveling off may very well be accompanied by the further breakdown of the institution of the family which would be reflected in rising divorce rates as well as the increase absolutely of the numbers of single people. A breakdown in the family system will have profound generational effects since the family is the traditional area of primary socialization. There might occur, even with the rise of day care centers an overall decline
in the affective bonding of small children to social traditions which could only have the effect of increasing the already rapid social change occurring in the United States. Indeed, there may be manifold effects from the batching children into centers at early ages (on the multiple effects of batching see Wheeler, 1966). This is not to leave out the liberation of women from child-rearing which leaves them free to enter into the economic institution and compete for shares of the decreasing economic surplus.

The increases in the population have additional effects in terms of the biotic community of which human beings are a part. The increase in humans leads to needs for increased resources such as timber, oil, food, and land. One area where these effects are sorely being felt is the national and state parks systems. Uses of these areas, as well as wildlife preserves, has drastically increased, upsetting the balances within these areas. In addition, the greater the numbers of people demanding goods and services the higher the probability is that the infrastructure will expand to meet their demands in the short-term. However, with some demand, such as the demand for lumber, the resources are non-renewable so that increased demands now will only lead to greater shortages later. Moreover, as Ehrlich (1971) succinctly points out: demand for goods and services is not the same as the need for goods and services. In a money economy demand is measured in terms of the ability to pay rather than in the necessity of the service to ensure the survival of the aggregate that has the need. Thus persons who do not have the ability to pay will feel the competitive pressures more so than those who can afford to pay, and this is, in fact, the ecological process of competition acting itself out again.
As I noted earlier, the population increments to the social organization are not evenly distributed across habitats, but for the United States, overwhelmingly clustered into urban areas. These developments have been labeled the "population implosion" in contrast to the population explosion. The explosion refers to the increasing numbers of people. The implosion indicates that these increasing numbers of people are increasingly concentrating on smaller and smaller portions of the planet, Earth. These areas of concentration are usually called cities, and contain many diverse cultural elements. This influx of persons imploding onto the ecological structures of the city will obviously effect the rates and patterns of deviations. Moreover, there is a related problem that can be termed the population "displosion," or the increasing heterogeneity of persons who share the same ecological zone, and consequently life spaces and political overlays (see Hauser, 1971:19; and especially, Hall, 1969).

The population implosion, or the packing of people into urban centers ill equipped for meeting their demands, has several immediate effects. Some of these effects have been recently subsumed under the notion that there is a "urban crisis," which includes, of course, the increasing pollution of these areas by the persons and industries that inhabit them. Other effects are the "housing crisis," the "transportation crisis" and the exodus of persons with larger shares of the economic surplus to more desirable habitats which effectively subverts the tax base of the urban area thereby making it more difficult for demands to be met. This development has lead to the federalization of programs, with resulting inefficiency (inefficiency due to many reasons). One major effect of the population implosion that has implications for
the production of deviant phenomena that I have not mentioned but will now turn to is that of raising the population density which selectively results in portions of the habitat becoming overcrowded.

POPULATION DENSITY AND DEVIATION

High population density is not the same phenomena as overcrowding. Overcrowding refers to extremely high population density such that the arrangements between organisms are profoundly effected (on this point, I wish to recommend especially Hall, 1969). The effects for each population vary according to its social organization. As Hall (1969) has so correctly noted, some social organizations that are touch oriented can tolerate greater population densities than those social organizations that are not touch oriented. Organisms that are part of non-contact social organizations appear to need more space and thus the effects of high population density may effect them at levels well below the levels necessary to produce similar effects in contact social organizations.

Ethologists studying animals have noted the effects of overcrowding on their survival patterns, and found such phenomena as die-off and reduction of reproduction (see the important volume by Wynne-Edwards, 1962). These developments were viewed to be "pathological," and abnormal in the sense of "deviant." Tinbergen (1965), an eminent ethologist indicates the comparative nature of the notion of "abnormalcy" when studying animal populations, and in fact, humans (who are after all animals):

It is of course difficult to draw the line between normal and abnormal; 'normal' in this context means nothing else than 'often observed', and abnormal means rare; there are intermediates of all kinds.
That is, a die-off where large numbers of organisms simply die, and reduction in natality are adaptations of the organisms to conditions of extremely high population density. By altering the density conditions of the population, one also alters the social organization. This isn't astounding since we have been arguing all along that the complexification of the population was always co-incident with its increase. And whereas this complexification at some levels leads to a more efficient exploitation and utilization of the habitat, it should become clear that at still other, higher levels, there are reverse effects (Hawley, 1950, notes the former of these conditions, but neglects the latter which was a serious neglect on his part). As the population re-stabilizes at lower levels of density, the "abnormal" adaptations disappear.

Calhoun (1962) published some of his findings from experiments that he and associates had earlier carried out with rats, and these findings set off a discussion and controversy among scientists and scholars. Calhoun (1962) used a barn in which he set up a series of pens for the rats to live; these pens were constructed in various designs such that the conditions of drinking and feeding were controlled. He added enough rats so that the population density was significantly higher than "normal." That is, the rats, if left to themselves would establish living conditions at a much lower density. The arrangement of the pens allowed for a single rat by guarding the runway between the pens to effectively seal off that pen from other rats. Calhoun (1962) found that in all but one of his cases, "behavioral sinks" developed. A behavioral sink is a term Calhoun invented to refer to the gross distortions (adaptations) in behavior that appeared as a result of the extremely high density (see Calhoun, 1962, 1966). What occurred was "alpha" rats
(large males) would take over the outside pens by driving out the other rats (except for a few female rats). In one such experiment, the alpha rat (so designated by his ability to hold the pen or the territory) stationed himself by the entrance ramp and effectively kept all other rats out of his pen, except, of course, female rats. The result was that the two pens on each end were occupied by a large male, alpha rat and a few female rats who were currently in residence. The middle pen contained all the other rats such that the density was extremely high, and it was in this pen that the behavioral sink developed. The sink manifested itself in terms of the following adaptions to the extremely high density:

1) increased mortality, especially among infants
2) lowered fertility rates
3) child neglect by mothers
4) sexual aberrations (e.g., homosexuality)
5) a percentage of rats became withdrawn from the community
   (Calhoun terms them "somnambulists")
6) other rats became hyperactive and overly aggressive

In the end pens where the alpha rats guarded the entrance ways, the density was kept very close to "normal" rate density and none of these adaptions developed (see Calhoun, 1962: 139-148).

There have been other animal studies of the effects of extremely high density (overcrowding) and the adaptions that result. For example, Perrins (1965) studied the Great-Tit (a bird) and found that under overcrowded conditions the Great-Tit reduced its clutch size (the number of eggs laid) and this, as well as infant mortality, reduced the numbers of offspring. Christian and Davis (1964) report very similar findings for
shrews. Higher up on the evolutionary scale, Susiyama (1967) researched the effects of extremely high densities on monkeys, and reports that overcrowded conditions lead to the breakdown of the social order (the organization that would exist under ordinary population conditions) and subsequently, adaptations such as feticide, infanticide, hypersexuality, and aggressiveness occurred. From all of these studies, as well as others not reviewed here (see Wynee-Edwards, 1962), one adaption that recurs is decreased natality (lower birthrates).

One must be quite selective in generalizing from these types of studies done on animals to human beings. Human beings have different density requirements and as Hall (1969) has indicated each human population with its unique social organization is differentially susceptible to the effects of overcrowding. Stated another way, as the population density increases there is an increase in the frequency and types of interaction between the organisms. CRITICALLY, THE NATURE OF THE SOCIAL ORGANIZATION WITH ITS ATTACHED RULES OF INTERACTION either mitigates or fails to mitigate the strains of the increased interaction. When there is a failure in mitigation, there is a high probability of a breakdown in the general rules of conduct which leads to a greater range of adaptive behaviors. In terms of generalizing from animal organisms to human organisms, Hawley (1950) indicates that after all and perhaps foremost humans are but "a further manifestation of the tremendous potential for adjustment inherent in organic life." Thus, when generalizing from non-human aggregates to humans, one must keep two related factors in mind: (a) non-human aggregates have varying density requirements; and (b) human aggregates have varying density requirements. As Wynne-Edwards (1962) has shown the density requirements for non-human aggregates varies with
which particular species is under study; some species can tolerate high densities better than others in terms of not manifesting the "pathologies" found in the Calhoun experiment. In addition, one should not interpret the limiting of population through decreased natality as a "pathology" but as an adaption.

In terms of human aggregates, Hall (1969) indicates that each particular social organization has normative standards in terms of density. Groups that are in frequent contact with each other, that touch each other, appear to be able to tolerate higher densities than those groups that are non-contact in nature. Baxter (1970) utilizing covert observations of natural groups found variable distances between Anglos, Mexican-Americans, and Blacks. Baxter (1970) picked four locations at a zoo and had two independent observers score the average distances that varied groups of persons maintained in their interactions. He picked these settings on the basis of their open-enclosed dimensions, traffic flow, and whether groups stopped to interact or continued walking. He found that Mexican-Americans stood closest to each other, engaged in greater amounts of touching behavior, and that females in the Mexican-American groups stood closest with the exception of adult children pairs. Anglos were intermediate in all of these categories, while Blacks had the greatest distance between group members (see Baxter, 1970:444-456). Baxter (1970) found in addition, that children stood closest and touched more often than adolescents who stood closer than adults; overall-male-female pairs stood closer and touch more often, with female-female pairs intermediate, and male-male pairs requiring the most space. Finally, Mexican-Americans clustered closer together when they were outside, while they increased their distances indoors;
Blacks were exactly opposite—outside they increased their distances while indoors they spaced themselves closer together. Anglos appeared to space themselves similarly indoors and out (see Baxter, 1970:444-456). This last finding is interesting in that the buildings were designed by Anglos, and perhaps if put into a context not designed by them, they would make adaptations. Hall (1969) indicates that "mediterranean peoples" have closer interaction distances than northern Europeans, and Little (1968) found this to be true: mediterranean aggregates stand closer and touch more often in their interactions than do northern Europeans. Thus, it appears that human aggregates have differential adaptive patterns to the space they inhabit, and these differentials can be expressed in terms of their rules of interaction [which include spacing rules]. As I have indicated before, these rules can either facilitate adaption to high density situations or, as in the case of non-contact cultures, lead to increasingly stressful situations.

Since the Calhoun (1962) experiments with rats, several studies of the effects of high densities on human aggregates have been carried out with equivocal results. Mitchell (1971) studied the effects of high population density and overcrowding in Hong Kong. He used three large-scale surveys that involved 3,966 individuals, 561 husband and wife pairs and 2,631 persons married but their spouse was not interviewed (Mitchell, 1971:20). As Mitchell (1971) notes, the densities in Hong Kong are extremely high when compared to American densities. For example, 39% of the respondents share their dwelling units with nonkinsmen; 28% sleep three or more to a bed, and 13% sleep four or more to a bed. The housing units are not likely to have tap water, flush toilets and cross ventilation and as many as ten people per room. Naturally, the poorest
sections of the city suffer the greatest deprivations in housing as well as other deprivations (Mitchell, 1971:21). The physical characteristics of the housing do not appear to have significant effects on the production of emotional strain, but when coupled with social features there are effects; that is, the social features manifest potentially destructive outcomes only when combined with certain physical settings. In general, the number of households sharing the dwelling and the number of people in the dwelling unit appear to effect levels of strain and stress. As the numbers of household sharing the dwelling unit increase, the stress and strain increases. In addition, floor levels proves to be a significant variable. In Hong Kong [as in high rises with limited access elevators, or elevators that do not work], the higher up one is the harder [more work and time involved] it is to get away from the dwelling unit. Thus, there are more forced close relationships between members of the dwelling unit. This was especially true when the interactions were with nonkinsmen (see Mitchell, 1971:23-24); that is, when persons were in forced interaction with kinsmen there was not a production of stress such that mental disorders developed. Moreover, when persons were on the ground floors or lower floors of the buildings, the levels of stress decline so that the effects of nonkinsmen is mitigated. Likewise, Mitchell (1971) found that hostility levels increased the higher up the floor level was, but that this effect was related to the number of households sharing the dwelling unit.

Mitchell (1971) further indicates that high densities effect child rearing patterns. Specifically, high densities affect the amount of surveillance that parents have over their offspring such that as the density increases, the proportions of parents who indicate they don't
know where their children are also increases (Mitchell, 1971:26). Another factor affecting the degree of surveillance is the floor level of the dwelling unit. Mitchell's (1971) explanation for this relative freedom of the child in high density dwelling situations is that the density creates uncomfortable situations for the members of families in which there are children. Thus, the children are given greater freedom to leave the home [thereby reducing the density], and in leaving the amounts of surveillance the parents can maintain is reduced. The lack of surveillance leads to "the development of many of the social problems of youth assumed to be characteristic of high-density slum communities around the world (Mitchell, 1971:26)."

Mitchell's (1971) findings by and large can be applied to high density dwellings that have similar characteristics. For example, in the various urban centers of America where high rises were constructed for the poor several of the factors Mitchell (1971) finds related to surveillance and emotional stress obtain. First, the persons are poor which is the primary reason they live in the high rises. Secondly, in many of these buildings, there are elevators, but they either do not work, or they are time-prohibitive [they take minutes, sometimes as much as ten to twenty if they arrive at all]. Thus, the higher up one is the more enforced are the boundaries of the dwelling units, the less surveillance one has over one's children who are playing 24 stories below.

Another study of density effects was carried out by Galle, Gove and McPherson (1971) in the city of Chicago. However, this study has many serious defects the first of which was the use of official statistics as indices of "pathology." For example, as a measurement of density they
utilize number of persons per acre, and later numbers of persons per room [a much more effective measure]. They are on relatively safe ground using fertility and mortality rates for the city, but then as measures of "pathologies" they use official rates of juvenile delinquency, admissions to mental hospitals, and numbers of recipients on public assistance [as a measure of "ineffectual parental care of the young"] as well as racial and social class variables (see Galle, et. al, 1971:5-8). The authors claim familiarity with Mitchell's study, yet they ignore many of the important findings especially as these findings relate to their own research. As I have indicated previously, the use of official statistics for some areas of deviance (juvenile delinquency and mental hospitals being two of those areas) as accurate measures of incidence is precarious. For example, Green (1970) analyzed arrest rates for Blacks and whites and found that rates were not race related but class related. That is, the lower the socio-economic class of the person the more likely he or she shall be arrested (see Green, 1970: 476-490), and of course, this in line with our earlier findings. Thus, in many instances, the Galle, Gove, McPherson study is correlation by definition. As Mitchell (1971) pointed out even in Hong Kong, the ability to pay influences the degree of density one will tolerate; likewise the ability to pay [or the amounts of the economic surplus one has available to effectively compete for space and resist the deviant appellation] is clearly related to being labelled deviant. Beyond these considerations, the Galle, Gove and McPherson study, a study of Chicago, fails TO DISCUSS THEIR WORK IN LIGHT OF THE FIFTY YEARS OF ECOLOGICAL WORK ALREADY DONE ON THE CITY. This ecological work, much of which we have reviewed in earlier pages, indicates that in slums and zones of
transition people are overcrowded and privacy is reduced. Moreover, surveillance of children is reduced and as a result youth groups and gangs form (see on this point Thrasher, 1936 among others mentioned earlier), and rates of arrest and deviation increase. I find it even more incredulous that these authors can state in their beginning pages that there "is a paucity of good research" as if what they have offered is a correction on this perceived trend. Such a conception on their part is extremely unfortunate and any attempt to pass this conception on to others would be sheer deception.

Marsella, Escudero and Cordon (1970) were interested in the effects of high density on the development of mental disorders in Manila, Philippines. The area which they chose to study was the Sampaloc municipal district in Manila because the area offered the representative contrast that characterized Manila as a whole. They describe the area as follows:

It is both a business and residential area; large businesses, small shops, and peddlers coexist side by side. Large houses, sheltering corporation leaders and professionals, are separated from the shacks of laborers by brick walls topped with jagged glass. Some streets are small and quiet; others are large and noisy. These are the contrasts the authors sought (Marsella, Escudero and Cordon, 1970:289).

Like Hong Kong, Manila is a city where even those who are relatively well-off [have adequate shares of the economic surplus] are living in high densities.

Interviewers administered a questionnaire and in addition visually estimated the amounts of space available to the occupants. Ninety-one
males were used in the study and they were classified into categories on the basis of age and social class. The researchers found that low social class was related to numbers of persons per dwelling and mental disorder [as measured by a symptom checklist]. That is, as the social class decreased, the numbers of persons per dwelling generally increased as did the rates of mental disorder. However, as they point out, even in middle class areas of Manila, there exists high densities of persons, and the high density seems to be related to mental disorder independent of social class (see Marsella, et al, 1970:291-293). This finding is important in those areas where density is not necessarily related to social class, where the ability to buy space is almost irrelevant since there is simply no space to buy.

An interesting experiment designed to test some of the effects of high density situations on personal mood states was carried out by Griffitt and Veitch (1971). These researchers, working from the United States Riot Commission Report of Civil Disorders (1968) noted that the commission used the variables of density and temperature as partial explanations for the eruptions of civil violence. For example, "in most instances, the temperature during the day on which violence first erupted was quite high (U.S. Riot Commission Report, 1968:123);" in addition, the report noted that there were many people on the streets during the times when the violence occurred and that the temperature had some effect on the numbers of persons on the streets (U.S. Riot Commission Report, 1968:123; 325). Griffitt and Veitch (1971) using introductory psychology students subjected them to varying conditions of density and temperature and asked them to perform a series of tasks [such as a mood adjective check list, and judge strangers responses]. Griffitt and
Veitch (1971) report that on the basis of their data, there is evidence that overcrowded conditions promote negative affective responses, and that these conditions can be worsened by high temperature, but temperature was not as important as the density of the population.

Tucker and Friedman (1972) used the college cafeterias of three size graded universities as sites to study the effects of population density on the size of groups. They used three campuses that were in the area where they live (the University of Texas--high density; St. Edwards at Austin--low density; and Southwest Texas State University--an intermediate type), and collected data by counting the number of persons in a group as they emerged from a cafeteria line and made their ways to tables. The researchers believed that as the population density of the cafeteria (as indicated by the size of the school) increased, there would be a decrease in the size of interacting groups, and they confirmed this hypothesis; in addition, as the population density rises, it appears that males form smaller groups or become loners (Tucker and Friedman, 1972:742-750). This study was criticized, and rightly so, by Fischer (1973; see also Tucker and Friedman's (1973) reply) who points out that they failed to take account of race, ethnicity, and class factors, as well as the fact that there may be many more available places to eat as the campus grows in size. All of these criticisms are quite valid and throw suspicion on the findings.

On the basis of the available data, it becomes quite difficult to discern with any accuracy the relationship between population density and the production of deviation. Durkheim's (1964) analysis of the division of labor would indicate that as the density of the population increased, there would be a shift in the basis of solidarity, and there
is indication (see Hammond, 1966) that during the time period when the shift is made from mechanical to organic solidarity social conflict increases. However, at some point, even an organic solidarity breaks down under continuous pressures of extremely high population densities. It becomes difficult to separate several sets of variables that seem to interact upon one another and enhance the destructive effects of high density situations. Clearly, in America, where space is available the effects of being poor manifest themselves interconnected with high density situations especially in urban areas. That is, the ability to compete for greater amounts of space is directly linked to one's position within the economic infrastructure which is, in turn, linked to the amounts of rewards [shares of the economic surplus] that one receives.

The effects of unfamiliar others, as Mitchell (1971) points out seems to be related to the production of emotional stress. Specifically, persons can tolerate high densities of their friends and relatives much better than non-related individuals. Perhaps, the persistence of ethnic and racial segregation in the United States has some relation to this variable, but at this time it is not at all clear what that relationship might be. Mack (1954) indicated that ecological segregation reduced the inter-ethnic tensions between groups, which would, I presume reduce the amounts of emotional stress. Likewise, Van Manen (1971) in her study of the ecological variations of deviance in Singapore makes a similar observation. The segregation of cultures [in this case Chinese and Malay] appears to minimize social conflict and thus reduce the amounts of deviation. In Singapore's case, apparently the reduction of tension is even greater since the Malay's definitions of success are different
from the Chinese. Thus they apparently do not compete as intensely for valued goods and services since their definition of what these goods and services are varies. Furthermore, Van Manen argues that deviation is reduced in these high density areas by the provision of social services by the government (see Van Manen, 1971:389-406). One might state the relationship between tolerance for density and similarities in others in this manner: the greater the perceived and manifested [acted out] similarities the higher the toleration of density. Similarities can be based upon kinship or upon differential association; in the latter case, persons develop affective bonds as well as commonalities of interest which facilitate adaptive patterns to high density. But this hypothesis, in fact, is an insufficient explanation of the variables involved. It would appear that even with many similarities in common, persons who are existing under forced interaction patterns and the conditions of high population density experience a great amount of emotional stress perhaps because of the lack of privacy. But here too, there can be additional variables that mitigate effects. The remarkable capacity of our species to segregate territory by the use of partitions [or houses for that matter] reduces the amount of visual and auditory interaction that must take place. All in all, the relationships between these variables and the production of deviation remain extremely complex and open to large amounts of speculation. However, one should keep in mind some of the findings [for example Mitchell's (1971)] as we examine a set of related phenomena [pollution] which appear to contribute to stress levels.
As Hawley (1950) has noted organisms are constantly doing things to their habitats that gradually make them uninhabitable. They do this by two related processes: (a) they reduce the amounts of edible flora and fauna; and (b) they pollute their surroundings. In the former case, the organism gradually must shift its base of operations in a constant search for life sustaining food sources, or it must find ways of sustaining its food supply by allowing enough of its prey to reproduce. Predators, in general, usually succeed in catching the very young, the old, the diseased and the infirm. Except for man, most other predators have kill ratios that are quite low; a lion pride may make ten approaches a day and miss every time, but man with his superior technology, would not. Beyond hunting, human beings have devised systems of agriculture that supply a more sustained food base, but only at the expense of the sophistication of the ecosystem. That is, exploitation through agriculture reduces the complexity of the ecosystem by reducing the numbers of flora and fauna in that system; the exploited system is thus composed of a lower number of species and biological types (see Margalef, 1968:45-49). In addition, through the uses of agriculture, the structure of the soil is simplified and consequently, the numbers and kinds of soil micro-organisms is reduced which puts a greater stress on the ecosystem. To a limited extent these effects can be mitigated by crop rotation, but in practice, the only effective way of replacing nutrients short of stopping agriculture is the use of fertilizers. These fertilizers have additional effects on the structure of micro-organismic life which naturally affects the food chain at its base. The overall
effect is to produce a simplified ecosystem that is more prone to break-
down.

POLUTION IS A NORMAL PHENOMENA, and one might well wonder what I
am doing discussing it under the rubric of deviance. For one, if organisms
are constantly doing things to their habitats that make them uninhabitable,
and if one conceives of the 3.6 billion persons polluting, one might well
want to consider where we as organisms are going to go when the habitat
[planet, Earth] becomes uninhabitable? I for one consider the notion
of leaving the planet a moot point since we as a species will not be able
to master the technologies necessary to do so before we as a species have
experienced the effects of the pollutants. So, the answer to the first
query is nowhere, and this answer raises problems of survival. Survival
problems, and the converse, problems of death certainly stand somewhere
near the notion of deviance. That is, it is deviant to kill, murder,
an organism like ourselves within our group, and when persons are caught
for this they are duly sanctioned. I doubt that polluters will be
viewed as killers, although of course, there have been instances where
polluters have directly contributed to murdering portions of human
aggregates (see Schrenk, et. al, 1949; and Revelle and Landsberg, 1967).
Secondly, there is some evidence that persons labelled deviant (i.e.,
blind, heart attack victims, etc.) are unfortunate products of a pol-
lution process, and that various kinds of pollutants contributed to their
dis-ease. Remember, the planet is an interrelated and interconnected
web-of-life that cannot be distinguished even though mankind has tried
to make distinctions by social definition. Third, the amounts of pol-
lutants in any habitat influence changes in the social organization of
that population which influences the organization of rules structures that produce outcomes of deviation. Fourth, there are indications that the social organization of a population either promotes or hinders amounts and productions of pollution via its technological order. Specifically, the economic infrastructure is responsible via the means of production for separating product from waste, and discarding waste.

Pollution can be defined nominally as an excess of either naturally occurring or synthetic matter that exists in concentrated amounts in selective parts of the ecosystem. There are basically only three mediums that one can pollute: liquids, gases, and solids. Likewise, there are really only three types of pollutants: liquids, gases, and solids. If one wanted to, one could make a nine-celled table of the possible combinations of mediums to pollutants (see diagram next page). Human beings, especially humans in industrialized nation, have succeeded in polluting every medium with every kind of pollutant, and of course, the mediums include themselves. One should also keep in mind a simple formula: the more polluters there are the more pollution there is, and the more pollution there is, the higher the probability of an ecosystem breakdown. There are basic differences in human's conceptions concerning exactly what is a pollutant, and what is a critical amount of pollutant. Industrial agents have much more liberal definitions than conservationists, and I personally do not wish to become involved in ideologizing for one side or the other. Instead, I will examine research literature on the effects of various types of pollutants on the human organism noting the various types of dis-ease that has been observed to result. One surely is aware that being blind in America is viewed as a deviance subject
FIGURE II
SIMPLE POLLUTION-MEDIUM PARADIGM

<table>
<thead>
<tr>
<th>Type of Medium</th>
<th>liquid</th>
<th>gas</th>
<th>solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>liquid</td>
<td>ammonia &amp; cyanide from steel production</td>
<td>(unstable - results in gas gas pollution) insecticide</td>
<td>suspended solids from steel production</td>
</tr>
<tr>
<td>gas</td>
<td>ethyl-eneimines (from rocket fuel and pesticide)</td>
<td>carbon monoxide</td>
<td>tetra-ethyl lead emission from cars</td>
</tr>
<tr>
<td>solid</td>
<td>2,4,-D (pesticide aquatic) thru seepage</td>
<td>?</td>
<td>beer cans in in parks</td>
</tr>
</tbody>
</table>
to job discrimination and thus penalization in the competitive struggle. So we might want to ask, to what degree is a form of blindness related to pollution. This steps somewhat outside of our definition of deviance since the blind person receives the label, rather than the polluter. But of course, there have been polluters who have been caught and labelled deviant. Naturally, the penalizations [sanctions] varied along lines of social power and social class. I will start with "solid waste" pollutants that are deposited within the three mediums.

Solid waste is an analytical category refering to all those wastes or pollutants whose time of decomposition is the longest of the three mediums. In this category I would include aluminum beer cans found strewn on beaches, in lakes, and briefly in the air [the gravity of the situation nullifies ultimately the ability of solid waste matter to stay in mediums lighter than itself]. The Federal Sewage Disposal Act (1965) defines solid waste as "... garbage, refuse, and other discarded solid materials, including those resulting from industrial, commercial, and agricultural operations, and from community activities." Recent Federal Government figures (1971) indicate that there are 3.3 billion tons of solid wastes entering the habitat [and for that matter the environment] each year. Agricultural sources account for approximately 2 billion tons, mineral wastes produce 1 billion tons, and industrial sources beget 0.3 billion tons per year. These wastes can be burned and thus transformed into air pollutants or they can be tossed into rivers and streams and become water pollutants. For example, agricultural wastes are either incinerated (air pollution) or composted in dung heaps. As Steele (1972) indicates dung heaps lead to the production of mosquito
breeding areas which result in over one hundred farm-waste related diseases (e.g., anthrax, salmonellosis, tuberculosis, brucellosis, and leptospirosis). When solid wastes from community sources are collected, they are usually sent to garbage dumps. The average home owner never has any conception of the amounts of solid wastes produced in one day since he is shielded from the total collectivity. This solid waste is usually incinerated and finds its way into the air. In a national survey of local garbage dumps, only 14% were reported to be sanitary (see Mulhich, Klee, and Britton, 1968:483). That is, besides polluting the air with solid waste, the dumps also serve as breeding grounds for mosquitoes.

One method devised to handle solid waste materials is re-cycling. In the United States, from the data at hand, it appears that re-cycling occurs only when it is economically feasible; that is, when it results in a net profit to the industry involved. Re-cycling appears to be growing in the United States, but of course, the economic infrastructure and especially the industrial aspects of it are growing at a more rapid rate; thus, in terms of the overall effectiveness of re-cycling, there appears to be a decline (Solid Wastes Management, 1972:8). Moreover, new unused sources are still less expensive than re-cycled material. One example of this comes from the pulp and paper industry where approximately 20% of the products are re-cycled. The industry reports difficulty in collecting enough re-cycled materials to make it profitable and in addition, once collected there are transportation costs. These costs arise from the location of the re-cycled paper vis a vis the location of the paper mills. An industry report indicates that to
run an economically efficient plant [one that would at least break even] approximately 100 tons of waste paper per day would be needed (see Steideny, 1972: 50).

One of the most visible solid wastes are automobiles which pollute at a much slower rate than many other materials. Nevertheless, abandoned automobiles must sit upon land that cannot be used for production, and one estimate places the number of abandoned automobiles at 20 million with an additional 4 million added every year (see Secondary Raw Materials, 1973: 145). Again, the major problem with re-cycling this metal is the transportation cost involved in moving the metal from its resting place to factories. There are of course, many other examples of this solid waste pollution and absence of re-cycling: rubber, plastics, glass, and mineral and mine wastes. But given the social organization of the economic infrastructure, effective re-cycling seems unlikely since it simply is not profitable.

There are basically two ways one can pollute the air medium and they are through "noise" and through solid, liquid, and gaseous elements. The first of these may not appear as a pollutant, but as noise levels increase, efficiency in activity, and in addition tension-bindings decrease. By tension-binding I refer to the levels of frustration persons can tolerate before producing either violent reactions of dis-ease related phenomena. In the past twenty years, the amounts of noise in the environment have rapidly increased largely from increased automobile and air traffic as well as industrial manufacturing (see especially, U.S. Environmental Protection Agency report, "The Social Impact of Noise," 1971). In general, noise levels increase as one moves toward the center
of any city, and decrease as one moves away from the center; thus, noise levels vary across habitats. For example, at the rim of the Grand Canyon the noise level [as expressed in decibels] is 16 decibels (see Berland, 1970), while on an average farm it would be 30-35 and in an average urban area 60-75. Naturally, the noise levels increase and decrease with the patterning of human activity so levels would be higher when there is more intense human activity, or during the daylight hours. Noise levels above 60 decibels are usually categorized as "very noisy urban" which means that an average conversation becomes difficult to carry on in an open area. At levels above 66 decibels, apartment living is undesirable unless the windows are closed [necessitating air conditioners in some climates]. A United States Environmental Protection Agency report (#NTID 300.3, 1971) indicates that a second floor tenement in New York City has an average decibel level of 70; a third floor high rise in Los Angeles [a car city], 78; and a third floor apartment next to a Los Angeles freeway, 80. This same report predicts an average rise of one decibel per year for the United States.

Deviations appear in association with high noise levels. Some of the effects that can occur are loss of coherent thought processes, increased mental stress, physiological damage to ears and loss of hearing. In addition, noise can effectively alter the meaning that one is trying to communicate via interaction (see Bragdon, 1970). Michaels (1965) indicates that high levels of noise, by creating stress upon the organism, are related to the production of colitis, high blood pressure, migraine headaches, and various nervous disorders. Likewise, unexpected noise has been demonstrated as an effective way to increase blood pressure,
heart rates, and breathing rates as well as produce sharp muscular contractions (see Broadbent, 1957). Glass et al. (1969) report that high noise levels are related to increased adrenalin production which can result in lowered frustration tolerance [reduced tension-binding]. Since all of these stress-related conditions occur differentially across ecological zones, one would expect the dis-eases related to these conditions to also vary by ecological zones. In general, the higher the noise level is, the less the space where it occurs is worth and the greater the probability that persons with smaller shares of the economic surplus will live in these zones. [This is in addition to the fact that these zones usually contain higher population densities than low noise zones.]

The other ways to pollute the air medium are through gaseous wastes, particulate matter, and liquid wastes. Oddly enough, pollution of the air due to particulate matter raises the temperature of the polluted area and this effect is greatest where the pollution is greatest or urban areas. Some forms of air pollution occur naturally; an example of naturally occurring pollution is the eruption of volcanoes which spew forth particulate matter. In general, these sources are not the ones that human beings have to worry about except for those humans who live near active volcanoes. Most forms of air pollution occur as a direct result of human effort. Ehrlich and Ehrlich (1972) report that the bulk of industrial air pollution stems from pulp and paper mills, iron and steel mills, petroleum refineries, smelters, and chemical plants. Automobiles are another vast source (90 million tons of pollutants per year in the United States of which 66 million tons are
carbon monoxide). Fuels for heating homes, offices and plants contribute an additional 7 million tons and the incineration of trash adds only 4 million tons per year. Ehrlich and Ehrlich (1972) estimate that the per year tonnage of pollution sent into the air in the United States is 140 million tons or about 3/4 a ton per person.

This type of air pollution is the less subtle in its effects on humans than noise; in the recent past some fairly large scale disasters have resulted from emissions into the atmosphere. One way these disasters occur is through the process of temperature inversion, or when cold air traps the warmer polluted layer on the planet surface, which results in significantly lower dilutions of the air. One instance of inversion occurred in Donora, Pennsylvania in 1948. Smog and fog created by the factories in the city remained undiluted and dispersed on and near the ground for six days. As a result, there were 6,000 reported illnesses [out of a total population of 12,300], 15 deaths, as well as numbers of lives shortened (see Schrenk, et. al., 1949). Another such disaster, one that is known to greater numbers of people [possibly because of the place where it occurred] happened in London, England in 1952. This inversion of factory, industry, and automobile pollutants lasted five days and resulted in 4,000 dead (see Revelle and Landsberg, 1967). But these occurrences, due to the presence of pollutants and, in addition, rare weather conditions, appear not to ordinary occurrences. Since most of the air pollution is usually blown away or at least diluted [but it is always blown somewhere else]. An analysis of emissions indicates that particulate matter and sulfur dioxide are the main causes of disease (see Davies, 1970: 35), and these are common forms of emissions in urban areas. There is little direct data on the rates of these
emissions as they vary across ecological zones, but I suspect they would be higher in zones immediately next to the plants that produce them [or low rent zones where the urban poor reside]. There are several epidemiological [ecological] studies of mortality rates for geographical areas. Lave and Seskin (1970) indicate that variations in air pollution are directly related to variations in the number of deaths due to bronchitis; that is, urban rates of death by bronchitis are twice as high as rural rates. In another study of mortality variations, researchers discovered that as pollution [as measured in particulate matter in micrograms per cubic meter per day] increased, mortality rates for asthma, bronchitis and emphysema increased (see Winkelstein, et. al., 1967). In general, then, the higher the particulate matter in the air the higher the rates of mortality for specific disease categories. Naturally, these pollutants vary in their concentration by ecological zones, and there is every indication that the more undesirable habitats [those characterized by low rents, deteriorated dwellings located near factories] contain higher emissions. However, one factor involved in these concentrations is the direction of the wind, when there is one. Thus, one can look at wind flows, or zoned air space, and check the mortality rates along these corridors.

Other studies of the indirect effects of air pollution are inconclusive but present some indications that are disease and deviation related. Esposito (1970) indicates that such emissions as benzo-a-pyrene, a by-product of automobile exhaust, has been found to induce cancer in laboratory mice. Furthermore, there are mutagens [chemicals that cause
mutations in organisms] being pumped into the air from such diverse sources as aircraft and rocket fuel, pesticides, and industrial sources. Again, the levels of these pollutants varies directly with the distance from the center of a city. Benzo-a-pyrene, the hydrocarbon shown to be most closely related to cancer, has a concentration sometimes as much as 50 million times as great when urban areas are compared to the rim of the Grand Canyon [the cities most often compared are Los Angeles, Chicago, and New York]. In addition, asphalt, a common chemical compound utilized to make roads, has been shown to be carcinogenic when breathed and thus can be considered an occupational hazard for persons who routinely work around the stuff; this is, of course, also true for persons associated with the production and utilization of asbestos, copper [cadmium sulfate by-products], lead, and zinc.

Automobiles are not only the major form of transportation but also one of the major form of polluters. Hexter and Goldsmith (1971) report that concentration of carbon monoxide in the Los Angeles area is related to increased mortality. Naturally, higher concentrations occur in zones that are next to freeways, and the average daily contribution figured by Hexter and Goldsmith (1971) of carbon monoxide related death is eleven per day. Corn and Demalo (1964) reporting on emissions of sulfur oxides in the Pittsburgh area indicate that high emissions result in irritation of the respiratory passages and contribute to acute cases of asthma and bronchitis. Like all other pollutants mentioned, the concentrations of lead vary by ecological zones: the greater the distance from the center of the city the lower the concentrations of lead emissions. Lead accumulates in the cardio-vascular system with definite toxic effects
and is three to six times as prevalent in the bodies of urban dwellers as compared to rural dwellers. Furthermore, such concentrations vary within urban areas such that the ecological zones nearest to routes of transportation have much higher concentrations. These zones are generally inhabited by persons who can afford to live there. That is, in the competition for desirable habitats, those who have limited amounts of the economic surplus [in the form of capital] are forced to live in these zones and are thus, exposed more frequently to the effects of air pollution. In general, most urban dwellers do not live in cities by choice, but because they must "do dollars." That is, these organisms, by the nature of their skills, and the positions that result in the economic infrastructure from having those skills, are greatly influenced [by the necessity of employment] to live in urban areas. Other urban dwellers such as the unemployed poor, do not have the means to move anyway, and thus, ironically like the shellfish in a polluted estuary, they are stuck with an undesirable habitat they cannot leave, and one that yields every indication of shortening their lifespan (see on this point, Tuesday, 1971; Orski, 1971, and Klein and Arenberg, 1972).

Like the air, all of the water that is, is interconnected. All of the mediums we have discussed flow into each other, influence each other, and are distinguished by human beings only because such distinctions (via language) allow us to see the world. The water that you urinate into, and the water that you drink all come from the same source. To be sure, there are many intervening variables that either cleanse the water, or make it worse, but the water is interconnected as are all
things in the web-of-life. Water is being polluted from domestic, municipal, agricultural, industrial, and military sources, and like all other pollution is carried on daily like other normal activities. Some of the pollutants are very easy to detect, as in solid wastes like beer cans, coffee cans, pieces of metal, etc. Others one cannot see such as insecticides and DES [the animal hormone that fattens animals for market and is cancer producing]. And while there are genuine efforts to build water treatment facilities to cleanse our water, the population of polluters and the substances they use grow more rapidly than these efforts. This is especially true where there are concentrations of polluters, like urban areas for example.

A listing of the chemicals that are routinely dumped into the waterways of America would stagger one's imagination. Domestic use of detergents, in an effort to maintain norms of cleanliness, provides an excellent source of phosphates; these detergents are, of course, produced for the use of the person by the various industries that specialize in making soaps [this is not the only thing they make]. Municipal sources add such chemicals as arsenic, nitrates, and solid wastes. Industry, from point sources [that is, their effluent pipes to rivers] contribute heat, synthetic and organic chemical wastes which include plastics, synthetic fibers, and radioactivity. In 1970, the Department of Health, Education, and Welfare published a report on community water supplies indicating that companies dump not only known but unknown chemicals into rivers and waterways without treatment. Specifically, the report estimated that there are over 12,000 chemicals in industrial use that have "secret ingredients" that are routinely dumped into the water; some of course are
treated but others are not. In the previous decade, industrial pollution in America increased by three times the pollution of the population, and by 1968, industrial pollution exceeded domestic pollution by four times (see Zwick, 1971: 44; and Cost Effectiveness and Clean Water, Annual Report to Congress by the Environmental Protection Agency, March, 1971: 12).

In terms of water pollution the major industries that contribute the most wastes are: steel; paper; food processing; textiles; petroleum; electricity and transportation equipment; and non-ferrous metal companies. Let me give you an example, instead of re-cycling old metal like that found in the form of abandoned automobiles, companies find it easier to produce new ingot tons of steel. Each ingot ton of steel in turn produces wastes comprised of 125 pounds of suspended solids, 2.7 pounds of lubrication oils, 15.8 pounds of free and combined acids, about a half pound of emulsions, and in addition varying amounts of phenol, fluoride, ammonia, cyanide, and heat from cooling water. More than half of these by-products become pollution. If one wanted to, a quick equation of the total amounts of pollution available from these sources could be made, for there are approximately each year 1,000,000 ingot tons of steel produced (see Zwick, 1971: 44). In Pittsburgh, the three rivers that merge there and were used by the steel industries to dispense with their wastes took on this rusty brown coloring, and nothing could live in them. This particular problem has been somewhat alleviated by stricter enforcements of the laws against such actions, which resulted in a reduction of the amounts dumped in the water; however, they still must dispense of them and there are only two other mediums that can be utilized. Zwick (1971) indicates that "when total water and air pollution control
capital expenditures for each industry are compared to gross revenues, the most generous industry group spends a grand total of 0.69% of its revenues on controlling pollution." [these are the same industries that Sutherland (1949, Smith, 1961a; 1961b; Geis, 1970), and Leonard and Weber (1970) were writing about and we reported on in the previous sections on white collar crime.]

Pollution production is directly linked to the production of electricity by the use of nuclear reactors. The demands for electricity are going to increase partially because of the continuance of national work standards; that is, the infrastructure continues to impose a routine schedule on its components regardless of the climatic variations in the surrounding habitat. This is a critical point, for it links together increasing demands with the consolidation of the economy. To reach production quotas set for a unified national system, persons working in 95° heat must have air conditioning; likewise, persons working in 30° heat to meet quotas need additional heating. The unified overlay then must provide for these needs via additional electricity. In addition, there is increased domestic use of appliances that not only bring images to you [tele-vision], but smash your garbage, open you cans, dry your hair, mow your lawn, and a host of other non-essential items. That is, the demand [in terms of ability to pay] allows for the justification of increased production which allows for a greater number of plants to be opened. The cycle is inter-related to the point that demand is also "created" by the attachment of status characteristics to having items. Having an old car indicates that you cannot afford a new one, which indicates you are falling behind in adequately providing for your family,
etc. Naturally, not all persons are fooled by this ideologizing, but quite a few are. And of course, in some ways it does not matter since many of the appliances, such as automobiles are built to breakdown in a number of years. Furthermore, such cities as Los Angeles, where 60-70% of the space is devoted to cars in the form of street, parking, and freeways (see Hall, 1969: 175), it becomes virtually impossible to move about without an automobile. But I digress from the original issue, that of pollution from nuclear wastes - a part of which are provided by electrical plants currently, but the more plants there are the more plants there are to pollute.

Nuclear wastes from industrial sources, uranium mining, and uranium processing account for a portion of the waste in this category. Another source is military use which provided the atmosphere with a radiation belt. [there is some evidence that this belt creates a greater number of mutations - in the sense that the land area where the belt covers has a consistently higher rate of spontaneous abortions]. The use of nuclear weapons put into the air, excessive levels of strontium-90 and cesium 137 [which have half-lives of 28 and 30 respectively. A "half life" is a special term created to describe the atomic time associated with these particles in such a way as to indicate when their effects will be neutralized.] Currently, nuclear wastes are not put into the air, but because of the treaty on nuclear testing in the atmosphere, they are exploded under ground and thus put directly into the earth. This does not include "high level" reactor fuels, waste material that is placed in sealed lead containers and buried beneath the earth, or dropped into the ocean. In some instances, there are indications that such containers are gradually
leaking, and producing radiation in the ground and water supply (see U.S. Environmental Protection Agency, Radiation Data and Reports, December, 1972: 685-687).

One of the ways that water can be effectively changed, as we all know, is by the use of heat. Water can be made solid by making it cold, and it can be made gaseous by adding heat. When one adds heat to water, many of the organisms that live in the water are unable to adapt to the changes and thus die. This leads to a simplification of the ecosystem, and the more simplified the ecosystem, the higher the probability of a system breakdown. One example is that of the Great Lakes; specifically, two lakes within the system labelled Erie and Michigan. Lake Michigan had for several years this problem of heat disposal. Towards the bottom of the lake where Gary, Indiana and Chicago, Illinois are located, the water was simply warmer than in the north. Fish could not live in this area, and when they tried they died and washed up on the shore. [This is not to consider the related matter of building the Saint Lawrence Seaway that allowed for industrial expansion, but also an incredible number of life changes in the lakes area including the lamprey eel.] In addition, heat added to a body of water increases the aging process of that body of water and decreases the oxygen intake (see Research in the Physical Aspects of Thermal Pollution, Environmental Protection Agency, # 16130 DPU, February, 1971; and Eldridge, 1942). As Doudoroff and Katz (1953) indicate toxins are made more toxic by the addition of heat such that adding both pollutants to a lake and heat increases the pollution process. In terms of water, unnatural amounts of the following metals are found in the aquatic medium alongside, often, heat, and these metals
are listed by the levels of toxicity so that silver is the most severe: silver, mercury, copper, lead, cadmium, gold, aluminim, zinc, nickel, and chromium.

The contamination of water can occur in a variety of other ways such as strip mining. Vimmerstedt, et. al. (1973) indicate that water analysis below strip mines show high concentrations of sulfates, manganese, and hydrogen ions. These additives up-set the aquatic balance and moreover, occur near public water supplies such that portions of these supplies become effected. In Pennsylvania, in 1940, the Vandergrift Water Supply Company had to close because they could not economically neutralize the high acidic content of the local water; likewise the West Pennsylvania Water Company closed for similar reasons - both of these conditions resulted from mining and other operations in the area. The water in these areas simply was not drinkable (see Flentje, 1967: 13).

Human beings, like all other life, can be effected by heavy metal pollution. One of the most obvious examples is mercury poisoning which brings on permanent brain damage [and thus produces deviants] or in many cases death. While mercury is a naturally occurring chemical in the ecosystem, wastes from chemical, paint, paper, and pesticide manufacturing have made major contributions to high concentrations in selected parts of our habitat. Minamata, Japan experienced a mercury crisis in the early 1950's. In this city, where fish and shellfish are the staple diet of the residents, large quantities of these aquatic creatures became heavily loaded with mercury that came from nearby factories. The result in Minamata was 43 dead, 19 brain damaged babies, many losses of eyesight [total blindness], as well as many losses of the use of limbs. Goldwater
(1971) indicates that at least 1/4 of the human population has measurable amounts of mercury already within their systems, and others (Smith, 1972: 1237-1239; Nature, vol. 232, 1971: 15-21; Carr and Wilkins, 1973: 62-63) indicate that a high mercury concentrations exist in surface seawater and woody plants.

As I mentioned before, detergents are major sources of waste and specifically, good ways to put arsenic, mercury, phosphates, and other chemicals into the water medium. The most frequently used detergent in America [the linear alkyl sulfonate type] persist in the aquatic environment for long periods of time (see Andrews, 1972), and in 1970, two and one-half million tons of such detergents were produced (see Jones, 1972). Approximately two-thirds of these waste makers were manufactured by three corporations: Proctor and Gamble; Colgate-Palmolive; and Lever Brothers. [It is possible in some areas not served by municipal treatment facilities to serve up a glass of water with a "head" on it!]

Nitrogen is another chemical that when it occurs in high amounts can precipitate undesirable adaptations in human organisms. The high concentrations found in our habitat are directly related to the use of nitrate fertilizers, human sewage, animal wastes, and industrial sources. Methemoglobinemia in infants [or blue babies] results directly from high nitrate intake; likewise, high nitrate intake has been shown to be associated with behavioral disorders and mental deficiencies (see Gruener and Shuval, 1969). As Epstein and Lijinsky (1970) have indicated, nitrates can have secondary reactions in the human stomach when they meet up with other chemicals such as food flavorings or decaying meats which produce carcinogenic reactions.
Pesticides, obviously, kill insects. Just as obviously, the higher the concentrations of such products are, the higher the probability they will kill humans. As I mentioned in the beginning pages, the form of life varies, but the underlying process is quite similar. Pesticides can easily kill humans and do damage, and such information is usually printed on the labels that accompany such products. It is not uncommon for house cats, sprayed with flea powder, to clean themselves as they do with their tongues and become ill thereafter suffering damages to their systems. Many of these products contain "DDT" which as Butler (1966) cogently points out is mutagenic and carcinogenic, and despite this knowledge [which is quite common amongst manufacturers of the products] their world wide production and use continues, and some of it finds its way to your bodies via the food you eat, and that water that you consume daily. There is an intimate linkage between DDT, other insecticides and agricultural production [which in turn via the production of an economic surplus spurs population increases which demand greater yields from agriculture which further utilizes chemical fertilizers and insecticides, etc.]. One of the most interesting properties of DDT is its differential concentrations; DDT likes to concentrate in fat [adipose] tissue such that studies of oysters indicate 70,000 times as much DDT in the oyster as compared to the aquatic medium around the oyster (see Betler, 1966: 253-259). DDT also directly effects the reproduction abilities of aquatic life; for example, the calcium layers of aquatic birds egg shells become thinner, thereby yielding a decreasing number of young (see Roskan, 1968: 323-329). An example of what this can mean for human populations comes from the
California town of Montebello, where a small factory was producing an aquatic weed killer known as 2,4,D. Contaminated waste waters from the factory could not be fully treated by the municipal treatment plants and residents began reporting a "funny" taste to their water and odors developed in the well water. Plants that were irrigated with water from the wells died, and the water was unstable for three years thereafter since residues from the chemicals had leaked into the ground. A very similar occurrence happened at the Rocky Mountain Arsenal near Denver, Colorado in 1959 where chemical warfare products are manufactured (on 2,4,D and 2,4,DCP effects see Faust, et. al., 1964; and Gauvin, et. al., 1966).

There is an additional effect from the process of spraying pesticides and that is the development of pesticide resistant pests. Cole (1969) has pointed this out, and one can only hope that humans might develop similarly. This kind of hope though is idealistic given the relatively slow adaption rates for our species. Instead, it appears that insects may be able, by adapting to the pesticide levels, to sustain their numbers [not their variety as strains will die], while other life-forms higher up on the life chain suffer the destructive effects of the pesticides.

There are so many other sources of water pollution and so many other effects on the web-of-life that it would be difficult to cover them all in a year of continuous research and writing. But before I leave this topic I would like to consider one more source - oil. Oil slicks on oceans have become routine and there are companies that specialize in cleaning these slicks up by chemical means. Oil is necessary because of
the arrangement of the economic infrastructure and its planetary spread. There seems no way to stop this spread since many other nations now desire the "ways of life" and "improvements" brought by the use of oil and its attendant technologies. But the extraction of oil, especially in geologically unsafe areas has consequences for the web-of-life, and one example of these consequences was the oil-spill that occurred off Santa Barbara California in 1969. The Union Oil Company had been allowed to drill in an area that was geologically unsafe and a massive leak occurred that resulted in approximately 21,000 gallons of crude oil per day leaking out for 12 days [162,000 gallons]. Even though the leak was finally fixed and "stopped", divers who went to the bottom of the drill site reported oil sludges six feet thick on nearby reefs and the aquatic life in the area was effectively reduced (see Newsweek, vol. 73, February 17, 1969: 31-32; Time, vol. 95, February 9, 1970: 46). There are so many other examples of oil slicks and the effects of such slicks on the web-of-life that I find it needless at this point to detail them (see if you wish, Tendron, 1968: 114-121; Marx, 1967: 83-110).

Let us be clear about some issues, pollution is directly related to the numbers of people and the amounts and kinds of technologies utilized by a given social organization as it meets the needs of its population. Pollution is selectively put back into the habitat in such a way as to make some parts of the habitat more undesirable to live in than others. These undesirable factors are reflected in land values, especially in the case of urban areas. Persons who live in these zones usually cannot afford to live in other places, and thus their relative
lack of competitive power subjects them to increased chances of ill health and effects from pollution. However, urban habitats in general are more polluted than rural habitats, and the numbers of people living in urban habitats can be directly linked to the availability of opportunities provided by the organization of the economic infrastructure. This infrastructure utilizes a technology that contributes in heavy amounts to the waste problems, and this contribution is not mitigated primarily because there is no profit involved.

Some ecologists claim, like Hauser (1971) that technology is a neutral thing, a tool, nothing more and nothing less. I cannot take this view. Human consciousness acts with intention and tools were made by men as *utilizers*. That is, they were made with some purpose in mind, and that purpose includes all the variables they believe to be relevant. When a man creates a tool that makes waste, and when that man does not provide in his tool-use for waste clean-up, then it should be clear that the waste was not relevant to his project. IN FACT, THAT IS HOW THE "WASTE" BECAME DEFINED AS WASTE RATHER THAN PRODUCT. To separate the tool from the tool-maker and the tool-user, is in my opinion folly of the highest order. It becomes obvious, given the scale of the waste problem, and its effect on life that something should be done. It also should be obvious that we cannot shut down the factories and stop the use of fertilizers since we have created a population explosion that would utterly collapse if the food supply were cut off. Indeed as Ehrlich (1968) has indicated, this cut-off will occur selectively anyway. If we take a moment to examine Ehrlich's (1968) thesis, we can
see its relation to the relative social power involved. In this case, social power can be defined in terms of having a desirable habitat [one that produces an economic surplus] and the technologies necessary to defend such a habitat. The argument runs like this:

1. The poorer a population is, the higher the death rate [the greater the numbers of people will die];
2. Being a poor person in a poor population increases the probability of death;
3. Being a child (a person with especially low amounts of power) in a poor population increases the probability of death;
4. Being a poor child in a poor population increases the probability of death (see Ehrlich, 1968).

These hypotheses are not unlike hypotheses concerning deviance:

1. The probability of being labelled deviant increases other things being equal, as the relative amount of social power decreases;
2. Being labelled deviant brings a larger share of the "negative rewards" than "positive rewards" [death being one form of rewarding deviation];
3. One of the negative rewards is an undesirable habitat;
4. The probability increases that the socially poor will exist in undesirable habitats which will manifest:
a. higher rates of deviation;
b. higher rates of health problems; and
c. higher mortality rates.

After all, as the early Chicago ecologists pointed out [see earlier sections] living in the zone of transition or the slum IMPOSED UPON THE ORGANISMS a set of conditions that required adaptive patterns that resulted in higher rates of deviation. It was not the organisms that were inherently pathological, but the interaction between those organisms and the IMPOSED SOCIAL AND PHYSICAL ENVIRONMENT that produced the deviations. When the organisms were placed in more desirable habitats, the rates of deviation declined [see also the Calhoun (1962; 1966) experiments on this point for rats].

If we apply these power variables to the pollution issue, we can readily understand how it is that business [large social power] claims that the costs of cleaning up the environment will have to be paid [negative social rewards] by the consumer [low social power]. And this shall be the case as long as the infrastructure is organized as it is requiring automobiles, requiring large amounts of fertilizers and pesticides, and requiring air and water and land pollution. As Dubos (1970) an eminent scholar has noted:

Because human beings are so likely to become adapted to many undesirable conditions, and because they tend at present to make economic growth the most important criterion of social betterment, it will not be able to create a climate of opinion favorable to the immense effort needed for the control of environmental
threats. Yet it is certain that many environmental factors exert a deleterious influence on important aspects of human life. The reason this damage is largely overlooked is that the damage caused to human life by environmental insults is usually so delayed and indirect that it escapes recognition through the usual analysis of cause-effect relationships.

And in terms of these issues, this section makes me feel sadly like a human Anubis; you know, the Egyptian god with the head of a jackal who lead the dead to judgement.
SUM CONCLUDING REMARKS

This essay, as I told you in the very first sentence, was an attempt to relate a vast perspective, a way to see the world, to a very large conceptual area, deviance. The ecological perspective is a very old one; the idea that all that is alive, is interconnected and interrelated influencing and now being influenced each by the other is very ancient. In fact, this perspective, like all others, is really a philosophy that makes the assumption of the inter-relatedness of life. It is a way to see the world, and what is in the world, a place that is, after all, a very complex and mysterious place to be. Ecology as a perspective embodied and practiced by living human beings has three major divisions and we concentrated on that division labelled "human ecology," and attempted to relate it to human being's notions of deviance.

Human populations socially organize themselves to meet their needs through a technology in an environment. This social organization can take on many forms, and the forms that it does take on arise in relation to the context of their being. They arise in relation to the habitat in which they are spatially and temporally located. Human social organizations are of varying complexity and in general, the more people there are, the more people there are to be. That is, as the population gets larger there arises an increasingly complex division of labor, and as the labor gets divided so does the reality that the labor experiences. There arise more rules and more ways to see the world. These ways, in the beginning usually overlap and exist under one overall set of "things" believed to be: the family not only raises the child, but educates the child; the education is in pragmatic affairs that allow the social organization to economically meet survival needs. In these small social
organizations, reality is experienced as a unified whole. But as the population increases (as a result of a stable habitat that produces an economic surplus) reality complexifies. There is simply more to be known, and there are more people to do the knowing. In conjunction with these events, the social organization develops a technology, or a set of tools which enable it to meet its ongoing needs. The primary tool is language, and this system of vocalized signs and signals allows for the socialization of members into the reality system of the social organization. This reality system contains rules that structure the behavior of the humans that are members, and define what constitutes a deviation.

As the population continues to increase, being becomes more specialized and reality more complex. There arise "institutions" or social habits," or socially shared sets of ways of doing and seeing, that are utilized to meet the ongoing needs of the population. Each of these institutions has its own set of rules, and thus its own way of seeing the world. It becomes possible then for the rules of one institution to conflict with those of another, and so it becomes possible for a person to obey one set of rules and break another at the same time/space. As a way of resolution to this problem, there develops a "political overlay" or the political institution that claims ultimate jurisdiction on defining what is, how one acts, and what happens if you do not act appropriately. But each institution retains an amount of social power, and in some social organizations the political overlay and the economic infrastructure cannot be readily distinguished. In fact, the economic institution (infrastructure) becomes dominant because as an institution it possesses superior technology and in addition deals with sustenance. This is especially true of social organizations that have defined reality as
material and seek to maximize their gains of material through maximum exploitation of their habitat.

As materially oriented social organizations [those labelled sensate] with their increasing populations and complexifying realities locate themselves in space and time, hierarchical arrangements of social power develop. This power is directly related to the position one holds in the system of rewards that are derived from the economic surplus. The amount of social power humans can muster enables them to secure niches within the habitats covered by the social organization. Some of these habitats are more desirable than others, and in general, the more socially powerful people occupy the more desirable habitats. Undesirable habitats are then left for the humans that have relatively little amounts of social power [as defined through capital that is exchanged for the labor one puts out in the economic infrastructure]. Undesirable habitats have unique interaction patterns that are attached to them, and so, totally, those who possess small amounts of the economic surplus, through competition, find their niches in undesirable environments. Since this is not an individual process but a process applying to aggregates of people, niches in habitats tend to cluster in "ecological zones" that can be described in terms of their recurring features. Deviance like all other social phenomena clusters in ecological zones and as one moves from one zone to another the kinds of deviance change.

Deviance is an appellation that has attached to it a set of positions within the social organization that can be characterized as undesirable. For the deviant, the achievement of the label can be seen as an unfortunate outcome of a competitive power struggle in which his or her
definition of reality cannot be defended. Deviance only occurs when there are more powerful others that can enforce their rules and the attendant sanctions on the person, act, attribute or things they see as deviant. Thus, the amount of social power a person or group has influences not only the habitat location, but in addition, the probability of receiving the deviant appellation - given of course, that one breaks the rules as defined and enforced by those who possess larger amounts of social power. Now some of these definitions of "what is deviant" have been around for hundreds of years while others are more recent and even novel. Nevertheless, those who are socially powerful, even if labeled deviant, can also muster their social power and the legitimacy that goes with it to mitigate the severity of the sanction. So not only does the amount of social power one has influence the probability of achieving the deviant appellation, but in addition, influences the severity of the sanction applied. The only possible exception to this hypothesis occurs when the person or group commits acts of treason [supreme acts against the state], and fails.

Of all the institutions that I could have focused on, I chose the economic infrastructure, and in addition the political overlay. These two institutions greatly influence the processes by which habitats and positions are allocated. Had there been more space, I would have dealt with the rest of these institutions showing how they are influenced in their structure by these two dominants. Within the topic of deviance, I focused on two areas that were traditional topics of research by ecologists. In the case of juvenile delinquency, I tried to indicate that the rate of violation has very little to do with who
gets labeled deviant; in deed, a reasonable estimate of the number of violations that come to the notice of the police is about 22%, and of these only about 2% get officially labelled delinquent (see Williams and Gold, 1972: 213). With the notion of "addiction" I tried to indicate how historically the phenomena has changed and how the focus on illicit heroin hides the complexity of the "drug problem". But let me come back a little later to this drug problem.

Discrimination was another topic that I looked at trying to indicate how the process altered the ability of some persons to compete on an equal basis and thus have the equal opportunity to achieve equal shares of the economic surplus. I tried to show that discrimination does not end with the social definitions of legality but can extend into the "illegal" opportunity structure as well. Discrimination like addiction has historical roots and the history of discrimination yields the data that one group after another has had to overcome the discriminatory process. But this overcoming could only be accomplished because there were positions available to move up to. Blacks and Mexican-Americans [as well as the American Indian, a group that genocide was practiced on] have been allocated positions at the very bottom of the economic infrastructure which influences how they must live.

In considering occupational and white collar deviations, I focused on deviation committed as part of the routine business cycle. I did so to indicate that the nature of the market structure [economic infrastructure] promotes certain types of deviations from the political overlay. That is, economic deviation by middle class and upper class persons appear in the form of institutional conflicts. As a result rarely are
these persons severely sanctioned. In briefly looking at Watergate [a case of white-collar deviation], I wanted to indicate the normalcy of the espionage process in light of what is considered routine albeit legally illegal!

I then turned to some related issues that involved population increases and the intensification of the competitive struggle. This was an old argument: as the population increases and the available goods and services do not increase as fast, there arises an increase in competition. But given the numbers on planet Earth, this old hypothesis takes on a grimmer meaning. I concentrated on the historic "baby boom" and what its effects on the social organization might be with special reference to deviance. I further examined the literature on population density as a producer of deviance since the density of the population is directly related to its increase and its increasing division of labor. I tried to indicate that the issues surrounding the relationship between population density and deviation are quite complex, but basically there are some commonalities. Namely, extreme population densities [over-crowding] manifest conditions of existence that intensity the competitive struggle for adequate amounts of space. What an adequate amount of space is, varies for the aggregates under question: in non-contact social organizations and those that are heterogeneous, there may be a need for a greater amount of space per individual than in contact, and homogeneous social organizations. High population densities in America are directly related to the economic position persons occupy to that those with large amounts of the economic surplus also have the ability to possess large amounts of the available space. Two additional considerations
are where there are most people, there are more likely to be more deviations; and when these people are in extremely dense clusterings, deviations are likely to be more severe (since the competition is greater and the amounts of rewards less than in other habitats). Finally, one must add to hypotheses about density effects, the variable that I will call the "degree of pollution," for as I indicated high levels of pollution reduced individual's levels of tolerance.

Pollution, as I discussed it, was a normal phenomena that greatly influenced the overall habitat of urban dwellers. This phenomena has been linked in some instances to certain kinds of behavioral disorders that certainly can be seen as deviant. Rarely do these disorders strike persons with large amounts of the economic surplus because rarely would they niche in habitats that were severely polluted. But as I tried to point out, given the amounts of pollution and the consistency of the pollution effort, it is only a matter of time until the numbers of desirable habitats are reduced to a minimum, if any will exist at all. And in this context I would like to make some concluding remarks on the "crime problem," "drug problem," and population.

Sure there is a "crime problem," but to focus on the lower classes is to look away from criminal activities that cost the population billions of dollars per year. For law enforcement efforts to have as their focus the "delinquency" and "crime" of the lower socio-economic classes not only directs the available energies away from the biggest offenders, but in addition, paints a false picture of the true dimension of the problem. For example, the President's Commission on Law Enforcement and Administration of Justice (1967) advances the view that
delinquency is a lower class phenomena. For example,

But there is still no reason to doubt that delinquency, and especially the most serious delinquency, is committed disproportionately by slum and lower-class youth (The President's Commission on Law Enforcement and Administration of Justice, 1967: 57)

It is not true, bluntly and simply put.

Likewise, to focus on marijuana and the diluted street heroin as the "drug problem" ignores the incredible practices of the drug industry in specific and industry in general. I find it amusing that stimulants like caffeine are consumed in copious amounts alongside poisons like alcohol by persons worried about the "drug problem." Of course, both of the aforementioned drugs, caffeine and alcohol, are addictive. Moreover, the numbers of "pain relievers" sold and dispensed by the drug industry and physicians to persons concerned about the "drug problem" is ironic. It becomes pathetic when one considers the crippling drugs administered to mental patients not to rehabilitate them, but to make them controllable much in the same way Ritalin (amphetamines) is administered to "hyperactive" children. The pathos is increased when one considers the notion that LSD "breaks chromosomes" which appears to be true only for multiple drug users, and appears to be true only for a short period of time; yet these same people who advance these notions fail to indicate that caffeine, and especially caffeine combined with tobacco and alcohol use, certainly has similar effects. The whole
"drug problem" becomes bathetic when one considers the amounts and numbers of mutagenic and carcinogenic substances, CHEMICALS, DRUGS IF YOU WILL, that are routinely pumped onto the land, into the sky and into the water everyday.

And this brings me to the population problem. Ecologically, the competitive struggle can only become more intense since planetary population increases will not be matched by adequate increases in the sustenance materials. These intensified competitive struggles will not take place, at first, in habitats graced with abundance, but in habitats that have scarcities. But from the intensification of such a struggle, it is not too unreasonable to expect new kinds of diseases (new viral strains, plagues, etc.) to spread out to more desirable habitats and the species that niche in them. Moreover, to adequately meet present demands, the economic infrastructure must pollute the habitat of planet, Earth, at an incredible rate—a rate which eventually will begin to take its toll on the ecosystem. A simplified ecosystem under increasing and intensified competitive struggle, under increased exploitation will be pushed to the breaking point. A weak ecosystem in a crucial place operated upon by persons that have large plans but meager knowledge, limited powers but heavy responsibility [feeding the population], this kind of situation will seldom bring anything but disaster. And that is why, in telling you this, I feel like a human Anubis, the bringer of the already dead to judgment.
REFERENCES


REFERENCES

Bierstedt, R.

Blau, P.

Blau, P., and O. D. Duncan.


Bloomquist, E. R.

Blum, R. H. and Associates.

Boggs, S. L.

Booker, S.

Bordua, D. J.

Bragdon, C. R.

Broadbent, D.

Brown, L. P.

Buettner-Janush, J.
REFERENCES

Butler, P. A.

Calhoun, J. B.

Cameron, M. O.

Carlin, J. E.

Carr, R. A. and P.E. Wilkniss

Caspari,
1967

Cavan, R. S.

Cavan, S.

Cheech and Chong
1972 "Big Bambu." Ode Records (sp77014).

Chein, I.

Chein, I., and D. Gerard, R. Lee, and E. Rosenfeld.

Chilton, R.
REFERENCES

Christian, J. and D.E. Davis

Cicourel, A. V.

Clark, J. P. and E. P. Wenninger.

Clausen, J.A.
1957 "Social and Psychological Factors in Narcotics Addiction."

Cleaver, E.

Clinard, M. B.

Cloward, R.A.


Cole, L. C.

Cooperstock, R.

Corn, and DeMalo.
1964 "Sulfate Particles: Size and Distribution in Pittsburgh Air." Science 143:143-
REFERENCES
-5-

Cressey, D. R.

Dai, B.
1937 Opium Addiction in Chicago. Shanghai, China: Commercial Press.

Dalton, M.

Davis, J. C.

Davis, K. and W. E. Moore

de Chardin, P. T.

DeFleur, L. B., J. C. Ball, and R. W. Snarr.


DeVore, I., and S.L. Washburn.

Doudoroff, P., and M. Katz.
1953 Critical Review of the Literature on the Toxicity of Industrial Wastes and their Components to Fish, II., The Metals, as Salts. Sewage and Industrial Wastes. 27: 802-839.

Douglas, J. D.

Dubin, R.

Dubos, R.
REFERENCES

Duncan, O. D.

Duncan, O.D., and L.F. Schnore.

Durkheim, E.
1951 Suicide. New York: The free Press.

Easterlin, R. A.

Eldridge, P.


Erikson, K.

Erlich, P.

Erlich, P., and A. H. Erlich.

Esposito, J. C.

Faris, R. E. L.

Faris, R. E. L., and H. W. Dunham
1939 Mental Disorders in Urban Areas, Chicago: University of Chicago Press.
REFERENCES

Farley, R.

Faust, S. D., and O. M. Aly.

Finestone, H.

Fischer, C. S.

Flentje, M. E.

Frejka, T.

Galle, O., W. Gove, J. M. McPherson

Galpin, C. J.

Gamson, W.
1968 Power and Discontent.


Geis, G.
REFERENCES

Gibbons, D. C.

Glaser, D.
1971 Social Deviance. Chicago: Markham.


Glass, D. C., J. E. Singer, and L. N. Friedman.
1969 Psychic Cost of Adaptation to an Environmental Stressor. Journal of Personality and Social Psychology 12:

Goldman, N.

Goldwater, L. J.

Griffitt, W., and R. Veitch

Gruener, H., and H. B. Shuval.

Haley, M. J.

Hall, E. T.

Hallowell, A. I.

Hammond, P. E.
REFERENCES
-9-

Harary, F.

Harrington, M.


Hauser, P. M.

Hawley, A. H.

Hayner, N. S.

Henley, J. R., and L. D. Adams

Henry, A. F., and J. F. Short, Jr.

Hexter, A. C., and J. R. Goldsmith.

Holzner, B.

Howard, J. and P. Borges.
Hughes, E. C.

Hunter, D. R.

Johnson, B. D.

Johnstone, A. D.

Kitsuse, J. I.

Kitsuse, J. I., and A. Cicourel

Knudten, R. D.


Lander, B.

LaFave, W. R.

Lave, L. B., and E. P. Seskin.

Lemert, E.


Liazos, A.

Lieberson, S.
REFERENCES

Lichtenstein, P. M.

Liebow, E.

Lind, A. W.

Linn, L. and M. Davis.

Lindesmith, A.

Lipset, S. M.

Little, K. B.

Lodhi, A. Q., and C. Tilly.

Macaulay, S.

Mack, R. W.


Marcuse, H.
Margalef, R.


Marshall, O.

Martindale, D.

Marx, K.

Marx, W.

Matza, D.

McKenzie, R.

Mead, G. H.

Merton, R. K.

Michaels, P.

Mitchell, R. E.
REFERENCES

Moreno, J. L.

Mowrer, E.

Murphy, F. J., M. M. Shirley, and H. L. Witmer.

Nature.

Netolicky, S. W.

Neubacher, J.
1973 "Thefts, Corruption Strangled Model Cities Loan Program," Pp. 1a; 14a-16a in Detroit Free Press 143(October).

Neuman, D. J.

Newsweek.
1969 "Breat Blob: Oil Slick off Santa Barbara." vol. 73, February 17, 1969: 31-32.

Nisbet, R.

Nye, F. I., J. F. Short Jr., and V. J. Olson.

Oakley, K. P.

O'Donnell, J. A.
Odum, E.

Ogburn, W. F.

Orski, K.

Park, R. E.

Parry, H. J.

Perrins, C. M.

Pescor, M.

Petersen, W.

Piliavin, I., and S. Briar

Polk, K.

Popular, J.
REFERENCES

Porterfield, A. L.
1946 Youth in Trouble. Fort Worth, Texas: Leo Potishman Foundation.

The President's Commission on Law Enforcement and Administration of Justice.

Quinney, R.

Radin, P.

Redlinger, L. J.

Redlinger, L. J., and J. B. Michel.


Revelle, R., and H. H. Landsberg.

Roach, J. L.

Robinson, J. T.
REFERENCES

-16-

Rosett, A.

Roskan, R. T.

Rudofsky, B.

Rytina, J. H., W. H. Form, and J. Pease.

Schneier, E.

Schmid, C.


Schutz, A.

Seaman, J.
1965 "Ecology of Delinquency for Fort Worth, Texas." unpublished paper, Department of Sociology, Texas Christian University.

Secondary Raw Materials

Seeley, J. R.

Sellin, T., M. E. Wolfgang.
Shannon, L.  
1964 "Types and Patterns of Delinquency in a Middle-sized City."  

Shaw, C.  
1929 Delinquency Areas. Chicago: University of Chicago Press.

Shaw, C., H. McKay.  

Shepard, P.  

Short, J. F., and F. L. Strodtbeck.  

Simmons, J. L.  

Skolnick, J.  

Skyes, G., and D. Matza.  

Smith, R. A.  


de Sola Pool, I.  

Solid Waste Disposal Act  

Solid Wastes Management.  
1972 "Use of Salvaged Material is Declining Steadily." Solid Wastes Management 15(November): 8
REFERENCES

Sorokin, P. I.

Spergel, I.

Spuhler, J. N. (ed.)

Steideny, J.

Stinchcombe, A.

Suarez, P.

Sudnow, D.

Susiyama, Y.

Sutherland, E.
1937 The Professional Thief. Chicago: University of Chicgao Press.

Sutherland, E. and D. Cressey.

Sutter, A.
REFERENCES

Suttles, G.

Tannenbaum, F.

Tendron, G.

Thio, A.

Thomas, W. I.

Thomlinson, R.

Time

Tinbergen, N.

Thrasher, F.

Tucker, J. and S. T. Friedman.

Tuesday, C. S.

Tilly, C.

Umpleby, S. A.
REFERENCES

-20-

United States Environmental Protection Agency

United States Environmental Protection Agency

United States Environmental Protection Agency

United States Environmental Protection Agency
1971 Community Noise. U. S. Environmental Protection Agency Report # NTID 300.3 (December).

United States Environmental Protection Agency

United States Riot Commission Report

Van Manen, G. C.

1973 "Effects of Strip Mining on Water Quality," Ohio State University Report # 330x.

Vold, G.

Wade, R. C.

Wallerstein, J. S., and C. J. Wyle

Wattenberg, W. W., and J. Balistrieri
REFERENCES

Weber, M.

Weidenbaum, M. L.

Werthman, C., and I. Piliavin

Wheeler, S.

Whyte, W. F.
1961 Street Corner Society, Chicago; University of Chicago Press.

Williams, J. R., and M. Gold

Winick, C.

Wirth, L.

Wolfgang, M. L.

Woodrow, D. A.
1971 "Interaction Frequency and the Rise of Violence: a Verification Study." Heuristics 3(May):12-17,

Wynne-Edwards, V. C.

------------------ADDITIONS------------------

Jones, H. R.
REFERENCES


