PROPOSAL FOR A MAJOR PROJECT ON THE MEANS OF ORIENTATION IN THE CITY

The general subject of this inquiry would be the perception of the city as a unified whole: the extent to which an entire city or large city-section can be perceived or felt as an organized totality, and the physical means which facilitate such sense of coherence. The problem will be approached by a study of how people conceive their city as a whole, and by what means they locate themselves in it or guide their movement through it to a goal.

This ability to apprehend the total organization of a city is a vital element in our first normative criterion of city form: that an environment must have continuity, meaning and significance. Here we are dealing with these qualities on the upper end of the scale, where we are concerned, not so much with direct sequences of perception, as with conceptions of unity which are built up through experience.

It would be our basic hypothesis that an environment is a good one which allows individuals to orient themselves in it easily, which facilitates an understanding of the relationship between the observer and his world, and which presents itself in such a coherent way that it can be easily grasped in the mind. This quality becomes increasingly important as the size and complexity of our urban environment increases. One practical effect of such good organization will be that both newcomer and old resident can keep their bearings easily and find what they want with a minimum of effort. This practical effect will furnish a principal avenue of attack for the study, but will not be considered as embracing all the values to be derived from such organization.

A city is a very large, powerful and complicated object, and there is much emotional satisfaction to be gained from the ability to

apprehend it as a whole and to relate one's self to it easily. Simple illustrations are the excitement

of the famous views of cities from water or from high places, or the general pride with which

people attach themselves to their home city.

Such coherence does not arise only, or perhaps even mainly, from physical features. It is

based equally on the accumulation of personal or group experiences which associate with the

environment, on names and other intellectual concepts, and on mere familiarity, which allows us

to a surprising degree to organize even the most chaotic surroundings.

It is our assertion, however, that the physical form at least plays an important supporting

role in forming organized wholes in the city world. If it does not inhibit, still it may strongly resist

such organization, and exact a psychological strain on the organizer. Even when such conceptual

organization has been achieved, it will lack the emotional richness that comes from a parallel

organization in the physical world. It is evident that certain cities are more difficult to orient in,

even to old inhabitants; have less "character"; or spring less vividly to mind.

It may also be granted that much of our lives, except as tourists, are related to smaller

fragments of the city: home neighborhoods, work-areas, etc. The means of organization on a

large scale will also teach us something of organization, on this intermediate scale. But if

orientation is confined to these fragmentary areas, both general efficiency and emotional richness

must be impaired.

Based on these two assumptions, therefore, of the key importance of an environment

which can be organized as a whole, and secondly, of

the important role that physical shapes play in this ability, our study will try to uncover the physical means by which such large-scale organization can be facilitated. The study may also cast backlight on the soundness of our original assumptions.

It is clear, incidentally, that the answers will not be simple ones: that it is not sufficient, for example, to impose a huge conceptual order on the city, such as a detailed number-file system, or a rigid casting of shapes into a standardized mold. Such techniques will be empty of the emotional significance of a richer form world, will lack the differentiation of parts that allow us to take hold of a large whole, and will defeat the purpose of orientation by creating an order which does not point to the complex and varied details of reality.

It also is clear that each person will see his city in a different way, and that his organization will differ from others according to his class, temperament, activity, experience, etc. We can do no more than search for basic similarities that run through this organizing process, at least among individuals of our common culture and time, and who live in our great metropolitan centers.

No direct work has been done in this direction, to our knowledge. Many designers have, however, struggled with this problem indirectly as they strove to give "form" and "unity" to a large city environment. From this source we have a number of intuitive techniques, such as the use of axial lines, dominant landmarks, or sharp boundaries. The scale of our cities, and of city-projects, has grown tremendously, however, and many professionals have given up the possibility of unifying large

areas in any physical sense.

Psychology has documented the importance of the process of organization in perception and in dealing effectively with our world. Artists as a whole have developed intuitively many of the techniques which facilitate the making of visual wholes. This material must be transferred with caution, however, to another medium and a vastly different scale.

Early in 1955 we conducted some tests of method for such a study. The following techniques were tried:

Some ten people were asked to make a quick sketch map of central Boston, roughly of the peninsula within Massachusetts Avenue. They were all MIT personnel, some trained in design or map-work, some not. They were then asked to describe in detail how they would walk from one given point to another, giving both the route and the direction-clues that they imagined they would use. There were some five pairs of such points, crossing central Boston in all directions.

Secondly, the routes between these same points were walked on the ground by the experimenter, noting in detail the sense of direction and of the whole, as well as the clues and the points of confusion. Finally, a part of this central area was mapped in detail for objective location and visibility of various types of guidance clues.

The results of these studies were collected, mapped, and analyzed – noting on the sketch maps, for example, the elements shown, the distortion and the sequence of drawing; the routes taken, the clues given, and the sense of confidence or doubt on the imaginary walks; and so on.

This fragmentary study was no more than a test of method. Results

of the analysis, which are quoted only as examples of the kind of answers that may be expected, include a list of basic means of orientation in the city: internal dead reckoning of direction; lines of communication; distinctive spaces; linear barriers; point-references; use-areas with distinctive functions and form; slopes; and an overall grid system. Something could also be said of the form-qualities of each which most facilitate orientation. The study revealed, in this small sample, a consensus on areas of confusion and disorientation, pointing both to certain difficult features and also to a common tendency to organize the city into a series of relatively well-structured sub-areas, which often fail to interlock. The results, if fragmentary, indicated the value of a thorough study on these lines, which would be deepened to consider other fundamental aspects of large-scale organization, and which might conclude with design studies based on the analytical results.

It seems clear that a unified, if simplified and distorted, picture of a city is a necessary accompaniment to the efficient activity within it of a mature person. It furthermore forms the symbolic base to which he can attach his local pride and loyalty. This unified picture may come from long associate, but is all the more powerful if it has the support of some clear form, of some harmony of shape or texture. The symbolic image of the city that we carry in our head is the product of the objective physical surroundings as well as the associations of our mind.

This is the background for our inquiry. This basic hypothesis has two parts: that the ability to be organized easily is a key

feature of a good environment, and that the physical shape of the city plays an important part in such ability. The study will not proceed to test this normative hypothesis, exept incidentally, but will go on, as from an assumption, to discover the physical means facilitating organization.

The questions for which we will seek answers, therefore, are:

1. to what extent can an entire city or a large city section be sensed as one physical whole; having continuity, meaning, and significance;

2. what are the physical shapes which facilitate such recognition; including, particularly:

3. what techniques allow the inhabitant to orient himself, the total city, and his goals, with minimum effort?

The following methods would be employed in the study:

For two separate large central city areas, beginning with central Boston and following, on an abbreviated scale, with a newer, more "regular" city, a study of orientation and unity of character would be made:

1. A test of perhaps 50 subjects, drawn not necessarily from a "cross-section" of society, but insuring at least a variety of work-places, residence and habitual paths. Each would be asked to:

a. Characterize the city very rapidly, and say what first comes to mind when the area is mentioned.

b. Draw a quick map of the area.

c. Describe a series of "imaginary walks" (and drives), as described above.

d. And, in a few selected cases, taken out in the area, asked to go to certain goals and describe their clues enroute, and to intermittently point to or otherwise locate other features out of sight.

2. Special questioning would be made of traffic policemen, taxi dispatchers, firemen, city planners, and other who must develop a special knowledge of locality.

3. These tests would be supplemented by asking directions from chance persons in the streets and by careful subjective analysis in the field of the sense of the whole city, by personnel of the project and other interested and trained people.

4. Following an analysis of this material, a detailed map and series of photographs would be made to record the location, visibility and character of all the elements commonly used.

5. The complete material will be analyzed to develop a "collective picture" of the city area, to find the elements most commonly used for organization and what their optimum qualities seem to be, and to locate the orientation difficulties. The general implications of these studies for city form will then be developed.

6. It will also be instructive to analyze subjectively a number of great cities which have, by common consent, strong unity, and character. Analysis can be made by aid of photographs and a selection of plentiful descriptions. Here again, we will attempt to find the physical qualities that reinforce this sense of unity.

7. Design studies would be made to illustrate some alternatives for enhancing the strong features and removing the problems of the particular areas studied and then be broadened to develop city-forms which have strong

potential for organization and orientation.

The project will require a year's time for completion, with the possibility that extensions or deepening of the inquiry might go into the second year, as well as the preparation of the material for presentation. In addition to the project principals who would be in charge, developing the theoretical aspects and involved in special parts of the study, a half-time assistant would be needed to carry out the analytical work. A mature designer will also be part of the team, occasionally for consultation in the first half of the year, and on a third-time basis in the final half.

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