THE FUNCTION OF LEISURE IN THE URBAN ENVIRONMENT

by

JON K. ROSENTHAL

B. A., Amherst College
(1954)

and

BARBARA SUE ZIDELL

B. A., Wellesley College
(1957)

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Signatures of Co-Authors

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Certified by

Thesis Supervisor

Accepted by

Chairman, Department Committee on Graduate Students
ABSTRACT

Title of thesis: THE FUNCTION OF LEISURE IN THE URBAN ENVIRONMENT

Co-authors: JON K. ROSENTHAL and BARBARA SUE ZIDELL

Submitted to the Department of City and Regional Planning on May 21, 1960, in partial fulfillment of the requirements for the degree of Master in City Planning.

This study is an examination of the rule of leisure and the factors that influence leisure pursuits in contemporary American society. Based on the objective of "self-actualization"—or realization by the individual of his human capacities—a methodology is set forth for the systematic provision of facilities for use during leisure time.

It is postulated that human needs which await fulfillment in leisure time can be categorized and that corresponding satisfaction potential can be imputed for leisure activities. The existence of barriers to participation is recognized and substitution among alternative activities is developed. Finally, a procedure for integrating and utilizing the developed concepts and systems is delineated. This technique consists of a reconnaissance method and a resource allocation phase.

This thesis is exploratory in nature and its hypotheses require testing.

Thesis Supervisor:

Title: Associate Professor of City Planning
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FOREWORD

This thesis is regarded by the authors as a speculative enterprise which has been undertaken with two personal objectives in mind. The first is to establish a workable linkage between the body of present knowledge relating to leisure and the principles of city planning. Secondly, there has been a desire on our part to create a framework that will serve as the basis for further criticism and speculation on the subject of leisure in our society.

At this point, it is felt that greater progress may be made by organizing existing knowledge and attendant theories rather than becoming prematurely embroiled in the minutiae of detailed, free-floating investigations. In commenting on the value of general theories, Lewin states:

Not infrequently it has been stated that theories which merely explain known facts are of no particular value. I cannot agree with this view. Particularly if the theory combines into one logical system facts which previously had been treated as separate theories, it would have definite advantages as an organizational device.¹

Statement of the problem

The purpose of this study is to establish a rational approach to the provision of adequate leisure time pursuits and associated facilities. Many philosophical treatises have been written on the meaning of leisure. On a more immediate level, there have been scores of investigations pertaining to the requirements, availability, and use of leisure facilities and the manner in which people spend their leisure hours. Nevertheless, the chain of reasoning that links these two areas of

study has been neglected in the literature.

The general approach of this thesis is to cast the problem of allocating resources and providing facilities within a philosophical context, which, it is felt, will provide a positive direction in attacking these problems. The method will be to organize facts and concepts drawn from related fields of study in order to synthesize a comprehensive and integrated system that will facilitate decisions between "parks and pool rooms."
INTRODUCTION

Historical Background

Several characteristics of American life at mid-century focus attention on the subject of leisure:

Observation reveals that there is an increasing amount of free time and personal disposable income available for leisure pastimes. This situation has resulted from the industrial revolution and subsequent technological developments. Productivity has increased at a faster rate than the population, creating a high level of real income even though the working period has been reduced. Unionization, government regulation, taxation, and efficiency of enterprise have caused the wealth of the nation to be widely distributed.

Radical shifts in employment patterns have been necessary to accomplish these advances. From farm, to factory, to office vast changes have occurred in the nature of the job and the meaning of work-leisure has emerged as an entity distinct from work. The concentration of manufacturing and service industries in towns and cities created opportunities for earning a livelihood, which enabled the urban areas to absorb the expanding population.

Industrialization and urbanization have been accompanied by social changes that have had significant implications in regard to the use of free time. The extended family has vanished in the face of greater mobility and changed values; job security has led to more lengthy education periods, now an end in its own right, and toward a fixed retirement age; women have been emancipated politically and, to a large extent, from the drudgery of housework; the high standard of living has
resulted in the lengthening of the life span. The impact of all these developments has been to increase the amount of free time which could be utilized as leisure time.

Simultaneously, the flexibility of the urban environment was diminishing which meant that certain types of traditional leisure pursuits were no longer readily available. Other of the customary forms of leisure were easily adapted to and encouraged in an urban environment. The denial of some traditional outlets created a demand for additional leisure pastimes; and, in turn, the presence of a ready market encouraged the commercial provision of new forms of entertainment and facilities. In recent years, the proliferation of leisure pursuits has been witnessed, with the consequence that competition for the attention of the individual has ensued. Since the auspices furnishing leisure pursuits are fragmented and uncoordinated, it is questionable whether the potential satisfaction that might be derived from leisure is actually being realized.

This supposition acquires additional significance when one observes the residuum of social maladjustment from the laissez faire epoch and the further disorders generated in the present era that are apparent in the American environment. Since leisure time is now deemed an important, distinct aspect of life, there are many spokesmen who assign it significant roles in fostering the well-being of society. One argument states that the availability of too much leisure promotes social maladjustments; another maintains that "poor" or unelevating uses of leisure are a cause; a third believes that proper uses of leisure time may act as a preventative or curative agent in respect to the aberrations.
The general controversy concerning leisure pursuits stems from those who approach the matter with certain moral values or social viewpoints, those who have vested interests in the provision of leisure activities and facilities; and those who attempt to investigate the subject objectively. The examination of the controversy indicates that one must be aware of biased points of view.

Two recent illustrations of diverse outlooks are found in writings of spiritual leader Cardinal Cushing and scientist Dubos. Cushing comments:

Certainly our leisure must be used in some measure for recreation and for relaxation....What we are experiencing is something quite different and something immensely dangerous for our own personal development. The inferior quality of so much that passes as literature, the mediocrity of mass entertainment, the frivolous nature of much socializing, the excessive seeking after excitement---dull the truly creative powers of man, break down the disciplines of virtue, and give an example to the young that puts all spiritual values in jeopardy. I cannot warn too strongly against the unhealthy climate of a society where those hours which are given to man as his own are thrown away in a dissipation of mind and body that cannot fail to lead to debility and degeneration.1

Cushing believes that the lack of balance in leisure pursuits may be one of the ultimate causes of social disintegration. Dubos declares:

If psychiatric illnesses are truly increasing in the Western World, the reason is not to be found in the complex and competitive character of our society; but rather in the accelerated rate at which old habits and conventions disappear and new ones appear. Even the marginal man can generally achieve some form of equilibrium with his environment if the social order is stable, but his is likely to break down when the extent and rate of change exceeds his adaptive potentialities...In most industrialized countries, also, electronics and automation are found to cause maladjustment and social stress by revolutionizing from one year to another the way of life and the techniques of production, as well as the amount of leisure and the manners of entertainment. It probably took Western man long periods of relative stability before he could enjoy the peace of the Sabbath and the sociable evening at the end of the day's work.

The four day week may be the cause of as many stresses as was the exploitation of labor a few generations ago. Dubos maintains that the particular forms of leisure are not the cause of maladjustment, only symptoms, but offers as an explanation of causation the dynamic element---rate of societal change.

Objectives of the Thesis

The historical background and resulting controversy outlined in the previous section have had an influence on the character of the thesis objectives. They are the following:

1. Creation of a framework within which the controversies can be reexamined.

2. Determination of a function for leisure time which will serve as a guide in realizing its potential as an element benefiting the individual and society.

3. Establishment of a framework within which leisure pursuits may be evaluated and the need for activities and facilities of various kinds considered.

4. Identification and systemization of the diverse, multitudinous factors affecting leisure which have heretofore been related in piecemeal fashion.

5. Development of a reconnaissance method for assessing the leisure time potentialities of an area and a basis for considering the allocation of resources.

Definitions

At the outset it is necessary to define several basic terms which will hereafter be employed according to the meaning assigned.

Free time - is time available for activities and personal obligations after livelihood, employment, and formal educational commitments have been met. Such time is characterized by flexibility in scheduling and includes such activities as eating, sleeping, shopping, personal care, worship, play, and various leisure activities.

Leisure time - is a specific term referring to time remaining for leisure pursuits once the obligatory activities encompassed within free time, such as personal, social, and moral commitments, have been met. It is realized that the line between leisure time and free time is frequently indistinct.

Leisure pursuits - are activities or pastimes occupying leisure time that have the following characteristics:

1. They are freely chosen by the individual.

2. They are undertaken with the expectation that they will produce satisfaction or minimize dissatisfaction.

3. Commitments to leisure pursuits may result in subsequent activities which are not freely chosen or satisfying if the pastimes have an indivisible quality which does not permit the satisfying components to be separated from the unsatisfying ones.

4. The commitment of time resources and energy which leisure pursuits involve are subject to reappraisal, revision, and retraction at frequent intervals. These choices are fairly short term in nature.

5. Pursuits motivated by the pathological needs of an individual are not considered leisure pastimes, for insofar as they are compulsive they are not freely chosen.

6. Determination as to whether a pursuit is good or bad, beneficial or detrimental to society, are irrelevant to the definition. Judgments on these points do not prevent a pursuit from falling within the initial purview of leisure although society may elect to encourage or discourage certain types of leisure once criteria are formulated.

Assumptions

The subsequent assumptions have been adopted for the thesis;

1. There is a dichotomy between work and leisure. It is recognized that some qualities similar to those obtained from leisure may be found within the work process. But, this premise is accepted for convenience in analysis and for promoting recognition of the function of leisure time as equally important to that of work. The validity of this assumption will be explored further in Chapter 1.
2. To experience leisure, it is not necessary to achieve a certain attitude or condition. It is the use of leisure time as defined above. This assumption is embraced in order to avoid preconceptions which arbitrarily restrict the scope of leisure pursuits.

3. The thesis is intended to apply to the culture of the United States at the present time.
I

THE FUNCTION OF LEISURE

From colonial days until comparatively recently, life and values in this country have been profoundly work oriented. Leisure, where it existed, was the dessert in life for the rich and the left over for the poor. In the twentieth century a different attitude toward leisure has been emerging; now it seems to be serving as the entree.

Since work was once equated with virtue, there was a strong implication that idleness and merriment were sinful. This attitude is illustrated in the adjustment difficulties presented by the Great Depression. Riesman observes:

The depression did not lead to a redefinition of work but on the contrary made work seem not only precious but problematic. This is not surprising when we realize how stunted were the play opportunities for the man unemployed in the depression. We could see then, in clearest form, how often leisure is defined as a permissive residue left over from the demands of worktime. Even financially adequate relief could not remove this moral blockage of play. For the prestige of work operates as a badge entitling the holder to draw on society's idleness fund. Because by cultural definition the right to play belongs to those who work.

Confronting Riesman's observation is the realization that work may be repetitive, boring, and frustrating and that it may not contain some of the important and valuable experiences of life. According to Keniston, many jobs, even those of a professional nature, are so specialized that

2. In Mirage of Health, Dubos states that recent studies show that after prolonged exposure to monotonous situations the individual's thinking is impaired, his emotional responses are childish, his visual perceptions become disturbed, and his brain wave pattern changes. (pp. 175-6).
they enlist but a small portion of the workers' total talent and understanding. Furthermore, the work bears an abstract and distant relation to the final use of the product, the result being that these occupations no longer have a content with which the worker can associate his imagination. 3

Two ameliorative alternatives appear as a solution to the dilemma which is posed by work. The first is to reinstate joy in the work situation -- a point of view espoused by such men as William Morris, Le Corbusier, Frank Lloyd Wright, Elton Mayo, and Daniel Bell, although the orientation of their proposals differ. The free enterprise economy, characterized by the desire to optimize profits and the interdependence of technological processes, has prevented the incorporation of satisfactions which are personal and varying, such as those found in leisure. The second alternative is to shorten the work period as much as possible, thereby increasing leisure time, which can be used in a desirable and rewarding fashion. This viewpoint has been tacitly accepted by unions, management, recreationists, and community center leaders who wish to minimize the harmful, disagreeable, and unrewarding aspects of work. Riesman maintains that the dichotomy between work and play should be emphasized instead of obscured. His reason for adopting this outlook is pragmatic: "For the long run, I think it makes more sense to work with rather than against the grain of impersonality in modern industry." 4 Leisure is the sphere that he hopes will accommodate the spontaneous play element which would aid the would-be autonomous man in reclaiming his individual character from the pervasive demands of his social character. 5

4. op. cit. p. 310.
5. op. cit. p. 315.
The various functions that have been proposed for leisure time have evolved from the fabric of historical change in social attitudes that has been delineated. When any of these roles is examined individually, a similar, fundamental inadequacy can be noted; the theoretical functions would disenfranchise many persons from the experience of leisure as they delineate leisure in a restricted manner. It will be observed, though, that the various functions considered together include many of the purposes and almost the entire range of activities which might occur in leisure time as previously defined.

Leisure as a Respite from Work

As an evolvement from the "Protestant Ethic", work is regarded as justification for the existence of leisure. The glorification of work as a moral duty posited in Puritan thought lingers on today "intertwined with philosophies of activism, doctrines of progress, and interest in the psychology of success." Accordingly, leisure is viewed as the restorative agent which girds man up for the return to work, the reward for industriousness, and as a means of increasing the worker's efficiency and lowering the costs of production. These viewpoints have led to the reduction of the work period and the embellishment of work time with supposed leisure breaks. It is now evident, however, that more than enough time is available for recovery from the fatigue of labor.

7. Evidence to support this supposition may be found in the fact that a recent rapid rise in dual jobholding has occurred during a period of near full employment and rapid rise in real wages. An estimated 3.6 million persons, 5.3 per cent of the total employed, held more than one job in July 1957 as compared with 1.8 million, or 3 per cent of the total, reported in a July 1950 survey. This dual jobholding is not concentrated among lower income persons either so the implication that people are over-extending themselves merely to survive is lessened. Joseph Zeisal, "The Workweek in American Industry", Mass Leisure, p. 153. (Multiple Jobholding, July 1957. Current Labor Force Series, p. 50, no. 79 U.S. Bulletin of Employment, p. 1)
Furthermore, such books as David Potter's *People of Plenty*, Geoffrey Gorer's *The American People*, and Vance Packard's *The Status Seekers* indicate that the aspirations fostered by the "work hard for rewards" outlook is no longer in harmony with the realities of the present environment because the opportunity for vertical mobility is decreasing. Finally, Bell quotes a worker's cynical, but realistic, comment on the success of attempts to introduce leisure into the work period.

After a few months... the regularity of the break and your dependence on it as a means for destroying the day, utterly rob it of its purpose. Your first break on Wednesday... means that you have six hours left for that day and twenty-two for the rest of the week. Not half the required forty hours is yet past, and only one-fourth of Wednesdays.

While such a respite from work may have the effect of increasing productivity, this result can hardly be considered more than a peripheral purpose of leisure.

**Leisure as an Instrument of Full Employment**

In our society, consumption is frequently considered a means rather than end—that is, consumption is deemed instrumental to the attainment of full employment. Since the end of World War II, a sizeable portion of our productive capacity has been directed toward the provision of leisure oriented goods and services, with the result that play, recreation, and amusement have become dominant themes of the American culture because they are the subject of the hard sell. For example, an advertisement in *Life* magazine showed a gleaming Lincoln car in the patio-living room of an elegantly simple house, with the following copy.

"Your home has walls of glass. Your kitchen is an engineering miracle, your clothes and your furniture are beautifully functional. You work

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easily; play hard."\textsuperscript{10} The significance which can be extracted from such advertising is that the economy is dependent on continued consumption of goods and services which are related to leisure. The logical conclusion is that one must play hard (and consume) in order to have work so that more means are available with which to play. It may be a dangerous one, for it is devoid of humanistic direction.

**Leisure as Compensation for Frustrations**

Another function that has been proposed for leisure time is that of counteracting the frustrations met in work. Under this view, leisure pursuits are outlets for the release of tension and compensations for the denial of satisfaction through jobs. Therefore, leisure is assigned the restricted, but essential role, of raising man's existence to the tolerable level. However, this interpretation of leisure does not account for the meaning of many free time activities in the life of a man whose work is challenging and satisfying.

**Leisure as Activity or Pure Play**

This last observation raises the question of whether a leisure time pursuit has any function outside the activity itself. Campbell explains play in the following manner:

Pure play is activity for activity's sake. It is the expression of an inner need of activity, a recurrent urge to be doing something which belongs to the nature of all living things.

...There seems to be no alternative but to recognize that the psychological nature of man, and all other living creatures is such that they cannot remain inactive even though there is no call to activity in pursuit of a particular end.\textsuperscript{11}

Huizinga, author of the most recent, comprehensive book adopting this view in reference to activities encompassed by the term leisure

\textsuperscript{10} Bell, op. cit., p 36.

pursuits, indicates that play is a quality found in an activity and a
certain attitude or spirit with which a pursuit transpires. Therefore,
many activities, such as scientific research or artistic endeavor, could
potentially include the play element. Yet, Huizinga maintains that these
undertakings, and most leisure pastimes as well, do not possess the
play element today because they are pursued with motives and attitudes
other than those contained in pure play. For example, the game of bridge
is criticized because the players are competitive and "over-serious" in
their participation in it. Although these conditions may reduce the
value of an activity in respect to the pure play element, it does not
eliminate the positive attributes of the game insofar as leisure is con-
cerned. It is evident, therefore, that the pure play explanation is too
restricted in scope to postulate as the function of leisure time.

Leisure as the Basis of Culture

A point of view having several variations endows leisure with the
role of serving as the basis of culture. If the term culture is
broadly interpreted to denote the total of symbolic values which a
society ascribes to objects and events in order to organize its world,
then leisure is not a precondition for its emergence. Societies on the
edge of survival, where leisure is virtually non-existent, have devel-
oped numerous and complex symbolic values. Supporters of this outlook
usually employ the term in a more restricted sense, referring to "high
culture" -- that is, intellectual and highly refined aesthetic forms.
Pieper implies that leisure is a mental and spiritual attitude, which
is not the result of external factors or the mere availability of
spare time. In fact, he claims that idleness is a state which is
incompatible with leisure because it makes man restless;\(^\text{12}\) and the three elements of leisure are, in his opinion, effortlessness, calm, and relaxation.\(^\text{13}\) Consequently, he believes that the soul of leisure lies in celebration, for these elements merge together there.\(^\text{14}\) He continues:

But, if celebration is the core of leisure, then leisure can only be made possible and indeed justifiable upon the same basis as the celebration of a feast and that formation is divine worship.\(^\text{15}\)

In his opinion, all celebrations without divine inspiration are forced and artificial; and, therefore, cannot be undertaken in a leisurely frame of mind.

Pieper's exposition is representative of arguments concluding that leisure is limited to cultural pursuits. The following illustrates the chain of reasoning:

1. Leisure time is a prerequisite for high culture and cultural advancement.

2. Since leisure is the basis of culture (in the restricted sense), the sole function of leisure is to promote this "high culture" which thereby contributes to advancement.

3. Therefore, leisure pursuits must be culturally oriented (narrow sense of the term).

4. Cultural and intellectual activities, which are by definition culturally oriented, are the only ones which may properly be undertaken in leisure time.

5. Since other free time activities are not culturally oriented, they are not leisure pursuits.

A logical fallacy and a debatable assumption are apparent in this train of thought: logically it does not follow that the sole function


\(^\text{13}\) Ibid., pp. 51-54.

\(^\text{14}\) Ibid., p. 70.

\(^\text{15}\) Ibid., p. 70.
is the promotion of "high culture" or cultural evolvement, for additional functions would not outlaw the initial premise; it is questionable whether only "high culture" pursuits contribute to the evolvement of culture as broadly defined. Moreover, if only cultural pursuits are deemed leisure, the existing society would possess relatively little leisure and a great amount of unoccupied free time. This time, whatever it is called, will be occupied by pursuits, and the planner will still be faced with a similar planning task under a different name.

The NRA and the Function of Leisure

The National Recreation Association has not devoted much attention to organizing a philosophical basis on which its program might be based. Butler, in a book prepared for the NRA, generally accepts the self-expression of activity theory of play.\(^{16}\) That is to say, through play, or recreation, or leisure, activity is carried on for its own sake with no expectation of rewards outside of the activity itself. Gans points out, though, that the organization has neglected to inter-relate its programmatic goals with either such a philosophical explanation or its professed socio-psychological goals.\(^{17}\) The following broad objectives mentioned in its publications seems to be the socio-psychological goals: 1) happiness or enjoyment; 2) personal growth, self improvement and development of skills; 3) physical and mental health; 4) safety; 5) integrative sociability; acceptance of group norms; 6) citizenship democratic values. The relationship between these socio-psychological goals and its program and facility standards has not been adequately

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analyzed or empirically substantiated. The outcome is that the latter, which should be means, have become behavioral and programmatic goals; and, hence, facilities requirements are thought of as needs. This tendency represents a confusion of terms; for the socio-psychological factors rather than the facilities correspond to needs. The facilities simply become requirements once their relationship to need fulfillment has been demonstrated.

The examination of all the functions for leisure that have been suggested reveals that the scope of each is somewhat limited. Due to this, each point of view incorporates a bias as to what leisure should be and some writers are outspoken in what they regard as good or bad leisure pastimes.

The eventual judgments that must be made to establish a comprehensive program for leisure time, can be made more properly and with greater assurance if the meaning of each pursuit is understood in relation to other pastimes and within the socio-cultural context. Dubos states that ecological systems are highly integrated and interdependent. Therefore, it may be dangerous to put unstudied conceptions into practice because tinkering with one variable may produce undesirable effects in other parts of the environment. For example, prohibition called forth a host of attendant evils by cutting off a needed outlet. Since the significance of any leisure pursuit is affected by the fact that there are alternative pastimes available in the environment, the objective is to obtain a balanced program of activities.

Returning to the assumptions that there is a dichotomy between work and leisure and that leisure is the use of a certain type of time, the following can be added as requirements for a new and positive proposed function for leisure.

1. Avoidance of bias - It is desirable that the proposed
function be free of normative elements, but it is probable that any function presenting a significant outlook will inevitably be biased.

2. **Proper breadth for proposed function** - The nature of the function allocated to leisure time should be broad enough to encompass the meaning of all major aspects of the use of leisure time. Yet, it should be framed so it is directly applicable to leisure which means that it should not usurp the functions of other aspects of life - work, education, etc. If the function should overlap the others, it should be central to leisure and a secondary function of the others.

3. **Orientation towards man's health** - Since Dubos indicates that all pathological disorders are the summation of a multiplicity of interplay between external and internal environmental factors, it is believed that leisure, as an element of the environment, is intimately associated with the maintenance of well-being. Under this view, health is not simply the result of specific causative agents, but also influenced by factors which keep disease dormant and which help attain positive, joyous health. Therefore the proposed function of leisure should not be oriented merely to achieve safety and a dull, grey state of contentment. It also should embrace exhilaration and strivings towards happiness.

**A New Proposal: Leisure as the Basis of Self-Actualization**

It is proposed that the function of leisure time be thought of as the facilitation of self-actualization. This term, borrowed from the writings of Maslow, refers to the process through which an individual

18...the characteristics of the total environment - physical and social - determine in a large measure the types of diseases most prevalent in any given community. The belief that disease can be conquered through the use of drugs fails to take into account the difficulties arising from the ecological complexity of human problems. (Dubos, p. 136.)

19. Just as the great epidemics of the nineteenth century were precipitated by environmental factors which favored the activities of pathogenic micro-organisms so many of the diseases characteristic of our times have their origin in some faulty factor of the modern environment. It is not to be doubted that precise knowledge of the physico-chemical mechanisms of those diseases will eventually provide means for their alleviation, but maintenance of joyous health is a higher goal than discovery of a cure. (Ibid., p. 182.)
may realize his potentialities -- that is, the process through which he exercises his human capabilities and becomes everything he can become. In explaining this concept, he states:

The muscular person likes to use his muscles, to use them in order to self actualize and to achieve the subjective feeling of harmonious, uninhibited, satisfying functioning which is so important as an aspect of psychological health. People with intelligence must use their intelligence, people with eyes must use their eyes, people with the capacity to love must have the impulse to love and the need to love in order to feel healthy. Capacities clamor to be used and cease their clamor only when they are used sufficiently. These capacities are manifested as needs, according to Maslow, and the act of fulfilling these needs contributes to the achievement of self-actualization. As needs may appear and may be satisfied in all of the major aspects of living, such as work, education, and family life, self-actualization is the ultimate function of all of life's activities. Hence it may seem peculiar to accept this broad concept as the particular function of leisure. Even though the performance of activities in all aspects of life can promote self-actualization, it is desirable to guarantee that adequate opportunities are available, rather than to assume that they will be automatically present. Hence

20. Indirect support for this point of view can be drawn from various books that have referred to a similar concept employing different terminology, such as self-actualization, integration, psychological health, individuation, and autonomy. A parallel is found in Riesman's delineation of the concept of autonomy. In his opinion, it may be easier to break the institutional and characterological barriers to the development of the skill and competence, which are essential to the emergence of autonomous character, in play rather than in work. Since leisure is the sphere that most readily accommodates play, he expects that it may be able to afford opportunities for the development and exercise of these necessary attributes. Inasmuch as the identifying characteristic of the autonomous person is his ability to self-actualize, it follows that leisure time serves as the basis for the latter in fostering autonomy.

possibilities in some realm of life should be directly designed to facilitate self-actualization.

Because the proposed function is broad and abstract, it seemingly violates the previously stated condition limiting the breadth of the function of leisure. However, this function can be considered the central one of leisure, whereas the other aspects of living already possess different primary functions. For example, the chief functions of work are to provide a livelihood, which allows men to satisfy biological necessities, and to provide security. Any instrumental bearing that the fulfillment of these functions has on long-term self-actualization that is not an immediate means to realization of capacities is not considered self-actualization. Secondly, the work process may actually interfere with self-actualization or, at least, have a constricting effect on the opportunities for achieving self-actualization. For many persons, work activities do not employ more than a fraction of their capabilities. Moreover, the inflexibility of work schedules, which are predetermined and remote from personal control, limit the choice of activity - at least, in the short run - even for persons who normally find their work challenging and satisfying. Therefore, direct promotion of self-actualization is incidental and intermittent in the realm of work. Analogous arguments can be drawn for education and family living as they are subject to time inflexibilities, social impositions, and economic restrictions.

Since the sphere of leisure is not burdened by any other preemptory functions, which would adequately encompass all its significant dimensions, the one of self-actualization can be compatibly assigned to leisure time as a primary role. Leisure time is flexible enough to
permit the potential fulfillment of the variegated needs that might arise in this quest. It is hoped that other spheres of life will contribute to this process, but it is considered secondary for them.

As a function for leisure, self-actualization embraces the content of all of the preceding proposed functions. Rather than regarding leisure as a chance for rest and recuperation from the job or merely as an occasion to vent frustrations, the emphasis is on the positive opportunities which can be presented during leisure time. Certainly, the play element is admissable under the proposed function of self-actualization, but it avoids disqualifying pursuits as leisure ones simply because they are stimulated by other motives or they are performed in a serious manner. The dissemination of culture is attained in the course of affording opportunities for self-actualization. It is felt that cultural evolvement will ordinarily occur as a result of self-actualization, although it is possible to conjure up examples illustrating that promotion of individual self-actualization retards cultural advancement. Even though this function encompasses the other roles, it has a unique quality which inheres in its stress of the positive importance of the individual in contradistinction to sub-ordinating his capacities to the immediate "welfare" of the society as they necessarily are in other aspects of life. In the long run, it is felt that culture and the welfare of society is advanced by allowing different individuals to develop fully by choosing freely. The risk that the latter will in specific instances not achieve the former must be accepted once barriers to intelligent decisions are removed.

Implications of Self-Actualization

The satisfaction of the need to exercise one's capacities is the means to self-actualization. Hence, a diversity of individual talents
will be expressed as a corresponding array of needs. Therefore, identification of human capacities becomes of vital importance; and the idea of needs is the dominant construct underlying the remainder of this thesis.

Maslow maintains that there are some basic needs common to all mankind, but in addition to this core there are idiosyncratic needs due to constitutional differences among people. Since leisure is characterized by freedom of choice, it offers opportunity for the fulfillment of a wide range of needs — both those types that are common to all men and the kinds that are peculiar to some. Assuming that idiosyncratic needs cannot be adequately realized in other aspects of life, limitations of leisure may mitigate against the possibility of ever fulfilling them. The implication is that in a large population, displaying heterogeneous capabilities, a variety of means, or opportunities for the use of leisure time, will be required to promote the satisfaction of the needs of all people.

22. A similar notion is expressed in the Hindu religion. Hinduism recognizes four general kinds of persons; and for each of these personality types a distinct yoga is recommended and designed to capitalize on the endowments at the individual's disposal. Huston Smith, The Religions of Men, New American Library, New York, Harper & Brothers, 1958, pp. 41-2.
II

THE RELATIONSHIP BETWEEN NEEDS AND LEISURE PURSUITS

The environment should provide opportunities for self-actualization. To promote self-actualization, it is necessary to satisfy the needs that arise from the capacities and physical requirements of individuals. Insofar as the planner influences the environment, it behooves him to identify the needs that may be present in the population.

Definition of Needs

Lewin, in a work on Field Theory in Social Science, defines need as equivalent to a "system in tension" -- that is, a state that demands the release of tension either through direct satisfaction or indirectly through substitution. As needs arise in response to capabilities and physical requirements, there is a tendency for the individual to undertake some action, assuming that he is aware of the need, which is calculated to satisfy it. Therefore, when a need develops within an individual's life space - which consists of the person and his psychological environment as it exists for him - it becomes a goal that motivates and directs his actions. In addition, subconscious needs are included within the conception of life space to the extent that the scientist can determine their efforts either by direct observation or
inference. Thus, the individual possesses both conscious and latent needs. Under this definition, there is no "baseline" of specific, unchanging pressures and tensions which are deemed needs.

**Distribution of Needs**

At any point in time, a person's needs are arranged in a hierarchy according to their urgency, but any one or more of them may be so dominant that others are temporarily obscured. As the most prominent need is satisfied (i.e., the tension is released) by realizing the goal or finding an appropriate substitute, less urgent needs will replace the first one as the dominant. In the short run this progression is described as: \( a \rightarrow b \rightarrow e \).

Over a longer time period a man's capabilities emerge, mature, and finally degenerate, with the result that he experiences different types of needs during various stages of life. The following diagram represents the needs that may be present at three sample periods -- youth, maturity and senescence. Here "a" is a need that is present throughout life; "b", "c", and "d" are peculiar to the first, second and third periods respectively. The remaining symbols, "e", "f", and "g" represent needs commonly found in the three periods.

<table>
<thead>
<tr>
<th>Youth</th>
<th>Maturity</th>
<th>Senescence</th>
</tr>
</thead>
<tbody>
<tr>
<td>( a \rightarrow b \rightarrow e )</td>
<td>( a \rightarrow c \rightarrow f )</td>
<td>( a \rightarrow d \rightarrow g )</td>
</tr>
</tbody>
</table>

The next diagram suggests that the needs of two or more individuals will not be identical; for the idiosyncratic needs, "h", "n", "l" --- experienced by B replace the "e", "f", and "g" needs of A because there

are constitutional differences in the two individuals.

<table>
<thead>
<tr>
<th>Youth</th>
<th>Maturity</th>
<th>Senescence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>a → b → c</td>
<td>a → c → f</td>
</tr>
<tr>
<td>B</td>
<td>a → b → h</td>
<td>a → c → j</td>
</tr>
</tbody>
</table>

The final diagram depicts the needs of a population of six individuals through five generations. During the planning period (the third generation), needs are present that are universal throughout life; universal in youth, maturity, and senescence, respectively; those that are commonly apparent at these stages; and others that are idiosyncratic.

<table>
<thead>
<tr>
<th>Generation</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Fifth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual A</td>
<td>a - b - e</td>
<td>a - c - f</td>
<td>a - d - g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>a - b - h</td>
<td>a - c - n</td>
<td>a - d - l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>a - b - e</td>
<td>a - c - f</td>
<td>a - d - g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>a - b - i</td>
<td>a - c - j</td>
<td>a - d - n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>a - b - e</td>
<td>a - c - f</td>
<td>a - d - g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>a - b - n</td>
<td>a - c - k</td>
<td>a - d - m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Planning period

a - universal in life
e - common in youth
b - universal in youth
f - common in maturity
c - universal in maturity
g - common in senescence
d - Universal in senescence

h, i - idiosyncratic in youth
j, k - idiosyncratic in maturity
l, m - idiosyncratic in senescence
n - idiosyncratic anytime

The diagram suggests that the planner must consider all needs from "a"
Identification of Needs

Like other animals, the fundamental concern of man is survival. For the individual these instincts are manifest as the drive for self-preservation and the sex drive. A biologist can compile a list of physiological needs that are essential for the continuation of life and its propagation. But, in addition, there are psychological needs, for as Dubos observes:

It is a universal trait among men that as soon as their physiological needs are satisfied, they develop new wishes and urges which in turn are soon replaced by other desires .. the more man becomes civilized or, at least, urbanized, the more he is likely to lose the experience of physiological hunger and to replace it by nonphysiological needs born out of the pleasure of eating. This pleasure becomes an end in itself, replacing the physiological purpose from which it originated.2

Thus needs can be classified according to whether they are physiological prerequisites for life or ones which are complementary to life as aids to the process of self-actualization. Physiological requirements will not be included in the subsequent discussion of human needs because it is assumed that the means of satisfying them are primarily found in work, education, and free-time family activities. The gratification of complementary needs may be thought of as necessary for the attainment of the benefits and the joy that civilization can provide. Through speculation, the authors have composed the following list of man's personal needs which must be recognized and relatively satisfied for progression in the process of self-actualization:

Security--- the quest for confidence, stability, and refuge from

2. Dubos, op. cit., p. 44.
fear and uncertainty with regard to the present and the future.

Love--- the desire to relate in an intimate manner to other particular human beings.

Identification--- the need to determine one's position within the universe.

Recognition--- the desire for acceptance of oneself and/or his deeds by other individuals and groups.

Activity--- the need to release energy through occupation in some endeavor, be it directed or aimless.

Release of Creative and Destructive Impulses--- the need to convert into action images and energies which are possible sources of internal conflict.

Relaxation--- the need for the absence of pressures and the experience of rest.

Change--- the need for frequent alterations in the physical environment, atmosphere, and activities.

Although these needs are thought to be common to all persons on an abstract and general level, they are registered within the personalities of various persons in an individual manner. Because the means of fulfillment are diverse, the specific manifestation of such needs within a personality will affect whether or not gratification can be obtained from various sources. Consequently, it is impossible to link modes of satisfaction directly to this list of needs. The reasons are manifold. It would be presumptuous for the planner to infer that such subtle needs as love, security, or identification have any particular means of satisfaction. They are a state of mind with which the psychologist is more qualified to deal, and then only on an individual basis. The limitation of resources precludes conducting a psychological investigation for every member of the population, even if everyone would submit to such an invasion of their privacy. Moreover, the results would probably not be
of great significance in planning for the use of leisure time, for the needs are so amorphous that the modes of satisfaction will be personalized and multitudinous.

A more feasible approach entails the development of a system which could be directly associated with potential sources of satisfaction. This objective indicates that a needs system should be so framed that it is attuned to the analysis of leisure pursuits. The following assumptions serve as a basis for this procedure.

1. People share a common core of needs in addition to the general, personal needs.

2. These needs can be satisfied for many persons through the same or similar activities.

3. The intrinsic characteristics of a leisure pursuit can be analyzed to ascertain the types of needs it may satisfy.

A triad of instrumental needs has been set up as a device upon which to peg the recognition and systemization of human needs. In order to be useful, the system devised should meet the following criteria: the categories should be operational; they should be as distinct as possible with overlapping reduced to a minimum; they should refer to a similar level of specificity. The major instrumental needs which will form the basis of the system are: stimulation, interaction, and self-expression. They are defined as follows:

**Stimulation** refers to the reception of messages or impulses originating from or aroused by external agents that are absorbed by an individual. They may bring forth awareness or sensations, but they do not necessarily result in externalized response. Stimulation pertains to the operation of the environment on the individual.

**Interaction** is a phenomenon in which there is a fairly balanced interchange of communication and action between an individual and external elements. Interacting consists of interplay between the individual and the
Self-expression is defined as the transmission of messages or impulses which are generated from within an individual. Such transmission does not require immediate response or reaction from the individual's surroundings although he may cause the environment to change by this transmission process. Self-expression refers to the impression of the individual.

As a device, the concept of instrumental needs is useful insofar as it enables the activity to be analyzed in regard to the satisfactions that may be derived from participation. Moreover, when needs are considered in this way, they have the virtue of being easily subdivided into more specific categories.

The authors feel that the major instrumental needs will be experienced repeatedly by all members of the population. It is through their fulfillment that the aforementioned personal needs are achieved. Stimulation, interaction, and self-expression have been subdivided into two further levels which are successively more specific. The relationship of the instrumental needs to the second and third levels of the system is illustrated in Chart 1. These are the need-types that may occur within a population at one time or another. They are termed need-types because it is not expected that every member of the population will experience all of them as they arise in response to the stimulus of diverse personalities and capabilities. But, as a reflection of the personal need for change and the maturation process, a great many of these needs will be experienced during an individual's lifetime.

Although it is possible to continue subdivision almost indefinitely, thereby making the need-types more and more specific, eventually a level of specificity would be reached which associated a unique pattern of satisfaction potential with each leisure pastime. Inasmuch as the
### Chart I: Instrumental Needs and Need Types

<table>
<thead>
<tr>
<th>Level</th>
<th>STIMULATION</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sensation of Physical Forces</td>
<td>Calculated to Arouse Cognitive Interest</td>
<td>Arousal of Apprecciative Response</td>
<td>Creation of Tension and Release</td>
</tr>
<tr>
<td>3</td>
<td>Natural Motion Body Contact</td>
<td>Direct Indirect</td>
<td>Human Creations Natural Phenomenon</td>
<td>Due to Calculated Effort Induced by Nature of Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>INTERACTION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Social Interaction</td>
<td>Cultural Interaction</td>
</tr>
<tr>
<td>3</td>
<td>Solitude Intimacy Camaraderie Fellowship &quot;Chain Linked&quot; Anonymity</td>
<td>Laws of Art Formal Rules Heritage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>SELF EXPRESSION</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Use of Skill or Talent</td>
<td>Creation</td>
<td>Release of Energy</td>
</tr>
</tbody>
</table>

See Appendix B for delineation of second and third level categories
precise nature of the satisfaction produced by a pursuit is ultimately influenced by the individual participant such specificity is not meaningful. For example, the recognizable differences between badminton and tennis may have a significant bearing on the relative satisfaction obtained from the two sports for one individual, but for another person, these differences may be inconsequential. Secondly, when each activity has its own specific pattern of satisfaction potential, the possibility of substituting similar activities is eliminated. As a major value of the matrix is its utility in determining which activities may be substitutive, this extreme specificity is not desirable. In view of these points, subdivision was only carried to the third level which appears to embody operationally meaningful distinctions among pursuits.

The Satisfaction of Needs

The instrumental needs and need-types may be satisfied through activities of various kinds.² Although occupational, educational, and free-time pursuits may afford opportunities for the fulfillment of these needs, the specific intention is to focus on need gratification derived from leisure pastimes. Consequently, the needs system was keyed to this objective and the subsequent discussion of activities specifically pertains to leisure pursuits.

Activities may be analyzed to extract their need satisfaction poten-

tialities. Through examination of the intrinsic motions, characteristics and content associated with a pursuit, the authors have attempted to ascertain whether a specific pursuit may satisfy specific needs. Need satisfaction potential was attributed to the pursuit on the following

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². The term activity (and in other places pastimes and pursuits) refers to the absence of effort or motion as well as to active endeavors.
basis: All types of gratification were accepted that the authors felt could be obtained upon some occasion by physically and psychologically healthy participants. Although it is realized that various pastimes differ as to the maximum satisfaction they could afford in relation to a given need-type, it is not feasible to arbitrarily rate them in this respect. Such an undertaking would require detailed examination of the motions, effort, and concentration involved and the level of intensity of the activity. The accuracy of such an appraisal would have to be checked experimentally.

Within the theoretical maximum satisfaction afforded by an activity, actual satisfaction produced by a specific pursuit is governed by the needs, attitude, capabilities, and requirements of the particular participant. The possibility that the same activity may have different meanings among various people can be ignored in devising an analytical method. The first reason is that in dealing with populations or groups, rather than individuals, the planner can only assume that the same activity may yield similar satisfactions for many persons. Secondly, the planner can never ensure that a person will receive satisfaction in a particular instance; he can only provide opportunities for need fulfillment. In recognition of these factors, the process of inferring general need-satisfaction potential from an examination of the pursuit is a reasonable alternative to determining it from actual socio-psychological experiments on a sample group. Such studies would prove useful in establishing the accuracy of the approach adopted in this thesis.4

4 These investigations may actually be more enlightening once the activities themselves have been analyzed for need satisfaction potential as these analyses can provide a structure within which the results of the experiments can be evaluated. In this manner, it may be possible to recognize the peculiarities which owe their existence to the fact that actual amount and type of satisfaction obtained from
Delineation of the Components of Leisure Pursuits

In order to simplify and systematize the matrix analysis of leisure pastimes, it is necessary to clarify and limit the meaning of the term activity. It has customarily been employed in a loose manner to designate various aspects of leisure pursuits. For instance, in reference to the sport of tennis, the following components may be commonly termed activities: playing a game of tennis, a tennis match, a tennis volley, serving. In this thesis, such components will be denoted as activities, events, sequences, and respective elements. Distinguishing between these constituents avoids the necessity of undertaking separate analyses for each of them. Playing tennis and watching a tennis match are activities; cheering and socializing are sequences. The activity of watching a tennis match contains the satisfactions derived in cheering and socializing. Similarly, the satisfactions which can be attributed in one way or another to a tennis match, which is an event, are the summation of those which can be ascribed to the constituent activities.

These distinctions are particularly useful in the analysis of composite events. For example, a party, as an event, can be combined with distinctly different activities, playing cards or drinking cocktails, to form a card party or a cocktail party, respectively. The possible types of satisfactions that can be derived from these special types of parties are those which the basic event of "party" affords, plus those which are contributed by the additional activities - card playing and

---

a pursuit on specific occasions may be influenced by a host of factors prevailing at the time.
5. Definitions of the components of leisure pursuits will be found in Appendix C.
drinking. 6

To the planner, activities and events are of primary importance because they are the basic units for the provision of leisure pursuits. Sequences and, perhaps, even less complex components, are significant in ascertaining the precise character of the need gratification that may be acquired from a pursuit. By starting the analysis of the content of pursuits with the less complex levels and building up to activities and events, attention is focused on the origins of the need satisfaction potential. 7 This organic interrelationship is of interest to the planner and the recreationists because it may afford insight into new combinations of sequences to form activities and events providing unique combinations of satisfaction. Although this procedure would be desirable as a means of perfecting the analytical method, it is beyond the scope of this thesis. The matrix analysis will be confined to activities and events.

To instill order into the analysis of the multitudinous leisure pursuits, the following major categories were selected: sports, games, etc.

6. The analysis can be conducted as follows: Assuming that the card party is composed of playing poker, drinking beer, and socializing, and the cocktail party consists of socializing and drinking, the activities of playing cards, collective drinking, and "chain-linked" drinking can be treated under the activities section and the pastime of party only has to be dissected once under the events category. Similarly, a birthday party and a wedding anniversary party requires only one additional analysis, that of celebrating an anniversary.

7. If socio-psychological experiments were to be conducted, it would probably be advisable to commence with the less complex levels, for the production of need satisfaction could be attributed more accurately to the components.
social pastimes, cultural pastimes, educational-religious endeavors, hobbies and manual crafts, travel, and finally miscellaneous, low-organized pastimes. In order to obtain a variety of examples under each heading, these eight categories were arbitrarily subdivided. Appendix D lists the selected examples under the relevant headings.

Interpretation of the Matrix

The use of the needs system matrix is demonstrated in Chart II. The needs system purports to be independent of the needs experienced by particular persons at specific times and the analysis of pursuits is not contingent on actual need gratification produced for specific individuals. This construction is intended to depict all the human needs represented in the urban population of a metropolitan area that may be cognizably associated with satisfactions obtainable from different kinds of leisure pursuits. All of the need-types are expected to be present in the population of a metropolis during any time period as a result of summing individual need-types. In devising this system, it was necessary to omit certain universal, personal needs which are connected with various modes of satisfaction in a subtle, individual, and fluctuating manner; but it is expected that these needs may be fulfilled, in one way or another, through satisfaction of the need-types in this system. There is no guarantee, though, that the universal personal needs will be fulfilled even if possibilities are available, for the individual must make proper choices as to pursuits and/or satisfactions in reference to his own personality.

The leisure pursuits listed on the vertical dimension of the matrix offer opportunities for satisfying those need-types that have been
**Chart II: Needs Matrix**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Stimulation</th>
<th>Interaction</th>
<th>Self-Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastics Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing Chess</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Church Services</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Horseshoe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending Sports Events</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Stamp Collecting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woodworking (at home)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gardening</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Embroidering</td>
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<td></td>
<td></td>
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<tr>
<td>Oil &amp; Watercolor Painting</td>
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<td></td>
<td></td>
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<tr>
<td>Attending Opera</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singing in Small Groups</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Ballroom Dancing</td>
<td></td>
<td></td>
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<tr>
<td>Testimonial Dinners (an event)</td>
<td></td>
<td></td>
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<tr>
<td>Participation in Political Club</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bible Classes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Studying Books</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Debating</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sunday Driving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camping</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Summertime</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking Children to Zoo</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Writing Letters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteer Hospital activities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Indicates presence of satisfaction potential
- Indicates alternative manifestations of satisfaction potential
checked in the matrix. The pastime may satisfy all of the needs-types marked, any combination, or any one of them. In view of these propositions, it is evident that an individual's participation in a pursuit may not be stimulated by the desire to satisfy the entire complex of needs that it may potentially satisfy. The pursuit may produce only one type of need gratification for the individual in question and he may be unaware of or indifferent to the other need satisfaction potentialities of the pursuit. Therefore, different persons may undertake the same pursuit to fulfill diverse needs and receive different degrees of satisfaction from it. As the need satisfaction potential of most pursuits is multiple, there is considerable duplication of particular satisfactions among the pastimes. Hence, persons may participate in different activities to satisfy a similar need. The particular activity selected may depend on the correspondence between the other satisfaction potentialities of the pursuit and the subordinate needs of the individual. The stage of development of abilities may also dictate that different modes must be found to satisfy the same needs of an individual.

**Implications of the Matrix**

The analysis suggests important issues that the subsequent chapters will consider. When two or more needs exist concurrently within a person, it is conceivable that they either may be separate entities cognized simultaneously or they may be forged into an interdependent constellation. In the latter event, it may be impossible to obtain complete satisfaction without finding a pastime that gratifies all elements of the constellation simultaneously. For example, the need
for physical exercise in conjunction with the need for "arousal of appre-
ciative response by natural objects" may be satisfied by the activity
of swimming outdoors. Swimming indoors may not be a real substitute
at all because it does not provide opportunity for the fulfillment of the
second element of the constellation. Related to this point is the pos-
sibility that activities have a Gestalt nature. The connotation of en-
gaging in an activity which affords many types of need satisfaction po-
tential may be entirely different from that which can be derived from
several activities each offering satisfaction for one of the need types.
Although the satisfaction potential of an activity may correspond with a person's needs, barriers capable of denying the fulfillment of needs may intervene. Whether an individual actually participates in an activity is determined by the realities of his circumstances and environment. One the one hand, the expectation of satisfaction from an activity will induce participation; on the other hand, the presence of barriers will discourage him from engaging in the activity.

The existence of any fact or attitude which suppresses an individual's enthusiasm for an activity or presents obstacles to participation will be thought of as a barrier. If he can and does surmount the obstacles, they are only potential barriers. If he is capable of surmounting the obstacles but elects not to, they are at that time effective barriers. If they are impossible to overcome, in objective fact, they are absolute barriers.

The decision of whether or not to attempt to surmount a barrier will depend on the individual's appraisal of the urgency of his need, the satisfaction expected, and the barriers that will be encountered.
In general, the positive effect of satisfaction in assuaging his need must equal or exceed the inconvenience, discomfort, or embarrassment caused by the barrier if participation is to occur.

Complexities are introduced because neither barriers or satisfaction are likely to remain constant in a person's estimation. For example, continual participation in an activity may reduce the satisfaction derived because of monotony and boredom, even though the barrier remains constant. The barrier becomes effective as satisfaction declines. Similarly, an increase in the magnitude of the barrier may effectively prevent participation even though satisfaction is unchanged.

A second complication arises because the very act of overcoming a barrier can itself produce satisfaction. Illustrating this point is the example of satisfaction derived from being admitted to exclusive social groups or from overcoming difficulties of access, such as a boat trip to an island. More phenomenal are cases of one-armed golfers and one-legged skiers who have surmounted what would appear to many as absolute barriers.

Although the planner cannot determine the magnitude of a barrier or the quantum of satisfaction obtained by every individual, it is important for him to be cognizant of the types of obstacles that can arise. Case studies and experimentation may be useful as a supplement to his intuition.

Loci of Barriers

Barriers may be associated with the individual, the activity, or the linkage between them. The focal point in the analysis of barriers is the individual, for ultimately he selects from among the leisure pursuits that are available. As a result of his personal attributes and his circumstances, certain needs become manifest and a particular
outlook is developed. His orientation may result in self induced bar-
riers and limits of confidence and tolerance. For participation to
occur, the overriding requirement is the existence of the activity.
If the location of the pursuit is spatially removed from the individual
there must be means of access.

The potential and the connotation of the pursuit are evolved from
the intrinsic characteristics of the activity. The individual's re-
lationship to an activity is developed through his awareness of the
need satisfaction potential of the activity and his perception of the
degree of correspondence between his outlook and the requirements
and connotation of the pursuit. Thus the individual is presented with
ertain conditions and facts over which he has no control; he can choose
to accept or reject the activity.

Lack of awareness may also constitute a barrier at several points:
a person may not recognize his needs; he may not realize that an ap-
propriate activity exists; he may not be cognizant of the means of
access.

The following diagram depicts the overall relationship between
barriers that are associated with the individual, the activity, and
the means of access.
INDIVIDUAL PERSONAL ATTRIBUTES BACKGROUND OBLIGATIONS INCOME

NEEDS

SATISFACTION POTENTIAL

INDIVIDUAL ACCESS ACTIVITY

MEANS OF TRANSPORTATION PHYSICAL FACILITIES ORGANIZATIONAL INPUTS

INDIVIDUAL’S OUTLOOK REQUIREMENTS AND CONNOTATIONS

CAPABILITIES & EFFORT SOCIAL ORIENTATION LEISURE TIME MONEY FOR LEISURE

DEMANDS ON INDIVIDUAL SOCIAL CONTEXT TIME REQUIREMENTS MONEY REQUIREMENTS

Course of Action

Development of Individual's Outlook

Development of Requirements and Connotations

Necessary Correspondence between Individual and Activity
The nature of barriers will be discussed in greater detail by analyzing factors as they are associated with the individual, the activity, and the means of access.

In attacking the problem in this way, all factors will be analyzed insofar as they are related to the individual, the activity, or the means of access. The purpose is to emphasize the fact that each of these elements is affected by barriers in a different manner. In applying the extensive checklist compiled in the following outlines, specific reference points must be accepted—a selected individual, a particular activity, and the means of transportation that he uses. However, the outlines are intended to cover all types of barriers that may be existent in a population and an environment.

The Individual

The personal attributes of an individual (age, sex, mental and physical condition), his background, obligations, and financial resources may be thought of as the "raw material" which he draws upon during the conscious moments of his life. The factors which contribute to the shaping of every person are listed on the left side of the following chart. It is evident that there is considerable interplay between them, but they have been arranged in this manner to emphasize their relationship to leisure. An example would show that a man's education (here thought of as a background factor) will effect his job (an obligation in relation to leisure) which in turn establishes his income, some of which may be used in leisure activities.

The "raw material" may be translated into terms which the individual employs in judging leisure activities in context—his outlook toward leisure. He will assess his own abilities and determine the level of
effort he is willing to contribute. His background along with other factors will shape his social orientation; not all activities will suit him. A person's other obligations will determine the amount of time that is available for leisure. Finally, he will allocate a certain portion of his income for leisure. In summary, at any moment there are limits within the individual which narrow the range of activities in which he can and is willing to participate. The factors are listed on the right side of the following chart.

<table>
<thead>
<tr>
<th>Individual &quot;Raw Material&quot;</th>
<th>Individual's Outlook: Limits and barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal attributes</td>
<td>Capabilities and effort</td>
</tr>
<tr>
<td>Age</td>
<td>Skills and talents</td>
</tr>
<tr>
<td>Sex</td>
<td>Mental and physical energy</td>
</tr>
<tr>
<td>Physical condition</td>
<td></td>
</tr>
<tr>
<td>Mental condition</td>
<td></td>
</tr>
<tr>
<td>Background</td>
<td>Social orientation</td>
</tr>
<tr>
<td>Accumulated experience</td>
<td>Influence of family, peers, neighborhood</td>
</tr>
<tr>
<td>Family</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Outlook toward people, groups, atmosphere, etc.</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>Obligations</td>
<td>Leisure time available</td>
</tr>
<tr>
<td>Employment and other</td>
<td></td>
</tr>
<tr>
<td>occupations</td>
<td></td>
</tr>
<tr>
<td>Free time commitments</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>Money available for leisure</td>
</tr>
</tbody>
</table>

Activities

In general, the two requirements for the existence of an activity are physical facilities - that is, space and equipment - and organizational inputs, or programming. While a person may be able to conceive of the activity and recognize that it is capable of fulfilling his need,
an absolute barrier exists if either of the mentioned elements is missing. Only a few of the items in the following list will be applicable in the case of a simple, solitary, activity, such as reading a novel. The physical requirements would be a place to sit, sufficient light, and freedom from noise; the book is the equipment; the organizational element is limited to the reader. Absence of these requirements would constitute a barrier. A much more complex example would be an initiation to a secret society. Presumably, the space and equipment would be elaborate and rather uncommon and the members would have to assemble at the chosen time. The following outline describes the possible requirements for the provision of an activity.

Activity: Prerequisites for Occurrence

Physical facilities

Space

Availability
standard amount
makeshift substitution
intensity of use - under used or overcrowded

Degree of specialization or adaption required
protection from natural elements
protection from unwanted man created elements (noise, pollution, etc.)
adapted for year round usage (temperature control)
adapted for day or night usage (lighting)

Condition
appropriateness for proposed level of usage, i.e. informal, amateur, competitive, professional
presence of characteristics that could be detrimental to health or safety

Equipment

Appropriate quantity

Appropriate quality

Condition
Organizational inputs

Necessary sanctioning of activity by society

Presence of adequate and sufficient numbers of public, institutional, and commercial suppliers

Government constraints
licenses, taxes, rules and regulations, prohibition

Private constraints
censorship by pressure groups
disapproval by neighbors, peers, etc.

People (when many participants are needed for group activities)

Appropriate qualifications

Compatibility of participants

Other organizational functions

Assemblage of activity constituents at appropriate time and place (participants, space, equipment)

Leadership

Publicity

If the existence of an activity is possible according to the preceding criteria, there remains the question of the relationship between a specific individual and the activity. Of concern to the individual will be the demands that are made upon him in terms of effort and ability; the social context of the activity - the conditions under which he will be accepted and whether the atmosphere is suitable to participation; and, finally, the requirements of time and money. The assumption is set forth that the conditions in which an activity is couched will be generally known to the individual. To the extent that they differ from his own wishes, these conditions will be perceived as barriers. Perfect correspondence between them will indicate the absence
of barriers; he may tolerate the presence of potential barriers. By contrast, deliberate exclusion by the sponsors of an activity may be interpreted as an absolute barrier. The outline below is an expanded checklist of activity requirements and connotations as seen by the individual.

Requirements and Connotations of the Activity as Seen by the Individual

Activity demands on person

Ability, skill, or talent
- Physical - strength, endurance, agility, coordination, etc.
- Mental - intelligence
- Manual - dexterity

Effort
- Physical - energy, output
- Mental - concentration or attention requirements

Social context of activity

Conditions of admission (from point of view of sponsors)
- Necessity of membership in group, club, or organization
- Deliberate exclusion by cost
- Exclusion according to other criteria (race, religion, social status, etc.) by tacit agreement or regulation

Atmosphere (from point of view of individual)
- Presence of characteristics that may be socially or psychologically repugnant
- Distasteful physical setting
- Presence of objectionable social or economic group
- Personal distaste or lack of rapport with sponsors
- Catering to objectionable level of morality ("immoral" or too "moral"?)
Time requirements

Duration of activity or event
Possible indivisibility from other activities or events?

Scheduling of activity or event
Convenience of schedule in relation to individual's free time
Conflict in scheduling with other activities

Cost

Admission fee to activity or event

Indivisible admission fee to several events (subscription or series ticket)

Cost of preparation, investment in equipment, etc.

The means of access

The structure of the urban environment introduces distance as an obstacle because land uses are spatially removed from each other. Since the respective locations of the individual and the activity may not be coincident, the factor of distance is added to the barriers associated with the activity itself in appraising the total potential barriers to participation. Because the individual moves as part of his daily routine, the entire complex of spatial barriers to available pursuits changes. It follows that hypothetically identical people in different locations may be presented with different barriers to the same activity. The absence of transportation facilities rarely constitutes an absolute barrier because there is always some means available if enough time, effort, or money is expended.

The following outline lists the modes that might be employed and their intrinsic characteristics.
Means of Access

Transportation facilities

Public - or common carriers
- airplane
- railroad
- boat or vessel
- rapid transit
- busses and streetcar
- taxi

Private
- airplane
- boat
- automobile
- bicycle
- beasts of burden
- foot

Characteristics and considerations

Convenience to origin and destination

Frequency of scheduling

Condition of system
- network; highways, rail lines, etc.
- vehicles

Flexibility of system

Intensity of use

Speed

Organizational functions
- entrepreneurial functions
- publicity

Transportation is similar to other activities insofar as satisfaction may be derived even though barriers are encountered. As an obstacle, its requirements and connotations will be estimated by the individual in the same manner as with activities. For this reason, the diagram portrays the requirements and connotations of the activity and the means of access as linked together, for the individual will regard the entire

1. Transportation, such as a Sunday drive, may be undertaken as a leisure activity and would be analyzed as a distinct leisure pursuit.
undertaking as a single event. A special adaptation of the outline of requirements and connotations of transportation follows.

### Requirements and Connotations of Transportation as Seen by the Individual

<table>
<thead>
<tr>
<th><strong>Demands on Person</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effort</strong></td>
</tr>
<tr>
<td>Physical - energy output (as in walking)</td>
</tr>
<tr>
<td>Mental concentration - (as in driving)</td>
</tr>
<tr>
<td>Level of comfort inherent in mode of transportation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Social Context</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmosphere of the mode of transportation</td>
</tr>
<tr>
<td>Appropriateness in relation to principle leisure activity?</td>
</tr>
<tr>
<td>Distasteful physical conditions of vehicle or route?</td>
</tr>
<tr>
<td>Presence of objectionable people?</td>
</tr>
<tr>
<td>Overcrowding</td>
</tr>
<tr>
<td>Degree of privacy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Necessity of special permission for access; visas, licenses</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Time Demands</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total time required for trip - a function of distance and mode</td>
</tr>
<tr>
<td>Flexibility for planning a sequence of trips</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Cost</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating cost or fare</td>
</tr>
<tr>
<td>Capital investment required</td>
</tr>
</tbody>
</table>

Communication may be thought of as an analogue to transportation, as it is the means by which individual awareness is achieved. Although lack of awareness may become an effective barrier in several ways, it has not been included in the diagram because it is primarily a linkage factor between elements. The factors that establish the
limits of awareness are: the means of communication that are employed; the extent to which environmental facts are publicized; and the ability of the individual to receive information and messages.

**Barriers: In Summary**

The preceding paragraphs have suggested that barriers may arise from the constitutional make-up of the individual, the intrinsic characteristics of the activity, and the means of access. Whereas any of the obstacles considered individually might only have been potential barriers to an individual, the conjunction of several of these factors may constitute an effective barrier. Although obstacles may not prevent or discourage participation in some cases, they may reduce the amount of actual satisfaction that the individual experiences. The compiled checklists of potential barriers are designed to aid the study of particular environments.

**SUBSTITUTION: A MEANS OF CIRCUMVENTING BARRIERS**

The systemization of barriers is descriptive of the relationship between a single individual and a particular activity. In striving for self-actualization through the fulfillment of needs, the person will assess his own needs, the satisfaction potential of the activity, and the magnitude of the barriers. If the intuitive calculus produces a positive result, it will be assumed, for the purposes of analysis, that his needs can be fulfilled by the activity. A negative decision will indicate that the needs awaits satisfaction through a substitute activity. Otherwise it will remain frustrated. The study of substitution

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2. It is recognized that the actual receipt of satisfaction does not always equal that which is expected. When freedom of choice exists among leisure pursuits, the individual's course of action should lead him to more satisfactory alternatives. Assuming that he is able to learn from his experiences, he will not continue to engage in an unsatisfying activity.
introduces the question of alternatives, if they exist, and the choice among them.

The Variables of Substitution

The most significant factor to be considered is individual need. In theory, a perfectly rational man would be able to arrange his needs in a hierarchy of urgency. Practically speaking, a person will feel, more or less vaguely, that certain needs are more important than others at any moment in time. The general symbolic description of the hierarchy of needs is $A \rightarrow B \rightarrow C$, where "$A$" is the dominant need and "$B$" and "$C$" successively subordinate needs. Special cases may exist where there is a single dominant need "$A$", where two or more needs are equal in strength, "$A = B$", and where two or more needs are inseparably linked, "$A \leftrightarrow B$". It will be assumed that the individual will first attempt to satisfy his primary need. Success in this endeavor will mean that it will recede from the dominant position, at least temporarily, because it has been satiated. Failure means frustration, possibly with attendant costs to society and anguish for the individual. However, a normal person will realistically proceed to concentrate on the second most urgent need, having accepted his lack of success in fulfilling the dominant one. In spite of his acceptance of this course of action, the dominant need may still be present, but dormant.³

Satisfaction potential is the second variable operative in the selection of an activity. The needs system matrix does not purport to identify the quantum of satisfaction that a pursuit might provide because actual satisfaction is a function of the inherent possibilities of the activity and also the interpretation of the satisfaction

³ See Appendix A
potential by the individual. This reasoning suggests that a person will arrange activities, capable of satisfying the same need types, in a hierarchical manner in accordance with his view of the expected satisfaction. In other words, in relation to particular needs, there are some activities that are favored over others. A first reason is that some activities are more suited to a particular person than others, due to some of the factors brought out in the analysis of barriers. Secondly, one activity may appeal to an individual more than others just as a matter of whim. More detailed investigation could probably trace the causes to the type and pattern of the simpler components of a pursuit that are described in Appendix C (bits, elements, and sequences). Finally, some activities are capable of simultaneously satisfying the foremost needs of the individual.

The third variable of substitution is the magnitude of the obstacles to participation as viewed by the individual. A rational man with perfect knowledge of his environment would be able to determine the relative weighting of obstacles to any activity that he might choose. In practice, a man has only a general idea of which pursuits are likely to satisfy his needs, the activities and means of access which are present in the environment, and the conditions of entry. He will assign an intuitive value to the barriers that face him at any moment in time.

**A Substitution Model**

The interplay of these variables can be demonstrated by a theoretical construction which is based on the following assumptions.

Needs arranged in a hierarchy can be described in terms of their relative importance at any moment by assigning the value of "one" to the dominant need and fractional coefficients to the subordinate needs.
If the dominant "A" is twice as important as "B" which in turn is twice as urgent as "C", the symbolic description would be $A=1$, $B=\frac{1}{2}$, and $C=\frac{1}{4}$.

The total satisfaction potential of an activity is evaluated on a scale from 1 to 10; it is the aggregated contribution of all the component satisfactions corresponding to need-types. The maximum in total satisfaction may, for example, be distributed among three types of satisfaction, such as, $A=5$, $B=3$, and $C=2$, for a total of 10; it may be concentrated in a single type of satisfaction as $A=10$; or the total satisfaction may be somewhat short of the ultimate, as $A=3$, $B=2$, for a total of 5.

Barriers may have any value from 0 to 10, with the additional proviso that an absolute barrier is symbolized as infinity, for convenience ($\infty$). The satisfaction obtained from surmounting a barrier is assessed along with the satisfaction potential of the activity, so that only the negative aspects of the barrier are measured.

In order to determine the preferred activity under varying circumstances, the expected satisfaction of each activity is calculated by multiplying the satisfaction potential of the pursuits by the coefficient of each need-type present. The favored pastime, under varying barrier conditions, is that activity which shows the greatest excess of expected satisfaction after subtracting the value of the barrier. Pursuits which result in the same surplus even though the personal satisfaction potential and the barriers are different, are equally desirable. Zero indicates indifference to the activity under the circumstances. If the barrier exceeds the value of expected satisfaction, there is no participation (symbolized as "N.P." in the following illustrations).
The simplest example is the special case where there is a single dominant need type "A" (with a coefficient of 1) and six alternative activities. All of the pursuits are examined under assumed barrier conditions which are indicated for activities "A" through "F" by an X under the appropriate barrier evaluation.

Dominant Need: A 1

<table>
<thead>
<tr>
<th>Activity</th>
<th>Personal Satisfaction Potential</th>
<th>Expected Satisfaction</th>
<th>Barrier Conditions</th>
<th>Resultant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 3 6 10</td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>10</td>
<td>10</td>
<td>X</td>
<td>4</td>
</tr>
<tr>
<td>b</td>
<td>8</td>
<td>8</td>
<td>X</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>6</td>
<td>6</td>
<td>X</td>
<td>0</td>
</tr>
<tr>
<td>d</td>
<td>4</td>
<td>4</td>
<td>X</td>
<td>4</td>
</tr>
<tr>
<td>e</td>
<td>2</td>
<td>2</td>
<td>X</td>
<td>NP</td>
</tr>
<tr>
<td>f</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>NP</td>
</tr>
</tbody>
</table>

The diagram depicts "b" as the most satisfactory activity under the circumstances. Although the individual can perceive that activity "a" offers the greater potential, the barriers to participation are more formidable. If the barrier to "b" increased, "a" and "d" would become equally preferable activities. If these activities were ruled out, the individual would be indifferent to "c", because the resultant is zero. In any case, he would not select "e" or "f" because the barriers exceed the expected satisfaction.
A more general case is described where there are several need types arranged in a hierarchy by the individual. The relative weighting of these needs in the illustration below will be \( a = 1 \), \( B = \frac{1}{2} \), and \( C = \frac{1}{4} \). All of the activities from "a" to "i" have a total satisfaction potential of 10, but in each of them the dominant type of satisfaction differs. The barriers associated with each activity are arbitrarily chosen for purposes of illustration.

Hierarchy of Needs: \( A = 1 \), \( B = \frac{1}{2} \), \( C = \frac{1}{4} \)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Personal Satisfaction Potential</th>
<th>Expected Satisfaction</th>
<th>Barrier Conditions (assumed)</th>
<th>Resultant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>b</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>c</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>d</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>7[1/2]</td>
</tr>
<tr>
<td>e</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>f</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>g</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>h</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>3[1/2]</td>
</tr>
<tr>
<td>i</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>2[1/2]</td>
</tr>
</tbody>
</table>

Effective Satisfaction (coefficient of need) \( \times \) (potential of need type)

The resultant figure indicates that the order of preference among activities is "b", "a", "i", "g", and "h". The individual will be indifferent to "c" and will not participate in "d", "e", or "f". The example indicates that the barriers associated with "a", the activity best qualified to assuage the dominant need, are great enough to cause the
individual to choose the second best pursuit because the obstacles are less formidable.

The hierarchy of needs may change for two reasons. First, the need may be satiated through participation in an activity. Secondly, needs may change as a result of frustration when no means are available for their satisfaction. This condition may be demonstrated by modifying the preceding illustration. Here the relationship of needs and satisfaction potential is held constant, but it will be assumed that absolute barriers intervene between the individual and activities "a" and "b".

Hierarchy of Needs: A 1, B 1, C 1

<table>
<thead>
<tr>
<th>Activity</th>
<th>Personal Satisfaction Potential</th>
<th>Expected Satisfaction</th>
<th>Barrier Conditions (assumed)</th>
<th>Resultant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A  B  C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>10  0  0</td>
<td>10</td>
<td>8</td>
<td>NP</td>
</tr>
<tr>
<td>b</td>
<td>6   4  0</td>
<td>8</td>
<td>7</td>
<td>NP</td>
</tr>
<tr>
<td>c</td>
<td>6   0  4</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>d</td>
<td>4   6  0</td>
<td>7</td>
<td>10</td>
<td>NP</td>
</tr>
<tr>
<td>e</td>
<td>4   0  6</td>
<td>5 1/2</td>
<td>7</td>
<td>NP</td>
</tr>
<tr>
<td>f</td>
<td>0   10  0</td>
<td>5</td>
<td>10</td>
<td>NP</td>
</tr>
<tr>
<td>g</td>
<td>0   6  4</td>
<td>4</td>
<td>3</td>
<td>1 1/2</td>
</tr>
<tr>
<td>h</td>
<td>0   4  6</td>
<td>3 1/2</td>
<td>3</td>
<td>2 1/2</td>
</tr>
<tr>
<td>i</td>
<td>0   0  10</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

In this situation "i" is the preferred activity although it satisfies only need-type "C". Under the conditions no alternative will satisfy the dominant need "A" which will remain frustrated. The outcome of this situation may be manifest in two ways. On the one hand, the

4. See Appendix A
individual may be continually disturbed by the frustrating circumstances so that satisfaction of "C" is comparatively poor compensation. On the other hand, he may temporarily set aside his fixation on needs "A" and "B" and concentrate on need "C" which can be fulfilled. If this is the case, "C" becomes the dominant need and activity "i" is admirably suited for its fulfillment. Rearranging the needs with "C" as the dominant, under constant barrier conditions, the full satisfaction potential of 10 is realized.

The Substitution of Leisure Activities

The preceding illustration of the individual's intuitive processes yields insight into the appropriate manner of substitution in planning leisure pursuits. As a point of departure, it will be assumed that the preferred activity cannot be provided. There are two methods which could be utilized to determine substitutes, both of which are referenced to the needs-activity matrix.

1. The preferred activity can be analyzed to establish the type (s) of need satisfaction potential that it offers. Then, for each need-type, the appropriate column of the matrix can be scanned for substitutes which can satisfy the respective need-types separately.

2. An activity can be selected which offers the same pattern of satisfaction potential as the preferred activity.

From the individual's point of view, the second method of substitution is preferable because it meshes more closely with his rational processes. When needs are manifest simultaneously, the person prefers to satisfy them through a pastime that provides all of the corresponding types of satisfaction potential. Since the first method of substitution furnishes the gratification of the particular need-types through separate pastimes, the individual who experiences the need-types simultaneously will be forced to fulfill them on different occasions, or not at
all. This fragmented provision of satisfaction potential may yield a modicum of actual satisfaction to the person, but use of the second method should provide a greater quantum of satisfaction in relation to the original needs.

Examination of numerous pursuits has also suggested that the second method of substitution is desirable because the complex pattern of satisfaction potential appears to be strategic in establishing the identity and determining the connotation of a pursuit. 5

The crucial test of the two substitution procedures emerges in trying to supply alternatives for the fulfillment of need-types which are concurrent and conjoined. If, in this case, the constellation of needs is a unified entity, it will be impossible to offer a substitute for some persons without reproducing the identical pattern of satisfaction potential. For others, an activity with a very similar total pattern of satisfaction potential will offer some degree of fulfillment. Thus, the second method maximizes the probability of producing some degree of actual satisfaction, whereas the first method of separate substitution for the need-types contained in the constellation will not be entirely satisfactory because the connotation of these pursuits will be different from that of the unavailable activity. Furthermore, the pastimes selected in this fashion might involve extraneous elements that would be incompatible with the experienced combination of need-types.

These ideas can be more clearly comprehended by reviewing specific examples. If a person requires gratification of a need constellation composed of "solitude", a modicum of "physical exercise", and the

5. See Appendix E
"arousal of appreciative response", canoeing might be appropriate. The sport of crew, furnishing "arousal of appreciative response" and "physical exercise", and the pastime of reading, offering "solitude", would not be satisfactory substitutes for any person experiencing the aforementioned constellation. There is a possibility that fishing, with its similar pattern of satisfaction potential will provide gratification for some persons.  

Even when the second method of substitution is adopted, there is a limitation to its effectiveness. Although the general characteristics of a pursuit are retained by substituting one with an identical pattern of satisfaction potential, this point may be irrelevant to the individual who is habituated to a specific pursuit. In the course of a lifetime, a person's activities feed back to shape his capabilities and consequently the need-types he experiences. Accumulated experience can give a person a very specific pattern of need-types satisfied by a particular activity; but from the vantage point of the individual, the activity itself appears to be a need. In such instances, there may be no substitute available.

Although the second method of substitution would appear preferable from all aspects, it will be necessary to utilize the first method in situations where resources are quite limited; for the second method will require many more pastimes in order to provide pursuits with all the combinations of satisfaction potential.

6. See Appendix E
An effort has been made in the preceding chapters to formulate tools which could be utilized in a benefits approach to the planning of leisure pursuits and the allocation of resources for the provision of facilities. While adopting this approach, the determination of the individual's receipt of actual satisfaction and the decision-making problem presented by interpersonal utility comparisons have been avoided by analyzing the potential satisfaction possibilities of leisure pursuits themselves. This chapter will indicate roughly how this approach might be utilized; but, inasmuch as the costs aspect of the decision-making problem has been relatively ignored, the method in its present form is limited.

By accepting the proposition that the promotion of self-actualization is the function of leisure, a heavy responsibility is placed on "leisure time planners" to provide opportunities from which benefits can be derived. If an individual does not have the chance to satisfy his physical requirements and exercise his capacities fully in the other spheres of living, the realm of leisure, where a person can give full vent to his whims and fancies, must offer opportunities for their fulfillment if the full meaning of his existence is to be realized. From this point of view, the objective of ensuring that individuals will find sufficient opportunities for self-actualization serves as the basis of orientation for the efficient allocation of resources. Where it is impossible to determine precisely people's needs,
the modes of satisfying them, and the existence of barriers, provision of a varied program of leisure pursuits becomes a corollary method of promoting self-actualization.

**Indication of Ways to Promote the Objectives:**

The manifold variables which enter into the promotion of self-actualization, insofar as this aim relates to the uses of leisure time, are encompassed within two manipulative processes. One involves the reduction of barriers to the receipt of satisfaction from leisure activities presently available in the environment. The other entails enlarged efforts to expand the number of persons fulfilling needs and to increase the extent to which various persons realize their capacities. In both of these procedures, it is possible to encourage self-actualization by operating on the situation of the individual and the characteristics associated with the activity. It is also feasible to reduce barriers by improving the linkages between the individual and the pastime.

One of the more feasible ways of reducing obstacles to participation in existing activities that offer potential fulfillment of needs is to train people's abilities to coincide with the demands of the pastimes. The practicality of this method depends, in the great measure, on the age of the persons in question and, also, on the amount of time they have available to devote to training. In both respects, young children and adolescents qualify for this type of education. Oldsters, who are retired, frequently have sufficient time, but their age argues against the development of new skills because their natural physical and mental powers are waning and their practiced life styles ordinarily make them less flexible. Yet, the abilities of members of this group most frequently require
adaptation to leisure outlets because the emphasis was on work, rather than on leisure training during their youths. Middle-age adults frequently lack the time for learning new skills due to work, family and other obligations. The possibility of matching skills to existing pastimes is also a function of capable leadership.

Revision of social attitudes is theoretically a means of eliminating barriers, but there are dangers inherent in utilizing this approach. It may result in undesirable manipulation of persons and tampering with important basic values. In some instances, though, social orientation is a reflection of fears and anxieties which might well be eradicated.

Barriers originating from lack of time and income are sometimes inversely related and on other occasions positively correlated. The usual determinant of the relationship is whether one depends primarily on his own efforts in earning a livelihood. To a certain extent, a high income may be able to reduce the barriers presented by the shortage of time because the person is then able to command time saving resources. Both time and income barriers are liable to attain their greatest magnitude in the lower income groups which are still burdened with long working hours. In the upper middle and upper income brackets, money may be no obstacle, but time may be a barrier. Attempting to remove obstacles by increasing income or available time is not very feasible because these circumstances of the individual are the outcome of many interrelated variables.

These types of barriers can be attacked more directly by altering the characteristics of the leisure pursuits. Admission costs of existing facilities may be lowered through government subsidies or private donations. Alterations in the scheduling of activities may reduce barriers for many
for many types of persons. For example, persons who work the swing shift or weekends probably find that many forms of leisure are precluded. Multiple use of facilities may offer another way of increasing leisure opportunities with appreciably increasing capital costs. The noticeable trend on the West Coast of designing high schools which can be utilized after school hours as community centers is a positive example of this point. The factor of ownership is a natural obstacle to such multiple programming, but this hindrance might be removed in some instances by directing effort to furthering collaboration between sponsoring bodies.

Sometimes, improvement in existing facilities may remove barriers to participation either by extending the types of activities which may occur there by altering the atmosphere of the pursuit or locale. The recent installation of an imaginative children's play facility within a small space of Copenhagen's Tivoli stands in contrast to the asphalt playgrounds, which occupy as much area and display few facilities, that dot the densely populated portions of many American cities. Improvements in landscaping, night lighting, protection from natural elements, etc., may also expand potential participation. Disagreeable atmospheres may remove an existing activity from the ken of realistic possibilities. For example, New York's highly accessible Central Park loses its utility for most potential users once twilight comes, due to the reputed presence of unsavory characters. This could be removed through improvements in crime prevention and police protection.

Barriers resulting from flaws in the linkage between individuals and the activities require increases in awareness and accessibility. Heightening
awareness of existing possibilities depends on improvements in communication channels, leadership and organizations, while greater accessibility hinges on better transportation and organization modes. The existence of an organization which compiles a systematic and consolidated list of commercial, public and semi-public leisure pastimes with locations, dates and times is an essential aid in allowing persons to choose activities which will satisfy their particular needs. In the second case, cheap public transportation to activities considerably reduces barriers, particularly for children.

The enlarged efforts to further the process of self-actualization focuses on the aspect of needs as well as activities and facilities. One of the most fundamental barriers may be the person's inability to recognize his own needs. The responsibility for preventing such barriers in the first place rests primarily with the family and secondarily with educational, spiritual and recreational groups. The removal of such barriers can be further aided by socio-psychological counsellors. Unfortunately, many persons realize the full extent of their needs tardily, past the time when it is comparatively easy to develop new modes of satisfaction for them. Moreover, the same needs may be present in an individual throughout various stages of life; but, as abilities and circumstances alter, he may experience difficulty in finding new modes of fulfilling the need if he has not developed a range of skills previously. Investigations suggest that the anomie experienced by many retired persons may reflect this adjustment problem. To avoid this difficulty, it seems necessary to expose persons to a variety of stimuli and modes of expression while they are still young. Implementation
of this aim will require various types of activities and associated facilities to be brought within reasonable proximity of residences.

Related to the education of a person's faculties for recognizing real needs is the necessity of allowing him to discover modes of satisfaction for these needs. Keniston points out that the gap between level of aspiration and degrees of realization is a major cause of the growing state of alienation found in our society. He states the following opinion:

Yet one of the lessons of the study of rebellions is that they come about not because of any absolute well of misery, but because of a gap, a felt discrepancy, between what is and what is believed to be important, desirable and possible. . . . Rather it is the conviction, the belief, that the present order is inadequate which produces discontent . . . . In other words, the extension of some of our powers reinforce our dissatisfaction with how little we seem able to ask for in our own lives.

Thus, the corollary of improving the recognition of needs is the expansion of abilities to allow inherent capacities to be exercised. There are three variations of this objective: first, some ability to perform a pursuit that is satisfying must be acquired by the individual; second, a person who already enjoys a pastime may be encouraged to expand his skills to a level that more nearly coincides with his capacities; third, alternative ways of fulfilling a need may be developed. Facilitating these ends is partially a matter of education and leadership. When the required facilities are made available to persons at a young enough age, they are often capable of developing a degree of skill independently.

These points focus attention on the desirability of increasing the variety of activities and facilities; for, whenever possible, it appears preferable to shape a leisure program to the needs and potential abilities

Keniston, op. cit., pp. 176, 179
of individuals instead of leaving the individual to adapt his abilities to the existing facilities. The increase of opportunities may be implemented through the following types of action: by duplication of the existing programs and facilities; by varying the peripheral factors associated with an activity, by furnishing different alternative activities; by innovating forms of activity. Multiplying existing activities and facilities may be required in order to eliminate the barriers of distance, over-intensive use, high cost, etc. By furnishing variations of a fundamental activity, it is possible to minimize hurdles presented by atmosphere, time and cost. Providing alternatives satisfying the same need circumvents potential barriers for persons with diverse abilities, helps mesh the time and money demands of the activities with the time and income of the individual and facilitates the development of various skills which contribute to the full development of the individual. The innovation of new activities is a means of offering new and unique satisfactions to persons who have peculiar demands and also a means of introducing novelty and joy into life. The combination of various activities in an event or chain of events frequently creates unique and memorable occasions which are expectantly awaited, such as homecoming weekends, football bowls, wine festivals, the Mardi Gras and the Olympic Games.

The Role of the Physical Planner in Leisure Time Planning

It is apparent that the ways of encouraging self-actualization through leisure time planning are so numerous and diversified that they have bearing on almost every aspect of life. When all the facets of the objective of
reducing barriers to and expanding possibilities for the fulfillment of needs are assessed, there is a strong implication that a very meager amount of comprehensive leisure time planning occurs. The city planner, the recreationist, the conservationists and foresters, the school systems' physical education programmers, charitable groups and commercial entrepreneurs all plan for portions of leisure time. Since there is no leisure time planner per se, it is difficult to delineate the city and regional planners role in leisure time planning, for one is tempted to suggest that he assume many of these undertakings as the problems are presently critical. On the other hand, overextension of the city and regional planner in this direction, may saddle him with responsibilities that detract from his role as a co-ordinator. In his capacity as a long range planner, the city or regional planner seems legitimately able to undertke comprehensive leisure time planning. It is expected that the devices developed in the previous chapters will be of use in this undertaking.

Procedure for a Long Range Planning Study of Leisure Time Pursuits

Reconnaissance Method:

An extensive reconnaissance of the needs of individuals, of the satisfaction potential of existing leisure pursuits in the study area and of possible barriers to participation should precede the allocation of resources for new facilities. Without a critical appraisal of the present situation and comprehensive consideration of the merits of alternative ways of improving the program, there is an inclination to provide more of the familiar pastimes even though the more effective measures may involve such things as improvements in transportation, new types of facilities, cost
reductions, etc. A reconnaissance method employing the tools and concepts presented in the previous chapter is delineated below.

AIM I. To divide the study area into smaller geographical units. Geographic subdivision is intended to facilitate subsequent phases of the reconnaissance. Specifically, it is a technique for ascertaining which need-types must be fulfilled for different persons during leisure time; for collecting data relating to barriers which are applicable at a geographic reference point; for deciding which types of new pastimes would be appropriate for a particular area.

The size chosen for the subdivisions of the study area will vary with the characteristics of the city and the resources available for the study. Generally speaking, squares two or three blocks on each leg might be desirable. Different size units might be selected for different portions of the city, larger dimensions being appropriate for the areas having a population exhibiting homogeneous characteristics and similar types of employment. An indication of the appropriate size units could be gained by putting census data on maps.

AIM II. To determine which of the need-types must be satisfied during leisure time for various members of the population. The first step in this phase is to collect statistical data from which an indication of diverse individuals' needs can be obtained. Such information as age, sex, physical condition and handicaps, intelligence level, number of working hours, marital status, number of children per family, education, religion can be gathered, cross-classified and totaled for each subdivision. This material will aid in determining the capacities and capabilities of the population in each of the geographical subdivisions. By drawing on knowledge from
various fields, criteria can be established for judging the needs which would be generally experienced by different types of persons. For example, a specified range of intelligence quotient may signify the need for "arousal of cognitive interest." A sample sociological survey and psychological testing could both serve as a check upon such inferences.

The second step is to establish which needs are adequately fulfilled through work and/or formal education for individuals living in various subdivisions of the study area. Data on employment found in existing publications is not adequate as a summary of job types for use in this analysis. The categories of the U. S. Census are too crude and broad and the data in the Census of Manufacturers is compiled by place of employment. There are, however, two complementary methods of acquiring this information. One is to contact business firms for the number of employees in various types of jobs and where they live. The need satisfaction potential could be imputed by examining the elements, sequences and activities comprising the job, as was similarly done for leisure pursuits. Another procedure entails the sampling of individuals to discover their occupations. The job-types can be analyzed, as previously mentioned, and the results would then be compared with those obtained from interviews assessing the individuals' attitudes on types of satisfaction received.3


3. A similar procedure can be applied to formal education.
It is also desirable to estimate the needs that might be satisfied by fulfilling family obligations. For instance, it might be assumed that the process of raising children would satisfy the need to nurture and the preparation of meals may involve the exercise of creative capacities. However, there are difficulties in precisely determining the needs which are fulfilled in family living because the satisfactions obtained are a function of the particular circumstances of the persons involved. An alternative would consist of imputing satisfactions by examination of the possibilities for undertaking various activities within the home and spaces. For instance, spaces could be analyzed to discover whether they would permit solitude or various pastimes which require a fair degree of privacy. It is evident that this approach is not adapted to distinguishing between opportunities for undertaking activities which are considered family obligations and those which are in the realm of leisure. Since it entails additional effort to distinguish between pursuits in order to include only the family activities at this stage, all opportunities for satisfaction of non-biological needs in the home will be included in the next step of determining the leisure pursuits that are available.

Result: By summing the needs presently fulfilled in work, formal education and family obligations and subtracting this number from the total expected needs for various types of persons, needs remaining to be satisfied in leisure time can be obtained for each of the geographical subdivisions.

AIM III. To determine whether leisure pursuits are presently available to satisfy the need-types contained in the result of Aim II. A survey of leisure time activities should be conducted to discover what activities and
events are available at various times of the year within the metropolitan area. Both available facilities and programmed activities should be considered. For certain pursuits, such as skiing and certain types of hunting, that ordinarily could not be provided within the metropolitan area, the survey could include areas within reasonable travel time by automobile or bus. A sizeable portion of leisure time activities are enjoyed within the confines of the home. Therefore, the facilities of the house and its immediate surroundings should be examined for an indication of the pastimes they might permit. The difficulty of discovering whether housing types offer opportunities for certain pastimes will probably vary with the type of housing and the need-type being considered, but it should be possible to make certain generalizations about the adaptability of spaces.\(^4\)

Once the various pursuit possibilities have been collected, they can be inserted in the matrix and analyzed for their satisfaction potential. It is also necessary to know whether the amount of opportunities fulfilling various need-types is adequate for the proportion of the population that requires satisfaction of the particular types of needs. It is a difficult task to determine whether the amount of activities available is adequately related to the proportional incidence of various need-types in the population. A method of arriving at a rough estimate of the deficiencies in existing opportunities is suggested below:

1) Determine the capacity of facilities which are used for leisure activities in the study area.

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4. Technique and criteria for analyzing space would have to be more developed than at present if such a study were to yield significant knowledge.
2) Multiply the capacity by the number of hours of operation weekly to determine the man-hours of service per week.

3) Determine the numerical satisfaction potential of the activity for each component type of satisfaction. (On a scale of zero to ten, as suggested in the previous chapter.) Divide each component of satisfaction potential by ten to compute the coefficient of satisfaction per unit of time for each need-type.

4) Multiply by the man-hours of service per week for each activity by the relevant coefficient to determine the relative amount of satisfaction offered by each activity for each need-type.

5) Sum the relative amount of satisfaction offered weekly by each activity for each need-type. This is the total number of hours of potential satisfaction provided for each need-type within the study area.

6) Determine the number of persons in the study area experiencing each need-type.

7) Multiply the number of persons experiencing each need-type by the average amount of time required to fulfill the need if it were satisfied by an activity offering maximum satisfaction potential for that need. This is the total demand by each need-type in the study area.

8) Compare the total satisfaction offered by the activities with the total need demand for each need-type. If demand exceeds the total offering, there is a deficiency of means for the satisfaction of that need type.

This method is a theoretical approximation of the relationship between total needs and the means of satisfying them. It will underestimate the actual need for facilities for several reasons. First, the individual may not take full advantage of a type satisfaction potential offered by an activity. Secondly, the person may be indifferent to some types of satisfaction potential inherent in the activity. Nevertheless, he would be consuming all of the satisfaction potential during his hours of participation. Thirdly, the presence of barriers may limit the availability of some activity (and hence some portion of the satisfaction potential).
Lastly, as a check on the accuracy of these methods, the use of the actual facilities could be counted for some types of pastimes in order to secure an idea of the degree of use. In situations where there is over-intensive use, the results could be used as a check on those obtained from the preceding methods. Figures on under use of facilities cannot be employed in this fashion without qualification, for this situation may result from the presence of other barriers to participation rather than an excess of service capacity.

Results: The procedures should give an estimate of those needs demanding satisfaction through leisure that can and cannot be fulfilled by existing leisure pursuits.

AIM IV: To determine which need-types are actually satisfied for various types of persons. It was assumed in the previous chapter that participation in a pursuit with appropriate need-satisfaction potential will yield actual satisfaction corresponding to the needs of the individual. Therefore, by measuring participation in the available leisure pursuits according to the resident address of the participants, it is possible to establish which persons are satisfying the corresponding need-types. However, relying on this procedure of counting participants is only feasible, even in hypothetical terms, for leisure activities which are pursued outside the home. For pastimes within the home it can be assumed that the existence of appropriate space and equipment for the activities will also produce satisfactions. But, in many instances domestic activities are dependent upon supplies or training that must be acquired outside the home. For example, analysis of the dwelling unit would indicate whether there
were adequate space and permanent equipment for serious reading (lighting, quiet, relative privacy, a comfortable chair, and \( x \) number of square feet of space), but it will not determine whether the books are available. This factor is dependent on the amount of money the individual can spend on books and/or the public supply of books. Therefore, further determination of participation in pursuits within the home is dependent on the examination of barriers. The information which can be obtained from the population statistics discussed in the prior section can be utilized in this phase to provide a rough estimate of the pursuits which will actually be undertaken at home. Referring to the previous example, if the incomes were below a certain point, it might indicate that there was a barrier to buying the desired books. If there were no public library or bookmobile readily accessible, an effective barrier to serious reading might be assumed.

When participation does not occur, even though the activity is provided, other obstacles may be intervening. Of course, it is also possible that the types of needs experienced by persons were incorrectly estimated in the field reconnaissance. Before proceeding to the next stages of searching for possible barriers, it would be worthwhile to check on the accuracy of the initial determination of needs. For areas where the participation results differed substantially from the need-types the inhabitants supposedly possessed, a sample of persons could be interviewed to discover whether or not the inclination to engage in some activity related to the need-type existed. The construction of the questionnaire would be intended to uncover the existence of barriers. If frequently there were no barriers in the estimation of the interviewer and various pursuits satisfying the need-types were readily available but unused, there would be an indication
that the original appraisal of need-types was incorrect. Before proceeding, adjustments would have to be undertaken.

Result: An indication of the needs that are not being satisfied in leisure time is obtained by summing the results of Aim III (need-types for which adequate satisfaction potential is not available) and Aim IV (the need-types for which actual satisfaction is not being acquired in spite of the existence of appropriate pursuits). It is desirable to gather and compile this information on the basis of the area units. It is not possible to obtain the results for Aim III on this subdivided basis. In that case, the results will have to be apportioned in some manner once barriers have been examined.

AIM V. To determine loci of barriers. First of all, the characteristics associated with existing activities can be analyzed and the demands that they place on the individual can be ascertained. Then, the various attributes of groups of the population by geographical units ascertained in the accomplishment of Aim II could be compared one by one to the demands of the activity to obtain a rough idea of possible barriers. For example, the cost of an activity could be viewed from the vantage point of persons with various levels of income to gain some notion of whether it is feasible to expect persons of that income to be able to enjoy the pursuit. Since barriers in many cases are the result of the concommitant existence of several factors, it is necessary to utilize model types to discover more precisely the nature of barriers. The cross-tabulation of the various data that was collected in the course of Aim II presents a statistical picture of the various types of persons in the geographical subdivisions. Dissimilar ones should be selected to serve as model types for the following
comparisons; they should not be confined to the most typical combinations of characteristics. The set of conditions that the attributes of these "model" persons might place on a leisure pursuit must be established and then these requirements could be compared to the demands that the available activities make on the individual.

Next, the access and awareness factors must be examined in the search for barriers. The adequacy of communication channels can be examined first to discover whether the means are present for the propagation of information. Also, samples may be taken to find out whether persons are aware of the various opportunities. Determining the accessibility of each pursuit is a complex matter when it is undertaken in detail. Roughly speaking, lines of equal accessibility could be drawn concentrically around the activity. The time and cost associated with alternative modes of transport could be established from points along these lines to the activity. Then the geographical reference points which correspond to the "model" types of persons in each area of residence could be adopted as a vantage point.

Given the background information on the person's income, abilities, and leisure time, estimations could be made as to the amount of money and time he would be willing to expend on transportation and probable choices as to modes of transport could be ranked in order of preference. The time and cost connected with the respective modes of transport can be determined from the nearest point on an accessibility line. Then his desires can be compared to the expenditures the transportation demand, and the relative magnitude of the transportation barrier could be appraised.

Since persons do not only contemplate leisure activities from the location of their homes, it is desirable to consider transportation similarly
from other locales, particularly the CBD and other work locations. Frequently persons go from one type of leisure pursuit to another, so the distance barriers between types of pursuits that might be used in sequence should also be measured. The simplest means of carrying this out might be to adopt a geographical reference point and vary assumptions as to time and money available for transport in that instance. For example, if a person located on a street in the CBD has fifteen minutes in which he wants to "sit and observe people" with only fifteen cents to spend on it, he might appreciate a seat on a plaza.

Result: This final phase of the reconnaissance should indicate the origin of various barriers.

Resource Allocation:

At this point, the planner should have an estimate of the need-types that are not being completely satisfied in the existing environment and an indication of the factors responsible for discouraging participation in existing pursuits that offer appropriate satisfaction potential. After contemplating the possible means of correcting the deficiencies, the planner can turn from the reconnaissance to the problem of allocating resources. Since resources allocation inherently involves consideration of costs as well as benefits, a thorough discussion is beyond the scope of this thesis because it has been confined to a benefits approach. It is briefly treated at this point because the material derived from the benefits approach contains implications which impinge upon the resource allocation aspect.

Which types of remedial actions are preferable is dependent on political and economic factors as well as the social factor of increasing the
extent of need satisfaction. Furthermore, the city planner can apply some of the corrective means of reducing barriers more readily than others. For instance, when the physical planner is faced with a situation where persons lack the skill to participate in an existing pursuit, he cannot directly ensure that the persons will be appropriately trained. On the other hand, he is able to have a stronger influence over the provision of alternative pastimes which conform to the skill of the persons in question, both through advisory planning and through the tool of capital budgeting. The preferable means of correcting a deficiency depends on the particular case. For this reason, various means were outlined in general in the first portion of this chapter to call attention to the fact that the solution is not necessarily the provision of a new activity and associated facility.

**AIM I.** To determine a tentative list of alternative activities that supply the types of need satisfaction potential that are lacking and/or that provide additional ways of fulfilling need-types to promote the process of self-actualization for persons in different circumstances.

Initially, numerous pursuits which are believed to contain the appropriate satisfaction potential could be inserted in the needs matrix and analyzed. Then a list of pursuits satisfying the various need-types could be compiled. A review of the population data for the group(s) to which the new pastimes were being oriented should provide insight into the types of activity demands that would be most suited to them, which would allow them to be ranked accordingly. This procedure is based on the idea that certain pursuits have characteristics which will correspond in differing degrees to the circumstances of diverse persons which can be portrayed by statistical data. The relative differences in the suitability of the alternative
leisure pursuits for various percentages of the population in question permit only the order of preference to be stated. In order to determine actual benefits, it would be necessary to measure the contributions that a pursuit might make to the need fulfillment of different persons and to ascertain the total number of users. But, the technique which one might employ has only been approximated by estimating the satisfaction potential of activities and their correspondence to the abilities of individuals. Approaching the problem in reverse, one might attempt to ascertain the cost to society resulting from failure to provide leisure activities.

It is difficult to visualize an instance where the failure to provide leisure facilities can be held solely accountable for individual deficiency. Yet leisure is certainly implicated in part, and its percentage of the total causation must remain unknown. It is impossible to measure loss of productivity, creativity, and other inefficiencies that arise from failure to provide adequate leisure.

Result: A list of pursuits ordered as to their relative, expected suitability in fulfilling needs.

A AIM II. To determine the monetary and spatial requirements of the pursuits. Ordinarily, cost-benefits analysis translates spatial demands into monetary terms and this procedure is appropriate for this study. In addition, it is also desirable to record the space requirements in areal terms, because the total cost of acquiring different size parcels of land required for two pursuits may be identical, but the actual amount of space consumed may be critical as the land may be suitable for other uses.

Result: Compilation of costs and spatial requirements associated with each pursuit on the list.
AIM III. To determine the preliminary list of activities to be provided. Since the expected benefits to be obtained from the provision of additional leisure pursuits cannot be measured precisely, the typical method of cost-benefit analysis, where costs and benefits are equated at the margin, cannot be utilized. Therefore a slightly different basis on which to rest the decisions must be adopted. Satisfying the greatest number of need-types at the lowest cost or with the use of the least amount of space, could be accepted as an operational basis for the allocation of resources. Then rough comparisons between the cost and space demands of alternative pastimes and the percentage of persons to whose needs and circumstances the pursuits are suited can be undertaken. Employing this approach may suggest that the initially preferred pursuit, the one potentially fulfilling the greatest number of need-types as determined in Aim I—should not be the one actually furnished. Assuming that the cost of providing this pursuit is equal to or slightly less than that of two others, it could still be preferable to supply the latter ones because the two combined might satisfy a larger number of need-types. A review of the spatial requirements of activities can indicate the desirability of such substitutions; for, other things being equal, more needs may be satisfied by furnishing several pursuits consuming the same amount of space as single activities, particularly if the patterns of satisfaction potential are similar. Also, the feasibility of alternative expenditure levels should be examined in relation to the total resources available for capital improvements and the other demands/financial resources.

Scarcity of resources may necessitate substitutions for the initially preferred pursuit. The first step in substitution is to determine the
desired range of specifications in terms of financial cost and consumption of space. Then the various alternatives can be reviewed in order of preference. The pursuit which exhibits a pattern of satisfaction potential that is most similar to the original activity and which also meets the specifications should be selected. There are two situations in which substitution may be necessary. In one case, substitutes are required simply because the preferred activities cannot be furnished. This form of substitution will not prevent any of the basic types of need satisfaction potential from being fulfilled; it simply affects the correspondence between the total pattern of satisfaction potential found in the pursuit and the ideally desired one. It may also influence the availability of multiple modes of presenting satisfaction potential for the similar needs of diverse persons, thereby bearing on the existence of potential barriers to participation. The second situation demanding substitution affects the possibility of offering satisfaction potential for a specific need-type or need-type constellation because it is not possible to provide any activity which will fulfill the specific need-type pattern in question. The denial of opportunities for satisfaction of a basic need-type is undesirable and should be avoided whenever possible, even on the community level. The ability to provide opportunities for a particular need-type constellation is less crucial, but attempts should be made to offer all significant need-type combinations within the greater metropolitan area.

Result: A preliminary list of the activities that is to be furnished.

AIM IV: To determine the pursuits that will definitely be provided. If the reconnaissance method were flawless, the question of what amount of resources to devote to which pursuits could be resolved in the completion
of Aim III of resource allocation. The outline of this procedure indicates that much of the required information can only be estimated; other necessary determinations can only be approximated; and there are some factors which in a real situation could probably not be ascertained at all. Moreover, the resources may not be forthcoming for obtaining all the intelligence that would be required. Therefore, a method of reviewing the overall adequacy of the leisure pursuits program would be useful as a check on the sufficiency of opportunities for promoting self-actualization.

The concept of variations has been devised to implement this objective. Since the requirements and circumstances of different individuals are diverse and change over time, obtaining a variety of leisure pursuits which will accommodate personal choice is a means of facilitating the satisfaction of the needs of an urban population. The variations instrumentality aims to assess the entire program of pursuits in respect to the choice it offers. This device is composed of several factors and the variation achieved in reference to them alters the demands that a pastime makes on an individual and changes the peripheral characteristics of the pursuits. Thus, introducing variation reduces the possibility of barriers.

There is a discussion of the types of factors below which should be considered. This list of variables is included in order to illustrate the concept; it is neither a systematic nor comprehensive organization of all the elements which could enter into a construct of variations. Some of the factors have already been mentioned in relation to barriers, but it is necessary to utilize them again because the entire program of pursuits, rather than an individual activity, is being evaluated. The adequacy of
variation can be judged in reference to the baseline of work and in terms of the complexion of the pursuits program itself. The exact amount of variation which is deemed necessary is a question of surplus resources.

The leisure pursuits program should exhibit variety in regard to time factors. One concern is the amount of time that an activity requires. In general, there seems to be a lack of facilities outside the home for the use of short intervals of time, particularly when the variables of atmosphere and distance are taken in account simultaneously. Another type of time variation that should be checked is the time of occurrence. Some persons are precluded from certain experiences because their hours of employment vary from the norm.

The ability to exercise varying degrees of spontaneity can be assessed from two points of view. Certain activities accommodate improvisation, assuming that the individual's personality is capable of it; others do not. This form of expression depends on the amount of formal organization and predetermined response the pursuit requires. Also, the skill level on which the activity is undertaken—e.g., sandlot, amateur, tournament or professional—will frequently affect the opportunity for spontaneity. Conversely, there should be possibilities to participate in pursuits possessing various amounts of patterned structure. The other type of spontaneity pertains to the amount of preparation an activity demands.

The various pursuits can be appraised for the different types of human interaction they offer. One scale is presented in the needs matrix. Another would assess the degree of attention focused on an individual's personal performance. In this instance, the range might run from solitary
pursuits, to spectator pastimes, to active participation within a group, to individual public performance in front of an audience.

Activities could be evaluated as to the effort they required. The pursuits would first have to be subdivided into the types of effort and/or skill involved. Then, some approximation of the degree of effort ordinarily expended in an activity could be obtained by setting up criteria and constructing a rating scale which could be employed in analyzing the components of an activity. The variations of the general atmosphere in which pursuits occur could be indicated by descriptive adjectives, such as elegant, seedy, quaint, etc. The same pursuit must frequently be provided in association with several different atmospheres in order to appeal to different types of persons.

It may be desirable to evaluate the range of variation provided by an existing program of pursuits as a final step of the reconnaissance before entering the resource allocation phase. In practice, this assessment may lessen the difficulty of tentatively determining which pursuits to offer. But, in any case, before finally selecting new pursuit opportunities, they should be examined for their utility in providing variety and choice. The exact amount of variation which will be deemed necessary is a question of surplus resources.

Result: The selection of new leisure pursuit opportunities.

Relationship Between the Long Range Planning Study and Planning Implementation Tools. The delineated procedure is cast so that it could provide

5. The amount of effort expended in a specific instance is a personal matter, but some pursuits inherently require more effort than others.
results to be devised into a long-term program of improvements in leisure facilities. Then, the relevant portions could be incorporated into the regular capital budgeting procedure.

The reconnaissance may also furnish information on barriers to existing pursuits which the city and regional planner can attempt to remove in his function as a coordinator. He may have direct influence over some barriers; for others he may have to use persuasion—depending on the type of government and the planner's authority. A major barrier to participation is lack of awareness, particularly because the mobility characteristic of many persons brings them into environments with which they are unfamiliar. To increase awareness, the planning agency might publish (or encourage the publication of) a comprehensive guide to the location of various types of leisure pursuits supplied by private, semi-private, commercial and public organizations. The reconnaissance could also have implications that should be brought into consideration in planning transportation and school facilities.

If the contention that the possibility of fulfilling needs in leisure is vital to health were accepted, the reconnaissance method would also have an effect on the content of zoning and subdivision regulations. The number of square feet in a dwelling may have a bearing on the ability to satisfy the need for solitude and intimacy. The density and the types of communal facilities provided at various densities will influence a person's ability to satisfy other types of human interaction and self-expression. Under a more positive conception of subdivision and zoning controls, it would be reasonable to require community workshops (for painting, drama, woodworking, etc.) as well as communal open spaces for certain housing
densities or dwelling types. The basements and roofs of elevator apartments might be designed to offer spaces for leisure pastimes which cannot be undertaken in an apartment. If the balconies of apartments were more than window dressing, the patio barbecue might not be solely a symbol of the single detached house. Lastly, the restrictions on the building envelope in the CBD may hinder or foster the appearance of various stimuli (birds, fountains, trees) and facilities related to leisure (places to sit, to observe, etc.).

A change in the scope of urban renewal might allow this tool to be utilized to increase leisure opportunities. For example, an urban renewal area could be devoted to a unified entertainment district such as Tivoli in Copenhagen.

Summary: This chapter has depicted the use of several constructs, which have been proposed in this thesis, to facilitate leisure time planning. Various means of encouraging self-actualization have been discussed and the city and regional planner's role in this process has been broadly delineated. To interrelate the previous chapters and to demonstrate a potential use of the proposed systems, a procedure for a long range planning study has been outlined. It is realized that this method requires considerable refinement, such as could be best obtained through attempted application to an actual case study.
SUMMARY AND CONCLUSION

The concept of self-actualization was presented to guide the planning of leisure pursuits. The needs system, isolates the human requirements that may have to be furnished in an urban environment through a program of leisure pursuits. If the needs system has its shortcomings as it now stands, it is still valid as a concept, for it offers reasons for furnishing one pursuit rather than others. The content of the system can always be revised. The activities analysis is a new approach to the determination of satisfaction which attempts to circumvent the problems involved in making interpersonal utility comparisons. By matching the characteristics of activities first to need-types, then to the requirements and circumstances of the individuals in the population, as derived from the interpretation of statistical data and sampling technique, opportunities for the attainment of actual satisfaction of needs can be distinguished. The barriers classification system, calls attention to the multitude of obstacles which may discourage or block the satisfaction of needs and points out the variables which can be manipulated. The systematic substitution of pursuits, which is facilitated by the use of the matrix, is a concept which the planner could employ in order to determine the degree of equivalence of satisfaction potential offered by various activities. The roughly sketched reconnaissance and resource allocation procedure attempts to draw these tools together and demonstrate their use. In actual practice, it may be an unwieldy method. Therefore, the provision of variation has been introduced as a complementary method for the assurance of need satisfaction. It can also be used as an alternative to the more "scientific" procedure--that is,
pursuits could be evaluated for diversity and planned to offer choice in terms of the variables without conducting all the steps of the preceding reconnaissance and resource allocation procedure.

Needs and activities have served as the focus of this thesis. This approach is complementary to a goals-forms analysis because goals are a long term reflection of needs and forms are the physical facilities which enable activities to be carried on. Greater emphasis has been placed on activities than on forms in this thesis because it is the series of activities—that is, the process—which are instrumental in the attainment of goals. Much of the meaning of life is imparted through activities.

The authors have not discovered other studies which attempt comprehensively to order the range of factors that affect the use of leisure time. This thesis, which presents a method of approaching the problem, frames a series of hypotheses which can be tested by conducting a pilot study of small areas or of selected points in the metropolis. There are portions of the methodology which can be used independently. The insights gained concerning the substitution of leisure pursuits could be employed by the urban planner in attempting to provide alternatives for particular activities. Even though the barriers system may present difficulties in adapting it to a detailed, statistical use, it calls attention to factors which are significant. The constructs can guide rational attempts to increase opportunities for rewarding leisure pastimes.

The authors have discovered that an enormous number of variables affect the behavior of individuals during hours that are free of obligations. In planning for leisure, the complexities and subtleties that determine the
actual use of facilities must be considered. The complicated manner in which the variables are interrelated is not an irreducible limitation, for it is expected that developments in information theory and computation techniques will be helpful in closing some of the gaps.

Nevertheless, the lack of data pertaining to various aspects of the approach is a valid criticism of its feasibility. Detailed research is suggested to determine with greater accuracy types of human needs, the incidence of needs in a population and the effects of need frustration. The satisfaction potential construct was posited as a theoretical concept, but it would be worthy of exploration. Activities—and their simpler components—should be analyzed with greater rigor to determine the satisfaction received from activities by different types of individuals.

Even with these studies, one can expect that certain aspects of leisure will forever remain a mystery. There will always be people who, with anonymous ingenuity, will find means to fulfill their needs. The object is not to plan leisure, but to plan for leisure. Free choice must be maintained as a primary characteristic of leisure.
Appendix A

LEWIN'S FIELD THEORY

Kurt Lewin in Field Theory and Social Sciences outlines several concepts which have been employed in the development of this thesis.

Life Space

Life space is defined so that at any given time it includes all facts that have existence and excludes those that do not have existence for the individual or group under study. In individual psychology, the environment and the person are ordinarily included in the life space. But, in addition, unconscious states are also included to the extent that by direct observation or inference the scientist can determine that they have effects.¹

Life space can be conceived as having three main dimensions of extension. One deals with the scope and differentiation of that area which, for the individual, has the character of the present reality. This is the dimension in which action occurs. The second deals with the differentiation between reality and irreality. The third deals with the psychological time dimension, i.e., the extension of the "psychological past" and the "psychological future" which exist as part of the life space at a given time.²

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¹ Lewin, op. cit., Pp. xi-xii.

² Ibid., 127-128.
The boundary conditions of life space depend partly upon the character of the person, his motivation, his cognitive structure, his way of perceiving, etc. and partly on the "stimulus distribution" on the retina or other receptors as enforced by physical processes outside the organism. Needs are generated by the factors that are operative in the life space of an individual. Awareness of the means of satisfaction is similarly limited to his life space.

**Needs**

Lewin describes a need as equivalent to a system in tension. The satisfaction of the need is correlated with the release of this tension, or "reaching the goal." The basis of his field theory rests on the following assumptions.

1. The intention to reach a certain goal $G$ (to carry out action leading to $G$) corresponds to a tension $(t)$ in a certain system within the person. Tension $(t)$ is greater than zero.

2. The tension $(t)$ is released if the goal $G$ is reached.

3. To a need for $G$ corresponds a force $(f)$ acting upon the person and causing a tendency of locomotion toward $G$, if both $(t)$ and $(f)$ are greater than zero. This assumption determines the relation between need and locomotion.

Lewin notes, however, that the existence of $(t)$ and $(f)$ can lead to fantasy as well as action.

3. Ibid., P. 57.
5. Ibid., p. 10.
6. Ibid., p. 11.
4. A need leads not only to a tendency of actual locomotion towards the goal region but also to thinking about this type of activity; in other words the force \( f \) exists not only on the level of doing (reality) but also on the level of thinking (irreality).\(^7\)

**Needs and Valence**

Needs have the character of "organizing" behavior. One can distinguish a hierarchy of needs. One need or a combination of several needs may set up derived needs (quasi-needs) equivalent to specific intentions.

Needs are closely related to valences. What valence a certain object or activity has depends partly upon the nature of that activity and partly upon the state of the needs of the person at that time. An increase in the intensity of need (for instance, the need for recreation) leads to an increase of the positive valence of certain activities (such as going to the movies or reading a book) and to an increase in the negative valence of certain other activities (such as doing hard work). Any statement regarding change of needs can be expressed by a statement about certain positive and negative valences.

As a result of the increase in positive valence which accompanies the state of hunger of a particular need, areas of activities which are negative or on a zero level when the need is satiated acquire a positive valence. The hungrier person is usually satisfied with poorer food.\(^8\)

**Satisfying a Need**

A. Satisfaction Through Reaching the Original Goal. The intention to carry out action is equivalent to the creation of a quasi-need. As long as

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7. Ibid., p. 11.

8. Ibid., pp. 273–274.
that need is not satisfied, a force corresponding to the valence of the goal region should exist and lead to an action in the direction of that goal.\footnote{Ibid., p. 275.}

Lewin notes, however, that the action leading toward the goal may be interrupted. Experiments have shown that the continuance of the need is dependent upon the attitude of the subject.

B. **Substitute Satisfaction.** Frequently, one activity is called a substitute for another if they show similarity. Functionally, substitution can be linked either to the valence of an activity or its satisfaction value. For problem tasks the intellectual solution is decisive; therefore, talking can have a very high substitute value. For realization tasks the building of a material object is the goal; therefore talking has practically no substitute value. Thinking through an activity has no measurable substitute value for realization or problem tasks according to experiment. Theoretically, the substitute value of one activity for another depends upon a communication between the two underlying need systems in such a way that satisfying the one also satisfies the other.\footnote{Ibid., pp. 277-278.}

C. **Frustration.** A failure to reach a certain goal may increase the negative valence of the obstacle until the constellation of forces is changed in such a way that a person will withdraw temporarily or finally. This withdrawal is frequently accompanied by an open or concealed conflict which may show itself in aggressiveness. The withdrawal can, however, go hand in hand with a full acceptance of the inaccessibility of the goal. This is equivalent to an actual giving-up: the inaccessible region ceases to be an
an effective part of the life space. If the child or individual reaches a state where the inaccessibility becomes a "matter of fact," he is no longer in a state of frustration or conflict.\footnote{Ibid., p. 281.}
Appendix B

DELINEATION OF NEED-TYPES

Sensation of physical forces is defined as the cognizance of physical force. Obviously, one could not function were he constantly aware of the pull of gravity and the motion of lower extremities in walking. In addition to forces of this character, which are relegated to the lowest levels of human neuro-muscular action, an individual learns to accept physical contact in crowds, motion of vehicles on a thoroughfare, seasonal cycles without any significant stimulus arising. The definition is restricted to purposeful exposure to such forces as described above.

Natural forces are defined as those forces of nature which have inherent characteristics capable of arousing physical sensation. Typical examples of natural forces used in this context are heat of sun, wind resistance, gravitational pull and water pressure. Man in seeking the sensation imparted by these forces is obtaining natural physical stimulation.

Motion, for the purpose of this thesis, is defined as a force which affects the equilabatory and vibratory mechanisms of the body. It is seen that within the limits of this category, we include forces which are capable of moving the body. Occasionally natural forces will act within this context, but more commonly such stimuli are executed through man-made devices. Reference to the major category shows that this operates in man only when he purposefully seeks the stimulus of motion.

Body contact, in this context, means the application of touch, pain stimuli directly to the individual's body directly by the stimulating force. This contact ranges from the jarring effects of rugged athletics, to the soothing sensation of light stroking. Body contact will therefore evoke different reactions according to the activity.

Calculated to arouse cognitive interest: there are certain activities or objects that are conceived and created for the express purpose of stimulating the cognitive or intellectual faculties. The potential of arousing of
the intellect is the delineating criterion of this category. Stimulation of cognitive interest is indicated by the acquisition of knowledge or the exercise of the analytical or synthetic capacities of the mind.

Direct: the arousing of the intellect in an immediate way is considered to be direct stimulation of cognitive interest. Exposure to the factual content of a textbook would be a good example of direct stimulation. A program of music would serve equally for the musicologist or serious amateur.

Indirect: an activity stimulates indirect cognitive interest if it arouses the individual’s curiosity and motivates him to engage in subsequent intellectual exploration.

Arousal of appreciative response: this category is defined to include the emotional appeal inherent in certain activities or phenomena that awaken man’s sensitivity to beauty in its many forms. These activities are detected through the senses. It is obvious that an activity may evoke different responses based upon the individual’s background. The amateur astronomer and the lover perceive the stars through different eyes.

Human creation: the creations of human beings are often undertaken with a duality of purpose which includes the arousing of an appreciative response on the part of the observer. This can be seen in music, architecture, art forms, and literary creations.

Natural phenomenon: nature provides an array of forms and beauty which are capable of arousing appreciative response in man. Where the "raw material" and basic forms are primarily natural the stimulant is included in this category even though man may have modified the original condition considerably. A formal garden would be a borderline case consisting of components that are both man created and natural.

Creation of tension and release: man’s propensity for voluntary exposure to experiences which result first, in accumulation of energies within the body and second, with a dénouement which releases these energies, is the
limiting feature of this category. This tendency is commonly recognized as a desire for thrills, excitement, adventure, suspense and optional insecurity.

Due to calculated effort: this category refers to activities or events which are contrived with the express purpose of creating tension with subsequent release on the part of the observer or participant. For example, in the old style melodrama the audience identified with the hero or heroine and vicariously shared their experiences. This extension of experience beyond immediate reality is known as romance. The observer's response may take the form of empathy, suspense, fear, love, etc., and is directed by the creator's design in staging of the activity or event.

Induced by nature of activity: in contrast to the creation of tension by calculated effort, some activities by their nature, have the effect of producing tension and release as a side effect. These activities may be characterized by their spontaneity and the uncertainty of their outcome. In facing changing situations, the individual constantly revises his viewpoint and perhaps his objectives. Examples of induced tension and release are likely to be found wherever game theory is applicable. The gamut runs from athletics to gambling.

Social interaction means contact and exchanges among human beings. For the purposes of classification at least three kinds of distinctions can be made. One is based upon the degree of intimacy of the contact and is the basis of sub-categories in this system. Similar subdivisions could be derived from systems based on the number of persons involved and the method of exchange.

Solitude: isolation from human interaction characterizes solitude. Solitude may be enjoyed as a means of relaxation; a time for loafing--or one may be occupied with intense contemplation which will permit no interruption. This system does not attempt to discover the individual uses of privacy.
Intimacy is descriptive of the closest of human relationships. It can exist among members of a family, very close friends, and lovers. A relationship of this nature can only be carried on with a few individuals at any given time. For the purposes of this system, evaluation will be made, not on the supposition that any small group of persons may be intimately related, but rather on whether the activity permits an intimate situation to develop.

Camaraderie is a term that describes close relationships which are enduring over a period of time. This relationship is less limited than the above. This type of relationship enables one to know the qualities of the other person and may be required in activities that require considerable trust or confidence.

Fellowship is a loose relationship between persons who possess a common core of interest at a moment in time.

"Chain-linked" interaction with other persons exists when the common core of interest is shared among a great many people, yet the interaction with other persons is limited to those in closest proximity. The unifying quality of the group is based on communication from person to person. A banquet is a good example of "chain-linked" interaction.

Anonymity is the condition that exists when one is alone in a crowd.

Cultural interaction takes place when an individual relates himself with the traditions, customs, systems, or methods of accomplishment that have been established. He may enjoy the framework as it exists or he may attempt to change it somewhat. Either case is cultural interaction.

Laws of art are a particular system of aesthetic judgment, by which one appreciates that which is beautiful, appealing or representative of observable phenomenon. Art may be a form of communication. In these cases there must be a point of reference, or criteria for understanding. The communication may be intelligible or emotional, but failing these, there is but a poor relation to the Laws of Art which must be borne in mind for both appreciation and creation.

Formal rules are contrivances for guiding behavior which are agreed upon by participants in an activity. The rules themselves, if they are subscribed to, place boundaries
on the range of human endeavor, but allow freedom of activity within these limits. The interaction process occurs once man agrees to the rules, for they must be borne in mind while he is a participant. Competitive athletics are a good example of formal rules that are accepted voluntarily.

Heritage literally means one's birthright. More broadly it means the customs, traditions, rituals that continue through time independent of individual personality. In this way, interaction with an aspect of one's heritage is a relation to something that transcends a particular individual yet may be represented at this point in time by living individuals who perform actions that are timeless yet understood. Religious ritual, exemplifies one's interaction with a heritage.

Use of skill or talent: An ability which is acquired through learning, practice, or natural endowment is classed as a talent or skill. Recognition of an ability by an individual may give rise to a desire or need to exercise this capacity, and subsequently to further perfect the skill or talent. Progressive increase in skill may increase the desire to participate in a pursuit in which one is adept. The mere presence of skills, may lead to an unconscious need for utilization.

Intellectual skills are those which place demands on one's reasoning and synthesizing abilities. Individuals are endowed with various levels of intelligence which can vary somewhat according to circumstance.

Physical skills are those related to general body mechanics. Skills such as agility, coordination, strength, speed, dexterity, etc., enable one to master many types of action.

Manual skills are the refinement of physical skills which are employed in use of the hands. The perfection of manual skills requires the use of mental skills.

"Practical" skills are here considered to be the ability to coordinate and guide the use of other skills. This skill is acquired through learning and experience and may be characterized by such qualities as ingenuity, cunning, finesse, and savoir-faire.
Creation is the product of man's imagination which results in original objects or ideas. Man's imaginative powers enable him to visualize relationships in different form from that appearing in his environment. Creation may be thought of as the production of new relationships.

Abstract forms of creation deal with ideas or concepts that may be conveyed through linguistic or material mediums. The creative aspects are the ideas of relationships and not the medium itself.

Material forms of creation are objects which are produced with the intention of making them meaningful beyond the utilitarian purpose for which they are designed.

Release of energy: Within the human body, emotions are constantly being stored which if not exorcised through different media will lead to internal conflict. Need to release aggressive instincts is the basis of one categorization, and the feeling that man by his nature is driven into some form of activity provides the other.

Competition is an outlet for psychic and physical aggressions in which the individual may feel the need to establish a position of competence in relation to others who engage in the same pursuits. It is impossible to recognize all of the forms of subtle competition that take place among human beings; and, therefore, this category must be interpreted narrowly in order to associate competition with pursuits where it is an intrinsic characteristic of the pursuit.

Self-competition is the individual's requirement in personal performance to surpass previous efforts in the same endeavor or to master a difficult pursuit in which competition is not inherent in the pursuit.

Physical aggression is a need that may be satisfied by exerting physical force on surrounding objects and persons. Sheer pleasure may be derived from throwing objects, knocking down objects (or persons as in football), or breaking windows. For the purposes of need fulfillment it may be of little import to the individual whether the outlet is beneficial or detrimental to society.
Control or power is the desire to exert one's influence over other persons or objects. The essential characteristic of this category is that the thing controlled is not the individual himself, but something outside of him or a mechanical extension. The demagogue may be able to affect such control; the automobile may for the individual be the same sort of satisfaction.

Exercise is the need for physical exertion of one's body. Such needs may be fulfilled simply by walking or in individual cases it may take practically any form of physical activity.

Verbal ventilation is the need to express oneself through the medium of language. As opposed to types of interaction (of which this may be a part) verbal ventilation implies that the individual has a point of view that he must get across.

Altruism is here used to mean love, benevolence, a charity, or concern that one may wish to express toward his fellow men or living creatures beyond those necessary to achieve the most fundamental ends of society, the survival and reproduction of the species.

Nurturing is the act of giving aid or encouragement to a person, creature, or living thing which is dependent upon the donor.

Service is a need which is sometimes felt by people who wish to improve the lot of mankind. The relationship between the donor (the person who feels the need), and the beneficiary may be of an impersonal nature and the dependency relationship is usually not so pronounced as in the case of nurturing.

"Common cause" is the act of participation in an association or group which is dedicated to the improvement or change in society or segment of it. Such groups arise for the promulgation of a point of view or an idea, often of a controversial nature. Often such groupings are formed on the basis of self-help so that there need not be a dependency relationship.
DEFINITIONS OF THE COMPONENTS OF LEISURE PURSUITS

1. A **bit** is the simplest fragment of movement, information or thought which has a fluid connotation until it is related to a specific pursuit. In order to engage in a pursuit, a person must be able to perform the movements or combine the symbolic bits of information so that they begin to acquire meaning. In reference to reading a book, an individual word, may be considered a bit.

2. An **element** is the least complex combination of different types of bits which are melded over time to form a pattern that is independently recognizable and that has an identity and some meaning within itself. Batting in baseball, bidding in bridge, and reading a sentence would all be considered elements.

3. A **sequence** is a series of elements, linked together through time, which are arranged in a pattern possessing a significant, independent meaning and constituting a complete unit of meaning in reference to the specified pursuit. A sequence can be analyzed in order to determine, at the simplest level, the satisfactions that may be derived from a pursuit. An example of a sequence in sports would be a complete tennis volley, a football play, an out in baseball. In cards, it would be one hand dealt and played.

4. An **activity** is a combination of enough sequences to potentially permit all the facets of a pursuit to be revealed and/or experienced. Therefore, the term "activity" applies only to the level which contains the full meaning of the pastime by accommodating a series of dissimilar
sequences. A single sequence can be an activity if it meets the other requirements. The number of sequences constituting an activity is flexible and somewhat arbitrary. For instance, an inning in baseball could encompass enough of the facets of a pursuit to qualify as an activity, but ordinarily several innings or a complete game would be necessary.

Activities are of two types: those that are formal in character and those that are informal in nature. The latter are simply sequences coupled together without a pre-arranged point of termination. An afternoon of athletic practice or several hands of gin rummy played without keeping score fall into this class. The formalized activity has a predetermined end point which can be looked upon as a signal for the cessation of that activity. Such items as score, completion of a run through material or a repertoire are common indicators of terminal points.

5. An event is a complex of activities creating a situation, milieu, or image that is different from that of all the involved activities considered separately. An athletic contest, a cocktail party, or a dramatic production all exemplify the concept of events. Various combinations of activities may be involved in an event—the primary types being joint, intermittent, collateral and instrumental. The term joint activity applies to simultaneous participation by an individual in two or more pursuits, such as knitting and listening to the radio. The term collateral activity refers to the simultaneous occurrence of two or more dependent, interrelated activities undertaken by different persons at the same event—an example of which is spectators watching football and participants playing football. Intermittent activities are two or more
activities, not intrinsically related, that are interspersed throughout an event. During particular intervals attention may be devoted to one or the other of the pursuits, but it is possible for participation in one type to overlap with that of the other. This type of event is illustrated by the cocktail party, which is composed of drinking, eating and socializing. Activities which are indivisible from other ones or which are the means to a desired pastime are referred to as "instrumental activities." Certain ones may be either instrumental or intermittent activities, depending on the circumstances. Thus, driving in heavy traffic to a football game is likely to be an instrumental sequence, while driving through the country to a ski resort may be an intermittent sequence. The importance of the manner in which activities are combined to form events is that the structure may affect either the type or relative strength of the need satisfaction obtained.

6. Lastly, a series of several events may be linked together to form a chain of events, which represent the most complex and infrequent type of pursuit. A homecoming weekend, for example, is composed of the following events: football game, rally, dance, cocktail and fraternity parties, etc. For the purpose of analysis, the component events can be separated due to the fact that participation in the events can be elected separately by an individual.
Appendix D

FUNCTIONAL CLASSIFICATION OF SELECTED PURSUITS

I. Games
- Playing poker
- Playing chess
- Playing charades
- Playing hopscotch
- Working crossword puzzle*
- Playing shuffleboard*
- Playing "Hide-and-Go-Seek*"

II. Sports
- Attending sports event

See Appendix E for other examples.

III. Hobbies and Manual Crafts
- Stamp and coin collecting
- Embroidering
- Gardening
- Butterfly catching*
- Cake baking*
- Weaving*

IV. Cultural Pastimes
- Oil and water color painting
- Singing in small group
- Attending opera
- Creative writing*

V. Social Pastime
- Ballroom dancing
- Testimonial dinner (event)
- Participation in political club
- Volunteer hospital activities
- Watching television*

VI. Educational--Religion Pastimes
- Bible class
- Studying books
- Debating
- Adult education class in music appreciation*

VII. Travel
- Sunday driving
- Camping
- Touring*

VIII. Miscellaneous Low Organized Pastimes
- Sunbathing
- Taking children to zoo
- Writing letters

* Additional examples that were not used in the matrix.
## APPENDIX E: SATISFACTION POTENTIAL OF SELECTED SPORTS

<table>
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<tr>
<th>ACTIVITIES</th>
<th>STIMULATION</th>
<th>INTERACTION</th>
<th>SELF-EXPRESSION</th>
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<tr>
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<td>Football, Soccer, Lacrosse, Field Hockey</td>
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<td>Tennis, Badminton, Squash, Jai Alai, Ping Pong, Handball</td>
<td></td>
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<tr>
<td>Shuffleboard, Croquet, Racketball</td>
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<tr>
<td>Croquet, Horseshoes, Baseball</td>
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<tr>
<td>Wrestling, Boxing</td>
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<tr>
<td>INDIVIDUAL SPORTS:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(frequently played with others)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bowls, Billiards, Pool, Golf</td>
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<tr>
<td>Archery, Darts, Rifle</td>
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<tr>
<td>Golf, Field Hockey, Skull, Field Hockey</td>
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</tr>
<tr>
<td>Skiing, Rowing, Canoeing, Row Boating, Sailing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canoeing, Row Boating, Sailing</td>
<td></td>
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</tbody>
</table>

* Indicates presence of satisfaction potential

X Indicates alternative manifestation of satisfaction potential
BIBLIOGRAPHY


