CHILDREN OF PARADISE?

ADOLESCENTS, NEW COMMUNITIES AND SOCIAL CHANGE

by

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ABSTRACT

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Submitted to the Department of Urban Studies and Planning on May 11, 1973 in partial fulfillment of the requirements for the degree of Master of City Planning.

This work is a design strategy for the system of services and opportunities for adolescents in a new community. It is hoped that through the specific strategy chosen this community can become a catalyst to broad social changes in the United States.

The design proceeds from an assumption that man has four basic, and interactive needs:

1. The need for security
2. A sense of self
3. A sense of personal impact on one's life
4. A sense of meaning.

Based upon that assumption a set of values to be maximized in an environmental setting is proposed. Then a survey is taken of potential settings in which such values might be promoted. It is concluded that a good "niche" within which to seek to create innovative institutional and physical structures is a new community, and more specifically the service network for adolescents in that community.

A design is then proposed. An educational system is designed which revolves around "vouchers" and influence sharing among pupils, teachers and administrators. A transportation system which makes great use of the concept of institutionalized hitchhiking is proposed. A Youth Corporation which would serve as the body around which adolescent interests in the community would revolve is proposed, as is a dual-tiered legal system oriented toward the institutionalization of a means of conflict resolution different from our present common law system.

I then propose a development entity which would be capable of creating a new community which would serve the cause of social innovation
and the interests of the town residents. Included in the development organization would be a learning agency capable of assessing the success over time of the new community. This agency would rely upon experiential and descriptive knowledge in an effort to learn whether the proposed community, once built, had evolved into a successful place.

Finally, the tentativeness of this design is emphasized. It is strongly noted that this work is intended to be suggestive, and not a final master plan for a future community.

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INTRODUCTION

This study is an attempt to roughly design a network of opportunities and services for adolescents in a new community to be located within the United States sometime in the future. It is therefore a projective work which is intended to be an integral part of my own approach to social intervention, a theory of personal action. The design is not comprehensive, nor is it intended as a representation of any particular end-state. It is intended as a part of a long-term effort to achieve social change through the use of environmental craftsmanship.

The major thrust of this design is toward the reduction of "social distance." The most serious malaise which afflicts the modern American society is the alienation of citizens from themselves, from their communities, from the products of their work, and from their society, all as a result of social distance.

What is this social distance? It is the psychological state which encourages people to fail to recognize, or to reject, their interdependence with other people. It is the "distance" between the centers of decision-making power and the people who are touched by those decisions. It is the imposed social distance between people of different status groups in a class hierarchy, and the desperate attempt to maintain such distance by those groups at, or close to, the top of that "heap." It is the distance from clients so rigorously maintained by the majority of "professionals" in all fields of endeavor, a distance defined by an extreme differential in access to information between these two groups. The list of examples is endless.
The design here presented is intended as a means to overcome these social distances by the manipulation of physical and institutional variables in an experimental environmental setting. The setting itself, if proved successful, is to serve as a prototype which would act as a catalyst to changes in the social matrix beyond this single community. In order to serve this dual function of the design I have assumed that there are certain "niches" within which a community based upon a value-structure in opposition to present social norms can occur, and that there is a causal relationship between the establishment of new and successful social paradigms and broad social change. Obviously, I have also assumed that we can judge whether an environmental setting is "successful."

The success of an experimental community can only be gauged by "testing." This requires both the creation of the proposed setting and the design of a methodology with which to learn about the consequences over time of that setting. This first requirement has influenced the means by which I have proposed that such a setting might be created. The second requirement I have attempted to meet in an "un-scientific" way, as will be observed in a later section of this paper. There is presently a great debate in the realm of social sciences in regard to the definition of social experimentation and its potential usefulness. The major point of this study is not the justification of social experimentation, and I will therefore sidestep the abovementioned debate. But it should be made clear that I use the word "experimental"
to denote the "tentativeness" of this proposed community, and not to emphasize any process of forced innovation.

Whether defined as an experiment or otherwise, the advocacy of an alternative community prototype and the exposition of a normative design for such a setting is a political as well as a professional act. The design becomes part of a strategy to deflect the society in a direction desired by the designer. So the setting becomes an instrumental goal rather than a utopian community. And it is one piece of strategy among many. I should make it plainly understood that I have chosen this specific strategy by dint of personal inclination as well as reasoned analysis. I have long been interested in the potential of new communities as experimental settings for the testing of various social changes; I do not mean to imply that these communities are the only such potential settings, but I do think they would prove to be among the best. And I think that the particular niche within such a community upon which I have chosen to concentrate—the opportunity and service network of adolescents—will be even more obviously useful as a place in which to seek to create new social paradigms, for reasons which I shall endeavor to demonstrate.
FOOTNOTES

Introduction

1. There is an analogy to be found in the historical development of scientific thought. A new, exploratory paradigm can become predominant when the old organization of "meaning" breaks down and when the new paradigm proves worthy when subjected to testing. (See Herbert Simon, The Science of the Artificial.) The analogy becomes more elegant if one supposes that our present social structures and values are beginning to seem inadequate to a good number of our citizens.

2. Just what is considered a "professional act" is open to question. The procedure which I seem to be following is the design of a strategy for social change which can be implemented in the future if a client is found which is ready to consider this design a reasonable model for action on its own part. This sounds like either utopianism or a "putting of the cart before the horse." In fact, I see this as behavior which should be pursued by a large number of planners in order to move planning toward a definition as a "choice-creating art." These various normative designs, if executed in an easily explicable manner, would serve as keynotes of public debate and catalysts to better policy-making. But, in the absence of a supporting client where will planners find a niche within which to execute these designs? This is a critical issue. But if planning is to be a source of moral, political, social and economic choices rather than an instrument of policy created by others then it must struggle toward a methodology which does not wait for a client before the practice of making plans is begun.
CHAPTER I

HUMAN NEEDS AND SOCIAL VALUES

In order to suggest the maximization of certain social values in a desired future, or the minimization of social "distance," the designer must have an image of man which he uses as the basis for his suggestions. Under the rubric of this image must be a model of to what the human being aspires, and what are his, or her, most essential needs. It is obvious that the primary need of any human is survival, but beyond this there is little agreement among those who have pondered the definition of human wants and necessities. And, of course, even the issue of "survival" becomes blurred as a society becomes stable and begins to consider the definition of a minimal "kind" of survival. What once meant continuity of life may now mean an existence at a level which includes "adequate" food, shelter and clothing. "Adequate," of course, is an extremely relative adjective and the definition of a level of material existence which is considered "adequate" is constantly changing; variable between cultures, nations and regions; and subject to the dynamics of the political process at every juncture.

In any case, it becomes incumbent upon me to suggest a model of the most critical human needs and desires before I can proceed any further in this exercise. This is certainly a normative process. It is a task which requires that one toss aside any sense of humility, any fear of being wrong, and any lingering fear of disposition toward banality.
The end product must be imprecise and incomplete because of the nature of the task. But this is a failing only if viewed in a reductionist context. Since the thrust of this entire undertaking is inimicable to reductionism, I see no reason to tremble in the contemplation of the effort. I will use references sparingly, largely because I think that bolstering a value-laden argument with analogous value-laden arguments from other contexts is, at best, of little merit and, at worst, entirely spurious.

It is, of course, obvious that one of our primary needs is security, both physical and economic. The objective of fulfilling the need of individuals for security is often the fulcrum upon which the political debate over national priorities is balanced, whether that debate centers around nuclear strike capacity or minimum levels of family income. This need, then, is publically recognized and even, to some extent, quantifiable. One can examine whether a person has enough personal income to meet minimal needs which are considered necessary to a decent existence. We can say a person is to some extent insecure if he or she is unemployed and in need of work. We can roughly calculate the level of armed forces which we must retain to give us security (although these calculations, clearly, shift as the assumptions which underlie them shift). Most of the great issues of our recent history have
revolved around the question of security: should we enter a war which was not directed at us (circa 1940)? how much should be spent on welfare payment for unemployable citizens? to what extent should there be a redistribution of income in a country which was founded upon egalitarian principles (the issue of founding principles, though, remains a source of historical debate)? are child labor laws necessary to protect adolescents from unscrupulous businessmen? Implicit in these debates has been the recognition of the need for security.

Recognition, surely, "does not a solution make." Particularly in regard to the economic security of individuals, agreement as to goals and means to reach those goals seems distant as long as political and economic power is unevenly distributed. A good percentage of our citizens are not truly secure. They live a precarious existence which is to a large extent debilitating. It becomes most difficult to attempt to become "whole" when one lives as a marginal man or woman. The struggle for security become paramount in the day-to-day existence, and it becomes difficult to look beyond this struggle to other needs.

The abatement of these individual struggles for a minimum level of security is one of the great items of "unfinished business" on our national agenda. The problem is recognized; so, then, must be the need. This need is, of course, one that must be fulfilled on a national level for the most part. A single community that by itself took on the attempt to redistribute income, guarantee jobs, and otherwise create security for the "have-nots" in its population would be at, to say the least, a
considerable disadvantage in attempting to attract upper- and middle-class residents. The recognition of this constraint makes this need one which can be only partially served, if served at all, by the setting I will design; this recognition is absolutely necessary if the concept of the community is to be anything other than a utopian "place" which would be extremely hard-pressed to attract enough residents to serve as either a legitimate "prototype" or a "marketable" development.

This caveat notwithstanding, the design of any community should take into consideration the need for security, which I shall deem fundamental to human nature.

Many of the best theories of human needs are based upon developmental psychology or vice versa. These tend to be hierarchical; it is contended that certain needs must be fulfilled before others can thrust themselves into consciousness. It is assumed also that the abovementioned need for security comes before all others; that failure to fulfill this first need condemns all others to the unconscious level of mind. This condemnation to unconsciousness seems particularly applicable to concerns over identity and role. The model which I shall use rejects this paradigm of human needs. It assumes a nonhierarchical structure of needs, and contends that none of the needs can be fulfilled except in unison with the rest. I cannot prove that my model is correct. I can only offer it as the image with which I am working in order to design a setting which will allow for the fulfillment of the human needs which I think are crucial.
In any case, the remaining factors in my model of human needs are:

1. a viable sense of self;
2. a sense of personal impact; and
3. a sense of meaning in one's life.

The exact degree to which these needs are felt is, of course, variable among individuals; this results in a variable emphasis upon the fulfillment of the needs on the part of specific citizens of any society. I assume that these differences are dependent upon culture, biological variety and the specific psycho-social development of each human being; I assume, however, that the needs are universal and should be served by any design. And it should be obvious that there is a relationship between fulfilling these needs and shortening the social distances of which I have already spoken.

I will offer a definition of what I mean by each of these needs in order to make their implications more clear. By a "sense of self" I mean the sense of one's own being as, on the one hand, separate and distinct, while at the same time inextricably and intimately related to others. There is in this conception a sense of unique personal identity and history, and a consequent desire to understand the identity of at least some number of other people. I cannot, unfortunately, say that this results in the need to understand all other identities and histories; this verges too close to sounding like a "need for tolerance of differences," which history has clearly proved to be too often lacking in human constitutions. On the other hand, this definition implies the
clear need to have this self recognized by others; in fact, I assume that only through interaction with others who recognize a "self" in an individual does that individual begin to fully integrate this sense of self which I have deemed a basic, universal need.

By a "sense of personal impact" is meant the sense that one can, and does, have a recognizable and continually reaffirmed influence upon the decisions that ultimately affect the quality of one's life. This comes about from the experience of participating directly and with as few preconditions as are possible in the process through which the boundaries of one's personal freedom and life-space are determined. This is not a need for absolute self-determination, although the two are related. The sense of which we are speaking would lend credibility to one's personal involvement in the social, economic and political world; it is related to some conception of a participatory community. There are, of course, different degrees of the need for personal impact. While one person may want to determine which choices of occupation are offered on a national scale, another may only wish to have influence upon the level of service offered by the sanitation department in his community. If a society is so arranged that certain people feel that they, indeed, cannot influence the public decisions that they feel affect them, this will be likely to lead to both: 1) a struggle to increase their influence, and 2) a turn toward "privatization"; the combination of which will depend upon the specific person and his, or her, inclinations. The determination that one has too little influence of course depends, as
we have implied, upon one's conception of the degree to which he must influence his environment in order to fulfill this need for personal impact. But any society should allow for a sense of participation on the part of every individual in whichever spheres that person feels he must influence in order to be minimally satisfied.

This need, as we have defined it, is at least implicitly recognized in a good part of our national debate over time. As a matter of fact, it is explicitly recognized in such places as the Declaration of Independence, the demand for decentralization of the public schools in many metropolitan areas, the clamor for student rights, and the Baker v. Carr decision of the U.S. Supreme Court. Again, however, recognition of a need does not mean that the need will be fulfilled by a particular community.

Finally, there is a need for what I have called a "sense of meaning." This is translated as a need to transcend one's own limited existence and forge some "sense" out of life by relating that life to a particular civilization and/or community. In the constant flux of history we must grasp a sense of collective perspective which links us to goals and ends beyond our day-to-day lives and even beyond our generation. The individual, too, must gain "meaning" by linking himself to some community within which he, or she, plays a role which is significant (i.e. serves the goals and purposes of that social group). This is one of the motivating forces behind the seeking of "worth" in a marriage, in service on the local P.T.A., in commitment to social work, in running
for elective office in high school, and so on. A community which serves these needs must provide opportunities through which this interdependence of individual lives with a community's or culture's purposes is recognized and played out. This is related closely to the question of whether the social myths of a community are adequate and believable. Can these myths motivate unselfish behavior in the service of the larger society, and are the goals of that society oriented toward the fulfillment of the basic needs and aspirations of its citizens? All of these are primary issues when we deal with the problem of "creating" a community.

These needs, as I have said, are not separable. One can only gain a sense of self by acting within a community which he or she can influence and which incorporates ideals which give purpose to specific acts. One gains security most directly when the influence of decision which affect one's life is secured. There is a strong interdependency in this model of man. It should also be noted that parts of the model serve as constraints upon other parts. For example, a commitment to a community from which one wishes to derive personal meaning requires the limitation of the need for personal control or absolute freedom of the individual. A design must consider these kinds of interrelationships as well as the maximization of the fulfillment of the elaborated needs themselves.

In order to serve the abovementioned needs certain values must be designed into the spatial-institutional structure of a place. I have posited a set of such values below. It should be noted that this set of values also becomes a set of criteria by which to judge an environ-
ment. A setting which maximizes these values is good. One that does not attempt to do so is inadequate. The believability of this set of criteria is, of course, dependent upon the acceptance of a causal relationship between an environment which incorporates these values and the fulfillment of the human needs I have defined. It is those needs, ultimately, which must be served.

I am not going to posit any specific hierarchy of values which should be incorporated in an environment. These values are interdependent and will be desired by different sets of people in differing intensities at different times. The values, then, should all be maximized at all times in an ideal community. This would be impossible if the values were conflicting, but for the most part they are mutually reinforcing. The one significant conflict is that between the maximization of equity in the community and the maximization of individual choice, if by the latter term we mean the maximization of free will. There will, of course, have to be a balance struck between these two goals, a balance to be derived from the political process of the experimental community, and not from the design. My own inclination is to weight the relationship more toward equitable treatment of all community residents via a fair distribution of resources; this would no doubt result in a redistribution of influence, and therefore a greater range of individual choice for the "average" citizen. As mentioned earlier, no design of a single community setting can substantially affect this relationship; ultimately, the redistribution of resources must occur at a broader scale. But both "equity" and "individual choice" are closely related to the
"need for security," and should be incorporated in a designed environment.

Beside the abovementioned values, there are a host of others which should be maximized in an environment designed to minimize "distances" in a community. It might do best to simply list these:

1) **Accessibility**; of services, places and organizations.

2) **Participation** in decisions which are significant (with "significant" defined by each individual in accord with his or her own priorities.)

3) Opportunity for **affiliation** of the individual with other people, groups and organizations.

4) **Pluralism**; the promotion of choice of participation, affiliation, allegiance, etc. among a variety of places and institutions of diverse natures. This implies, too, a tolerance of "differences."

5) **Decentralization** of decisions to the most reasonably small level of organization; this is, of course, dependent upon the decision in question and the organization of the institution or groups responsible for that decision.

6) **Communalism**; the orientation toward "sharing" of resources in order to both increase the efficiency of the community and to foster greater group identifications.

7) Promotion of **competence**, the ability to do things well.

8) Promotion of **learning**, both by people and institutions.

9) **Adaptability**; the openness of the environment, and its inhabitants, to the need to change, and the promotion of the organizational ability to do so.

10) **Continuity**; the retention of "good" ways of doing things, of looking at things, and of a historical sense.

11) **Penetrability**; the means of organizing decisions, processes, tools, places, etc. so that they are clearly understood by
those citizens who wish to understand the "parts" of their environment. This is not advocacy of the end of mystery, which is a source of human delight. But people should be able to get the information necessary to penetrate any mystery in human affairs which they think affects their own lives.

12) "Fit" between the built environment and the natural ecosystem; this value will also act as a constraint upon the rest of the community development process in its entirety. By "fit" I mean an approximation of a dynamic equilibrium between the community and its natural context.

These values may appear to be verbal generalities, but they are a means of dealing with the design of a whole community. If they are to be criteria, by which a design can be judged, then we must be prepared to "test" environmental design with some methodology capable of measuring the fulfillment of broad purposes. But regardless of the issue of testing a proposed prototype, these values—or their maximization—become the goals of a design intended to fulfill the human needs that I have posited. I do not think that these values, or at least the mix that I propose, are presently given high priority in the United States. We may publically support "equity" as a national goal, but we covertly undermine any attempts at implementing such a goal. We actually promote "competence" in many fields, but at the same time we restrict the accessibility of the means to acquire such competence via admissions procedures in graduate schools, high costs for learnings, and the establishment of licensing boards which pass upon a person's character as well as ability. We, as a nation, reject communalism despite the increasing loneliness of extreme individualism.
So, again, the design of a community which would incorporate these
general values--in combination--is a political proposal for change. I
assume that if such a community could serve the needs of its citizens
at a small scale then pieces of its structure would be transferable to
a larger context. So, the task of the designer seeking such a change-
process is to design a setting which will increase the probability of
the delineated values being maximized. This will be a
tentative design; tentative because no person should presume to know the
future, and because the design must be very broad in order to allow the
eventual citizens of the community to create the flesh of that community.
The planner can only seek to "deflect" the community in a certain direc-
tion.

I do not think it necessary to devote a substantial amount of
space to the definition of the linkages between values and needs men-
tioned above. These are, for the most part, self-evident. It is my
contention that if every one of the values that I have established were
maximized (within the limits of constraint imposed by the environment
outside of the community being designed and the inherent constraints re-
quired to incorporate all of these values in a single design) there
would be a resultant maximization of the number of individuals in the
society who are able to fulfill their essential needs. Further, I as-
sume that the maximization of every one of these values contributes to
the fulfillment of every one of the four basic needs and the minimization
of social distances. This results from my rejection of a hierarchical
model of needs and values in favor of a highly interdependent paradigm.
So, for example, although an environment which incorporated communal possession of certain public services or goods might not lead directly to a sense of personal impact, the maximization of participation of people in the decisions about what to do with those communally-controlled resources would lead to a sense of impact; this would translate into a "sense of self" partially based upon interaction with one's community, and a "sense of meaning" based on one's sharing with others in a collective decision about the future of one's community. These interrelationships can, I think, be drawn from every value here proposed back to the model of needs constructed earlier.

It may, of course, be found in the more detailed designing, development or management and testing of the proposed setting for social change that:

1) These assumed consequential relationships are incorrect, distorted or at least questionable; or

2) That a hierarchy of the presently stated values must be organized in order to fulfill the model for needs that I have posited; or

3) That other values, left unmentioned, are more important to the fulfillment of human needs; or

4) That other needs are more important than those I have assumed to be most crucial.

I think that it is useful to expect certain modifications of this initial design. The process of design should be an organic one, subject to internal feedback and premised on the assumption that ultimate goals can never be adequately and permanently established before the process of implementation of a design is begun. Nevertheless, the creation of a
set of need to serve as ultimate goals of any design must exist before we can even begin to probe toward a finally useful plan. This is particularly true when the environmental piece so designed is intended to serve as a means to contribute to a process of social change in a specified direction. And the creation of this framework allows the client or critic of the design a first level of analysis. First, does he like the values which are to be incorporated in the design? Do they feel good to him? Would he like to live in a community which incorporated such values? Does he think that other people would like to live in such a place? Secondly, does the model of human needs used by the designer seem good, or even adequate? And thirdly, if the model of needs is accepted, is there in fact a consequential relationship between the needs and values to be maximized?

I will proceed to present a sketch plan for the vehicle through which I propose to begin to create the environment which I have stated to be desirable; this vehicle will be the network of opportunities and services for adolescents in a new town. It is first necessary to explain why I have chosen that vehicle among all other possibilities. Why is that particular "niche" an appropriate place to begin to struggle toward a different social organization of life?
FOOTNOTES

Chapter I

1. This concept of "security" is akin to the previously mentioned process of redefining "survival" to mean survival at a minimal, or adequate, level of existence. The concept is obviously not new. Its position at the "core" of human needs is eloquently analysed in what I think are the two best models of a hierarchical structure of human needs; those of Erikson and Maslow. See E. Erikson, Childhood and Society, W.W. Norton: New York, 1950 and A. Maslow, Motivation and Personality, Harper and Row: New York, 1954.

2. As far as I am concerned there is an epistemological issue as to whether any model of human needs can be "proved." For example, Erikson freely admits that his paradigm is based upon intuition as much as observation. B.F. Skinner notwithstanding, I have yet to hear of anyone who has proved what our needs are in a "scientific" manner. In fact, like many crucial issues in human affairs, I suspect this is not subject to a scientific methodology and is therefore not subject to what we call "proof."

3. By "privatization" I mean the direction of one's concern toward interests that are purely personal, have nothing to do with public policy, and can be influenced by the individual. I believe that the creation of a sphere which one can influence is the primary motivation behind privatization rather than any economic concerns which are usually pointed to as the reason behind such behavior.

4. The keystone of the policy of "one-man one-vote."

5. The "community" may be as small as one's nuclear family or as large as the family of all living creatures on earth, depending upon the individual's perceptions of in which community he or she is a functioning member. I suspect this perception is closely related to my previously mentioned need for personal impact. If one can influence a community one becomes a member of that community. This, of course, does not always hold true (i.e. does every American assume that he, or she, has influence upon the delineation of national goals? It seems doubtful. It seems, though, a good point of departure from which to understand the ecology of human needs.

6. A single community could act to redistribute resources, but it would then become an experimental setting with no transferability to the larger social system even if it "worked" for its own residents. This would result simply from the lack of identification of most Americans with the kind of people who would probably reside in such a "utopian" place.
CHAPTER II

NICHES

I have stated that the objective of this design is the creation of an experimental setting which, by serving as a prototype of an alternative organization of places, institutions, and social functions, might contribute to large-scale social change. I have stipulated my values and assumptions in regard to the proper direction of this change. It now becomes necessary to carve out an "arena" in which to produce and evaluate this social experimentation, and from which to generate an alternative set of social paradigms if the prototypical setting proves to be successful.

The first question to be answered is this: What arenas exist in which social experiments can be performed? There are many such places already in operation. There are farms in Vermont which have been changed into socialist communes. There are hundreds of free schools which have been organized around cultural paradigms in opposition to our presently dominant one. And there are scores of places where future experiments could probably be conducted. Among these are prisons, asylums and other arenas in which the people who inhabit the setting have little or no power, or actually would like to be part of a radically-changed environment. Unfortunately, setting such as these often retain their constituents via coercion (i.e. prison inmates can't move to another setting if they don't like the one they're in), and thus lose some of their credi-
bility as prototypes for broad social change. Experimental settings could also probably be created in vacation villages, work camps, or any other place in which the people involved in the experiment could separate their participation in the experiment from their permanent sense of self-identity. The corporate banker will spend a week digging ditches at a work camp, under the direction of a forest ranger, as long as he, or she, need not give up the status inherent in the permanent occupation waiting back in the city after the vacation is over. Unfortunately, this unwillingness to fully invest one's self in the experiment and to accept that setting as a relatively permanent community to which one belongs, diminishes such arenas' value as prototypes for changes in peoples' real everyday lives.

Another "niche" in which experimentation might occur would be educational institutions which committed themselves to a model of experiential learning in which students would examine alternative ways of organizing their lives by "living" the alternatives rather than, or along with, reading about them. This is promising, but still somewhat too unlike the "real" world to serve as a fully legitimate vehicle for introducing other ways of living as realistic alternatives.

Then, too, there are specific classes of people who are more likely to embrace social experimentation and change than others. Two of these are the upper class, which is populated by people who can afford to experiment with themselves and their society, and the very poor, who can't afford not to seek something new (and have little to lose in any case).
Obviously, in a middle-class nation the modes of existence which these people choose will not necessarily be seen as much of an example to be followed by the nation as a whole.

All of these potential experimental "niches" might be useful places to try to begin a process of broad social change. Each seems to have a failing, but they all remain potentially fruitful sources of needed innovation. Another potential source of experimentation is the design, development and management of large pieces of the environment, and the creation of new communities in particular. This is the niche which I have chosen to explore.

Why have I chosen new communities as a proper setting in which to develop social prototypes? First I'd better define what I mean by a new community. A new community is a large-scale development constructed under a unified management, following a fairly precise plan and including different types of housing, commercial and cultural facilities and amenities sufficient to serve the residents of the community. It may include land for industry and other employment generators, and may eventually achieve a measure of self-sufficiency. A "typical" new community in the United States would be constructed on 10,000 acres of land, and would eventually house 100,000 people. So the design, development and management of a new community must include the integration of interrelated physical and institutional elements in a fairly comprehensive manner. And such a community would be a relatively large setting (assuming a population of at least 50,000 people). It could be highly
useful as an example of how large numbers of "normal" people live successfully in a "better environment," assuming that the environment can be made better. The proponents of new town development have argued that the environment of a new community will, in fact, be "better" because of the opportunity to design and build these places from the ground up. The ACIR has said that this quality allows for a plan of orderly growth; proper sequencing of development; establishment of a relationship between regional growth plans and new town development; adjustment of plans to unforeseen circumstances once planning and development have begun; and the creation of outstanding public facilities, transportation networks and open space designs. New communities also offer a "chance to break away from conventional thinking and to attempt new arrangements without the constraints of existing patterns and established interests and rights." This is the advocacy of utilizing new towns as laboratories. Although the reference is usually directed toward innovations in zoning patterns, housing codes, utility systems, and so on, there is no reason not to carry this pursuit to the point of experimenting with institutional arrangements as well.

I am not quite so sanguine about the lack of constraints upon the new community development process. One constraint is the need of the developer to make a "profit." I am assuming that new towns will be developed in the future by some form of partnership between public agencies and private entrepreneurs. No matter what the "mix" of risks and responsibilities between these "partners" a profit equal to at least
the cost of money to the government (the bond rate) plus a minimum profit for the private-sector participant must be received. Even the best innovations, then, are subject to the constraint of financial feasibility. This becomes significant to any design.

Secondly, contrary to the assertion of the ACIR, there is no such place as one in which there are no established patterns and interests already formed. When a new community is proposed it must deal with local government, district school boards, federal agencies, and so on, all of which have certain interests in regard to the development of the new town and most of which have the power to affect the new town in some way. I do think, though, that the constraints are far less than those encountered in the process of developing, or redeveloping, a piece of environment situated in an already densely-populated place. This will allow for innovation, or social experimentation, but within limits.

What I have said is that new communities could serve as settings for social experimentation because of their relative freedom from institutional constraints, and the nature of the design and development, which is large-scale and comprehensive. This allows the designers, developers, managers and residents to institute innovative strategies in certain areas of physical design which will affect institutional arrangements, and vice versa. The size of these communities makes them extremely visible and useful as models of how a relatively large alternative community might be structured.

A critical advantage which new communities possess as "niches" in
which useful social experimentation might take place is the fact that the residents of the community must choose to move there, and must choose to remain. This means that the design must be appealing enough to be "marketable" to Americans who must move to this place in order to make it financially feasible. It also means that the experimental environment must be successful enough to hold ordinary people in it by free choice. If the setting can do this then, along with its size, it fits the model of what a good social prototype would be: a place which is enough like the environment beyond its boundaries to serve as a believable "alternative" for the people who live in that "external" environment. This means that the community must be large enough to withstand intuitive judgement that its scale is such that its structure is not transferable, even in part, to the country as a whole (or to other communities in that country). And it must be populated by people who can be identified with by a broad range of other people in order for the latter to consider the experience of the former useful to themselves in their own communities. These are, of course, also constraints on the design of a setting for social experimentation. The scope of directed social change cannot be so great that the community would not attract enough people to absorb the housing produced. It must not be so great as to attract only "malcontents." At the same time, if a true alternative is sought then the setting created must be more than a glorified suburb. This tension will have to be faced by any design which seeks to utilize a new community as a social prototype.
There are three last reasons why I have chosen the area of new communities in which to concentrate:

1) The increasing need to create at least state-wide growth plans will tend to require the increase in public support of new town building, a consequent attachment of "glamour" to these development and a resultant increase in the visibility of these places. A prototype which is not made available for inspection will change no one's way of living except those who are in the prototypical community itself. New communities will certainly be inspected.

2) I think that new communities which incorporate new ways of organizing institutional and spatial relationships could prove to be more marketable than otherwise rather than less. If a nonalienating environment could be created it could increase the projects' profit, both in human and dollar terms. There is therefore an incentive to the developer to incorporate "alternative" organizations in his program design in order to, in effect, extend his "amenity package" beyond superficial physical elements.

3) I have been interested in new towns in the past, and would like to be involved in designing and developing them in the future. If I am seeking a vehicle for social change, then, it might just as well be in the area in which I intend to work. If this were not the case then this paper would be no more than an exercise, never to be pursued any further. I intend to use this study as an "informing vision," to which short range actions and decisions can be related. It will, no
doubt, be a vision which is altered in the organic process of interaction with the requirements of new community planning and development in the real world, but it is a platform from which I feel that I must start.

The ultimate reason I have chosen this specific kind of "niche" within which to create an experimental setting is the belief that the concept of experimentation is not antithetical to the purpose of creating new towns, the belief that a new community would be a place which would fit the requirements of a useful prototype for social change, and the belief that the creation of alternative ways of organizing institutional relationships (in order to maximize the values I have deemed critical) is possible in the context of new town planning, development and management.

I have chosen to generate a design of the network of opportunities and services for adolescents in a new community for a number of reasons. First of all, because of time constraints, as well as constraints upon my imagination and stamina, the problem I was to address had to be delimited. I could not create even a sketch plan of an entire community oriented toward the maximization of the values I have offered as design "goals." Even if I were able to do so, I suspect that such a design would be considered "utopian" by the developer of a new community, and its worth therefore seriously questioned. But I have assumed that there are certain "places," or "niches" is you will, within a new community
in which the introduction of experimental changes of a certain kind are more likely to be accepted, both by the people who will be directly affected by the changes, and by the set of people and/or entities who have some measure of control over the development of the community. One such place is the set of institutional and physical structures oriented toward servicing the needs of adolescent in the new town.

Adolescents are more likely to welcome change than any other age group in our society. According to Kenneth Keniston, adolescence, at least in our culture, revolves around the themes of a search for positive values; the problem of incorporating and identity; the longing for fusion with a goal, a cause or an institution; the cult of experience; and the rejection of adulthood. This often results in alienation and a desire for change in the social fabric, particularly when the "adolescent" discovers the absence of a worthwhile national or community wide social myth and/or the hypocritical adherence to a set of goals which are never actually pursued. The needs that Keniston sees as those of the adolescent are similar to those that I have said are universally felt. But the fact that the adolescent has not yet incorporated an identity and has not yet had to accept a responsible social role (indeed, has usually not been allowed to assume such a role even were it desired) makes him more likely to demand a society in which he can define a "worthwhile" role, and allows him to be less fearful of social change toward that end. We thus have a client group which is likely to be ready to willingly embrace social experimentation.
will be seen by the various groups which have influence in the new town development process as somewhat less threatening than comprehensive attempts to alter, all at once, the institutional organization of the entire community. In particular, the developer might be convinced that innovative design in this area can help him increase his absorption rate of land and housing by attracting the parents of adolescents who would benefit from the proposed innovations. New communities in the United States have had little success in attracting families in which the head of the household is 35 years or older. These families are desired because their earnings are usually at a peak when the working husband or wife is between the ages of 35-55, and because their presence in the community would lend it greater "balance." Among the primary reasons that these families seem reluctant to move to new communities is their unwillingness to move when their children (who are usually teenagers) are in school, have established friendships, and have generally become "rooted" in their community of residence. A new community could counteract this by offering an environment which adolescents would willingly seek, thereby increasing the likelihood of their parents' attraction to the new town. This is all to the developer's advantage.

An innovative setting for adolescents might also be useful in keeping people in a new town once they've moved there. In a survey of new town residents conducted in 1970 the level of satisfaction with their environment exhibited by teenagers was less than half that of their parents, and was less than that of teens in towns that were not
planned in a coordinated fashion. This is bound to cause a greater population turnover than would be the case if adolescents were generally satisfied by the new town environment.

So, in terms of maximizing the attractiveness of the new community, the developer would seem to have certain incentives to plan for innovative strategies in servicing the needs of adolescents. This becomes doubly true if the developer is actually concerned with the human, as well as monetary, return on its investment.

So we have, in the design, construction and maintenance of a network of opportunities and services for adolescents, a willing client group (the adolescents), and a powerful client (the developer) which may be less resistant to the advocacy of change in the direction I have indicated in this area of the development process than in most other areas of that process. The combination is pregnant with potential.

There is one last significant reason that I have chosen the bundle of opportunities and services for adolescents as a "setting" into which alternative ways of organizing life should be introduced. This reason is my belief in a "social multiplier" affect, by which seemingly small actions can result, over time, in significant consequential effects. I assume that overwhelming social changes cannot be introduced in an integrated way into American new towns. This is because of the generally conservative nature of the developer, the political bent of the rural localities in which most new towns will be constructed, the
conservatism of the mortgagee who lends the money necessary to finance the land development (whether that mortgagee is a private banks or a government agency), and the real potential that a radically different kind of community might have a lower rate of housing absorption because of peoples' fear of "pioneering." So if real innovation is to occur it must be generated in specific and limited areas of the planning, development and management of new towns. I have chosen the realm of adolescent services because better ways of organizing life, if experienced in adolescence, will be demanded by those adolescents in adulthood. I assume that the needs of adolescents are, for the most part, the same as those of adults, except that they are more intensely felt at the younger age. Therefore, means of fulfilling those needs will be applicable to the organization of all institutional structures in a community. If an 18 year old can create a measure of control over the decisions that affect him, or her, that 18 year old will not be willing to give that control up at the age of 21, or 35, or 60. So, if we can maximize certain values in a part of a community such as the one which I have outlined, and this process fulfills peoples' needs, then these people will carry over an effective demand for the maximization of these values throughout their lives.

Perhaps, then, the success of such an experiment in the proposed new community would serve as a model to be followed in other institutional and physical sectors of the community. Thus over time the community could become a real prototype, wholly organized around alterna-
tive ways of ordering the environment. This time-lag is crucial. Assuming that the constraints upon "change" in the new town development process will not be drastically altered, we must be content to design a setting which will incorporate the positive values I have posited to the greatest degree possible. We must also treat the design in a way that the maximization of those values becomes possible in the long run. A utopian design would include the present incorporation of all of those values in all parts of the community. A design which is possible must aim toward the maximization of those values without expecting to succeed immediately. But if those values can be incorporated somewhere in the design of the entire community (even if not maximized), and if they contribute to the fulfillment of peoples' needs, then the experimental setting in which this success occurs can have great influence as a model of social alternative, both for the people immediately affected (the adolescents in the community) and the people who observe this success (other adolescents, older residents of the new town, and the general population). Thus, a multiplication of the consequences occurs. This effect is facilitated, as I have said, by the overall "visibility" of new towns, which results both from the glamour attached to their development and the relatively large-scale at which they are created (a new town of 100,000 people will be seen, no doubt, as more significant than some other social experiment such as a new school of 100 pupils).

It can be argued that this approach is manipulative. I would argue that any design is manipulative; this one happens to be manipulative
in a direction at variance with the norm. In any case, the beauty of
the approach is that the design I propose can be rejected, in part or
whole, by the people who would supposedly benefit by it. People could
refuse to move into the community because of its "radical" bent which
would result in a reorganization of the plan. Families living in the
new town might join together to alter the community design if they so
chose. The adolescents might ask for a change in the areas of the com-
munity which serve them. This work is not intended as a mature blue-
print for a future society. It is subject to change if it does not
meet human needs. It is subject to change even if it does meet human
needs but in a manner found undesirable by the people affected. I
think, however, that a setting oriented toward the maximization of the
values I have advocated will prove successful in meeting peoples' needs
and will be welcomed by those people. The proof of this awaits some
"testing" of the environmental setting once it has been created.

A last caveat is in order. The use of the system of services and
opportunities for adolescents as the focus of my efforts is a tactic.
The same principles applied in that realm should, ideally, be applied
to the new community development process in its entirety. However, as
I have explained, the political feasibility of the latter is small.
The area in which I have chosen to concentrate, then, must be seen as
a model for what could be done in other parts of a community, as a test-
ing ground for my stated principles of design, and as a seed which hope-
fully will sprout into a demand for a differently-organized environment. The focus of the design is how to organize a community around certain principles; this effort is then applied to the area of adolescent services and opportunities. The design process did not evolve exclusively from an analysis of adolescent needs which led inexorably to a set of design criteria.

This design, therefore, is located somewhere along an interface of adolescent needs and my own feeling about how community development can contribute to a particular kind of social change. Having stated this we can finally approach the design itself.
FOOTNOTES

Chapter II

1. Again, it is assumed that a great many people are dissatisfied by our present social matrix, but lack a paradigm of what might be better. The marxist model has been rejected, and it has served as the only real alternative in the twentieth century. It can be assumed, I think, that social change requires alternative paradigms before people will knowingly shift from one form of social organization to another. Thus, prototypical settings are integral to social change if they can be designed in such a way that they might "work" for the average citizen.

2. Advisory Commission on Intergovernmental Relations, Urban and Rural America: Policies for Future Growth, Washington, D.C., 1968, p. 64. This definition of a typical new community is in need of update as a result of the federal Title VII program which has been used to guarantee new town developments which will contain as few as 30,000 residents.

3. I shall use "new town" and "new community" interchangeably.


5. ACIR, p. 100.

6. This already exists under the Title VII provisions of the Housing and Urban Development Laws of 1970.


8. See also E. Erikson, Childhood and Society and P. Blos, On Adolescence.


10. Even if the developer is looking for more than profit, it will generally be felt that in order to attract people he must "follow the market," which means the provision of a community similar to those new towns already built. This reasoning makes the fallacious assumption that the market has been operating well. In fact, in the area of new towns the developers have chosen to follow a similar development plan and have left the "consumers" of their housing little choice. There has been no effective demand function established in the new town field.
Chapter II

11. New towns have been seen as a new "frontier," places where new ways of living could be constructed. The idea of a "new chance" is so deeply imbedded in the American consciousness that new towns will always be considered useful places to begin anew. But this tradition goes back to the ideas of Ebenezer Howard incorporated in his Garden Cities of Tomorrow and first attempted in industrial England.
I.

Among all of the institutions with which adolescents interact it is the educational system with which this interaction is most intense. It seems reasonable, then, to first develop a sketch plan for the educational network available to the community's adolescents.

Erik Erikson has written that schools should facilitate a student's definition of "meaning and purposefulness" and must orient these same students toward a viable sense of "self." I would add that students must have a good measure of personal impact upon the educational process in order to allow "schooling" to fulfill the two functions described by Erikson. I have already proposed incorporation of certain sets of values in an institutional environment in order to fulfill the abovementioned "needs." The issue, then, is how we can include such characteristics as diversity, decentralization, and competence in the range of educational opportunities available in the experimental "setting."

There is an overriding assumption behind my plan of a "good" educational system. That is that every person is unique, and therefore deserving of respect and tolerance from all others who would have their own "uniqueness" recognized. People are not the same. They do not seek to be educated for the same reasons. And since people have differ-
ent purposes in seeking certain modes of education there should be a flowering of alternative kinds of educational resources from which the student can choose according to his needs at a specific time. In order to create the diversity and flexibility required in such an institutional structure I have relied upon the use of an educational voucher system as a primary instrument in my design.  

The operation of a voucher system should be kept as simple as is possible. Once the allocation of operating and capital funds to be expended on each student was determined, a large fraction of money would be granted directly to those families which included students among their number. This sum might be $1,200 per student or $1,500 per student, or whatever. The exact figure is not critical. What is essential is that the funds go directly to the "consumers" of education rather than to the institutional structures which "provide" education (school bureaucracies, et al). There could, of course, be an allowance of one-fourth, or one-third, of this money to be allocated to the maintenance of a number of public educational "places" in order to allow them to pay their rents on leased building space, to buy equipment, and to maintain skeletal staffs of administrators, teachers, janitors and so on. The other 75 percent (or whatever fraction is decided upon) of the funds could be distributed as vouchers with each student entitled to four vouchers of equal value, to be exchanged for any accredited mix of educational services.

This kind of budgeting process would give ultimate control over
the kind of educational services used by adolescents to those adolescents themselves, their families, and the accrediting agency within this educational network. This would be a relatively "open-market," competitive system of "schooling." It will be necessary, however, to have some way of regulating this "market" to some extent in the interests of its consumers. There must be an agency which will assure the community that the diversity built into such a system will be maintained; failing to provide for such an agency would probably result in an educational version of McDonalds hamburger stands—a series of cheap, quick and easy forms of mass-produced, tasteless, undifferentiated education, produced by corporate structures possessed of the inherent efficiency capable of debilitating better quality competitors.

So we need an accrediting agency. The precise manner in which it goes about accrediting particular kinds of educational programs is not of utmost importance. What is crucial is that the agency include professional educators, public officials, local residents and representatives of the student population. This agency should take as its task the establishment of a complementarity of competing and differentiated kinds of educational opportunities which will promote competence in a variety of ways.4

If organized properly such a voucher system would allow for a tremendous variety of educational options. There could be large vocational schools serving the entire town, small apprentice programs in the crafts, the hiring of groups of tutors by a number of neighborhood
residents, the purchase of self-paced computer learning programs, the entrance into basic skills classes, and so on. Essentially, then, there would be an educational network, a series of interactive opportunities available to individuals who would have a wide latitude of choice in how they used this network.

A network alignment such as the one needed to fully accommodate a voucher system both allows and requires certain other elements within the broad confines of the educational system. One of the most critical potentialities in this kind of design is that of institutional decentralization.

It should be clear that decentralization of decision-making in the educational realm is effected by the voucher system itself. People can choose where to get their education, and by what means. Within certain limits there is free choice in this network of opportunities; those limits are the need for accreditation and the need to assemble a group of people willing to learn and teach in the same area of knowledge. This seems to me to be the most practicable form of decentralized schooling short of the abolition of compulsory education.5

The logical extension of this decentralization would be the decentralization of learning "spaces" in the new community. There would be no such thing as "school-buildings." The educational system would utilize leased space in community buildings, factories, office complexes and so on. This space would be of three basic kinds: "home centers," "learning niches," and a central place which I shall call the "cortex."
The home centers would be small facilities in which groups of students maintained a work-space (desk, cubicle, locker, drawing table, etc.), took basic courses in English and mathematics, had access to communications hookups to the "cortex," and could avail themselves of career or personal counselling. These units should be kept fairly small. They should be staffed by a small number of administrators, teachers and student representatives.

The actual size of these places could be about 15 square feet per student (for those in the adolescent age bracket), and should probably be limited to serving no more than 300 students in toto. The limit on numbers is imposed in order to create a small social unit, which in turn creates a greater probability that an individual will participate in the affairs of the "community," will interact with a variety of other students and will be given a share of the responsibility for the management of the schoolplace. This will directly result in an increase in self esteem and interpersonal success, which are mutually reinforcing, and will thus contribute importantly to self-definition, personal impact and personal "competence."

Further, if we assume a rental basis of $3 per square foot for this space we would get an annual cost of space of about $13,500 per annum for such a facility (not including anything but the bare walls and floors). The equivalent cost of school construction would be on the order of $40 per square foot, or $180,000. The cost of financing the bond required for such capital costs would be about $14,400 per
year if we take a net interest rate of 8 percent as our guide. There are obvious savings inherent in this leased space concept, adding force to the argument for decentralized educational centers to be acquired by leases.

The second form of space would be learning "niches." These would be areas donated, or leased at minimal rents, to the educational system by places such as banks, factories, warehouses, power plants, museums, police departments, and so on; wherever there were to be "classrooms" in such functional areas the class would be at the place where the function is performed. So if 30 students join a cooperative program in business techniques they might attend classes at a commercial bank, at a large manufacturing plant, at a neighborhood grocery store, at an accountant's office, and at a cooperative day-care center. At each of these places some space would be laid aside for such purposes, and the courses would be taught by people from those real-world groups. Of course, the students would be paying for the learning by giving their vouchers to the educational consortium formed for the purpose of giving the course; the consortium then turns in the vouchers for payment by the community education board.

The final category of space would be the "cortex." The cortex would be a central place both physically and in terms of its centrality to the network of information and resources necessary to such a form of education. It will be the coordinating unit which procures educational resources, announces the availability of such resources, schedules the
The informational function of this "cortex" is crucial. If you were looking for someone to teach you automotive mechanics you would go to this central place, or connect to it by some communications media, in order to find out if anyone had offered to teach such a course or had sought an apprentice in that field, or whether there were enough other people seeking the same kind of service to create an aggregate demand large enough to buy the services of a local mechanic and an engineer, both of whom could be approached for that purpose. The cortex would also contain vast files of educational programs, films, etc., to be called upon at will by either the "home centers," individual students via home computer consoles or cable television outlets, neighborhood groups, etc.

Such forms of network mediation would require relatively little physical space besides a large computer, a communications studio and
some related offices. But as I have said, the cortex would be linked to a "container" of activities and shared resources to be located in the town center. In order to increase the accessibility of these resources, and to lower their cost, it becomes useful to integrate such educational space with community-used space. This sharing would do much to break down the artificial boundary between "education" and the rest of life, a necessary element in any good educational plan.

That an integration of school and community space if feasible has been demonstrated in the educational plan for Welfare Island New Community in New York. A couple of examples of how space could be coordinated are shown below:

<table>
<thead>
<tr>
<th>SCHOOL FACILITIES</th>
<th>SHARED</th>
<th>COMMUNITY FACILITIES</th>
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<tbody>
<tr>
<td><strong>Performing Arts</strong></td>
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<tr>
<td>drama studio</td>
<td>scene shop, theatre</td>
<td>practice areas</td>
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<tr>
<td>dance studio</td>
<td>concert hall</td>
<td>performing arts center</td>
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<td>music studio</td>
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<td><strong>Visual Arts</strong></td>
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<td>painting studio</td>
<td>print equipment</td>
<td>museum galleries</td>
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<tr>
<td>photography studio</td>
<td>photo offset processing</td>
<td>rental studios for artists and artisans</td>
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<tr>
<td>graphics shop</td>
<td>splicing room</td>
<td>movie theatre</td>
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<td>darkroom</td>
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<td>commercial photographers</td>
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<td>photo laboratory</td>
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<td>camera-print shop</td>
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### SCHOOL FACILITIES

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<tr>
<th>Communications</th>
<th>Shared</th>
<th>Community Facilities</th>
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<tbody>
<tr>
<td>newspaper production lab</td>
<td>city newspaper and newsrooms</td>
<td>Western Union</td>
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<tr>
<td>television production unit and</td>
<td>television studio repair services</td>
<td>cable TV franchise</td>
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<td>cable TV facility electronics lab</td>
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<td>radio station</td>
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<td>TV station</td>
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<td>appliance stores</td>
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### Environmental Design

| planning studios construction trades  | project areas                      | developer's offices         |
| demonstration areas                  |                                    | building supplies           |
|                                       |                                    | professional offices        |

This concept of shared facilities between the educational system and the general community can be carried over to places beyond the city center. For example; basketball courts, gyms, park areas, tennis and squash facilities, swimming pools and so on could be shared recreation areas. And there might be an "ecological park" which could be linked to an earth sciences lab, physics demonstration lab and conference rooms in the "school" area; and would share a planetarium and a water and air pollution testing lab. Some of this facility-sharing could occur as well at neighborhood centers or community sub-centers. Still, it seems most useful at the town center. This would be of use for a number of reasons. First of all, the scheduling of night-time educational activities would add vibrancy to the town center, in contrast to the "closing" of the center in most new towns after dark. Secondly, the aggregation of activities at the community center would help generate a reasonable demand for a mass-transit network and a good walkway system,
both of which I regard as good elements of a plan. Thirdly, the town center will be located at a place convenient to people in the town's region (probably on a highway) and certain educational activities, if located at the center, could be used as a source of export income into the new community and thus serve as part of the town's economic base.

One such resource, of immense benefit to both the adolescents of the new community and the region as a whole, might be a center at which people of various ages could acquire "previews" and test experiences of things they thought they might like to pursue further, but to which they wanted to avoid unknowledgeable commitment. Such a place would be one where one could attempt under expert tutelage the possibility of learning a new language, or fabric design, or skydiving, or creative writing; it would provide the novice or the slightly trained student with two to four weeks of carefully planned experience and learning; whether in marine biology for the 15 year old biology student, housebuilding for the carpentry wizard, or monasticism for the budding ascetic.

In any case, the sharing of facilities, both central and otherwise, will help eliminate the barrier between education and the community as a whole, and will be a cheaper means of providing education. There are other means with which these tasks can be accomplished. The design of buildings should include street-level windows which allow people to observe what is going on inside. There should be designated nature walks in the open areas, and urban paths in the built-up sectors.
of the city. There should be a facility which would contain the his-
tory of the new community (an important contribution to a sense of meaning and affiliation); it would include photographs of the area before the town was built, taped interviews with town residents, planners observers, and leaders; memorabilia of the life histories of certain town residents; scale models of the changes over time of the physical structure of the community; and so on. All of this makes the community the school, and vice versa.

This entire network system of education would save money in the long run. The central intelligence package (computer programs) could be sold to other localities which wished to implement similar educational systems; the flexibility built in by the voucher system will reduce costly overhead; facilities will be had at cheaper rates; and labor costs will go down. Instead of employing one teacher for every 1222 students, the present American average, use could be made of a group of highly trained facilitators and network managers (who would be both teachers and human resource directories), an increased use of non-professional staff (including adolescents who would help teach younger children and even their peers and elders if they were knowledgeable in a particular field), and a reliance upon the large group of community people who have something to teach. Pupil/teacher ratios could probably go up to about 40/1 under these circumstances, substantially reducing the personnel costs which are at the heart of the rising cost of education.
Of course all of this design is "sketchy." One can be nothing but sketchy if the design is meant to be suggestive. There are ideas which I have not developed; these include the use of undifferentiated age groups in the classroom, the inclusion of farmland in the land use plan of the community in order to serve as both a place to be apprenticed in the ways of the land and to provide some food to community stores, and the encouragement of the end of all grading systems which compare a person with all others without regard to his or her purposes and potentials. Even those ideas that are dealt with herein are far from exhausted. But the design is meant as a suggestive piece, a catalyst to a real creation of choice in the environment, so I do not apologize for its lack of preciseness.

How does such an educative system help adolescents fulfill their needs? Well, it should be obvious that such an educational structure is extremely flexible, is open to extreme freedom of choice, allows for a radical decentralization of educational associations which would promote participatory action on the part of all of the people involved in this system, is easily accessible to almost anyone with almost any purpose in seeking education, and would promote an integration of "learning" and the community. These elements would allow, and encourage, behavior which would serve the fulfillment of the basic needs I have posited. This can, perhaps, best be illustrated by briefly describing the activities of a typical adolescent in this new community. I shall call our "learner" Timothy Profane.
Timothy Profane is fifteen years old. He lives with his parents and a younger sister named Minerva, who is one year his junior. At the beginning of the year his family receive eight vouchers, each worth $250, which were the education allocations for both Timothy and his sister for the coming year.

At the time that we see Timothy, he has only "spent" half of his vouchers. One was exchanged for a course in carpentry, woodworking and basic architecture given at the community trade school, a course which was given every year by the school and which he had discovered, by perusal of the files at the cortex, to be well-received by past students. Some of his friends were learning carpentry by becoming apprentices, but Tim did not yet want the responsibility of being depended upon by a craftsman. His other voucher had been used in exchange for an interdisciplinary course entitled "The City." He and Minerva had actually organized that course by registering their interest in finding additional students in the "cortex" and by getting commitments from a variety of people to teach the course if at least 40 students could be found. Eventually the class totaled 46 and accreditation had been formed by the six people who had been asked to teach the course, and $11,500 had been submitted by the students (in the form of vouchers cosigned by their parents and themselves) in payment for the course. A board of directors of this "learning corporation" was created, with 3 teachers and 3 students serving as the directors. One thousand dollars of this money had been paid to the "cortex" in exchange for a series of
reading materials, self-learning computer programs, tapes of census data, films, and materials such as paper and pencils. The teachers were to receive $1,500 each, and the rest of the money was set aside for a class trip to New York City at the end of the first half of the four-month course.

It is Tuesday, the day that Timothy spends entirely in pursuit of schedule learning. He has just left his "home base," where he has spent two hours puzzling over the significance of non-Euclidean geometry under the tutelage of his "teacher," a recently graduated young woman who has a Ph.D in the Philosophy of Science and teaches the English component of Tim's required core classes as well. Tim is on his way to a class in carpentry at the trade school, which is on the other side of town, but on the way he stops at the City Center and walks into the cortex offices. He tells a clerk that he wishes to find someone who will teach him structural theory at an elementary level. The clerk types certain information into a computer console, gets a printout and informs Tim that there are four people who have said that they would be willing to teach such a course. Timothy writes down their names and phone numbers and is surprised to find that one of the prospective teachers is Sally Bowles, a graduate architectural student who lives just three houses down the street from his home. He makes a mental note to call her. He then asks whether there have been any responses to his request for people who would be interested in studying the dynamics of the community farm during the non-growing season, and is told that no one else has expressed any interest but that the farm is anxious
to enroll students in its course in Applied Ecology. Tim thinks he might be interested, so he has the clerk call up the file of student evaluations of the course from the past three years. After reviewing them he find himself ambivalent about the prospect of enrolling in the course, and decides to investigate further.

In the meantime, he has to head toward his carpentry course so he leaves the cortex and walks over to the trade school. It is a Regional School which serves over three thousand students (its "regional" character was a concession made by the developer when the county board of supervisors began to question the worth of the creation of an experimental new community in their midst). Tim walks into the woodworking shops, grabs a saw, and gets set for his instruction. The teacher is an 18 year old girl who has been a master apprentice for six years. She combined with two members of a craft commune, who are woodworkers, and a retired architect to offer this course. Today she will be teaching how to construct a wooden truss for a wood-frame house. The class which had been given the day before was taught by the architect, and was oriented toward the uses of wood trusses in dwelling design. This follow-up is oriented toward the actual construction of such a truss by the class. Ultimately, the purpose of the course is to design and construct a storage house for one of the local parks. There are a number of middle-aged students in this class, all of whom had to pay cash for their enrollment since they aren't eligible for vouchers because of their age. But they have proved to be a tremendous resource
to the younger members of the class by their ability to describe the way the educational system was structured in their own youth. In any case, after three hours of learning about how to properly use a rip-saw in roof construction, and about how to properly use rafters in residential dwellings, the class is over and Tim heads home for dinner.

On the way home he meets his sister, and they decide to stop at the historical society building. When they were younger they were required to take courses in this building, which contains an abundance of records, books, films, artifacts, tapes, etc. which demonstrate the history of the region around the new community and the community itself. Now they stop for pleasure to look at the ecological maps which detail the effect to date of the new community upon the regional ecology. The maps have been produced by an educational group which had worked under the tutelage of a landscape architect from the offices of the developer. These maps are fascinating, and are continuously updated in order to create a good descriptive history of the environment.

Minerva wanders off into the "sound section" of the building and is engrossed in listening to a tape of the sounds generated by the original development of the community, complete with bulldozer, dynamite, foreman's orders, earth movers, etc. She then moved on to listening to a series of tapes which demonstrated what the original three hundred families which had moved into the community expected the community to become. She was surprised to learn that many of these people had expected the town to become a socialist community, which had not occurred,
and that they had completely anticipated the need to reduce the amount of open space originally planned because of the "uselessness" of some of that space.

Half-an-hour later they were home and eating dinner. After dinner, Tim and Minerva were to go to the offices of the community developer in order to attend one of the classes in their course "The City." This class was to be taught by a lawyer and the chief planner for the developer, who were going to discuss the finances and legalities of municipal bonds and their distribution. Since Tim's father was interested in the intricacies of this issue he decided to go along with the class (usually the teachers were happy to let "nonstudents" listen to their courses, particularly if they were members of the students' families. This sometimes got cumbersome when 12 members of a student's communal family appeared at the class, but none of the problems had become unworkable). Their mother had to go to a meeting in the neighborhood that evening in order to help decide what to do with the capital grant of $50,000 that had been given to their neighborhood for social services development.

The developer's offices were in the community center which at this time of night was a hub of activity. As they approached the developer's offices Timothy noticed a line in front of the movie theatre, a group of people creating a light sculpture in the plaza, a packed house in the local pub, and a group of senior citizens doing exercises on the top of the athletic club. Their small coterie bypassed all of this
and entered into the office building in order to proceed to the class.

At that night's lecture were the regular students, a number of local lawyers, municipal officials, and a group of taxpayers who were opposed to any increase in special assessments for the school system (an idea which was being bandied about by the community council at the time). The lecture was fascinating, but not as interesting as the give-and-take which followed. Although Tim and Minerva were not able to comprehend everything that happened, they understood enough to whet their appetites, and determined to make use of the special text on bonds which was available at the reserved materials library in the lobby area of the civic library.

Having ended their day, Tim and Minerva walked home, ready to begin again the next day on a not-quite-the-same schedule. Timothy was to work a half-day at his job in the Parks Department and then go to his home base for an English-social studies class. Minerva was scheduled to attend her home base course and then was going to attend a class taught by her uncle in "fabric design and silk-screen printing." Their father retreated to their house wondering why the typical school-house mode of education hadn't died yet all across the country, and felt extremely happy with the decision he had made ten years ago to move to the new town. He remained somewhat sceptical about the fact that his son and daughter, both of whom were on the Board of Directors of the entity which determined what the course on "The City" was to be, had as much power in determining their education as did their teachers, even
after they had chosen to pursue a particular course by submitting their vouchers. But his scepticism was somewhat allayed by the fact that his children seemed to be getting more competent at understanding what a city "is" every day. Education just wasn't the same as it had once been.

Does this scenario seem improbable? It does not include the critical periods during a day in which an adolescent thinks about sex, hangs out at the local "gathering spot," wonders about how he or she can be free of acne and popular among their peers, and plays out a series of "tests" to see how far the educational system can be bent. And these are critical times in an adolescent's life. I do not intend to design a system which would "incorporate" these periods; they are the facets of adolescent life which should be ordered only by the needs and experiences of the individual. To go further than I have chosen to go in designing an educational system would be, I think, to veer toward educational, and even experiential, consumerism; the client consumes a delineated "package" of ideas and experiences. But to remain ignorant of both the desires and drives of adolescents which cannot be incorporated within the educational system would be foolhardy. The knowledge of these further needs suggest that the educational "load" of courses might be reduced from the present norm of about six hours per day, five days per week to some lower figure. That knowledge also suggest that the most perfect educational system in the world would not
necessarily produce a generation of happy adolescents, which in turn should add a touch of humility to any environmental designer.

With the exception of the abovementioned omissions I do not think the prior scenario at all improbable. There would be resistance to such a program from some local citizens and from certain public officials; there would also be the possibility that some people would be reluctant to move into a community with a relatively unstructured school system. I think this last issue, in particular, is false. It should be obvious that anyone who wishes a completely traditional education can get that education by simply joining with a group of other learners to purchase educational services in the image of the three R's and history-science courses. Free choice works, also, to the advantage of these people.

The other two problems are real, as is the issue of money. They are also problems which are inherent in any new town proposal, whether innovative or not. It is my contention that in the long run, through a better use of physical space and a diminishing dependence upon full-time teaching staffs, this educational system will prove to be cheaper than those presently in use. The initial planning costs will be substantial, but there are sources for this money. First of all, the state could provide part of this cost in order to promote a prototype which might save that state considerable expense over the long run by reducing the share of revenue which would have to be contributed to local communities as educational payments from the state. Additional funds might be avail-
able through the Environmental Education Office of the Department of Health, Education and Welfare (which grants up to 80 percent of the cost of a project's planning, materials and curriculum development); the National Institute of Education (which offers grants in order to test alternative educational projects); the proposed Urban Community Development Revenue Sharing program; Title III of the Elementary and Secondary Education Act (which funds a range of innovative educational approaches); the Bureau of Outdoor Recreation of the Department of the Interior; and a series of programs ranging from the Public Broadcasting Act of 1967 (which supports the establishment of educational broadcasting facilities) to Title II library grants, all of which help fund the planning and construction of educational facilities.14

As to the problem of opposition to a new town by citizens of the area in which the town is to be located, that is a political problem, and one which I shall skirt over in order to avoid being mired in its complexity. This might seem less than courageous, but it makes sense in the context of what I intended to do in this study.

There is not anything overwhelmingly innovative in this proposed educational scheme. The mixture of facilities between school and city, the use of educational vouchers, and the decentralization of institutions have all bee conceived and promoted at one place or another in this country. These ideas have not, though, been used side-by-side in any school system to date. And perhaps most important, there are no educa-
tional systems that I know of that are based upon a real sharing of power between students, teachers and administrators. The design I have proposed gives the seekers of education the power to shape the kind of educational system that exists in a close partnership with the accrediting agency and the curriculum designers who would supply basic learning courses and a base resource bank at the "cortex." There is, therefore, a good amount of room for personal impact on the system of education, as well as upon the small social units created by the home bases. This, sadly to say, is innovative. And the opportunity for "learner" impact on the learning process is probably more important than any and all curriculum reform.

Hidden among the details of this proposal are a number of critical assumptions. First, I assume that an educational system should be directed primarily toward the personal needs of its students, and only secondly toward the filling of social "roles" which the rulers of the educational system deem important. Second, I assume that the critical determinant of the success of failure of a learning system is the relationship between "learners" and "teachers," or between "learners" and the educational system in its entirety. If students have no impact upon the institutional structure which allows for organized learning then they will be nothing but passive consumers of idea, probably incapable of reaching a state of true responsibility for themselves and almost certainly damaged in their struggle to become active citizens of the society. Third, I assume that the free choice incorporated in
the particular educational system that I have proposed can be used to advantage by all classes of adolescents and their families. This is not a design for only that group of most intelligent teenagers who can "best" utilize it at present. The reshaping of institutional responsibilities and powers will lead to the use of the voucher system to advantage by those teens who want to belatedly learn how to read at the age of 13, but on their own terms, and with dignity. And last, I have assumed that any attempt to detail the important relationship in this proposed community between family attitudes and institutions of learning, and their joint effect upon any adolescent, would be useless. I don't think that it is useful to design to that level of detail, for the most part because of the fact that family patterns of behavior and attitude are so diverse as to make design impotent. All a designer can do is construct a proposed institution. He cannot design family attitudes toward that same institution. Except for dyed-in-the-wool social engineers, I suspect that most environmental designers are thankful that such is the case. I count myself among their number.

Again, this design is supposed to be suggestive, not definitive. But although it is sketchy, I think that an environmental design like this one confronts the critical human needs I have posited and creates an opportunity to fulfill them. This is to be reinforced by other aspects of the setting. For example, in the description of a "typical school day" I mentioned the movement of a student from one side of the new community to the opposite "edge" for a class. This represents a
usually unmet need of adolescents in new, or old, communities: the creation of a movement system that will meet the needs of those people who cannot, or do not wish to, drive an automobile. Properly designed, a movement system created in order to meet this need for accessibility could contribute to meeting some of the other criteria which I have stated as design goals.
II.

I suggest that in the peculiar order which we in the United States refer to as the social system, and perhaps in the social system of all "modern" post-industrial areas, the standard attitude exhibited toward the adolescent population is "containment." There is an effective limitation upon the accessibility of adolescents to places, services, and power. One attempt to breach this containment would be the initiation of an educational system akin to the one I have proposed; the orientation of that learning mechanism was toward freedom of choice, ready accessibility, and a sharing of power on an equitable basis in one service network within a new community. Incorporated within that partial design was a decentralization of institutions and a breakdown of the delimiting of educational choice by spatial criteria. The "neighborhood school" would, to a large extent, disappear. Along with it would go the idea of "neighborhood" as it seems to now be understood. In this transition there would be a great potential to free the adolescent of the physical containment usually experienced in American planned communities. The means of achieving this would be an adequate transit system for the new community; one that could serve the needs of a population of adolescents who were not entitled to drive an automobile.

The need for bikeways, to be integrated into the path system of a new community, is already obvious. But not everyone will want to, or be able to, ride bicycles in a community of approximately 100,000 people. And as a matter of necessity, an adolescent who has only ten minutes to
get from one study area to a class in the town center, in the midst of an unusually cold winter, will require a transit network of some kind. This is not to say that bikeways should not be planned. They are a good, esthetically-pleasing, non-polluting, low energy consuming means of transport. Bicycles have the added attraction of being extremely flexible in regard to where they can go and on what schedule. They are not, however, an all-purpose transportation mode, and must therefore be integrated in a larger transit design.

There are two specific transportation needs: access from point-to-point within a community, and access from within the community to both outlying areas and the metropolitan center closest to the new community. A transit system must meet these needs. It should also be designed to fit as closely as possible the value criteria we have posited. In a new community of 50,000 to 200,000 people, which is the population range within which most new towns fall, a rail transit system is not feasible. The limited demand for transit, and the relatively low population density, will not justify the fixed investment required for such a travel mode. This will in all likelihood hold true for any future transit systems such as magneto-induction vehicles, or any other mode dependent upon a fixed right-of-way and a capital-intensive system design.\textsuperscript{17}

As an alternative to a fixed, separate right-of-way travel mode, a number of new towns have included mini-buses in their designs, combined with some form of the dial-a-ride system of calling in to a cen-
tral terminal for what is in effect a taxi service based on a flexible demand schedule. These have usually been relatively unsuccessful unless either subsidized by the community developer or the local homeowners' association, or based upon a fairly heavy user charge.

I propose that a properly-planned new community could utilize a system of institutionalized hitchhiking, first by means of normal automotive vehicles and then making use of electric cars as the latter option became possible. In effect, I am proposing use of an already extant means of travel rather than a new mode requiring a large capital expenditure and public operating budgets. I think that this will lower transportation costs, both to the developer, the taxpayers and the eventual users of the system. There need not be a hidden subsidy of transport facilities built into rents or home prices, which therefore makes access to residence in the town easier for all classes of income. And this mode of travel is both efficient (demand and supply should be relatively coordinated since more people will be driving and hitchhiking at "peak" travel hours before and after work and during breaks in the education day; both less drivers and hitchers will be available at 10:00 PM on a weekday evening), and energy-conserving (in comparison to our present options).

The working of such a transportation design would be fairly simple. There would be a designated bay every half-mile on the arterial and collector streets of the new community at which cars could pull safely off of the road to pick up waiting hitchhikers. Instead of an optimal design
width of about 60 feet for a collector (4 moving lanes of 10 feet and 2 parking lanes of 10 feet) we would reduce the width of the roadway by 10 feet and provide a small turnoff and bay, much like the rest-stop on small highways which we can see today, every half-mile. The reduction in width of the roadway (attributable to the reduction in numbers of cars on the road because of a higher utilization rate of automobiles; each car would carry more people, on the average, because of the use of this mode by hitchhikers who would otherwise require another auto) would more than make up for the cost of creating these "bays." The use of turnoffs and bays would reduce the danger to traffic usually inherent in hitchhiking.

Each person who wanted to use this system could purchase accident insurance from the community transportation authority, and with this purchase would also acquire a large, luminous badge, color-coded by area of residence and numbered in order to give easy identification of the rider. Any person who wanted to be entitled to pick up riders would apply for a special license plate at the transportation authority. Drivers' records would be scrutinized in order to ferret out poor drivers and/or felons from this network. The transportation authority would also regulate the fee that these riders should pay for rides. This might be a 15 cent sum, which would give the driver a total of 75 cents if he or she were to pick up 5 passengers. Since road costs for an automobile are about 10 cents per mile, this sum would afford the driver a small profit, or at least a cost-offset for trips of lengths
up to seven miles, thereby giving an incentive to offer rides and keeping the cost of "riding" reasonably low.

The bays could be designed so the riders would wait under one sign or another, each designating a different quadrant of the community to which the rider wanted to be taken. This would allow drivers to see whether they should stop at a particular bay, depending on their own destination. The license plates of the car would show from which neighborhood the driver came in order to help those who wanted to ride only with familiar faces or people from their immediate community.

The entire operation of such a transit network would be quite simple. It would be easily convertible to use by battery-operated electric cars when they became readily available as a means of city transit. It can coexist with a taxi or mini-bus system. It provides a good means of access within a community for those who cannot, or do not wish to, drive. It will have less environmental impact than the transportation systems generally designed into new towns. It allows for the communal use of cars, a means of intimate social contact, an extreme flexibility in the transit system, access to the system for a low price (low enough to allow easy use by low-income residents), and the coordination of a decentralized travel system with a design for a community based on institutions decentralized in function and space.

A travel mode like the one sketched above would help serve the critical need of adolescents for mobility. I have already demonstrated how a decentralized educational system would operate. It obviously re-
quires access between the separate points in the learning resource network. This will hold true for all of the other institutions which are structured so as to create small units of interaction and decision-making and are therefore physically decentralized. My scenario of a fairly typical day in the life of Timothy, then, might include his waiting at a transit stop near the city center until he got a ride from a passing car headed for the trade school area. He would pay the fare, find out something about the other two riders in the car (an elderly woman and a 10 year old boy) and get dropped off at another transit stop just 300 yards from his destination. Minerva, who did not have a tight schedule that day, was able to ride on the eight-foot bikeway which paralleled most of the road network except when it cut across open spaces either to save time or offer recreational paths through the woods. She used a regular pedal bicycle. There were other cyclists who owned battery-powered bicycles which could travel at speeds of 20 miles per hour in a special reserved bikeway which ran alongside all of the streets in the community.

This entire system would be managed by the local transportation authority, a part of the governance structure of the town. This would be a body populated by elected officials, appointed staff, car operators, transit users, pedestrians, and so on. The authority would be required to maintain a design and operational strategy for properly meeting all of the mobility needs of all citizens in the town. It would have authority to spend monies on any mode of transit in order
to achieve a flexible, efficient system of moving people around the city. It would also be responsible for maintenance of a means of transit from the community to both outlying areas and the nearest metropolitan center. This could be accomplished by bus systems, army surplus trucks to move bicycles and their riders over long distances by motor power in order to increase the range of bicycle transportation, and communal automobile rental systems at the edge of the city proper.

This entire system would allow for lower development costs (because of a savings in street widths), would not require large public operating expenditures, and would offer a flexible transit system which seems quite appropriate for a city which does not have the population density necessary to justify a separate right-of-way, high-capital cost mass transit mode. For my purposes its most crucial asset is the ability to move adolescents around at a low cost by means of a transit system as decentralized as the places to which the adolescents will want to be taken.

I have emphasized the need to depart from a policy of strictly "containing" adolescents. The two kinds of design strategies I have so far employed have promoted such qualities as accessibility to places and information, participation in decision by institutions which directly impinge upon adolescents, the decentralization of decisions and physical activities, and so on. But if we are to truly address ourselves to the problem of how to create a good measure of self-control, security and
communal meaning for adolescents in an experimental community we must concern ourselves with specific instruments of political and economic power. I will suggest two such instruments, a Youth Corporation and a specialized legal system, both intended as strategies for the fulfillment of adolescent needs and as demonstrations of how the entire community's institutional structure might be reordered.
III.

There should be a Youth Corporation established in the new community. It would be open to membership of all residents in the community from the age of 13 to 18 years old. It would be a non-profit corporation created to serve the general needs of its membership. It would receive an original capital grant of at least $200,000, to be held in trust in perpetuity, and would be empowered to collect dues, charge user fees, receive compensation for services rendered, and accept public grants. The original grant could be issued by a state development corporation in the form of special bonds, bearing an interest rate which floated a certain number of points above the "prime rate," probably ranging from 6 to 10 percent total interest. The Youth Corporation would serve as the organizer of collective adolescent interests in the community. It could retain counsel to institute class action suits in cases of unconstitutional age discrimination, in the cause of public interests (suits against polluters, unfair business practices, etc.), and in order to protect the interests of young residents in the evolution of the community. It could organize a group along the lines of the Public Interest Research Groups which have arisen under the present auspices of Ralph Nader. It could serve as a lobbying group in the town hall, the developer's offices, the educational Accrediting Agency, the Transportation Authority offices, and in any other locus of functional power in the new community.

Beyond these functions, the Youth Corporation should be granted
administrative control over certain parts of the community. It could be empowered to enter into contracts with the developer for the planning of teen centers in the city, for the construction of such centers (or designation of same when the centers were to be in leased facilities rather than built structures), and for the administration of these centers as they became operational. A certain amount of land (perhaps 1 percent of the total land area of the community), the location of which would be determined by the overall community planning process, would be "donated" to the Youth Corporation by the developer. This donation would be restricted by contract, requiring certain classes of use in perhaps 75 percent of the donated land. However, the other 25 percent would be considered as zones of minimal development control, allowing almost any use on these parcels that had been approved by the Youth Corporation.

Such "use" might include do-it-yourself play areas, the construction of clubhouses out of scrap materials, the creation of hard pornography movie houses, ungainly-looking loft structures to accommodate business ventures aimed at providing goods desired by adolescents, camp grounds, and any other use which might otherwise be disallowed for failure to conform to the general planning controls of the community. The use of the other 75 percent of the land might be playing fields, cooperative houses which could be populated by teenagers who were either estranged from their family or wanted to experiment with a different lifestyle, record shops which were either owned by the Corporation or promised to contribute a share of profits to it, special learning centers,
etc. I presume that all nonresidential land in this new community will be disposed of by the development entity by giving less-than-fee-interests to the users. This applies to the Youth Corporation as well: it would receive a 99-year lease, at a fee of $1.00 per year, with the right to sublet subject to the conditions of its lease.

The Youth Corporation might also be empowered to administer activities which took adolescents out of the new community. It could sponsor wilderness survival programs much like Outward Bound, establish student exchange programs with other regions and foreign countries, lease a hotel in the nearest large city for the use of its members, and sponsor weeken gripe sessions between young ethnic or class-defined groups at mountain cabins small enough to force the two groups to at least deal with each other. The range of activities which this entity would undertake would be limited only by its monetary and manpower resources, its contractual obligations, and the decisions made by its membership. This last factor is critical. If we wish to create an entity which will maximize the values for which we have decided to strive, how does such an entity reach its decisions. But in creating the structure of this Youth Corporation the opportunity to go even further presents itself. We can get away from the design of pyramidal organizations, which result from an adherence to what A. S. Tannenbaum has deemed "economic ends." This is the situation which results when the goals of the organization transcend the individual or collective needs of the staff. The functions performed by the staff are critical, the people who perform these tasks,
however, are expendable. It is this kind of organization which predominates in our society. Such an organization robs people of responsibility, power over themselves, a sense of desired organizational affiliation, etc. Such an organization is deadening. It allows no creativity except at the upper levels of the hierarchy, retards communication among members of the organization, and over the long run creates a great deal of functional inefficiency by alienating the organizational members from the purposes of that same organization. There is no self-actualization in such a situation, except at the top of the pyramid. And even at the top, there is little chance to learn from mistakes or to feel involved in anything but the administration of the organization (which may, in fact, cause as much anguish as does preclusion from the decision-making process). If we wish to create a Youth Corporation which will allow for the maximization of participation, affiliation, competence, adaptability, penetrability, commitment to the organization, and individual actualization then we must have an alternative organizational design.

The simplest way to organize such an alternative would be in a series of shifting hierarchies. Groups of decision-clusters would be formed to study particular functional problems. When an organizational decision had to be made in that functional area that decision-cluster would act as the coordinator and manager of the decision process, and would ultimately be responsible for a final decision. Membership in these groups would rotate each year, with the rotation organized so that half of each cluster would have 6 months experience at all times. This
informed array would be managed by a rotating group of decision network managers who would be elected annually and could serve in such capacity only once. Each of the decision-clusters would have staffs which were to serve as researchers, facilitators and field administrators. The decision-cluster would consult with these staffs in creating any policies. At least one-quarter of this staff would be charged with learning what every other cluster was doing, and why. People could rotate from one staff position to one for another cluster. In the case of any major decisions a public meeting would be called, to which any member of the new community could come. A vote of a majority of the members of the Youth Corporation might be required to enact certain corporate regulations which were, in effect, decisions. In any case, the point is that such a structure would allow for a decentralized, highly adaptive, and easily penetrable organizational structure. It would encourage participation, communal decision-making and individual competence through assumption of responsibility. The organizational decision-structure would become as important as the organization's stated functions.

I should make it clear that the purpose of this proposal is not to promote the creation of "teen-centers" which would, in effect, get adolescents "opt of the hair" of the rest of the community. The purpose of the Youth Corporation would be to allow those teens who wanted to maintain some distance from social responsibilities in the community as a whole to do so while still participating in those day-to-day decisions which affect their lives. But it would also serve as a pressure group
oriented toward the creation of jobs for teens in local businesses, the prevention of practices which discriminate against young people, and the promotion of community practices which adhere to the values of the adolescent population. This proposal is intended to make the Youth Corporation a vital community force, not a means to segregate adolescents out of the "real" world. It is intended as a means to affect the power balance of the community by shifting more responsibility for public action to the people most directly affected by that action. As such, the Youth Corporation is intended as a model of what could be achieved by neighborhood groups, by old-age unions, by food consumers, and by any other group of people with relatively common interests who wish to more closely influence their day-to-day lives. But I am proposing that such an institutional strategy be attempted first in the realm of the community's adolescents. If it works, other people will steal the idea and a flowering of similar organizations will surely follow.
IV.

The legal system of any community is obviously a basic part of the structure of powers and responsibilities which do so much to define that community. To be concerned with degrees of personal impact available to citizens of a society, to be interested in how a person defines his relationship to a community of people, is to be concerned with the legal system which orders the interactions of these citizens.

It is for these reasons that I propose that a special system of laws and adjudication be created by and for adolescents in this "alternative" community, and that this system be incorporated within the Youth Corporation outlined previously. It is, of course, obvious that the community as a whole would control that legal system which applies to criminal felonies, whether committed by an adult or child. But could we not envision a legal system which would allow adolescents to control their own affairs with the exception of those few criminal offenses of a serious enough nature to require society's intervention? And could not this realm of conflict resolution serve, too, as a model for the whole community if it proved successful?

The legal structure of any community which subscribes to the basic concept of "due process" as embodied in the common law is an intricately balanced one. On one hand, the weight of legal precedent, and the confines of a constitution, provide continuity in the rules which define a society. On the other hand, executive and legislative rule-making can
effectively create a quantum change in a society under certain circumstances. On the level of individual citizens, a person may bring a legal action against almost anyone or anything that he or she opposes for reason of violation of the law. The common law, applied by a court to particular conflicts, is unconcerned about who or what is morally "right" in a society. It is a tool for the resolution of particular conflicts, and depends upon citizens to protect their own rights by making appeals to its application. This fine balance is good. It should not be overly tested unless one would risk the substitution of some less delicate instrument, such as neighborhood tribunals or revolutionary courts. At the same time, this balance seems constantly strained by the inertia of old laws which do no one justice and are based upon perceptions of reality which are no longer useful (if they ever were). It is also strained by the need to use expert intermediaries in the process of claiming one's rights. When lawyers are necessary it is because the legal structure of society has become impenetrable (or is it that lawyers create the impenetrability in order to mystify their field and thus reap the spoils of professionalism which are possible only when ignorance is enforced against the society as a whole)? In a truly just society, however, everyone would have direct access to fair resolution of any conflict. The law is a tool, to be used in an adversary process in order to protect one's rights. The tool must be simple, explicable, and completely penetrable. How can we accomplish the task of creating such a tool for adolescents? First of all, in order for the tool to be
"penetrable," the users must make it. So any design I suggest is just that: a suggested design. The adolescents who eventually populate this alternative community may prefer some other kind of legal system. But I think what follows is a good outline of what could be done.

The Youth Corporation would have to draw a constitution in order to establish its own institutional limits, its purposes, and a set of rights to which any of its members could appeal when he or she felt deprived of these same rights by any other member of the Corporation. This would be done at public meetings by representatives of the Corporation's original members (this Constitution-making could be delayed until a certain number of adolescents were in the town in order to make it a more representative document), amidst a great deal of tumultuous debate, ideological warfare and personal insults. Nevertheless, this would become the framework of the legal system of the Corporation.

Everything would be done in plain language. "Legalese" would be banished to the netherworld. The legislative body would be the Corporation itself, which would operate as I mentioned earlier. There would be a significant difference between the laws and regulations promulgated by this body and those created by other legislatures: the Youth Corporation would have a two-tiered legal system. When a law was passed it would be classified in either of two categories: one category would be those laws that were permanent, to remain as passed unless repealed or amended; the other would be laws which had a limited life (i.e. 5 years), and which automatically ceased to have effect after that time period had
expired. In the latter category might be those major actions which were intended to fundamentally shape the course of the Corporation, or which were thought to have a possible affect of major consequence even if indirect. This subtle procedural change would have a significant effect. It would put the emphasis upon reconsideration of laws and/or rules, the testing of alternatives, an adaptiveness which legal systems presently lack, and would assume that the continuance of social rules should be based on a continuing demonstration of need. This would certainly attack the problem of organizational inertia, while maintaining the continuity inherent in a constitution, and a set of permanent laws. There is, of course, nothing preventing the Corporation from continuously reenacting laws in their original form every five years, but at least a discussion and reassessment will be mandated.

A legal system requires a mechanism by which conflicts are resolved. The present American judicial system utilizes courts, arbitration boards, hearing boards, and a host of other institutional devices. The Youth Corporation would have only two means of conflict resolution besides informal mediation. One would be arbitration, which would be defined as 'an administrative proceeding which would have no precedential weight in future legal actions. The other would be court resolved cases, which would be much like common law conflict resolution in regard to precedent-value and a basis in constitutional limits. There would be no lawyers. The conflicting parties would state their cases as well as
they wished within a given time limit (the limit would be dependent upon the nature of the case). The judge and jury, or arbiter, could ask any questions they so desired. A decision would then be reached. In the case of arbitration the arbiter would simply decide how to resolve the conflict on the basis of "fairness." The judgement could have attached conditions. If the conflicting parties chose to have their dispute arbitrated they forfeit rights to any further legal action.

In the case of a legal action the decision grants one party or another their claim. The decision could be made by a single judge, three judges, or a judge and a jury of three peers which would be called upon to rule on questions of fact. The decision would have to relate to precedential case-law which had been applied to analogous disputes from the past. All judges, juries, and arbiters would be adolescents unless the disputants specifically requested some other arrangement. The disputants would have to agree to abide by all decisions, therefore foregoing any recourse to the legal system of the community as a whole.²⁴

What would all of this accomplish? First of all, it would give adolescents control of the most crucial instrument of the social contract. They would gain possession of this most significant instrument, and therefore gain a great degree of impact on their own lives. Secondly, it would allow for a good degree of flexibility and adaptability in the institutional life of the Youth Corporation. Thirdly, it would allow teenagers to forge their own definition of equity. For example,
should a black youth be punished for punching a white youth who referred to him as "nigger"? Fourth, the necessary continuity of any legal system would not be impaired, but would be better balanced against the need for change than is presently the case. Fifth, this legal system is easy to comprehend, and requires no lawyers. It thus becomes easily accessible to anyone who wishes to use it. Sixth, the limited life of certain laws requires the Youth Corporation to constantly assess its needs by learning about itself and its environment. Lastly, a highly participatory legal system such as this promotes competence in the youths who choose to take responsibility for themselves, and at the same time encourages that choice by its openness to anyone who seeks justice and the fair resolution of conflict.
V.

The design strategies that I have proposed are far from exhaustive. Neither are they detailed. However, they are meant to be suggestive, not determinative; and they address what I think are the prime systemic determinants of what a new community will be. If we affect the transportation network, the educational system and the structure of laws and powers in a community, then we have shaped much of the nature of that place. This is not to say that other institutional designs, or activity-pattern sketches, would not be useful. For example, the use of rite of passage in this experimental community would be quite appropriate, particularly if such rites were linked to the process of the assumption of vital roles in the community by adolescents. The tests of skill associated with such activities would be undertaken by groups of youths, to promote a sense of comraderie and to help them establish a sense of interdependence born of their reliance upon each other for help in these tests. This would be a means to promote communalism as well as self-definition. There are undoubtedly other means by which the values I have championed could be maximized. It is not, however, within the power of one mind to envision all of the alternatives which might promote the goals that I have established. I will therefore arbitrarily limit my proposals for institutional and activity-pattern design to what I have already posited, without making any claim for comprehensiveness.

A community design would not, however, be complete without any
reference to the physical form of that community. The form of a setting is shaped by what happens in that setting, and vice versa. So, for example, the character of the new towns built to date in America have been very much affected by the fact that they are all based upon the use of neighborhoods, as defined by Clarence Perry, as the central unit of space definition. A specific spatial hierarchy has been built into these towns, based first on the neighborhood school ideal and then on the logical progression from small neighborhoods to an extremely dominant city center, and very much influenced by a reliance upon private automobiles as the transportation mode between activities. But, of course, this design was partially a result of the desired life-styles (whether real, or idealized) of the people who were expected to settle in these towns.

The life-style which I have proposed is at variance with that assumed for most new towns. The physical design must therefore be at least somewhat different.

The physical design of an experimental community based on decentralized institutions and decision-making processes cannot be detailed. As can be deduced from the preceding parts of this paper, I have designed into this community a certain amount of anarchy. Groups of people will control certain pieces of land which are subject to any use. Educational institutions will lease space in accord with their present needs, which could well fluctuate wildly. As will be discussed in the
next section of this paper, entering settlers in the community will take part in the design of their own housing clusters. A "designer," therefore, cannot create a physical statement in regard to this community unless that statement is extremely broad.

There are certain broad statements that I can make. The general design of the city will probably resemble a constellation, with certain activity clusters larger than others:

This will both result from, and encourage, the physical decentralization which accompanies a community of diversity and adaptability.

Road widths, and right-of-way shall be smaller than present standards. For example, instead of a standard R.O.W. of 70 feet for a collector street, and a pavement width of about 38 feet, we could assume a R.O.W. of about 55 feet and a pavement width of about 30 feet, all due to our better utilization of cars and a reduction in the need for on-street parking.

There will be an agricultural district somewhere in the community. This will provide an educational resource, a source of food and an outlet for some of the processed sewage from the community waste disposal system (the sewage could be used as fertilizer).

The developer would allot a variety of interests in land, for the
most part designed to both capture increments in land value for the community and to build in greater flexibility in the land use systems. These interests would range from fee simple or life-estate interests in residential land to short-range leaseholds for certain commercial uses, with rent escalation clauses related to profit levels or sales-volume levels of the holders of the lease. There would be widespread use of scenic easements and recreation-use easements in order to establish certain public rights on privately-controlled property. For example, certain open spaces could be given in life-estates to homeowners, subject to an easement for public use of that space for "quiet" recreation such as picnics, sun-bathing, kite-flying, etc.

There would be a widespread use of "impact zoning" related to a survey of maximum "carrying capacity" for development on a variety of land areas within the new town. The limitations of the land would have to be respected by all developers of specific land parcels; this would be written into the contracts between the community development corporation and the recipients of interests in land.

In order to allow for the inclusion of housing for low and moderate income families, and to offset the limits on use required by the concept of "carrying capacity" and impact zoning, the density of land areas which are capable of carrying intense development should average about 15-25 units per acre as a minimum.

The community zoning program should also orient itself toward the idea of "performance zoning" in order to allow for a diminution of seg-
regation of land uses. Performance rules would be drawn up in regard to noise levels, pollution levels, floor-area-ratios, light and circulation characteristics, etc. A commercial use which fit certain guidelines could be located within a certain number of feet of residential units. This would also hold true for other kinds of mixtures of use in order to create a measure of variety in the community and in order to bring a variety of services closer to peoples' homes.

There would be, as I have said, certain areas in which no performance rules were extant. These would be unzoned districts to be used in any way which did not violate the impact zoning guidelines. Some of these districts would be controlled by the Youth Corporation.

There would be incentives in the zoning and building codes to encourage building developers and managers as well as occupants in the high-use districts to provide for sharing and joint use of building space by means of scheduling programs. For example, a developer of an office building who provides for the use of two of the building floors as a youth hostel after 6:00 P.M. would be given permission to use a larger F.A.R. than standard guidelines allow. The occupant of a repertory theatre who allowed the use of the organizational offices for community meetings would be granted permission to give two performances per week more than the number allowed by normal standards. This would allow for more space efficiencies and a spacing of activities around the clock, to suit a variety of needs for the community citizens.

There would be a substantial use of temporary structures, such as
air bubbles or portable plywood modules, both for their ability to accommodate short-term activities, their flexibility, and their extremely low cost. An air bubble has just been constructed over a one-acre piece of land in Columbia, Maryland, for about $4.00 per square foot. It will be used for educational space by Antioch College, but is adaptable to nearly any use. Such a space could be well-used for adolescent clubhouses, school buildings, experimental greenhouses, etc. They could also be used to house prospective community residents who were in the process of planning part of their own housing cluster.

The basic unit of planning would be the living cluster of 12-25 housing units. These would hopefully be populated by relatively homogeneous groups, many of whom had known each other before moving to the new community. These might have a cluster association, and might share some common open space. The relationships between clusters would not be closely defined; this would be left to a natural course of development within the general zoning constraints.

There would be a city center, but it would not be the dominant place in the community to the extent that other locations of activity-clusters would suffer. Each of these other clusters might have one kind of dominant theme, such as performing arts or craft shops, in order to give it a distinctive identity and establish it as an activity magnet. But the city center would have a large enough variety of activities to be a center of entertainment, educational, retail and other service functions 24 hours per day. There should be one place where
anyone can go at anytime to interact with other people; this becomes the function of the center.

There are an incredible number of design rules and statements that could follow from the above. In the interest, again, of design as a suggestion rather than a blueprint, I will cease at this point. There are tensions in these physical plans, such as the conflict between a freedom of use in particular areas and the need to fulfill certain environmental requirements in all areas, just as there are tensions in the institutional design proposed earlier (i.e. the conflict between laws of limited duration and a deep commitment to inculcating the history of the community to its children). The purpose of these tensions is to create a zone of "freedom with community," a place in which these two ideals can coexist. It is only in this zone of coexistence that the goals initially postulated in this work can be achieved. It is my hope that a design such as this one will help to create such a zone. If not, its specifics are irrelevant. If so, it will only be discovered in practice, not in the pages of this study.
Chapter III

1. E. Erikson, *Childhood and Society*

2. I shall assume that either the new community is able to establish its own school district, or that the developers have convinced the local school district that educational innovation is useful and that a good degree of intra-district diversity is useful. In the second case the developer may find itself in the position of contributing resources toward the improvement of an entire school district in a rural or suburban area (i.e. Rouse in Howard County). This is unobjectionable in principle, but may cause financial problems.

3. The number of vouchers must be small enough to allow administration of the program to remain minimally feasible and should be used to encourage the creation of joint-ventures among inter-disciplinary teams by requiring a certain level of agglomeration of resources in order to give equal value for the voucher received.

4. The Berkeley School System in California could serve as an initial model of how to create this "complementarity." Of course, in actuality the determination of what to accredit, and for what reason, will be of critical importance. But the attempt to design to that level of detail would be foolhardy and presumptuous. The criteria by which courses and proposed instructors will be judged will be determined by the populators of this educational system. This will no doubt be affected by their judgement as to what purpose education should serve in a community and by their assumptions in regard to which variables in an educational process are critical to the success of that process. My design makes certain assumptions in regard to those issues, but I will not attempt to design to a level of detail which requires citizens of this proposed community to think in a particular way.

5. Although I favor such abolition, I am aware that this is an issue wholly in the realm of decisions to be made beyond the boundaries of a single community.

6. The costs associated with these "home" facilities could come out of the required 1/4 contribution of educational funds cited above.


8. Based on a range of $30-45 per square foot in metropolitan areas according to an interview with Peter Capinaris of Educational Planning Associates, January 22, 1973.
Chapter III

9. The leased space would also result in savings because the property owner would pay for a good deal of maintenance costs, therefore freeing the school system from a good deal of operating expense, and because as enrollment of pupils shifted there would need not be a mismatch of space and students if the leasing program was satisfactorily organized.

10. It should be noted that I favor the concept of a "town center" because I think that a new community should have one place which is being used 24 hours each day, whether for education, shopping, relaxing, eating, or whatever else might be thought of. I do not consider this a contradiction of my effort to decentralize decision-making in institutional structures.


13. This smaller load is also preferable if one assumes that adolescents should be encouraged to learn to a greater extent outside of any educational system. I suspect that knowledge gleaned from experience and observation is retained longer and considered more valuable than that which is "received" from teachers. Even if that is not true, such knowledge is certainly no less valuable than that gained in school.


15. In nearly every modern new community plan the hierarchical structure of environmental spaces depends, at the neighborhood level, upon the local school as the defining and integrating factor in the conception of that neighborhood.

16. According to a recent study, teen-agers' satisfaction with planned communities was directly related to their ability to get to various facilities and activities; most new towns were considered woefully lacking in this area. See Planned Residential Environments, op. cit., p. 55.
Chapter III

17. In the distant future some of the technology required to produce a cheap minirail may be available. Conversion at that time would be feasible, but not always necessary.

18. The place of this Corporation in the development process here proposed will be explained in the next section of this paper.

19. This is an extremely important assumption, but one which I think is not unreasonable. The advantages of such action, particularly the reservation of land appreciation for public use by renegotiation of lease-terms is obvious. Presently, private developers of new towns retain much of the non-residential land in their own accounts so as to capture the abovementioned appreciation. A public developer should do no less. Another reason for such a policy would be the greatly increased planning control such a system would allow the local governments.


22. For example, the U.S. Congress might pass a tax bill which would equally distribute wealth by means of an extremely progressive rate structure and a series of negative taxes.

23. It can, of course, be argued that our present legal system is unjust, and is populated by "dispensers of justice" who are stupid, petty, mean, or greedy. I am not praising our present judges, legislators, police, and so on. But the balance of past and present needs, based on a striving for due process is necessary. It restrains the future; it allows citizens to claim their rights on the basis of procedural protections rather than substantive "justice," which is ephemeral at best. And it is infinitely preferable to relying upon public opinion, embodied in a people's court, for ultimate justice.

24. Although it is usually illegal to forego legal rights of action by contract, civil courts in the U.S. refuse to hear cases which have been tried in the rabinical courts of the American Jews. There is therefore a precedent for such a stipulation.
Chapter III

25. Erik Erikson has shown that ego identity gains real strength only from a whole-hearted and consistent recognition of accomplishment by the community, or communities, to which an individual belongs (Childhood and Society, p. 195). But in order to prevent an adolescent from being frustrated by his or her inability to succeed at certain tasks, the greater community must tailor the responsibilities it gives to its adolescents to their actual physical and intellectual and moral abilities. How does it know when they have those abilities? They are asked to pass certain tests of skill, the tests becoming progressively harder as they grow older. It is considered no cause for shame if the test is not immediately passed. When it is passed, though, then celebration of the passage into a new life-style is in order. Models for such a process might be the striving for status as an Eagle Scout in the Boy Scouts of America, or the bar mitzvah tests and rites of the Jewish faith.

26. The ability of the land area to carry certain activities without adverse affects upon its ecology. Of course the definition of adverse impact would depend upon the level of impact deemed tolerable by the planners in charge of the program.
CHAPTER IV

THE DEVELOPMENT PROCESS

There are, naturally, certain problems which will be associated with the implementation of the design. A design which is oriented toward altering the social matrix is even more likely to encounter difficulties in the process of implementation. It is a crucial function of environmental design to anticipate at least some of these major problems and to incorporate "amelioritives" in the design itself.

Probably the most critical problem in the creation of an experimental, paradigmatic setting is the establishment of a development entity able and willing to carry through the design. This will require a developer committed to more than dollar returns; one willing to act as a primer, but not an exclusive agent, of social change; one willing to accept broad citizen involvement in the design, construction and management of the new town; one with the resources and skills required to create a new community which will cost hundreds of millions of dollars; one able to "protect" the community from adversary interests which would see it left as a plan only; and one willing and able to suffer a rather long period of investment "exposure."¹ This definition, I think, clearly excludes the use of purely private entities, whether they be small entrepreneurial firms or multi-national corporations. Public participation must be had. In fact the Title VII mortgage insurance program already presents us with an example of public-private partnership in the field of new community
development. The emphasis in that program has been the enablement of private development of new towns via loan guarantees. However, as in all federal programs the disbursement of money has resulted in the creation of an associated set of policy guidelines which the Department of Housing and Urban Development has manipulated in order to gain some measure of control over the way in which the sponsored communities have been planned and developed. The government, however, still takes a primarily passive role in this process, even though it has absorbed a good deal of the financial risk. The emphasis at H.U.D., too, has been oriented more toward the outlook of the mortgage banker (in line with the tradition of the F.H.A.) than that of an agency concerned with real social innovation.

There is another model of public-private partnership in the community development process; that of the Urban Development Corporation of the State of New York. That agency is a public corporation which raises its capital by floating public bonds; has the power to override local zoning and housing codes; is entitled to condemn property for public use; and is empowered to do anything that a private developer can do, including make contracts, buy, sell and lease land, enter into financial agreements with investors and/or banks, form subsidiaries, and so on. This is, essentially, a development entity created to serve the public needs of New York State. Written into its charter, though, is the necessity of involving the private sector in its projects as soon as is practicable. What does this mean for new community development? It means
that a public agency, the U.D.C., can designate which land areas in a state should be used for new town development, can aggregate the land needed to create a new town (if necessary, it can use its power of eminent domain), and can then enter into a joint venture with a private developer in order to actually build the project. The U.D.C. has a low cost of money (whatever the public bond rate is at the time that the corporation sells its bonds), which allows it to accept a relatively low rate-of-return on its investment. It also has enough financial backing to absorb the risks of new town development. So the U.D.C. can join with a private developer by forming a subsidiary company to carry out development, while still retaining control of the development process. The private developer assumes less risk than would be necessary if it assembled the land and incurred the debt financing inherent in that assembly, and therefore will accept a lower profit.

I think it is only under such circumstances, where in return for its assumption of risk a public agency gains a good measure of control over the new community development process that this process will allow for real innovation in the planning, development and management of a new town. At the same time, the private developer, which can probably add to the efficiency and quality of the process of actually building the town, is included in this development process and given a nearly risk-free profit. Although I cannot go into detail in representing what this interrelationship would look like, it seems useful to briefly state how such a development entity would be structured. It should be noted, however, that whatever the structure of this organization, if all of
the parties are not committed to the need to create experimental communities based upon alternative ways of organizing American life then this development entity will be of no use. This is why I have emphasized that my design is "projective"; it is dependent upon the future existence of a suitable client.² A state³ development corporation, such as the U.D.C., after acquiring the land necessary to create a new town would establish a Community Development Corporation. This body will prepare the plans for the new community, contract for the building of the town and the establishment of a service network and will assume overall responsibility for the administration and management of the development. The Board of Directors of this Corporation will include staff of the State Development Corporation, appointees of the Director of the State Development Corporation, a variety of consultants, local government officials, representatives of various citizens groups in the area around the new community, and business leaders from the locality in which the town is to be built. As residents move into the new community they would automatically become members of this corporation, with a right to vote for the Board of Directors of the C.D.C. The charter of that corporation must be so written that eventually the residents have complete control over its affairs. The phasing of this transition from developer control to citizen control is, of course, crucial, and also grist for the mill of another thesis.

There should be a second U.D.C. "subsidiary," the District Corporation, which would serve essentially as the service coordinator and muni-
principal government of the new community, depending for the extent of its powers on the State's devolution of powers to various levels of local government, and upon whether the new community lies within the bounds of some preexistent governmental entity. This district corporation could be an essential part of the development process if the State Development Corporation engaged in the activity of land-banking and declared certain such acquired areas of a certain size and location as special state development districts, to have their own local controls and rights free from the encumbrance of any other local government regulations. Such a law might, of course, result in an abolition of the State Development Corporation by locally-elected state legislators, but the risk will probably have to be taken in order to create experimental communities in areas where all land is already incorporated. In any case, the District Corporation would be either a governmental or quasi-governmental body which could make and enforce public laws and regulations; construct, maintain and operate public facilities and roads; raise funds by taxing and floating bonds; establish a school system; create a social service network; and in general act as a local governmental body. Its power is delegated to it by the Community Development Corporation, and it is therefore a subsidiary body. Its council might be in part elected by the citizens of the community and in part appointed by the C.D.C.

Again, the precise method of distributing power and responsibility among these different levels of developmental organization is not within the purview of this paper, but is understood to be a significant issue.
However, I will assume that an optimal situation would be one in which the District Corporation is wholly elected by the citizens of the new town and is constrained in the exercise of its powers by a series of contractual relationships with the C.D.C. In this the C.D.C. could protect the investment it has made, require the District Corporation to use certain innovative strategies in providing municipal services, and so on; and the District Corporation would be a major instrument of citizen desires right from the first day of the community's existence. It could serve among its other functions as the citizens' lobbyist in the overall corporate development agency.

There would also have to be a Development Corporation, which would actually construct the new community and make certain associated profits. It would be a private group, usually a series of companies and entrepreneurial groups which enter into a joint venture agreement. It would be required to invest a certain amount of equity in the project in return for a guaranteed minimum return on its investment. It would have representatives on the board of the Community Development Corporation, and would be closely consulted in regard to the economic feasibility of the plans and designs for the new community. But its powers would also be limited by the contractual relationships between it and the C.D.C. It will have to develop according to certain broad plans created by the C.D.C., will have to have its specific neighborhood designs approved by that body, and so on. In return for this it need not finance land acquisition; can leave dealings with governmental agencies
to the C.D.C.; does not have to assemble a complete staff until it has a firm contract with the C.D.C.; can develop shopping centers, commercial buildings, apartment complexes, etc. for its own account; and is given a guaranteed return on equity. It is enabled to do "business," which is what it does best, but is constrained as to the ways in which this talent can be expressed.

It is obvious that there will be disputes between the various parts of this organization in the course of the growth of the new community from an idea to a functioning reality. And if we are to be sincere about incorporating citizen participation in the development process, we need places where citizens can participate both positively, and via resistance to some concept or plan or management strategy in dispute. These two factors in the process of creating a new community require certain elements in that process itself which are not usually associated with developing new towns.

First, there should be created a Board of Trustees for the new town. There should be seven members of that Board, all of whom are very familiar with the new town development process and all of whom are committed to the use of that specific new community as an experimental setting for the testing of "alternatives." Two of these members must be selected by the Community Development Corporation, two by the District Corporation, one by the Development Corporation, and one by the political entity (whether county, town, or municipality) of which the town is a part. These six then agree upon a seventh member. All of these mem-


bers must be selected from a list of nominees created by the State Development Corporation, which will establish the list from the ranks of urban "experts" in planning, finance, law, philosophy, and so on. These trustees will then be used as a board of arbitration for major disputes among the various levels of the development-management organization. A single trustee will "hear" the dispute and rule whether it is "major," much like the procedure used in legal courts of appeal. To complete the analogy the Board will sit as a court to determine how to resolve such major conflicts, and will have the power of arbitration in all such cases. If it is determined by the single Trustee that the dispute is not a major one, then the weight of authority rests in the hands of the Community Development Corporation.

Each of the "corporations" will, of course, be encouraged to settle disputes among themselves by mediation or negotiation; and they of course retain their right of legal suit in a dispute over contractual obligations. It is really in the interest of none of these groups to delay the town development (it will increase the cost of development, thus increasing the tax rate, and so on). There is an incentive, then, to settle disputes quickly by means of compromise.

The "citizens" of the new community would be represented in this scenario by the District Corporation, and therefore have an instrument with which to effectively dispute the kind of development and/or management practices being utilized in the town in which they must live. This reduces, somewhat, the commodity-like nature of new towns in the U.S.;
the practice has been that a developer conceives and plans a new community, builds in accord with that plan, and then offers the entire "package" as a community to "take or leave" on the part of the family looking for housing. The procedure is much like purchasing an automobile; the buyer can't directly affect the product design; he, or she, can order a few options, but remains essentially a passive consumer.

The use of a formalized dispute mechanism partially overcomes these failing. 6

There is a means of further promotion of participation in the development process by the residents of the new town. In the initial state of community design a market survey should be taken in order to get "profiles" of those people most likely to locate in the new community. A team of interviewers should then go into the "catchment area" of the new town and find groups of people who fit these profiles and intend to move into the new community, or are strongly considering such a move. A number of these people (perhaps 100) should be formed into planning teams, given technical assistance, and then brought into the Community Development Corporation's design process. They would have to agree to work within certain design constraints (costs, density, development pace, etc.) and would concentrate upon the plan for the first two neighborhoods to be constructed. The professional staff of the C.D.C. could offer these teams alternative sketch plans from which to work (an example might be the design created in this paper), but the teams need
not accept those plans. These teams would create rough plans for the
first two neighborhoods (the ones in which they would live) which would
then be reviewed by the C.D.C. The C.D.C. could approve these plans
and proceed to make them more detailed, alter them with the approval of
the design teams, or reject them with cause. By "with cause" I mean
that the C.D.C. would have to show why those plans were inadequate to
the needs to be met by the community, inconsistent with its purposes,
or technically unfeasible; this would have to be submitted in writing
to the teams. They could challenge this contention by appeal to the
Trustees, whose decision would be final.

This procedure could be continued as new neighborhoods, or units
of development, were conceived. Groups of people who were going to
move into these neighborhoods could move into the community by taking
residence in some temporary housing (apartment-hotels, air bubbles, tent
cities) and forming design teams much as was done in the initial period
of community design. They would then help design their own localities
within the new town, and negotiate with the C.D.C. over the precise
form of these areas. Once this was agreed upon the design would be
finalized and used as the basis for the construction contract between
the C.D.C. and the Development Corporation. Again, such procedures
would allow for a real sense of citizen participation in the new communi-
ty development process. This might take away from the "efficiency" of
this operation, but if I must choose between efficiency and the active
involvement of people in the creation of their own environment I will
always choose the latter.

As I stated earlier, I do not intend to go into detail in discussing the structure of the development entity for the new community. Nor do I intend to discuss further the procedural features of such a process. The exact nature of a developer that could create an experimental community will, however, be of critical importance and should be addressed as a major issue by anyone who intends to make use of new towns as an instrument of social change.

It will, of course, seem somewhat contradictory to advocate that a government agency promote the creation of a new community, or communities, oriented toward social change based upon a rejection of presently used social paradigms. I do not consider it contradictory because of the reasons listed below:

1) Most American governments are not unalterably opposed to change, nor are they malevolent; they are simply unwieldy and stagnant;

2) In the future, the dysfunctionalism of social organizations will require policy-makers to seek new kinds of social networks; and

3) The United States is evolving toward a society which will require that governments tolerate, and even promote, radically different ways of living among their constituents. Environmental pluralism will be welcomed in a society no longer organized around the industrial work ethic.

These are assumptions about the present and future which can be
argued against. If they are true, though, then the inherent contradic-
tions seemingly embodied in my argument for a public developer of alter-
native settings are dissipated.

Even assuming that a "proper" development agency could be created
by the state, there are still significant problems to be overcome by
that agency when it attempts to create an "innovative" new town. Among
the most important are the difficulties to be met in the recruitment of
a proper kind of "staff" to guide the development process, the resistance
of local residents and officials to the creation of a new town in their
midst, the mistrust of the development agency by the residents of the
new community, and the difficulty of assessing what is happening (or has
happened) in the creation of this new setting. Again, all of these are
easily expandable to thesis topics, but will be very briefly examined
here.

In an enterprise which emphasizes the incorporation of a great
degree of citizen participation in all of the multiple aspects of com-
munity development, the professional staff which is hired by the develop-
ment agency must be of a special nature. The people hired must be able
and willing to deal with "laymen" on a partnership basis. This doesn't
sound difficult in an abstract context. However, once development has
commenced there is usually a tension between people who have professional
training and anyone who lacks such training but lays claim to a good
measure of decision-making power. There will be a natural inclination
of professionals toward defining problems, alternatives, and possible solutions in terms of the structure of knowledge which they have studied. This will be true whether they be planners, architects, biologists, managers, engineers or social workers. And these professionals will be inclined to seek answers which are rationally "right" as defined by the structure of knowledge in their own fields. The recruitment of staff, however, must be oriented toward getting people who can deal with the tensions of interdisciplinary, pluralistic planning in which there are no right answers. There will be a multiplicity of right answers depending on one's purposes and attitudes toward the development of the new community. The "professionals" on the staff must accept the fact that they will not be the final arbiters of the development plan and management process. So the kind of recruitment process used must be quite sophisticated. The emphasis must be upon getting flexible people. This flexibility will also be critical as the development matures. There is an inclination to routinize that process once the design and initial development have occurred. A flexible staff will be better equipped to combat this organizational rigidity and allow for the constant testing of alternative strategies apart from those originally agreed upon.

Any new town meets some measure of opposition from people within the "zone" which is impacted by the community. This will be particularly true of a community which proposes to structure itself around "alternative" institutional arrangements. It can be expected that some local
residents will oppose the development because it represents an "urban"
encroachment in what is usually a predominantly non-urban district.
Some local official will oppose the development because the influx of
new "kinds" of people will threaten their electoral base. Some bureau-
crats will oppose the project because it seems to imply a critique of
the way these people have been addressing social problems in the past.

All new town developers face this problem, and have responded pri-
marily by mounting public relations efforts directed at convincing lo-
cal people that a "directed" growth strategy which incorporates a new
town is a better alternative than undirected sprawl which would other-
wise result from growth pressures in the area under consideration. This
strategy might not be as successful when dealing with the justification
of social innovation.

There will have to be careful consideration of how to incorporate
opposition to the innovative new setting in the development process in
a constructive way, and how to promote the development of this projected
new community despite the opposition to such development. This will
require coalition building and the incorporation of local residents,
officials, and bureaucrats in the Community Development Corporation
which will be the prime agent of community building. This could be done
by creating a couple of planning teams from local residents (much as
would be fashioned from the people who would be new residents of the
new community), including local officials on the C.D.C. Board of Direc-
tors, and consulting agency managers and bureaucrats on any intended
social network innovations. This will undoubtedly fail to eliminate opposition to the community, but it is one approach to using this opposition in a constructive way. And the potentially withering opposition to be directed at such a community is clearly a problem which must be faced.

The issue of mistrust of the developer by residents should be eased by the nature of participation in that process discussed earlier. The problem of assessment is discussed on the following pages.
FOOTNOTES

Chapter IV

1. "Exposure" refers to the period from the time one's money is invested to the time that profits are equal to that investment (the breakeven point of the investment).

2. This is not to say that the design would not be useful to a private developer operating in 1973 in order to increase project marketability. I mean, though, that the values inherent in the design remain to be assumed by any large public or private developer in the U.S. (save, perhaps, the old T.V.A.) as its own values.

3. I have emphasized the role of the state because I think that that is the governmental level at which broad enough public needs can be assessed without overlooking local constraints and opportunities in regard to any policy.

4. This is the part of the development team most like what we now consider the whole development entity in American new town building. The Rouse Company would be an example of what kind of entity might be sought for this "slot."

5. The C.D.C. has already acquired the land.

6. This dispute mechanism also contributes to a fulfillment of the human need for "personal impact."

7. The professionals on the C.D.C. staff would have to do two things: 1) create constraints based on development feasibility and 2) represent the interests of residents yet to settle in the town (perhaps people yet to be born).

8. Probably the majority of the staff should be recruited from places in which they have had to deal in public contexts (which will assure the development agency that they have experience in highly complex and unstable projects which suffer the kind of inefficiencies inherent in public work because of the need to justify actions taken in "the public interest)."

9. We can also assume that if people are honestly consulted in regard to specific parts of the development process (by "honestly consulted" I mean with an intent to lend credence to their advice, not to co-opt them) they will feel a certain responsibility for the project's success and lessen any opposition they might have expressed.
CHAPTER V

JUDGING THE COMMUNITY

The creation of an experimental setting requires that that setting be judged in order to draw some amount of useful learning from it. The use of the term "experimental" setting is related as much to the fact that it is a "tentative" environment, subject to drastic change if proved unsuccessful, as it is to the process of social experimentation occurring in the community design that I have outlined. For both of these reasons a learning process is required when one undertakes social intervention of the kind I have proposed. This "learning" would serve two specific purposes:

1) If the setting is failing to meet its goals we must know why and how this failure is caused so as to correct the operating conditions and fulfill the needs of the community residents; and

2) If the setting successfully meets the needs of its participants it will be necessary to try to understand which factors are causal to this success in order to allow for the "transfer" to other communities of the organizational values and structures inherent in that success.

I do not think that a good learning process should emphasize the use of batteries of quantitative analytic instruments as measures of what has happened—or is happening—in an experimental community. I do not think that the experimental model relied upon in scientific inquiry is applicable to social experiments. There can be no holding certain variables constant; there can be no real "control" against which to
measure results; the temporal dimensions of the intervention are extremely significant, therefore voiding replication; and "scaling up" of the experiment is likely to alter the results. Despite these failings, we must still have a learning mechanism, a way of gaining "wisdom" in an ongoing process of social intervention and change. There must be a "way of knowing" about the experiment in order to extend its success to other situations. I have found no better discussion of this need than the analysis incorporated in Donald Schon's Beyond the Stable State—particularly in his chapter "What Can We Know About Social Change"—and I have drawn extensively from his ideas in the short discussion which follows.¹

There are two critical questions central to learning about a social intervention: What happened? and To what extent and in what ways was it successful? There is a "Rashomon" effect associated with any social intervention, a result of the existence of multiple actors with varying perspectives and interests (this "effect" is an allusion to the classic Japanese film which treats the same incident from the point of view of a number of participants in that incident and demonstrates how each has a different conception of what happened). Consequently, there seems to be no adequate objective "proof" of success in the course of social action. This very fact, however, often results in a contradictory demand for quantitative measures of success (social indicators) in order to achieve unambiguous judgements based on such data. But, as Schon indicates, the selected measures are always only inferentially related to
the criteria of which they are supposed to be measures—for example, "percentage of people voting" might be used as a measure of political participation. The measure is inadequate, but for lack of anything else is often adopted as a factor to be optimized by force of policy. The measure, not the goal, is optimized. The optimization of the measure is deemed "success," a result which is patently absurd.

But if this issue of analysis of experimental "outputs" is not easily resolved, there is an equally difficult issue in regard to experimental "inputs." If a setting does succeed, to what factors in the social intervention which resulted in the creation of that setting can we attribute success (and similarly, what causes failure?)? There is no clear answer to this question. In the face of the issue we usually resort to systematic distortions such as those below, in order to "make clear" what we have learned:

1) sloganeering; 2) radical simplification; 3) gross generalization of the project with the consequent implication that it is applicable to a large family of situations without any preconditions; 4) the dissociation of the project from the human actors involved, even though they might well be the "critical variables"; 5) the complete association of project success with the Great Man, the mover and shaker of the project; and 6) the increased reliance upon monitoring and evaluating an experiment, which is likely to cause certain distortion in the outcome due to the knowledge of the participants in the experiment that they are being observed.²

There are two other critical uncertainties mentioned by Schon, and to which I have already alluded. These would be critical even if we could avoid the above characteristics usually associated with social experimentation. There is the question of whether the next instance
may be critically unlike the experimental one (the temporal issue); and whether the success of a first instance, or experiment, can be repeated at a larger and broader scale in which we try to apply what we have learned to a range of other places which possess different characteristics from the particular place into which we first intervened.

All of these issues and uncertainties are obviously related to the design of a new community intended to serve as a "first instance" of alternative social structure and service networks. How can we determine the success of the experimental setting without resorting to sloganeering or slavish adherence to a set of measures which can never adequately judge the fulfillment of the broad goals embodied in this design proposal? Some learning mechanism should be incorporated in any design which is meant to be dynamic, and such a mechanism must be included in any scheme which purports to fulfill human needs, the range of which can only be dimly perceived by any designer. Beside the designer's need to learn about how his or her design must be adapted to the changing human needs that design was meant to serve, the agent of social change must have a way of "proving" that certain alternative institutions and strategies do successfully meet human needs. Otherwise he will have no credibility in the larger social system, which is the ultimate object of this agent's energies. Ergo, a "way of knowing" is a required part of the design strategy.

Schon presents an alternative to scientific inquiry as a way of
knowing about social matters, an alternative which recognizes the impossibility of applying the rational/experimental mode of analysis used in, for example, physics to the affairs of human beings. This alternative is the use of existentialism as a mode of learning. It is existentialism defined in a rather special sense, which Schon has borrowed from Raymond Hainer. It "begins with experience, phenomena and existence as these are perceived. Concepts arise out of the uniquely human process of perceiving, of pattern (Gestalt) forming, of symbolizing, of comparing, and of conceptualizing, which are not explicitly conscious.

Consistency can be assured only through repetition of experience.

Descriptions... are all that can be drawn from experience.

Descriptions are a simplified version of experience."

This existential point of view assumes that public events are complex, unstable and unpredictable. Knowledge about them has validity only to the extent that it is found to be valid in the here-and-now. And since the here-and-now of all past and future experiences are different from that of the setting being studied in the present, an existential theory cannot be used in a general sense as a projective tool for the future, nor can it be accepted based upon its past relevance. Each situation must be studied in and of itself, and learned from within those confines. This will lead to study of each situation by a case history, a narrative; in effect a description of the situation, actions taken, and the consequences of these actions, by a person or persons who are interested in learning about social interventions. This will,
of course, be colored by the conceptions which these people carry around
with them as intellectual and intuitive baggage, but as they gain more
and more experience they can refine their concepts and make wiser judg-
ments as to what models of situation-action-and-effect are useful and
explanatory in the course of social intervention. They then test that
model against the here-and-now to see whether it has relevance to the
present situation, and either apply or reject it. If the model is re-
jected then a new projective model must be used in the situation in or-
der to "make sense of" the social intervention.

This is the epistemological equivalent of "curve-fitting." It is
based upon an analytic model largely dependent for its success on experi-
mental learning on the part of some people or learning agency. It relies
purely on human judgement, and although it does not reject the use of
quantitative tools in order to hone this judgement, it does emphasize
the primacy of human perceptions (even unconscious perceptions) in the
analysis of social actions. These perceptions are "informed" by know-
ledge of other social interventions, gained largely from either direct
participation or the examination of descriptive case studies. But
these analogies must be examined constantly in order to test their rele-
vance to the present, and amended as needed, or altogether rejected.
There is, in this, a reliance upon the kind of human wisdom usually as-
sociated with the best of the village elders of tribal societies, or
the chief of an Indian nation. It suggests that the "testing" of a
social experiment is the judgement of a learning agent, or agents, that
the purpose of a setting has or has not been fulfilled for a set of interconnected reasons.

I would propose that such a "way of knowing" be incorporated in the experimental community as a mode of learning. In order to accomplish this task I assume that it will be necessary to bring a number of people who have experience in large-scale social interventions, community development, and urban planning and management, into the experimental setting on a relatively full-time basis. A "learning agency" could be fashioned out of these people to serve as an agent of the Community Development Corporation, defined in scope and powers by its contractual obligations. The members of such an agency should be required to designate 50 percent of their numbers to reside in the new community on a full-time basis. In this way the agency would have available the perceptions of people both "inside" and "outside" of the experimental setting, all of whom have accumulated enough past experience to proffer some measure of wisdom in regard to what is happening in the community, whether the experiment is successful, and if so why it is successful.

It would probably be useful if these people were empowered and required to conduct in-depth interviews with a sample of community residents from time to time, and to conduct occasional surveys. But these instruments of learning should not be used frequently enough to create a "social guinea-pig" effect upon the residents. Repeated social testing will be both tiresome and probably distorted (because of resident aware-
ness of testing), and should be used only to test the accuracy of the learning agents' perceptions and to allow them to modify their existential models of social behavior.

There is in all of this a great deal of ambiguity. There will be disagreement as to what is happening in the "experiment." There will be no quantitative measures of "success." Such a learning process might well be consider anathema by government agencies responsible for administering "parts" of the experimental setting (such as the State Development Corporation), particularly because their budgets might well be seriously affected by the "outputs" of their programs. But it is a more honest "way of knowing" about social intervention, and can be more comprehensive in its understanding than any alternative learning model.

This learning agency could serve a number of functions. First, the experience gained by the "agents" would obviously be applicable to their participation in future social experiments. They would have a specific experience against which to test any future here-and-nows. This is well and good, but not immediately relevant to the setting I have designed. There are a number of more immediate functions to be served by this agency:

1) It would, in the course of its learning: conduct interviews, take photographs, clip newspaper articles, compile impressions of the town, etc. This will serve as the basis of a community "history," a vital part of a real community which will contribute to a sense of meaning on the part of its inhabitants.

2) If the agency discovers that the designed community is not meeting the needs of its residents it can serve both as an advisor to the C.D.C. (as an instrument of feedback) and as
a "broker" between unhappy residents and the development corporation. Both of these activities will promote modification of unsuccessful parts of the development-management process and the free exchange of information. The second role, that of "broker," is particularly useful in that it allows the learning agency to become the catalyst to create conflict in the community-building process. It can bring together conflicting parties, help them understand why they are in conflict, and even attempt to mediate the dispute. The learning agent thus becomes an alternative to the Board of Trustees as a facilitator of accommodation and an instrument of adjustment in the development process.

3) If this community, based upon alternative ways of organizing life, succeeds in allowing its citizens to fulfill their needs and allows them to live happily and freely, then the learning agency will observe this. There will thus be an independent source of verification of the success of the social experiment, which will enhance the credibility of the "alternatives" and increase the chance of the experiment having a "multiplier effect" on the larger social system by selective transferance of elements of its structure to other communities. This is a crucial function, since this is the ultimate aim of a design oriented toward social change by means of construction of experimental, prototypical settings.

For all of these reasons, it should be clear that the incorporation of a learning agent such as the one that I have touched upon is as crucial to the design-development-management process, if not more so, than any other element of that process. As to the methodology by which learning shall occur, the comprehensiveness of community-building (and particularly community-building based upon social experimentation) requires a comprehensive "way of knowing." It seems to me that no other method could truly examine the success of a human-oriented environment more skillfully than that which relies upon a form of holistic observa-
tion by a well-experienced set of human minds, intuitions and creative energies.

This holistic approach will mean that the "success" of an educational system will not necessarily be determined by an increase in college admissions for graduates of the experimental high school, nor by increases in the median I.Q. of the students of this system. It will be more closely linked to such things as an increase in the degree of "responsibility" which the average adolescent undertakes, or an increase in the number of adolescents who feel that they can help shape the future of their community. The educational system is a "success" if other institutions in the community are forced to follow its example of breaking down the barriers between the institutional "clients" and the administrators of the institution. It is a success if people are enabled to acquire competence in some field of endeavor which can be termed useful work; useful both for the individual and the larger community. It is a success if parents and adolescents begin to speak to each other freely about life-goals and values in order to compromise on the ultimate use of the educational vouchers they jointly possess.

The transportation system will be a success, not if it increases the speed with which people get from origin to destination, but if it provides access to opportunity locations for anyone who needs such access. It will be a success if it results in a greater familiarity between people in the community as a result of shared "rides." It will be a success if the transit system reduces the community's adverse
impact on the ecosystem in which it is located to a practical minimum. It will be a success if people decide that sharing certain capital goods is proper; if, in other words, they become less "privatized."

These are not criteria for success which can easily be measured. An observer could probably best hope to get a "feel" for the consequences throughout the new community of the innovations incorporated in this design. Certain measurements are possible, but we cannot depend on a model which requires a hypothesis, a strict measurement of experimental results and either an acceptance or rejection of the original hypothesis. There will be many vague "gray areas" in this social experiment, successes and failures not easily attributable to any single factor incorporated in the community. Only the uniquely human process of perception based upon past experience could hope to bring some order to the attempt to understand whether this community was meeting the basic needs of its citizens. And in a community designed to give people an opportunity to better define a sense of self, and a sense of meaning, this methodology of observation is as it should be, based on the conviction that a seasoned body of human minds which rely primarily upon descriptive evaluation can judge the success of a human endeavor more successfully than any other means of judgement.
Chapter V

1. The reader who wishes to fully explore the issue of "knowledge" in the course of social intervention is strongly advised to read Schon's book in its entirety.

2. Donald A. Schon, Beyond the Stable State, p. 221-222.


5. For this purpose quantitative measurement of outputs would, no doubt, be much more convenient.
CONCLUSION

The final issue to be resolved is the manner in which this design is to be used. As I wrote earlier, my conception of design and planning is that they are choice-creating arts. This plan, then, is to be a choice, not a blueprint. It should be one alternative to be considered by the residents and the Community Development Corporation in their search for an "enabling" environment. Of course, I have not presented a comprehensive design. I have limited myself to a partial design of the network of services and opportunities for adolescents in a new community. My purpose has been to demonstrate how one could plan social and physical networks intended to promote the values which I have assumed will lead to fulfillment of the basic human needs. Such methods could be extended into other "niches" of the community environment: the principles of communalism, accessibility to power for the maximum number of residents, and so on, are surely applicable to other clientele besides the adolescent population.

There is no intent on my part to design an environment which would then be "bestowed" upon incoming residents of the experimental setting: this would be paternalism in its worst sense. But since my ultimate goal is social change, to be promoted by "alternative" communities, I am convinced that designs such as mine should be strongly backed in the process of joint planning by the professionals of the Community Development Corporation and the residents and residents-to-be of the new community. There should be no imposition of innovative plans on unwilling "consumers" of an environmental setting: this would be another
form of disregard for real participation of people in the creation of their environment which is presently endemic in new town planning in the United States. But such plans should be promoted, argued for, and believed in, in order to create real alternatives from which people can choose intelligently. I firmly believe that, given a real choice, people will choose to create and live in environments quite different from those in which they now reside. This would not result from sudden enlightenment; that would presume that people are presently either stupid or uncaring about where they live. The problem is that for the most part housing developers determine what kind of environments will be available (this is particularly true of new town developers), make their determination based on what has "worked" in the past (meaning what has been profitable), and generally give consumers only a relatively narrow range of "choice." My design argues for an extension of the limits of choice. And I would argue for the adoption of my decision as a means to promote a good community and a link in a strategy for broad social change.

It should be made clear that I am not advocating that all people live in new communities, nor that all citizens should live in settings which promote the values I have advocated. I have assumed that the United States is rapidly entering a period in which the organization of the environment will be less related to the organization of work than it was during the industrial era. I believe that because of the freedom allowed by new forms of exchange (information, economic, etc.) the
motivating factor in people's choice of environment will be the kind of "community" available at a certain "place." And these communities could be radically different from each other because they are not to be oriented toward a certain kind of standard "work" pattern (or, in many cases, around any mode of work.\textsuperscript{1}) A diversity of environmental places is then available. The kind of community I have advocated would be one kind of place among many, and although I would like to see all places incorporating some of the values which are maximized in this specific setting, I recognize that it is impossible, unnecessary, and undesirable to strive for precise duplications of the design in other communities.

It is critical, though, to create quality communities in a society in which the choice of living space is increasingly oriented toward the quality of "community" itself. In a society in which business transactions can be made by picture-phones, Broadway theatre can be seen in the Dakotas via holograph transmission on cable television, the choice of living place can be broadened. There need not be an increasing agglomeration of people, jobs, housing, etc. in large metropolitan areas. The quality of place environments will be carefully assessed by most people before choosing an area in which to live. This quality will be determined by institutional and social organizations as much as by environmental amenities, housing density and recreational opportunities. The design of new communities must take this into account.
In the end, the primary purpose of this design exercise has been to give me an "image" of how to create a part of a special kind of new community, an image which can be tested against the reality of future opportunities I might have in the area of new town planning. It is, in a sense, a "theory of action," a bundle of assumptions and ideas which will serve as a basis for my endeavors until, and if, it must be modified in the face of experience which denies its validity. It is intended to shape the limits within which I will, at least temporarily, attempt to pursue my own goals. So, although this design is intended to be of general use it remains first a personal statement. From my own vantage point that is use enough to make this endeavor worthwhile. I hope that the test of such a design will prove it to have validity at a much larger scale. If not, then at the very least I will have learned a good lesson.
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FOOTNOTES

Conclusion

1. The history of man-made environments is, of course, determined by man's purpose in creating places. The early trade cities were patterned around marketplaces. The capital cities were focused on political points of decision. Industrial cities and the great megalopolis are based upon a specific pattern of production and distribution of information, power and goods. (See Lewis Mumford, The City in History.)
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