

SOCIAL PERCEPTIONS OF THE
CAMPUS PLANNING PROCESS

A Case Study at MIT

by

Joseph Grant Ledgerwood

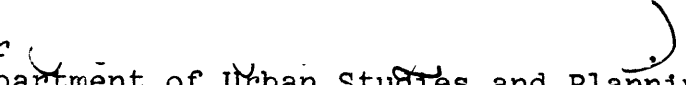
B.A., Honors College, University of Oregon
(1963)

Submitted in Partial Fulfillment
of the Requirements for the
Degree of Master of City Planning

at the

Massachusetts Institute of Technology

June, 1970

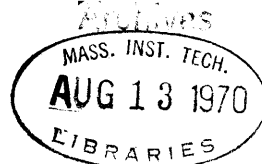
Signature of Author 
Department of Urban Studies and Planning
May 28, 1970

Certified by . . .

Thesis Supervisor

Accepted by . . .

Chairman, Departmental Committee
on Graduate Students





Room 14-0551
77 Massachusetts Avenue
Cambridge, MA 02139
Ph: 617.253.2800
Email: docs@mit.edu
<http://libraries.mit.edu/docs>

DISCLAIMER

**Page has been omitted due to a pagination error
by the author.**

(Page 36)

SOCIAL PERCEPTIONS OF THE CAMPUS PLANNING PROCESS:
A Case Study at MIT

Joseph Grant Ledgerwood

Submitted to the Department of Urban Studies and Planning
on May 28, 1970, in partial fulfillment of the requirement
for the degree of Master of City Planning.

As a social process, the planning and design of a building involves actors playing out work roles in an organized social setting. This study focuses on the events, perceptions and orientations affecting actors involved in one case of an architectural planning procedure within an urban university.

Although ostensibly directed at a technical production, the architectural process is found to embody a wide number of value orientations held by the participants. In particular, the social position of actors within the organization appears to relate to different understandings of high-priority objectives, of important social groups, and of appropriate decision-making procedures. Within this project setting, considerable conflict over goals and methods reflected uncertainties in policy within the School of Architecture and Planning for which the environment was being studied.

Three value clusters or orientations are suggested as explaining a series of conflicts in perceptions and, thereby, among roles and objectives. Depending on their organizational tenure (faculty, student, administration) actors orient themselves toward different significant reference groups. Their different tenures within the organization also generate different orientations toward the future, reflected in time horizons. Thirdly, a cluster of related perceptions of power--unitary vs. diffused; change seen as potentially marginal or radical--make up another orientation.

Project success or failure in its technical intentions appears to require a high level of consensus over specific objectives. The project sustained a multiple focus of attention around several goal-sets which repeatedly came

into conflict. Although many crucial issues were examined within the project framework, technical resolution of environmental needs and possibilities did not emerge. In part, this irresolution reflected uncertainties within the institution about the future of the School.

Thesis Supervisor: William L. Porter
Title: Assistant Professor of Architecture
and Planning

Thesis Advisors: Merton J. Kahne
Title: Professor of Social Psychiatry

Title: Benson R. Snyder
Professor of Psychiatry

TABLE OF CONTENTS

<u>Chapter</u>	<u>Title</u>	<u>Page</u>
I.	Architectural Planning as a Social Process	6
	Purposes	7
	Critical Issues	9
	An Overview of the Study	12
II.	Research Methodology	14
	Collaborative Research	15
	Inference from Case Materials	18
III.	Setting and Events Around the Webster Building	25
	Setting: Physical, Socio-political, Institutional	26
	Five Episodes	37
IV.	Perceptions and the Summer Project	60
	Perceptions of the Project	62
	Perceptions among Actors	81
	Perceptions of Environmental Alternatives	96
V.	Orientations	110
	Orientations toward Significant Reference Groups	111
	Orientations toward the Future	120
	Orientations toward Power	123
	A Synoptic Comparison of the Three Orientations	131
VI.	Concluding Observations	136
	The Project in Retrospect	137
	Some Speculations about Campus Planning	140
	The Monitoring of Campus Planning	143
	Institutional Innovation	144
	Footnotes	147
	References Cited and Bibliography	152
	Acknowledgements	157

ILLUSTRATIONS

		page
Figures	2-1	Sequence of Social Analysis 24
	4-1	A Social Mapping of Roles in Their Organizational Setting 83
	5-1	Orientations as Inferences from Perceptions 135a
Tables	4-1	Assigning Blame for Project Failure 80
	5-1	Orientations in Terms of Each Other 133
Map		MIT's Physical Location 1865-1969 A-1 (two parts) A-2
Photograph		A View of the Webster Building, April 1970 A-3

CHAPTER I: ARCHITECTURAL PLANNING AS A SOCIAL PROCESS

Purposes

Critical Issues

An Overview of the Study

PURPOSES

This study will examine in detail social phenomena associated with the planning of environmental alternatives for an academic school at the Massachusetts Institute of Technology. In particular, it focuses on social perceptions of actors engaged in assessing one building project during 1969 and early 1970.

In a narrow sense, the study analyzes how different social positions within the institutional social network tend to link with different objectives in regard to a single building. These contrasting perspectives bring about conflict among actors' values. As a seedbed of such conflict, the architectural planning process involves anxieties and frustrations for those engaged in it. Architecture requires long spans of attention. As well as imposing elaborate planning, it fragments assignments. Many who participate in architectural planning never stay long enough to see the final results of their work. Judgment of success or failure in a project is long delayed and often ambiguous in content. More than most professionals, the architectural planner and designer, must find immediate satisfactions in his work through attaching to it personal values and motivations. These values may relate to deeper levels of self-perception.

Often, in the interests of amiability, actors tend to underplay conflict in a social situation. Personal emotions and perceptions of the planning process may remain latent because the function of that process is to bring about consensus and concerted action. To make manifest this latent content of the architectural process was another purpose of the investigation. Accomplishing this aim meant entering the work process. The researcher contributed to its goals while studying its dynamics. Afterward, interviews and analysis were used to explore the unexpressed perceptions and latent value orientations influencing that process.

The interaction occurred between planners employed in a campus planning office at MIT and faculty and students of the School of Architecture and Planning at MIT. Since both groups claim competence in the same field of technical decision, the relation implies a tension which may be classed as role conflict. In addition to differences and probably conflicts in perception and values among actors, the social situation thus brings about conflicts of interest.* University planners, faculty in architecture and planning, and students in those departments are all

*The term interest will be used in this study to refer to that cluster of social and economic needs and preferences which pertain to an individual role in a social network.

interested in the same "product": Campus buildings and their immediate surrounding, social and physical. The situation of built-in role conflict both complicates and enriches the social process under analysis. A purpose of the concluding observations should be to examine whether conflicts in role among actors correlate with perceptual and value conflicts (see Chapter V).

As a case study in campus design, events, personalities, and communication patterns each affect the eventual outcome. Through documenting these social phenomena some tentative conceptual propositions will be inferred to account for differences in perceptions.

SOME CRITICAL ISSUES

The design and construction of many building projects in aggregate determine the design of the city. These are projects carried out by actors within different urban institutions and settings. As one such institution, the urban university, with its administrative apparatus, growing student population, and substantial endowment, is becoming a generator of urban spatial patterns.¹ Thus, one concern of this investigation is to increase understanding of the impact urban campuses have on their urban setting.

In some senses, a physical planning process is part of a general decision-making process within an institution. There is an interest in grasping how environmental decisions get "made." What are the values which designers and planners bring to the campus planning process? How are these related to political, psychosocial and economic pressures working within the institution and in the city? How are different environmental alternatives considered and chosen among?

Of these issues this study concentrates on the problem of values and perceptions of the planners involved in a single such project.

One such set of values revolves around that of student and faculty participation in the development of its own facility. "User-participation" in the design of buildings has, in planning and architecture, become a conspicuous issue.² Also, considerable discussion has centered recently around student participation in determining policies of the university "community." At MIT, within the School of Architecture and Planning and within official administration policy, participation of persons lowest on the totem pole of institutional power has become a privileged issue.

Thus, in this study of one campus building, an issue

is the quality of the participation that occurred. The analysis should indicate how students and other perceived their participation and its degree of "meaningfulness."

Other issues follow from this concern over decision-making and student participation in it. Specifically, why would the School consider this particular facility? What were the sources and nature of disagreements that occurred in the process? What other options got projected as alternatives? Why did these prove attractive to some and not to others? Were controversies around the new school facility in some way tied to attitudes toward political change within and outside MIT?

These questions look at external relationships of the planning process. In the meantime, the planning process had internal characteristics. What sorts of information were considered crucial in making decisions? Who participated?

The final concerns touch on larger issues of institutional planning. Through exploration of what happened around a single building on the periphery of the MIT campus, a sense of the overall pattern of decision-making for the university might be developed.

Controversy has surrounded campus expansion within urban neighborhoods in Boston, Philadelphia, and New York

City. In some quarters, MIT has been criticized for piecemeal annexation of adjacent pieces of Cambridge industrial areas.³ The Webster building is one such building, converted through acquisition by the Institute from industrial to academic and research uses. The origins and values which bring about such expansion by the institution may receive some exposure from the evidence developed in this study.

AN OVERVIEW

An overview of critical issues and findings can be gotten through reading several sections making up about a third of the total length of this report. Chapter I summarizes issues and purposes. Chapter III narrates several episodes and their settings in which the Webster building study took place; the Webster building episode (pages 48-59) should be looked at. The interweaving of perceptions and conflicts covered in Chapter IV can be sampled by reading two sections of that chapter, the first titled "Perceptions among Actors" (pages 81-96) and the second called "Perceptions of Environmental Alternatives (pages 96-109)". Chapter V considers value orientations as a model accounting for differences in perceptions among participants and should be read in full. Similarly,

Chapter VI attempts an evaluation of the project and of innovation in campus planning procedures, and summarizes findings of the investigation.

CHAPTER II: RESEARCH METHODOLOGY

Collaborative Research

Inference from Case Materials

COLLABORATIVE RESEARCH

This study focuses on a social setting organized to produce a study of its own environmental needs. The research, in turn, involved the researcher in that social setting and its tasks. The intent of the research was to collaborate on the goals of the social process, while, at the same time, to develop data on which an analysis of that process might be constructed.

For the researcher, entry into the social process is a crucial problem. In this case, a planning study occurring within the School in which the researcher was enrolled as a student considerably eased this entry. In this planning group, the researcher operated as a part-time worker and contributed to the final report. By taking part in meetings, conferring over decisions about how to produce the study, and interjecting personal ideas, the researcher can establish legitimate claims to knowing about other person's biases and insights. In exchange for others' intentions and agendas in the project, he must reveal his own.¹

The social researcher involved in monitoring an ongoing social process faces a number of problems of legitimation.

There is an ethical necessity to produce reliable data which will be later put back into the social process. He must gain the trust of other actors if he is to elicit inner responses to the social process he is seeking to describe and explain. He must have more than a passing acquaintance with the goals of that process as generally held among its participants.

From experience accumulated in this project and previous ones, one or two ground rules can be suggested to make the researcher both ethical and accountable to his respondents.² For instance, there should be within the researcher a basic concurrence with the goals of the social system which is being studied. In the case of an ethnographer in a peasant community, this set of goals would be fairly obvious: Maintenance of the community as a viable cultural and socio-economic entity. In complex societies where one participates in small sub-sets of large social systems, goals become more specialized. In this planning process, the goal was to assess the physical needs and possibilities for housing an academic department.

Second, the researcher should in one sense or another be able to contribute to achieving the goals of the process he is studying. By suggesting ideas and opening himself to the same level of criticism that others in the process

face, his understanding becomes intensified. Therefore, it is ethically and scientifically right that he become involved.

It has become a tradition for sociological researchers to engage in analyzing institutions and processes which their analysis, besides illuminating, may implicitly criticize.³ Sociological research as such may be said to be "interventionary." That is, in gathering information on social life, the researcher embodies in his activities a quality of surveillance and a set of interests which inevitably affects the nature of the observed process. On the other hand, it is difficult to predict precisely how social research as a participant or otherwise changes people's attitudes toward their roles and toward others. For instance, anthropological studies of tribal societies increased Western sensitivity to the diversity of human culture and needs. But they also provided information colonial powers found useful in governing those peoples.⁴ In sum, understanding a social system may improve its ability to meet its goals and, at the same time, alter the goals themselves.

The disadvantages of the collaborative method center on its inherent non-objectivity. A social observer who engages in the social system which he is studying may find

it impossible to discern cause-effect relationships in it. Much of what he analyzes he must accept as being affected by his own limitations and commitments. Therefore, he probably must abandon any hope of establishing a "reality" that goes beyond the composite realities he will document from his engaged position among the actors. In order to participate in the phenomena of social interaction and choice, the social researcher gives up at least some potential for objective data and the sociological models which can be built from such data.

In return, there are several advantages. By giving up some scientific claims for this study, the researcher can participate actively in influencing the social process toward normative ends which he believes desirable. The effort expended is more efficient for ends set, not by the community of social researchers, but those of the social system under study. Social science is put to work on the behalf of the social process, not that of priorities from the scholarly community.

INFERENCE FROM CASE MATERIALS

The model developed in this study and the materials on which it is based constitute a closed system of analysis and interpretation.⁵ This system could have been expanded

to include a variety of other materials. For instance, collecting data on each actor's biography might have produced rich materials.

Instead, the methodological purpose has been to test the explanatory power of a limited set of case materials. In this case, participation, observation and interviewing around a single social process within the institution constitute the set. The intention has been to explore the degree of understanding achievable with limited kinds of data, subjected to a particular form of analysis.

Events during the planning process and actors' perceptions

A detailed narrative and analysis of events around the Webster building from early 1969 through the fall will be attempted. The events have been divided into five principal sets or episodes, strings of events which are perceived by the actors as being interconnected through shared characteristics: common causes, results, etc.

The skeleton of occurrences in each case are expanded using interview data from the actors involved. In some cases, an actor may speak of his expectations in regard to the event. In other quotations, an immediate reaction or more considered reflection is expressed. The aim of this sort of presentation is to compare and to contrast differences in perception of the same set of events.

Following the study of perceptions of events, perceptions of actors and groups within the planning project are analyzed. A range of motivations is attributed to other actors. Apparently there is a tendency to invoke spontaneously hidden motives to explain others' behavior. This evocation is perhaps prompted by the interviews, which were openended. Respondants were encouraged to speculate beyond their knowledge about other actors' perceptions, in most cases. Using interviews the aim was to explore the hidden aspects of decision-making in the planning context.

Because the interview excerpts are consistently quoted out of context, they must be read, not as considered positions of the speaker (who in each case remains anonymous), but as spur-of-the-moment remarks responding to a flow of stimuli from the interviewer and the setting. As such, the analysis strives to contrast different actors' perceptions from one another. In doing so, there is some risk of caricaturing each position into something of a stereotype. For the purposes of this study, that risk has been chosen in order to gain as vivid as possible a portrayal of contrasted perceptions around a series of events which are normally accepted as banal.

The study is constricted to these actors working on this project and, during and after that process, reflects on their expectations and reactions. The series of episodes and the perceptual phenomena tied to those episodes comprise the closed system of interest. The explicit purpose is to extract from organizational process the complexity of meanings hidden within the sensibilities of participating actors.

The limitations of this kind of analysis rest on the fact that it is neither objective nor are its structural linkages with the psychology of each individual demonstrated. If it were based on personality measurements or on specially devised scales, a model relating personality, attitudes and social setting might be developed. If alternatively, the final model sought to relate the complete personality and history of each individual with the planning process, data requirements for each respondent would exceed available resources. The analysis used was conceived as a compromise between a more precise sociography and a more extensive psychological assessment of the individuals.

Since the purpose of this method is to bring out the complexity of the planning process, the results of the analysis should be judged on those standards. That is,

the resulting image generated in this study should reinforce the plausibility of a comparatively complicated view of that process.

A more quantitatively oriented analysis of decision-making might have developed from a study of the timing and character of a number of architectural planning cases within the university. This kind of study would have yielded insight into the organizational requirements of planning and about the common character of building projects undertaken. The resulting generalizations would probably have been more easily reduced to simply formed propositions, rather than the complex images which result from this study.

The advantage of the present method relies on the depth and richness of information about participants' involvement in the project. By examining at length one case, rather than several cases in less detail, the resulting model is perhaps less certainly applicable to future projects. On the other hand, the richness of its metaphors may provide information as useful.

The last three chapters explore a more concise way of understanding this planning process. By speaking of explanatory orientations to account for diverse perceptions among participants, the intention is not to generate a

series of precise analogues to the decision process.
Rather, the orientations of future, power, and reference groups (see Chapter V) should be judged as metaphorical images for an underlying reality of psychological states conditioning social process.

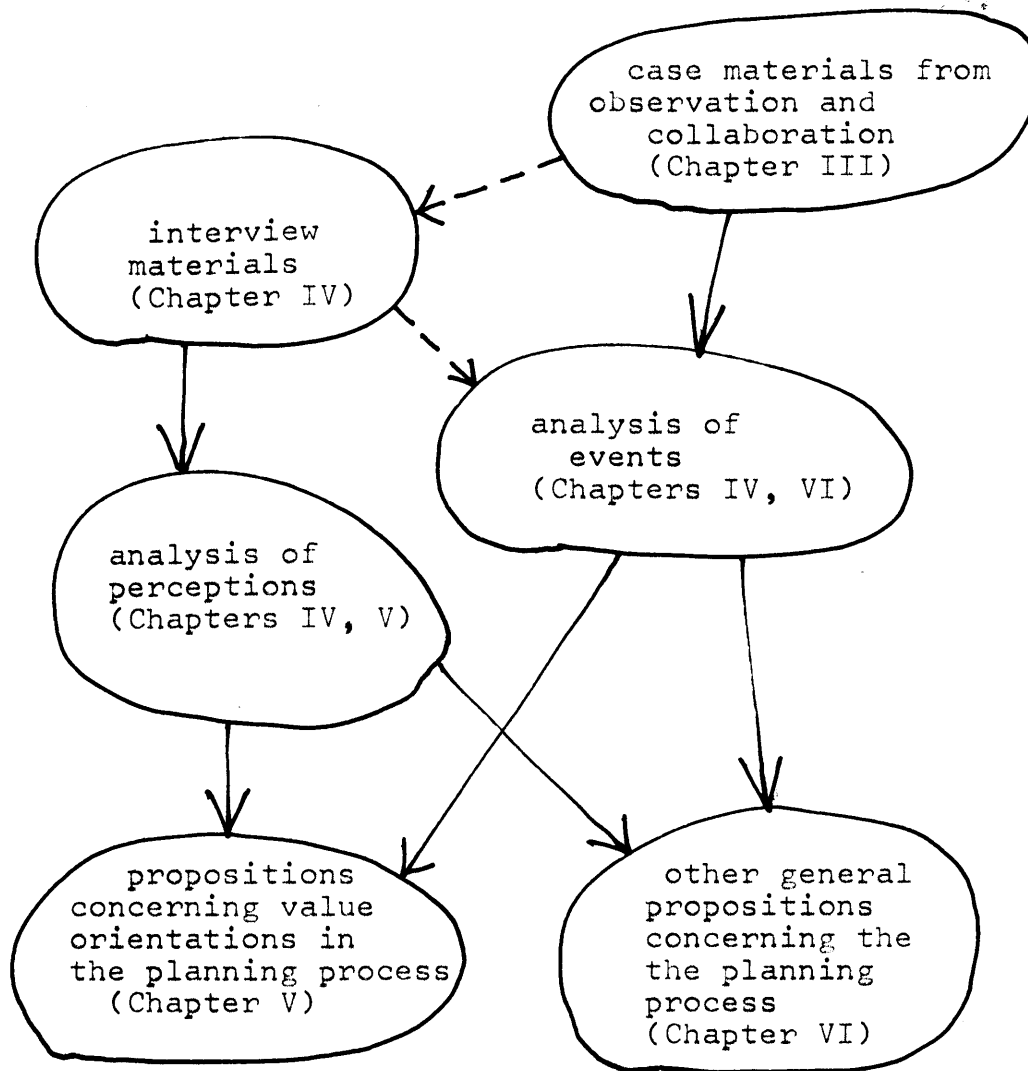


Figure 2-1. Sequence of analysis in the study of the architectural planning process.

CHAPTER III. SETTING AND EVENTS AROUND THE WEBSTER BUILDING
Setting, Physical and Socio-political
Five Episodes

SETTING

(a) Physical setting

In 1969, the year of the project examined here, the Massachusetts Institute of Technology was in its fifty-third year of residence in Cambridge. It is sited on 128 acres which stretch the length of the Charles River embankment for about a mile, facing across the water the city of Boston (see map).

The Institute originally occupied buildings near Copley Square in Boston.¹ Founded in 1861, it grew into a series of scattered, cramped quarters here and there around that square. In 1909 Richard C. Maclaurin became the fourth president of MIT. It fell to him to search out a new location where the rapidly expanding technical university would have room to grow.

During previous years' discussions of alternative locations, a number of sites had been proposed. Harvard University throughout this period had sought a stronger connection with the Institute. Harvard saw in this school a reputable engineering and science faculty to complement its own capacities. However, the Institute's students, faculty and alumni had tenaciously resisted these proposals, which had included at one point an offer of the site now occupied by the Harvard Business School. In

spite of the resistance to amalgamation, the MIT Corporation, with many members who had graduated from both schools, continued to bring forth the idea at intervals. Maclaurin was faced with acting decisively if this sort of proposal was to be stilled for once and for all.

1915 would be the fiftieth anniversary of the Institute. It was an auspicious time to go in search of funds for new facilities, for by this time "Boston Tech" had produced several generations of graduates whose ingenuity and energy had contributed substantially to the growth of technological industry in this country. The industrialists might now be appropriately grateful. They had responded to requests for endowments for faculty and equipment.

Shortly after taking office in 1909, Maclaurin was sitting in the Beacon Street apartment of a friend. Looking across the Charles, he saw a newly emerged mud flat on the Cambridge site. This had been created, in the same manner as the Back Bay area, with land fill. From the point of view of the Institute, the site was ideal. It was large and unencumbered by existing structures. It was very close to Boston, and, as importantly, still at some distance from the Harvard sphere of influence. Within a few weeks, the duPont family and George Eastman of Kodak owners of industries which had benefitted from the skills

of MIT graduates, gave funds to buy the site and erect the first building complex.

The men who planned this first complex took an innovative stance in choosing their basic design principles. After having suffered from years of fragmented and cramped quarters in Copley Square, they adopted the idea of a continuous multi-storied building. It would be laid out in such a fashion that additional sections could be added on over the years. It was conceived not as a closed form, but as a building system capable of growth.

By 1916, the four-story series of buildings in a U-formation around a "Great Court," at this time a soggy mud flat, had been erected. Next to it was a student dining hall and center, Walker Memorial. Around these two buildings with their Roman and Renaissance motifs stretched mud.

The opening of this complex in 1916 was the cause of a convening of all Institute alumni. Venetian-style barges and gondolas were built and, in a flash of cheering crowds, sirens, sailboats, and marching bands, the charter of the Institute was transported across the Charles to the steps of Walker Memorial. Bleachers and a stage had been assembled in the Great Court. With the Boston Symphony Orchestra and an opera company participating, two days of

pageantry, balls and parades apparently involving much of the population of Boston celebrated the new home for the Institute. Within the Great Court a pageant specially written for the occasion placed the forces of science and reason in a winning battle against superstition and irrationality.

Over the next fifty years, this area of Cambridge became a major industrial center. The Institute was to be surrounded by a perimeter of light industries, warehouses, and railway tracks. Beyond those were working-class neighborhoods. Thus, the Institute, while it expanded steadily around its original site to an area three or four times the original site, also attracted other uses.

In the post-War period, Boston as most other American cities, has seen a tendency for industry to move beyond the central city to more spacious and accessible suburban sites.

The market value of many industrial plants and warehouses for their original uses has not kept pace with the value of real estate in Cambridge. Thus, in a number of instances since World War II, the Institute has leased or bought industrial buildings. In some cases, these sites have been redeveloped for office uses. In other cases, the existing structures have been rebuilt and renovated

for academic uses. At this time, perhaps as much as a third of academic and administrative space at MIT is found in converted industrial buildings.

(b) Social and political setting of MIT

During the period 1968-69, the growth of large urban institutions like universities into surrounding neighborhoods became a source of national controversy. Political groups such as Students for a Democratic Society (SDS) found in this expansion of wealthy institutions into lower-income areas an aspect of what they referred to as "imperialism." Radical critics of the "American system" claimed that this expansion was a limited case of a general threat to poorer peoples. In their view of history, they saw leading U.S. institutions--corporations, government, the military, and the universities--producing the leadership of institutions aimed at dominating world resources.

In the case of Cambridge, some groups within and outside MIT felt that Harvard and MIT were working in collusion to create a city around education, research and development.² Cambridge has been traditionally an industrial city with two universities. Now, it was claimed, there was a conspiracy to redevelop it into an "Imperial City" of war research, defense corporations, and upper-middle-class neighborhoods. By buying up marginal industrial buildings,

MIT was supposedly contributing to this movement. For instance, in the case of the Simplex Company buildings, bought in 1969, it was argued that without the Institute to serve as a ready buyer of the 18-acre site, no buyer would have had the resources to acquire the entire parcel at once. In acquiring the plant, MIT was thus subsidizing the removal of working-class, blue-collar industrial jobs from Cambridge to Maine. Radical critics further argued that the company was moving without granting seniority rights in the new location to present employees. MIT, in not pressuring the company to at least safeguard the well-being of its Cambridge employees, made itself doubly culpable.

Other perspectives on campus growth gave different understandings of MIT's policies. Since the 1940's, a trend toward urban redevelopment and conversion of industrial land-uses in the inner city to other uses, such as residential and institutional, has had its origin in the urban renewal movement. Like often-criticized Federal urban renewal programs in poor neighborhoods, university expansion has perhaps imposed disproportionately high costs on working-class groups in the city. Meanwhile, the benefits have tended to revert to middle- and upper-class groups within the institution.

But the road of university expansion in Cambridge, like all such roads, has been paved with good intentions. James Killian, Jr., Chairman of the MIT Corporation, had said during the late 1950's that he hoped that MIT would one day have a setting around it "more befitting a major university." The perceptions of influential institutions during that time were not geared to the needs of working classes and the poor, for it was an orthodoxy of the time that all Americans would soon become suburban and middle-class.

The perceptions of these decision makers have become aware of these unintended consequences of institutional growth, it would appear. In early 1970, at a meeting discussing redevelopment of the Simplex property, Killian and other officials repeated assurances that provision for low- and medium-skill jobs in light industry was a goal of that project.³

The Webster building is located at the opposite end of the campus from the Simplex property. It was acquired in mid-1968 by the Corporation. It, too, housed a company providing blue-collar workers with jobs. As it has been converted to academic uses for the Institute, the analysis of the events around that conversion make up the main substance of this study. By inference, the

reader may be able to understand the process of university expansion somewhat better. It is the internal dynamics of institutional planning which dictate the decisions for expansion, it will be argued. The institution has no "plan" in terms of the city. But it orders its priorities around its own perceived needs for survival and growth. Some of these needs may be altruistic. Whether all these priorities can be justifiably maintained in the future is a matter not considered here. However, it is conceivable that university environmental planning must become increasingly sensitized to the influence it exercises in the inner city.

(c) Institutional setting

Internal changes within the School of Architecture and Planning

The School of Architecture and Planning at MIT has been for some years in the process of major changes in its curricula, its role in professional training, and its commitment to basic research. This process of change typifies environmental design and planning schools over the United States and, to a lesser extent, Europe. At MIT, as enrollments have risen sharply, the number of applicants for available positions has gone up even faster. Traditionally these two departments--architecture

and urban planning--have been somewhat isolated from the body of studies at MIT and at other universities. Their range of interests now relate to problems of urban society and social change which are affecting vocational interests of an increasing number of students. Within the School of Architecture and Planning, film makers, anthropologists, and ecologists are extending the range of subjects pursued. The richness of the course offerings attracts numbers of students from outside the School and from nearby universities, such as Harvard.

This recent process of abrupt expansion has taken place within a comparatively cramped set of spaces within the central building complex at MIT. To house its burgeoning activities, the School has been allowed to expand into warehouse space at the opposite end of campus, into adjacent office and studios within the main building, and to spaces within the athletic complex across Massachusetts Avenue and in a converted store near the student center.

Among faculty members there is generally recognized a need to develop a central facility to house the School more or less as a unit. Particularly architects feel the difficulties of a fragmented school environment. A warehouse converted into architectural studios is felt

to be an "isolation ward" by some. Students working there are a quarter mile from the library, administrative offices, and faculty offices of the School. Photography, film making and visual studies workshops also exist outside the central complex and apparently have limited contact and influence within the School.

Faculty in the Department of Urban Studies and Planning have been faced with equally intense shortages of space. Some feel that the ability to attract outstanding faculty is limited by inadequacies of present office facilities. However, relatively few planning classes occur in studio spaces, as the field has become opened to the social sciences and computer technologies. Instead of formal class and seminar rooms, students feel a need for individual work space and informal commons rooms. Social interaction within these unstructured situations is taking the place of more traditional workshops within this department.

Students in both departments are pursuing courses of study which are more and more of their own choosing. Within architecture a core of professional competencies still claims the allegiance of most students: structural design, visual and perceptual studies, site planning. But new methods and new philosophies permeate these fields:



Room 14-0551
77 Massachusetts Avenue
Cambridge, MA 02139
Ph: 617.253.2800
Email: docs@mit.edu
<http://libraries.mit.edu/docs>

DISCLAIMER

**Page has been omitted due to a pagination error
by the author.**

(Page 36)

computer-aided design, behavioral science, user-changeability in environments. In urban planning the fragmentation of recent years has been more extreme. There is a general interest in promoting social redistribution of urban resources and political power. Students develop competencies in fields as wide ranging as health systems and applied anthropology. A considerable number follow courses at Harvard Law and Business Schools, as well as the Sloan School of Management, MIT.

EVENTS AROUND THE WEBSTER BUILDING, 1969: FIVE EPISODES*

During the calendar year 1969, the School of Architecture and Planning at MIT undertook to explore its future space needs. At this point the two departments had been growing faster than any others within the institution, although they remained among the smallest in absolute numbers. MIT's enrollment is matched against budgetary constraints, on the one hand, and against "missions," the specific programs which have been decided on as having primacy, on the other. Thus, the fact that these departments had been permitted to grow meant that they were receiving resources which might have gone to

*episode--"any event or series of events complete in itself but forming part of a larger one: as, an episode in the war." (definition 3., Webster's New World Dictionary of the American Language, 1956 ed.)

other departments. Apparently central policy-making groups in the MIT faculty and administration see these departments as components in a changing definition of the missions of the Institute.

However, no unambiguous decisions about the future of these departments was to emerge in 1969. From many sides, the Institute was being pressed to withdraw from its thirty-year emphasis on defense and weapons research. The quality and size of physical facilities to house architecture and planning would remain unresolved during this period. This irresolution would be due in part to uncertainties about what role they would play in a new set of MIT programs in the social and urban sciences.

Thus, the analysis arbitrarily focuses on a set of events, or episodes, which do not culminate in any dramatic dénouement or success. Five episodes will be analyzed: acquisition and eligibility; first consideration; the spring workshop study; the summer project; occupancy and trade-offs among space resources.

(a) Acquisition of the Webster building

In 1930, the Webster Company erected a four-story building with a concrete column-floor slab structure and brick facing at the corner of Wadsworth and Amherst

Streets in Cambridge. This site is located one block from Memorial Drive along the Charles River and three blocks from the main complex of MIT, opened fourteen years before. Through 1968, this building continued to serve as a printing plant.

In mid-1968, MIT unexpectedly received an offer from the firm to buy the building outright. According to an administrator in the School of Architecture and Planning,

(The opportunity to buy) developed rather suddenly, as you know, because the company that owned (it) merged with another company. The property came on the market. The Institute didn't know very much ahead of time. Of course, it's in a district where they really should buy anything that they have the opportunity to buy. (J)*

This perception of the purchase is in accord with that of a planning officer at MIT. Acquisitions of property do not proceed on a case-by-case basis but, instead, within a general set of guidelines. Thus, market pressures won't have the chance to drive the price up.

...you have to understand that the actual act of buying a building is actually at the end of a long process. The decision to buy the building is the most important, and that is made considerably earlier, as a general policy decision. It would say, "Buildings in this area should be acquired as they are available." They should hopefully not be bought under duress, for obvious reasons. So that, when the building comes up for sale, unless the policy is changed, then it's a simple act....(Q)

*Letters following quotations indicate codes for interviewees.

Another planner notes that the planning office might have been asked for information relevant to this acquisition:

The decision to purchase is effectively made by the Treasurer's office. The Treasurer's office will look to the long-range planners for indications of the kinds of acquisitions that would be appropriate to the Institute's needs. The Treasurer's office did look here and will ask, "what do you need?" (R)

Through this purchase by MIT, the conditions under which the building would be utilized dramatically altered. As a utilitarian facility housing a printing press, jobs within it had gone to the semi-skilled and skilled workmen of nearby Cambridge and Boston neighborhoods. Now, as part of MIT's investment portfolio of real estate, the building might be rented out as a facility for another industrial or commercial firm.

However, it is closely situated to a number of MIT facilities. As well as being near a subway stop on the heavily traveled Harvard Square-Dorchester line, it is on the fringe of an urban renewal project around Kendall Square. Several high-rise buildings were nearing completion, land values were going up, and academic space within the Institute was increasingly scarce. The school administrator notes,

Economically it would have to be used for something academic quite soon, because otherwise they would have to pay taxes. If it isn't to be used academically,

they would need to find a tenant, and begin getting some rent income. (J)

Apparently after consultation with administrative groups who are charged with allocating space resources, including the Committee on Institute Resources and Space (CRISP) headed by the Provost, the Webster building was suggested to administrators within the School of Architecture and Planning as being a facility that might be suitable to the School's needs.

What are the criteria for an occupant, in order that he be in a position to be offered this kind of facility? A planning officer summarizes the criteria for occupancy.

In the case of this particular building, there (were) no immediate occupants from the academic departments who were eligible for moving in...

...by eligibility here, I mean people who have a capital commitment, financial commitment; in other words, what it means is that a group at MIT who have gone through the programming process, articulated its need, those needs have been measured, they have been equated in terms of dollars, the commitment to seek those dollars and to fulfill the academic objectives...

Now, that had not been done, although we, of course, do have a fairly up-to-date view of what people think that they need space and want space. There are a lot of people who are cheeping, but not all of them are ready to eat, so to speak. (Q)

- (b) First consideration by the School of Architecture and Planning.

A School administrator recalls,

My first introduction to the subject (of the Webster building) came when Howard Johnson (the president of MIT) asked me to think about whether it would be a good idea to move the School to the Webster building. (J)

After conferring with the two heads of departments (Architecture and Urban Studies and Planning, hereafter referred to as Planning), a joint memorandum was written confirming the School's interest in this environmental alternative.

From this point, early in 1969, faculty leaders went to some length to involve a wide representation of faculty and students in considering the Webster building. Wide participation conformed to contemporary professional concerns for citizen involvement in environmental planning. Due to the meetings and memoranda circulated to students and faculty, most persons apparently had heard of the building and were aware of the possibility of moving there by March.

A planning officer, recalling this period, notes that,

...it was my impression that people in the School were generally in favor of the Webster building; I know I talked with several people who were thinking that this was a good location to move to, it being close to the social sciences.... (R)

This perception, however, is not consistent with student

opinion as it began to take shape. Of the few students in planning who had taken time to consider the issue, there was apparent a sentiment to remain in the existing location.

In April faculty leaders called a School-wide meeting on the Webster building. During these discussions, a group of architecture students began to question openly the desirability of this choice before other possibilities had been thoroughly considered. One of the few planning students to take part in these sessions understates the situation when he recalls, "...division existed in the Department over this move."

It is also important to note that during this period of first consideration, planning faculty and students participated almost not at all in the rounds of discussions within the Department of Architecture. During a six-month period prior to these discussions, planning department affairs had attracted the energy of most people within that discipline. Student participation had been focused in considering a wide variety of issues affecting the future of the department: student involvement in policy making; a new chairman; faculty recruitment; tenure decisions; student admissions policies; student-initiated research. By March and April, after months of intermittent discussion,

a new physical environment for the Department apparently seemed of minor importance. To most, the Webster building alternative did not seem critical to long-term or short-term options of the department.

One might speculate that, had the problem been stated in terms of allocating potential capital resources to the level of \$5 to 10 million, more planners might have been drawn to the project. However, the originators of the project and the Webster building process saw it in terms of a building, rather than of a capital expenditure:

We had been looking for a location for the School on campus for ten years. We had to act on this available building or lose it to somebody else.... (K)

From the inception of the project, therefore, little time seemed to be available to consider at leisure basic questions of goals and policies.

(c) Workshop study of alternative locations, spring 1969.

As part of the activities initiated by the architecture department, it was suggested to a visiting design professor that his studio workshop consider design and planning consequences of alternative locations on the MIT campus.

In that semester's work, this professor and six students studied three alternative areas: the east end of campus around the Webster building; the central campus area near where the School presently is housed; and the

far west end of campus, an area now largely in student housing and athletic facilities. They identified MIT's ownership and leasing patterns around the campus, showing rapid expansion in the post-war period into industrial areas of Cambridge. Their eventual recommendation favored the present area in the central part of campus. As a second preference they indicated the west end of campus (see map).

Their reasoning was that the central area around Massachusetts Avenue was more likely to develop a mixture of shops and residential areas. While the MIT campus near the river was solidly built up in institutional buildings, across the railway tracks was a strip of Massachusetts Avenue and some obsolete industrial areas which would likely be opened up for residential redevelopment in the future. It was at this point that the Metropolitan Storage Warehouse, a massive brick structure along the railroad tracks, was thrust into discussions of possible locations for the School.

The Metropolitan Warehouse, dating from the 1890's, towers in red-brick solemnity over surrounding streets and industrial buildings. Its long solid walls are punctured at intervals with medieval slit windows. The doors are large wooden brass-bound Victorian relics.

The interior is equally somber and impressive, for space is greatly limited by the large brick piers which structurally support the building. Almost no daylight penetrates the interior.

As attractive to architects as this vast pile of bricks appears, Gothic romanticism was not the only consideration which directed the attention of this professor away from the Webster building.

The east end of campus borders a large urban renewal site around Kendall Square. The buildings rising in this area will apparently house major research-oriented corporations, many of which have been for years involved in war and defense research. MIT itself being a major war research corporation, these companies would find it attractive to locate in this area. It was this interpretation of the situation that apparently confirmed his tendency to reject the Webster building.

The linkage that existed in his mind between the corporation sanctuary being built there and MIT's campus can be speculated about. The architectural quality of the area would tend toward large office towers with few shops and with luxury apartment buildings. Little or none of the traditional industrial mixture of low-income housing, small businesses and warehousing would remain after

redevelopment. The environmental character that seemed inevitable from such tenants would emphasize high-income, corporate life styles. This kind of life style and the exploitative character of the corporations to which it attached seemed to this professor and his students repulsive. Moreover, it seemed anathemic to a good social environment for a School of Architecture. As a socially aware professional, he deplored the usurpation of low-income work places by upper-income office buildings.

To go one step further conjecturally, this professor was a South African of Dutch descent. Besides being a respected professional architect and the chairman of faculty in a School of Architecture there, he was also a liberal in a country where liberalism is under state suppression. South Africa is solidly supported through the investment policies of such companies as the Chase Manhattan Bank and other major American corporations. These same corporations were the sort locating in the Kendall Square urban renewal area.

When this set of perceptions became understood among students and faculty, some among the urban design group within the School suggested that the Webster building might be used as a means of developing "anti-corporate" types of urban spaces and activity patterns. Thus, one

purpose of the building might be to generate visual and social environments which could alter perceptions of people inside MIT against corporation life-styles. In other words, the building and its immediate vicinity might become a "laboratory" area of social and visual experimentation for the Institute. It could initiate a pattern of integrating campus uses with the uses of low-income groups outside the Institute. This urban-design-oriented group of architects and planners thus perceived in the Webster building an opportunity to affect social perceptions of environmental quality within the Institute.

(d) The summer project

During the summer of 1969, a group of faculty and students drawn from the Department of Architecture studied the Webster building and the space and environmental needs of the School of Architecture and Planning. Except for some contributions from this researcher, no participants from the Department of Urban Studies and Planning were attracted to the project.

According to a planner officer, the Planning Office had in its budget of the previous year requested \$15,000 for space studies to be carried out for future facilities of the School. With the unexpected purchase which made the Webster building available to the School as a possible

future center, this money might thus be used in assessing the Webster building as the most likely candidate. In spite of contrary preferences of the spring workshop group and of a number of dissident students in both departments, it was decided that the summer project would concentrate on the Webster building.

According to a planning officer, the senior faculty within the School who had initiated consideration of the Webster building and planning staff devised a work program in May. While the study was not to close off consideration of other locations, this one alternative was to be studied in detail. Its constraints and opportunities would promote greater understanding of the requirements of the School and how they might fit into an actual situation, it was argued.

At this point, however, external events brought about the withdrawal of the chairman of the Department of Architecture from the project. He had been until this point the primary initiator and organizer of discussions around the Webster building. He had suggested the workshop study of location alternatives for the School during the spring semester. Also, he had gotten together two "picnics" in the Webster building to which were invited students and faculty from both departments to introduce them to the

building, as well as a two-day discussion within the School during April. Recalling the summer he comments:

...the MIT project seemed more important at the time. I'm not sure now that I should have left the summer project. (K)

In his place, the Dean of the School agreed to take co-ordinating responsibility for the summer project. He, like the other two faculty members supervising the project, faced other responsibilities during the summer. One faculty member notes,

I suppose the sense of commitment ebbed away because the faculty people could take part only some of the time. (J)

From the first, then, the project's purposes were delineated by faculty members who could work on it only part of the time. A crucial faculty participant was forced to withdraw at the point work was initiated early in the summer. To compound uncertainties around the project, students remained unsure during April and May whether funds for the project were available. Apparently, their uncertainty persisted in spite of faculty attempts to reassure them.

Originally the Planning Office had requested funds during the previous year's budgeting process for studies of facility needs for the School. Somewhat later, the Webster building had emerged as an available possibility.

Thus, by early spring 1969, the Planning Office knew that the School might be thinking about doing a study of its needs sometime in the near future. A planning officer recalls that,

My perception of the funding for this program was that it was available, that it would be available, was known at least well before people left. Now, of course, people make decisions about what they are going to do for the summer earlier.... (Q)

A student comments, however, that to him and to others it remained unclear that money was going to be available:

Professor _____ didn't set the thing up. I ended up working there because I was too busy last spring to go get another job. But he kept everybody hanging. Everybody who had any sense went out and got a job. All the people who would have had the enthusiasm and would have had the energy to do it went other places.... He said, "Don't push me, don't push me. It's coming." (A)

A faculty member who worked out arrangements for the project also feels that misunderstandings persisted about funding for the project and thus prevented the recruitment of more people:

The core of the problem in the project seems to stem from the fact that we were not able to make commitments early enough. Some able people who might have worked defected from the project. We didn't seem able to communicate that the project would take place for sure. (K)

Eventually, however, several students were able to commit themselves to working on the project. By mid-June there were about six--the number varied from week to week--on the payroll. However, only two students were to spend

a complete ten-week period full-time on the Webster building. Thus, the project group was severely short-handed from the beginning on.

In initial planning sessions for the work group, tasks were divided into three main divisions:

1. study of the space needs and requirements of the existing School, using growth projections, space standards and performance criteria;
2. study of the internal spaces of the Webster building itself, developing typical furniture and partitioning systems and experimenting with mock-ups within the still-vacant spaces in the Webster building;
3. study of the external social and environmental character of the east end of campus adjacent to the Webster building, concentrating on potential building changes and activities in the area.

As the work was apportioned, one student worked full-time through the summer on space programming and another worked part-time on library needs. A varying number, ranging from two to five, worked on internal design possibilities in the Webster building. The urban-design fell to one full-time student and two others working on the final report and attending meetings. At the head of the two latter groups was a faculty member. The space programming was supervised by the Dean.

The students working in space programming tended to be less critical of the Webster building than the interior design group. Interestingly, it was this latter group most critical of the Webster building as a first-choice alternative that spent the greatest amount of time working on its interior design potential and in building a model and mock-ups of interiors. The third group was made up of students who tended to accept the Webster building.

In the interior-study group, some were to spend part of the summer out of the country traveling. Others were to become disenchanted with the study and stop work for a week or two at a time. Working within the building, these students got to know it better than others in the project group. However, as one faculty member later observed,

...It was not a good idea, I suppose, to have five people knocking around in that large building by themselves. (J)

There was indeed considerable hesitation and uncertainty among the work group about moving to the Webster building from the spaces which they occupied in Building 7 on Massachusetts Avenue. Through June, the building was still in process of being cleaned of the residue of printer's ink and other accumulated rubbish. At the end of this period, the interior was reduced to bare concrete floors and columns throughout the five floors. The summer

sun came through windows on the long southern exposure throughout the day.

At this time, students regarded moving to the Webster building as simply inconvenient. It was removed from the Rotch Library, the student center, Ashdown Dining Hall and other amenities along Massachusetts Avenue. Telephones had yet to be installed in the Webster building. The building was dustier and hotter than Building 7. To be over on that end of campus isolated students on the project, few as they were, from the chance social encounters typical when working near the Avenue.

These difficulties were heightened by a tendency within the interior-design group to become cliquish, as perceived by some other students. While programming and urban-design groups proceeded in their work through a routine of information gathering, presentation and mapping, the work style of the interior-design group emphasized formalistic, visual and intuitive studies of interior space. Thus, a division in work styles and approaches further split what was already a small group of people.

Eventually most students spent at least part of their work week in the Webster building. But it continued to be experienced as part of the "back alley" of the MIT campus. As one student in the interiors group describes working there,

...we found that we had to go back and forth to Building 7 many, many times. Much of it was just business, getting forms signed and so forth. But we found finally that we were having lunch over there, meeting people all the time. Everyone that we knew preferred to work there....The position of the building wasn't very amenable, it wasn't in the main line of traffic. (B)

The east campus is for architecture students at this time a social desert of factories, alleys, and construction sites. In the summer of 1969, students working on that building worked in isolation from the social accessibilities of undergraduate life at MIT. They tended not to see this area as a place of future potential activity but of present deadness.

Their attitudes toward the project at this time generally emphasized it as an available job for which the pay was fair. Some had hoped, as the following section explores, to get a more intensive exposure to professional office work routines. Others saw in the project a chance to experiment with their interests in developing interior design languages or models for external urban design.

By the end of August, the work slowly began to fade out. Although no report drafts were to be seen until November and were at that time largely executed by faculty leaders, some students felt by this time that they had contributed as much to the project as they could justify. On the fourth of September, a final meeting of the project group met in the Webster building.

At that time the presentations emphasized a series of themes or design purposes relevant to the Webster building. The urban-design presentation focused on the east end of campus as an area which was blocked from easy visual access to the Charles River, to which the central and western campuses were geometrically oriented. Instead, the geometry of the east campus suggests orientation to vehicular flows along Main Street. Thus, a building geometry for gradually rebuilding the area would emphasize lines of pedestrian passage to shopping areas and a subway station at Kendall Square. A second theme was the continuation of enclosed pedestrian streets and wide corridors from the central campus through the east campus. However, these pedestrian streets might be lined with shops and exhibition spaces, as well as the mixture of classrooms, laboratories, and offices which make the central campus walks monotonous. Along these pedestrian patterns there might also be a mixture of building shells which could house varying activities, including clusters of housing. A "Performing Arts Center" with a plaza, theaters and workshops was also touched upon as a possible future use of the area.

The space-programming presentation stressed the abrupt and continuing rise in permitted enrollments within the School of Architecture and Planning. However, it remained

unclear what the activity requirements might be that could specify interior design within the Webster building.

The interior design presentation, however, did not have to rely on pre-specification of future needs. The vocabulary of partitions and furniture modules developed by this third group showed how "changeable" interior systems could respond to a continuously altering set of demands from users. Instead of closed and solid partitions, half-walls could be moved freely and allow adequate noise suppression. Emphasis was placed on avoiding standardized corridors. Instead, a series of zones of privacy could be established by variations of the module system.

(e) Space trade-offs in the School and Webster building
occupancy

The Webster building summer study had not resulted in a strongly articulated program for immediate movement into the building. Instead, the summer ended on a note of irresolution and continuing lack of agreement over the desirability of this location over others. In the early weeks of the semester, two other episodes were to further lessen the chances for School relocation to the Webster building.

While the summer project had been in its discontinuous fashion mulling over the building's possibilities during

July, the Urban Systems Laboratory (USL) had apparently approached the administration for additional space. Since no apparent movement to the Webster building was going to take place immediately in Architecture and Planning, USL was offered "temporary" use of the first two floors of the building. Leadership within the USL reacted favorably and forcefully. By October carpeting and furniture had been installed, and partitions of both the floor-to-ceiling traditional sort and the project-designed movable kind were in place. Some students working on the project had participated in the weeks of August in constructing the movable partition systems.

Meanwhile, the chairman of architecture, seeing space occupied by USL adjacent to Building 7 becoming unoccupied, petitioned the Committee on Space Resources for architectural department use of that space. This request was granted. At the same time, early in the fall semester, some undergraduate students had confronted their faculty and demanded additional space adjacent to Building 7, rather than in the isolated warehouse over on the east campus known as E21. These space requests were apparently successful, for studio spaces were enlarged in the adjacent Building 5.

At this time, too, planning faculty had expanded considerably. Students were pressing for a coffee lounge.

Administrative decisions eventually allocated both departments enough space to meet these immediate needs. Apparently a "trade-off" had been made. The Webster building claim had been temporarily relinquished to USL in return for the space resources which USL had up to now occupied. For the 1969-70 school year, irresolution and disunity in the School could persist while immediate needs for additional space were temporarily satisfied.

CHAPTER IV: PERCEPTIONS AND THE SUMMER PROJECT

Perceptions of the Project

Perceptions among Actors

Perceptions of Environmental Alternatives

INTRODUCTION

A skeleton of episodes has been constructed: acquisition and eligibility; first consideration; the spring workshop study; the summer project; and occupancy with trade-offs. These event clusters comprise a stage set against which actors perceive each other and their interactions.

This section discusses perceptions of the actors on the summer project, the extended episode that will dominate the remainder of this study. There is interest in how participants expected to deal with the project and their reactions to what actually emerged, to begin with. An examination of perceptions of each other--motivations, influences, attitudes read into the behavior of others--will then be pursued. In following chapters, the perceptions studied here will be used to infer more general value orientations toward events.

Throughout this discussion the actors will be discussed in terms of their most conspicuous roles--students, faculty members, and planners in the administration's Planning Office. To use this classification for convenience is not to be able to predict agreement or disagreement among perceptions or values on this basis alone. Rather, this usage allows the respondents' anonymity, while at the same time providing the reader with a minimal sense of the social position from which the speaker is perceiving the situation.

PERCEPTIONS OF THE PROJECT

(a) Expectations of the project

Planners, faculty and students each had different expectations about what objectives the project was intended to accomplish--i.e., its content--and how it was to proceed in accomplishing those goals--i.e., its structure.

These varying perceptions of objectives and means can be roughly typified for each group. Planners expected a set of objectives centering on the building as a space resource and how to house the School within that resource. They were also interested in innovative techniques, such as sociological programming of activity patterns within the building. Faculty generally agreed with this aim, but, aiming to keep open their option to consider other locations, emphasized understanding the specialized space needs of the School apart from the Webster building itself. The faculty also had specific design concepts for interior architecture and for site development which they saw a chance to test within the Webster site. Students either aligned with the faculty, or, dissenting from the Webster location, lobbied for other locations and sustained a consideration of those locations throughout the project. In some degree, all actors entertained these objectives, but differed in what relative emphasis to assign each.

Before work began during late June, the purposes of the project were made fairly explicit in exchanges between the Planning Office, whose funds were sponsoring the work, and the faculty participants. While students were in a rough fashion kept informed about the agreements, they often appeared to have the sense of being shunted aside. This perception first arose in the confusion over the availability of funds, discussed in the previous chapter. It will be seen that this sense of partial exclusion persisted through the summer in controversies over location and report recommendations, among others.

However, among faculty and planners there appeared to be a fairly clear understanding of what was to take place. For instance, a staff planner recalls,

My introduction to the study was as an investigation of the capability of the Webster building and its physical environment, not just the building itself, but that part of MIT, as a possible future location of the School. (S)

This recollection fits with the perceptions of faculty involved in the project. However, in commenting on the summer, one faculty leader says,

Within the work group, there seemed to be different expectations about what the constraints of the study were. We fought the whole way against the idea that available space was restricted to the Webster building itself. But people seemed to want to confine the space study to just the building interior.... there was always the basic assumption that other space (outside the Webster building) was going to be needed. (K)

For instance, a student notes,

It was always my impression that the meetings (during the summer) were supposed to be a continuation of the evaluation of the Webster building as a possible alternative. But the focus was not to be the Webster building as the given alternative. Let's see how we can use it. That was what I thought the summer was about. (B)

A planning staff member, however, remembers that

I did not feel that any time was going to be given to studying the Metropolitan Warehouse, that that had been previously considered and for various reasons had been discarded for the time being. (S)

The student has a more extreme interpretation of the project's emphasis on the Webster building:

...perforce, the momentum of that study is just going to make us forget everything else. I think the implicit plan of the study was not to further the choice of the Webster building but to quiet other alternatives, to wash them out--a co-optation of the Metropolitan Warehouse people. (B)

From the first part of the project, then, some people working on it demurred from stated purposes of the project. Moreover, in some cases, they were willing to entertain the belief that hidden motives lay behind the project.

The content of the work and, thus, the purposes of the project were in doubt for some student participants. For other students, the structure, the organization of the summer work, was to become a source of frustration.

For instance, one student expected to work within a professional office setting for the summer:

My conception of the project before I began was that what was going to happen was that there were going to be a bunch of us working as I conceived an office working. The only office that I've worked in was a small office. The professors who would be working would be working as architects on a fairly regular basis. A couple of mornings a week, or every morning during some weeks. And that we would be their staff. There would be job captains working on the thing. Each of us would have independent pieces. That there would be a whole motion, everybody would have a commitment and that we would move. (A)

This expectation conforms to what a planning officer describes as what summer interns from the architecture department do within the Planning Office. Some students would have been happy to think of themselves as technicians working under the supervision of the faculty.

All the students agree on the observation that each took the job because it was convenient and available work. But students who dissented from the Webster building and who tended to read hidden motives into the summer project looked upon the job as more than a technical learning role.*

...I was only involved on a specific part of part of the project, to construct an alternative to the planned utilization of the space at that time.... Our whole thing was oriented (in the group working with Professor _____ on interiors), our work that summer, to the assumption that the building was going to be occupied and let's do our best to improve that situation.

...It's just that that was where the job was and that's what I was getting paid for. For me, the Webster building is not a pleasant choice. I don't like the floor layout, just that flat expanse.

*They saw themselves as not only instrumental to the planning process, but also as expressive of some basic purposes beyond the project.

...It's a fantastic building in some ways. But I don't think, in spite of its being a fantastic industrial building, that it's a very good location for an architectural school. Not that the present location is, either. (B)

Another student within the same task group expressed his hope for the project:

I talked a lot with (Prof. _____) about this... We really got going on this idea of making the Webster building into a "Webster's Dictionary" of space possibilities and vocabularies.... (C)

Apparently, then, the dissenters working on the project hoped for success in improving design options. Even in dissent, they would help accomplish some of the sponsors' purposes.

Within the Planning Office, expectations were more precise and more goal-directed perhaps. A planning officer remarks,

I would have been much happier here today if that School were in that building, if that were the option that everybody had chosen....In May, I sat down with (Professor _____) and identified the alternatives. What was needed, which I thought might develop after talking with the School faculty in May, was a clear resolution of the alternatives. Then the study would come, work on funding would begin in the fall, and another year or so, and the project (to renovate the building) might begin. (R)

(b) Perceptions of what happened during the project

The actors entered the project with differences, as well as areas of agreement, about the objectives and

procedures of the project. As the project occurred, their expectations were uniformly frustrated by what actually took place. The students who had hoped to work in a professional setting found themselves isolated. Other students who expected to study alternative locations discovered that the Webster alternative was the one to which faculty and planners preferred to pay attention. Faculty, initially unsuccessful in recruiting for the project, apparently felt that the project could not produce definitive findings without a larger staff. Therefore, they generated ideas rather early in the project which never became closely fitted to the constraints of the Webster building. Planners perceived distrust among the students and felt that the commitment and motivations of both faculty and students did not measure up to the opportunities of the Webster site. All felt disappointed about the project during the summer.

A student who had hoped to work in an office setting found instead that,

It turned out that there were two or two and a half students working full-time the whole summer. _____ and me: He doesn't know MIT at all and I don't know architecture at all. And don't know MIT that very well. I mean, I thought that it was going to be a student-faculty firm, it was going to put the thing together. There were no other full-time students for the extent of the summer. (A)

Rather than a group setting, this student found himself isolated from almost all group contact. Moreover, he

felt himself pressed for materials which he felt he had neither adequate training nor instructions to produce.

There was nobody telling me what to do. The people who were trying were being very vague.... Even when I did the legwork, (he) would sort of say, "Oh well, it's not quite what I want." (A)

Another student working on the project full-time sees part of the problem in relations between the Planning Office and the project group. Recalling the summer's first meetings, he remarks,

...things didn't go well last summer. I think it really got kind of bogged down in that first meeting. We were at the Planning Office and we were looking for background information. We needed specific facts. I think that set the tone for the whole summer, because we were looking for (them) to give us specific facts. I really don't think that the Planning Office works that way. (G)

(Their attitude) was a reflection of the way that the Planning Office works, the way the Institute works.... (After that meeting) it was little battles to pull out information. They could be very specific if you point-blank threw them a question. But as far as rapport or some kind of co-operative spirit went, they didn't volunteer. It didn't seem that they were trying to reach some valid conclusion from all the facts with someone else looking at them. (G)

The Planning Office has its own reservations about other actors' roles during the summer. It regarded the summer project as a special experiment, "an academic community studying its own housing needs." As an experimental project, the planners apparently did not feel they could guide the project explicitly. They also hoped for new ideas about how

to study environmental needs within the institution. A senior planner comments:

...What I missed in that summer, what I really hoped for, was some really new ways of looking at the problem.... We are not a research establishment. We are performing a professional service. And so, I had hoped that that group would take this opportunity to dream up some new, novel techniques, that we didn't have the time to figure out. (Q)

The project group, in his opinion, had not started by carefully planning out what they wanted to accomplish:

...It didn't seem to have very much discipline about what it said it wanted to do, at the outset. What it said it wanted to do at the outset was somewhat diffuse, of course. (Q)

Whether the Planning Office had clearly indicated their receptivity to something other than a technically oriented programming study is in doubt. However, apparently they had sought not to foreclose unexpected but useful results from the project by providing too much guidance. Moreover, it might have been thought unpolitic to suggest guidelines to faculty leadership in the project group.

A planning officer comments about how the experience of the summer project helped his office learn about the difficulties of such projects:

They learned what happens when you don't do certain things. They learned how much dependency there is, how the lack of experience of people who are gathering and analyzing and assembling data affects thingsWhat happens when there is not a clear organization of activities--so that you get repetitive and overlapping demands for information and so on. (Q)

What to this planning officer are "overlapping demands for information" is perceived by the students as a tendency to withhold information.

In any case, the planning officer feels that the planning staff's commitment in time to the project was substantial:

...(office staff) got a chance to see when a group of people come at a problem from different angles and different ways and what it costs us, in terms of time and energy.... I could convert that (time) into dollars, and I could say, our investment of time in this cost the Institute so many dollars, which were not spent doing other things. (Q)

Apparently the Planning Office preserved its sense of professional rectitude in the project.

Another staff planner feels that the participants in the project went into the problem with a fixed set of ideas:

...some of the participants went into the thing trying to prove something, one way or another. I think some individuals were interested in proving that the Webster building was suitable and others that it was not suitable for the School. This may be fairly important in thinking about why or why not there was difficulty in getting very far. (S)

He observes further,

People weren't sure of what they'd end up with when they started, but they began ready to structure it to prove, or to tend to prove, what they hoped it would. (S)

While planners and students tend to agree that a central problem in the summer's work was lack of firmly articulated leadership from faculty participants, faculty participants tended to look elsewhere for explanations for

the summer's shortcomings:

I think the project scale was greater than (the students') limited experience could handle. Whereas I think they might have responded better if they would have been able to participate in a design process, as a professional kind of experience. Understaffing was also a real problem. (L)

(c) Perceptions of the final report

By December faculty leaders in the project, with some help from the students, had assembled two draft reports. The history of the School, its growth prospects and space needs and alternatives were dealt with in the draft entitled "Space Needs of the School of Architecture and Planning." Urban-design potential of the east campus was studied in a folio-size set of drawings and short essays bound together and called simply "E-40."

In one sense or another, all participants in the summer project feel that it failed to produce a report of the sort that was hoped for at its inception. But expectations and hopes of the actors had multiple nuances. While planners might have hoped for a concrete space program on the needs of the School within E40, they would have apparently been happy with a much less crystallized set of ideas and studies.

For instance, a planning officer sums up his reactions to the report draft, "Space Needs of the School of Architecture and Planning" which came out in November:

...What it is, is a fairly traditional report on academic objectives, growth objectives, and a

conversion to floor area needs, and thus a physical program.... Let me say what I think it is not, what I think the experience did not do. Seemingly, it did not provide any innovative techniques either in understanding or measuring the requirements of the community, in physical terms or even in verbal terms, about physical things. (Q)

The traditional nature of the final report might be linked to the fact that no other sort of report was explicitly planned for in the beginning.

One faculty leader regards the study as weak in programming space requirements against the available space in the Webster building.

The whole study is weak in the area which was to assess the space use in the building. We never did get an overall sense of just how that would work out.

The other thing is that the Dean--who is an accomplished programmer professionally--found it very difficult to specify, to predict the necessary space-use pattern, because of the diffuse way we use space. Even though he knows this place inside and out, and has used it himself in all the ways it can be used--I was surprised at this, because I thought we would be able to just sit down and do it. It's funny; I almost had the feeling that I could. He found himself having to send out a questionnaire asking people how much space they needed. I guess this is what the space program was constructed upon. But it may have not been a powerful enough tool. (L)

Within the Urban Studies Department, a senior faculty member amplifies this criticism of the final results of the project. It should have suggested some new tools for defining qualitative characteristics of building interiors, he believes.

It seemed to me that here was an opportunity to experiment with some of the social planning and programming ideas that are around, to develop an understanding of just exactly what our teaching needs are in a building.

For instance, I have found often that a seminar room that is somewhat too small for the group will stimulate more intense discussions....

None of these concerns were apparently looked at. (O)

The area-development report received a similar comment from a member of the Urban Design staff in architecture:

This particular scenario has within it several different recommendations. Each one of these might be thought of as a separate dimension. The report should have communicated that dimension and allowed people to choose a position along it.... (N)

This study of area-development needs was carried out by one task group concerned with urban design. The principal question which this group sought to respond to centered around the future social and environmental character of the area adjacent to the Webster building. The results of this study were felt to be "helpful" by the faculty member who had co-ordinated it.

I have a suspicion that the only group among the several on that organizational chart which, apart from Professor _____'s function, did come up with an end result of its work that was useful, was the urban design group. The thing that it projected was probably valuable, actually,...I think (they) found it useful. (L)

Other actors in the process saw this portion of the report in a different light, however. A planning officer

regards the exploration of social change through urban design as "elitest:"

When you don't even own an area, it's very difficult to plan for it. Sometimes, I admit, it may be useful to suggest uses to other owners for their holdings.... (R)

Students working on other aspects of the project uniformly perceived this part of the study as without point: "(Prof. _____) got one idea and treated it again and again and again."

Another student somewhat more sympathetically comments,

The idea of attempting to influence the development of the whole area made some sense in theory, but politically it seems to be impracticable. (H)

This difference in perceptions of a contribution to the project is only one of many that might be articulated. It suggests that actors have difficulty in perceiving each other's response to their ideas. That is, it seemed important to most people in the project that the social environment of the area be examined. This social environment interacts with a physical environment which, in turn, was explored by these studies. Yet, the connections between these visual studies and the social environment remained undefined and apparently unestablished in most people's minds.

The planner's criticism of the area study is somewhat inconsistent with another perspective, articulated by a senior faculty member, who sees this area as "one in which

the Institute should acquire anything that comes on the market." If the Institute hopes to own it, why should it not speculate about its possible future character?

The adverse reaction to this sort of study can be explained in part by considering different organizational positions of the actors involved. The Planning Office is charged with long-range planning for the Institute environment, as well as programming buildings and administering the allocation of space resources. Faculty and student groups concerned with a facility to house their own departments assert a normative image of what they believe would be desirable or possible development adjacent to that facility. But this sort of study treads, however lightly, on one of the responsibilities of the Planning Office. Thus, a study which is thought to be necessary to exploring the implications for the School of relocating to the Webster building also implicitly threatens professional prerogatives normally reserved to planners. However mildly, an adverse reaction to the study of area development might be linked to a predictable sensitivity within the Planning Office. This speculation can be leaned against a comment of a planner about the area study:

I try to emphasize my technical skills, restrict issues to those (technically defined) things....
(But Prof. _____'s) visual values, in terms of

building scale and this constant talk of heterogeneity--the idea of using the Webster building as a center of total change in this corner of campus-- That to me is very elitest. (R)

(d) Some global critiques of the project's structure

Some students feel that, given that amount of money, issues of a more fundamental sort might have been addressed by the study.

An older student who worked part-time on the project sees the funds as being an aspect of general resource allocation within the Institute's priority structure:

For \$15,000 you could send at least one black student on a full fellowship, or maybe two or three....

To him this use of funds indicates the comparatively rigid limits which the project places around its policy planning:

All right: the question to me is: If you have \$7 million (in building funds), what can you do with it? I don't think you look at it as just spending that money all in one place. You should think of more alternatives than just spending all the money in one place, unless it was just absolutely critical to have that space. I think students see this and that's one reason that they haven't gotten involved.

On something like this, several different approaches might be tried. Maybe it's worth spending even more than \$15,000 on some really good studies of alternatives. (H)

The different approaches are diverse. A faculty member suggested that the capital, yet to be raised, should be used to found a low-income housing co-operative. Others threw in the idea of a "laboratory" or other resource

center for low-income neighborhoods. Another group thought that the capital might be used to set up a European or Latin American workshop for architects and planners from MIT and other schools. To some persons, the availability of the funds pre-ordained that they would get spent on the building study. A kind of Parkinson's Law went into effect, through which the amount of attention that was given to the Webster building project gradually approached the amount of resources to study it that had been made available.

It just seemed to me that that original money should have gotten turned off halfway through. (H)

From this, a student builds a critical perspective on the project's presuppositions as a whole:

I'm not sure that getting more done was all that good: maybe less should have gotten done. Because people, as they continued to work on it, started to see the futility of the work. That it probably wouldn't be a good place to go to. So people lost interest. At that point where everybody lost interest, maybe we all should have stopped, held off on what we were doing, and said, "Is it really worth doing this?" (H)

The tendency that developed was to go ahead and do more work on what each was interested in, whether it related to the purposes or the technical problems of the Webster program itself or not. In general, there was a commitment from the faculty leadership to provide a summer's work for people. Whether this work was well planned out and co-ordinated

or not, or whether even enough staff adequate to get an appropriate amount of product produced, were questions not considered after the project began.

A planning officer also perceives that work expanded on the project to approach the available budget:

It occurred to me and to others that it may not take much money to get people in (the Webster building). Now, we never looked at that closely.... Even if you throw in the cost of (bringing the building up to classroom standards), there wasn't a hell of a lot more that people were asking out of that building, because everybody wanted to throw up temporary partitions, the kind that were over there that summer.

One of the curious incongruities of the summer was this effort to... It just seemed to me that, talking with the kids during the summer and talking with other people, everyone would have been quite content to have a hell of a lot less than what they were generating in the way of designs, during the summer....

Clearly, there was almost a Parkinson's Law operating, which said that, "you have fifteen thousand dollars to spend to design." What you got were a lot of people putting in time, coming out of it with more than what they really wanted at that time. (By recommending only minor changes), you may have walked away from it feeling that you didn't do a great job. (R)

Many persons within the project group and observing it comment on the lack of development in the ideas that originated within the first few weeks of the project. One planner links this lack of development to irresolution about basic goals within the School:

...(the project) turned into much more of a consideration of where are we going, and especially the Architecture Department. What is the professional's role? What are our relationships with other schools and

other departments within the Institute?.... Whether the city, the metropolitan region are part of the problem definition.... (S)

For this planner, these questions should have been resolved before the project began:

Either you have to accept all these other levels as being decided and you're going to plan a building to fit that picture; or else, you have to re-open everything else, because you don't even know whether it's right to have a specific building to do a specific purpose. (S)

For him, the persistence of these questions through the summer indicated a lack of strong purposefulness within the School:

...no one was in a position, perhaps, and certainly not prepared to make a decision, to sit down and really say, "We want the Webster building, because we think it will meet our needs. Therefore, we've got to figure out how to fit into it." Maybe it was right that that shouldn't happen. It seemed like at the beginning that that was where there was going to be something that came out of the summer, that said yes or no about that building. It didn't happen. (S)

These uncertainties apparently did persist within everybody's mind on the project. As one student says,

Should the School have a location at all? That should be one of the first questions. (B)

A faculty leader of the project sums up his perception of the Webster building as a new location for the School some months after the project was completed:

I really don't know what my conclusion is about the Webster building. I've written a lot of stuff on it; but I came to the point where I sort of put it on the shelf. Other things came up. I do intend to

finish some report. What influence it will have, I don't know, but I hope it may put the issues on record and help toward eventual resolution.

I think that the immediate pressure for a decision is somewhat lessened by the fact that building is being used, at least in part, by a research project. It's proving to be a very valuable "surge" space. (J)

(e) Assigning blame for failure

To sum up, it is possible to typify in a general fashion how different sets of actors interpreted each others' roles in the project results. In their perception of each others' participation in weakening the final results of the project, a sense of the conflicts among roles may be suggested.

Table 4-1. Assigning Blame for Project Failure

	Blamed	Other explanations*
Students	administration's lack of imagination; faculty disinterest and obfuscation	uncertainties about future of School and MIT
Faculty	student inexperience	lack of faculty cohesion about desirable future for School
Planning Office	student disinterest; lack of faculty leadership	difficulties in establishing guidelines over project group's work activities

*Alternative explanations suggested only sample those that might be inferred from the study results.

PERCEPTIONS AMONG ACTORS

(a) Perceptions of other actors and their motivations

The project, as we have reviewed, was differently interpreted by the actors according to their role and position within the department and Institute hierarchy. A significant segment of their perceptions relate to other actors. This segment may be separated out from interview data to gain a detailed view of the attitudes and motivations actors attributed to each other.

Students in interviews were most willing to express freely their reactions to faculty and planner members of the project group. In a sense, they have no ongoing interest within the Institute. Their position as students and, from time to time, part-time employees on the project permits them the freedom to candidly express their reactions. Planners and faculty participants, on the other hand, must take a more complex view of the possible consequences of expressing themselves, even though the reportage of their conversations may be within an academic format such as this.

In any case, students had a great deal to say about their reactions during and after the project to faculty and planners. Emphasizing their perceptions, however subjective and momentary they might be, of the leadership and professional advisors to the project may be useful. An

assumption would be that by systematically dealing with these reactions, faculty and administration may better understand the nuances and sources of dissent and dissatisfaction within the student body.*

The views of dissent and frustration were in an indirect view conditioned by a climate of "confrontation" with the institutional priorities and authorities. No clear connection between project malaise and revolutionary politics will be attempted here, for it would be tenuous. There is the sense that some years ago, to voice one's malaise from the work programs and standards of a university faculty would have been unthinkable. The orientation which permits dissent from authority is also one which perceives the directions of authority as being fallible and even hypocritical in other, more controversial fields of decision-making.

(b) Student perceptions of faculty and planners

Students regard faculty participants varyingly.

One student sees them as indifferent to the outcome:

*At the same time, the research is not intended to provide the capability of or justification for manipulating student attitudes and opinion. Students have increasingly questioned priorities and attitudes which characterize the large institutions within which they are educated. In many ways they tend to challenge these institutional agendas, both directly and indirectly. The reportage that occurs here, it is hoped, also serves to help advocate their dissenting point of view.

"The faculty really didn't care...." Another feels that the project existed to give the illusion of involving students in decision making among alternatives that were attractive to the administration:

I think the implicit plan of the study was not to further the choice of the Webster building but to quiet the other alternatives.... the administration knew that if the study didn't take place, students would be pissed off. (It was) co-optation... (B)

He felt that participating on this project was much like participating in urban renewal for the area residents:

"You're not even sure you want any of the things that they are pushing at you."

An extreme version of this viewpoint regarded the faculty and administration as part of a "system" of corporate capitalism:

The System reduces everything to economic considerations and then excludes every experience which can't be economically justified... The project fitted in with this kind of thinking. By the time the summer ended, I just didn't want to have any responsibility in it... (C)

In other words, even though this student sees that he had the freedom to help define the terms of the analysis, he considers that freedom to be irrelevant to the ultimate decisions which will be in terms alien to him.

Among some of the older students, on the other hand, a less global view of the situation confronting the faculty prevailed:

I guess (the people who wanted to move to the Webster building) were the ones that felt the pressure for more space most acutely.

(They have to program the classes and they realize that there is no space. They manage to make the thing work out, and all of us who go to classes don't realize that there is any hassle. (H)

Some students perceived that the Webster building had become a fixed idea for some faculty members.

(Professor _____) has somehow, it seems he has some sort of axe to grind in going to the Webster building. He has inferred that it is his duty to make this move, more than it is his duty to openly consider what the various opportunities are. I hear that he is a very able administrator. However, I think that his memory is at fault sometimes. I believe that he is very defensive about this Webster building thing. (B)

Another faculty member is seen as intentionally obscure and confusing:

(He) doesn't inspire confidence. Nobody in the department (of architecture) has confidence in him, let's face it. It's a problem of getting anything going. Nobody quite believes him. Nobody actually believed that anything they produced was actually going to be used... I think you can actually take him at his word. But he's very difficult to deal with, you kind of feel like you're dealing with a marshmallow. (A)

Political dissidence within MIT continued after the summer. One student feels that one of the faculty associated with the project now sees it related to the general status quo within the Institute.

(His) defensiveness about the Webster building, I really believe, is due in part from the activities

of November,* the Actions and so on. All these radicalizing activities have taken place. I think they have really shaken him, almost as though, this is the last thing he would have expected from MIT students. His whole personality is geared to being very just, being very considerate, listening. All these (events around the Webster building) take place within a very specific context. The context is not only his own personal power over decisions, but the particular place of the whole administrative complex. (B)

Sources of student perceptions of faculty indifference may be traced to the project beginnings. For instance, students might sense faculty indifference from the fact that a chief faculty initiator of the project felt compelled to leave it for the duration of the summer. Having with some reluctance agreed to serve on an all-Institute task force, this obligation superseded his commitment to the summer project. From this withdrawal, students might infer that he did not take its stated purposes very seriously. If success in the project were important to this chief administrator, he might have attached priority to it over this other intervening task.

Among the faculty who did work on the project, students felt from their attitudes and presentations that the faculty were not fully involved. One student has noted that faculty seldom gave day-to-day attention to the project group or its task. When they did, he notes, there was

*The "November Action Coalition," an amalgam of student radicals, attempted forcibly to disrupt missile research at MIT in November 1969 through street demonstrations and, later, an occupation of administration offices.

impatience with inexperience among the students. In fact, several faculty participants stated that the main problem in the summer was a lack of both enough participants and of experienced participants. Apparently they judged those students working on the project not particularly worth paying a great deal of attention to when other demands were being made on their time.

From this concurrence of circumstance, students developed a cynical attitude toward faculty participants. This cynicism toward the end of the project apparently limited student enthusiasm in helping produce the eventual report drafts, to form a causal chain accounting for their disillusionment and lack of enthusiasm.

Cynicism about administration motives, it may be argued, was brought on by the faculty's inability to convey in depth and detail their assumed concern for student contributions to goal alternatives. Also, inconsistency in fact existed between the actual tentative commitment by the School on eventual use of the Webster building.

The administration did not clarify its purposes and goals in the project. Nor did it introduce student suggestions to the policy-forming process in such a manner that all students became convinced of the administration's interest in a wide variety of suggestions about new facilities for the School.

The students perceived a lack of consistency between the rhetoric of student participation in policy making--an issue of some months' standing within MIT and other universities at this time--and the way the project was planned, the kinds of goals it was considering.

Here, there is the sense that if additional persons, particularly planning students and faculty who might have emphasized the cost of raising and expending capital budgets, had chosen to participate, the project might have taken a different route. Because of the small number of students who volunteered and their relative inexperience, the project lacked a "critical mass" of persons able to deal with it in its deeper implications. While senior administrators recognized the validity of student claims to a wider goal framework, they themselves appeared to be satisfied with the Webster building as an option. Therefore, it would be unrealistic to expect them to emphasize a procedure for replanning objectives.

(c) Administrator and faculty perceptions of actors

Faculty leaders within the university apparently are not surprised at being "misunderstood" by students. A senior professor comments:

I don't think it's possible to be very optimistic (about student-faculty relationships). We're in a process of rather radical change. Not only in the

universities, but everywhere. It doesn't seem to be reversible, but nobody can foresee the outcome. It seems relatively calm at the Institute right now, but nobody feels confident that these tensions are fully relieved. (J)

Faculty consider disagreements to be part of the nature of their work, which requires them to be "middle men" negotiating on behalf of their constituencies with central administration for scarce resources. In these negotiations, they realize that demands cannot always be satisfied.

For instance, during initial discussions of the Webster building, students began to see in the Metropolitan Storage Warehouse another alternative to the Webster building. Administrative planners at this point seemed willing to consider that possibility. A senior planner in a spring meeting in the School, when questioned as to the "availability" of the Warehouse, answered that, "Yes, it might be available." However, at about the same time, another planner in a private conversation felt that an essential issue was whether the MIT Corporation's investment committee would consider allocating to the School another building from their investment portfolio, after having recently done so in the case of the Webster building.

To a faculty leader of the project, according to his recollection later in the year, this response signalled the

beginning of a series of "misunderstandings." As he saw it, this warehouse building, while perhaps desirable, was not necessarily available to the School. Only after the School established its "eligibility"--i.e., had its occupancy cleared through the hierarchy of planning officials and administrative committees, including the President and Provost's Space Resources Committee, would there be that possibility.

He goes on to suggest that that signalled student misunderstanding throughout the Webster building study:

The issue was clouded by uncertainties which presented me, and, I think, the Planning Office with some problems. When someone asks a question, the tendency, rather than to say "no," is to say "wait," to stall for some time, because you are in the middle of negotiations. You are trying to increase the possibilities that are presently available; but you are unsure as to how easy that is going to be.

In the case of the Planning Office, they seem often unwilling to say no. They seem to feel that they are willing and able to make something happen that doesn't seem possible right away. In the meantime, their attitude appears to be to never say no. Well, this presentation may eventually get interpreted much more unfavorably than they thought; some may come to think of them as double-dealing or purposely misrepresenting the situation.

With the Metropolitan Warehouse (which came up in a spring meeting), (they) didn't help too much by saying it was possible when I had heard from other sources that it wasn't going to be. Although later on it seemed to open up more, at the time it made it seem as if some duplicity was involved. Students could easily misread the situation. (K)

Apparently an image of flexibility and responsiveness is aimed for by the Planning Office. By not saying "no"

at crucial moments, this image might be sustainable. However, the price may be a later disappointment of the expectations that have been set in motion, resulting in a "credibility gap."

While faculty leaders in the project remained partly uncommitted to the Webster building, the Planning Office was interested in seeing the School come to a decision on the issue. A planning officer discusses his original hopes for the project:

I would have been much happier here today, if that School were in that building. If that were the option (they had) chosen. Because it would have done a number of things: It would, first of all, have gotten a major problem of this institution somehow resolved, (in terms of space resources). It would have freed up certain kinds of space that's desperately needed by other people. We are in a dominoes game here. The space in buildings 3, 5, and 7 (where the School is presently quartered) is very valuable. (R)

The planning officer, a graduate of the School, appreciates the difficulty of coming to decisions about space without a unified involvement of both departments. He perceives the Webster building move and the decisions that would have prefaced it as an aid in consolidating purpose within the School:

...it would have produced movement in the School to come to clear understanding of all the issues which have been bothering it for some time. (R)

From these remarks, the Planning Office clearly sees space occupied by the School as a resource in which other

departments and Schools within the Institute would be interested. Given the pressures for space in that area of campus, close to administration offices, the Planning Office would clearly support any group wishing to move out of that area into a less central part of the campus. If that School has plans for rapid expansion, as does the School of Architecture and Planning, the planners place great priority, apparently, in facilitating their relocation.

The same planning officer notes the high costs of growth that ensue when a School wants to stay within the central buildings:

It's also a marginal kind of thing. The school could have said (to the administration giving money to renovate the Webster building): "Look, the cost of adding one more student now in this present location is rather high, because we have no space. But the cost of adding one more student in the Webster building by the time we are in there will be much lower." And thus the School could demonstrate that, in fact, the Institute could get a lot more for its money, for allowing that School a certain amount of resources in order to expand its space. (R)

Thus, one may say that around the Webster building there are fewer competitors for available space. Its "cost" in terms of political and economic factors is much lower per unit than in a more central location of the campus.

(e) Inadequate goal articulation

In retrospect, the building study did not succeed in "proving" that the Webster building was the optimal

choice for a new center for the School because there was only one instance of conscious articulation of goals against the facilities resources being suggested within that building.

That single matching of needs against goals emerged in the final report, "Space Needs of the School of Architecture and Planning." In its conclusions, the report compares favorably the Webster building's space resources against the aggregated space "need" which emerged in studies of the School's existing resources in the early part of the project.

Other objectives were partly articulated that might have clarified the essential purposes of the project in the eyes of the students. For instance, there was implied from time to time the problem of the immediacy of the space need of the School. Faculty and student numbers were growing constantly during the previous few years. Architects were registering the need for increased construction experiment space. Increasing shortages of seminar space were being felt in the planning department's weekly programs.

A second goal which remained only half-articulate was the need for showing unified response to an administrative initiative. But this "need" is difficult to satisfy. At that time no unity existed between the departments in the

School. There is still doubt about whether, over time, the departments will survive jointly or separately.

In an effort to accommodate dissent over the Webster building, faculty leaders confirmed their belief that the study should look upon that building only as a possible alternative. Its constraints would prove useful in judging the ultimate needs of the School, according to the continuing discussion that went on through the summer.

It is apparent that students grasped easily enough that the faculty was more committed to the Webster building than its rhetoric about the openness of other possibilities was trying to imply. Behind this attitude, which might be perceived as misleading, students could perceive contempt for their point of view. By erecting verbal camouflage around their "real intentions"--the planning of a rapid removal of the School to the Webster building soon after the summer--the faculty leaders of the project invited the criticism and anger, at times, which students felt about the project's progress.

On the other hand, apparently faculty were sincere in their interest in keeping their options open on the Webster building. They were not ready to commit themselves to moving there, if only because planning faculty had not as yet been intensively involved in considering the move. The summer project, in light of this lack of unity around

that move, would hopefully produce a report which would convince others within the School of the desirability of the move.

To sum up actors' perceptions of one another, the general desire of faculty and administrators to establish participatory planning through student involvement was evidently compromised by previous commitments on the Webster building as the likely choice for a new School location. A planning concept requiring participation of all the affected groups evidently does not fit with established practices within the organization. From the tension between these two ways of planning, much of the sense of disillusionment among students can be traced.

To establish an adequate participatory planning process under the circumstances might have been difficult. Certainly the efforts invested in that direction were considerable. Conditions for such a process were not favorable. Guidelines might include some of the following: Involvement of all groups from the beginning on decisions; the ability to defer decisions until such time as groups have advanced their ideas at leisure and agreed to inclusive, consensual statements; a referendum procedure to efficiently condense the main issues and place them before members of the affected groups. In the case of the School of Architecture and

Planning, this referendum might be of benefit in resolving the issues which the project could not bring to a final focus.

PERCEPTIONS OF ENVIRONMENTAL ALTERNATIVES

(a) Introduction

By the winter of 1969-70, actors who had participated in the summer project or had reviewed its results had much to say about the Webster building's advantages and disadvantages. Their views displayed a number of associations which had become linked with the Webster building as a potential center for the School.

It is possible to typify tentatively positions on the acceptability of the building, its relative suitability to School and departmental needs, according to whether the perceiver is a student or a faculty member and whether he is in planning or architecture. Architecture faculty continued to look favorably on the move but no longer seemed optimistic about gaining a school-wide consensus in support of it, at least in the immediate future. Architecture students remained apathetic or openly hostile to this building, largely explicable to its being removed from the main centers of undergraduate life near Massachusetts Avenue.

Planning faculty regarded the location favorably but

remained uncertain about a continued close linkage with Department of Architecture activities. One possibility, somewhat supported by interview data, is that they regarded this linkage as a means of reducing their possibilities for development of a School of Urban Studies separate from architectural activities. This possibility, in turn, is heavily influenced by selection of a new departmental head for Urban Studies and Planning.

Planning students continued to prefer the Massachusetts Avenue location, even though many of their classes were at the opposite end of campus. As graduate students largely in non-workshop and laboratory subjects, they were less dependent on work space in the School than architecture students. Easy bus connections, however, weighed in their preference for the Massachusetts Avenue location. The subway at Kendall Square does not as conveniently link with student housing in Boston as the busline.

Urban-design faculty and students in planning aligned with those in architecture. Both groups seemed to agree on the importance of being in an area of campus which was as yet "unfixed" in its design character. Thus, their shared professional concern with environmental design somewhat blurred interest-group alignments arising from membership in different departments.

To emphasize the complexity of associations which actors projected onto the Webster building, their views will be presented as a series of dimensions. These dimensions differ among actors according to:

- the perceived adequacy of the building in terms of the amount of space (section (b));
- perception of the functional, visual and symbolic character of the building (section (c));
- perception of the functional and symbolic implications of its location (section (d)).

(b) Perception of size adequacy

A basic consideration in judging the desirability of the Webster building is whether it offers enough space for present and future needs of the School. On the surface, this question seems a matter of fact: Either the building is large enough or it is not.

As a matter of fact, however, size adequacy of the Webster building turned out to be difficult to make decisive judgments about. To begin with, there was uncertainty about how many students in what kinds of activities would have to be housed by the School. That question awaited Institute-wide decision about School expansion. Moreover, the Webster building, said some who dissented from its choice, wasn't much larger than present facilities. During

the project, faculty tended to see the Webster building as one space element among others that might grow with the School. Planners also seemed to feel that the Webster building offered the School a larger space in the short run in a location where growth was easier to accommodate.

The subjective perceptions of participants suggest these uncertainties in judging size adequacy. Initial consideration of the building, according to one senior faculty administrator, came about "... (because) there seemed to be a good match between the area available in the building and previously expressed needs of the School." However, he immediately qualifies this:

At least, it was clear if one took the building just as it was, the result would be to increase substantially the space that was available to us, even though it might not meet all of our needs. (J)

Thus, the building appeared to be an opportunity not to optimize the space resources available to the School, but to at least approach satisfaction of some needs.

On the dimension of space size adequacy, this position took the most favorable attitude, however tempered it might be by awareness of the limitations within the building. A planning professor emphasizes a similar aspect of the building's size:

There isn't any doubt that the Webster building will eventually be useful for some of the needs of the School. It certainly won't meet all of them.... (O)

He implies that it should be considered as one of a number of conceivable space resources.

Within the project staff itself, the issue of size adequacy recurred during meetings during the summer. A faculty participant felt that the issue became overblown. He recalls the summer:

...what I can't understand is why people constantly kept limiting their thinking to the Webster building alone. The original understanding was that this building was only the first increment and that we were to keep in mind surrounding spaces and growth of our needs into those.... (K)

This point appears consistent with the original guidelines of the project. However, some students repeatedly emphasized in their presentations over the summer that "...the Webster building isn't much bigger than the spaces which we occupy now." Their point seemed to emerge most often in discussions of other buildings, such as the Metropolitan Warehouse. The students found this building more attractive because of its location on Massachusetts Avenue. Its greater floor area (133,000 net square feet) came closer to the projected net need (151,000 sq. ft.) than did the Webster building (80,000 sq. ft.), if compared on this basis alone.

Some participants feel that the continuous comparisons of potential floor footage in the various alternatives were misleading. Some believe that the net need had been estimated on the basis of providing traditional studio

spaces for all planning and architecture students, although the intention originally had been to use other standards which might have been even more space-demanding. Few planning students at present enroll in studio courses. A significant number of architecture students are not taking studio in every semester of professional school.

(c) Perception of building character

Space size and location effectively qualified the Webster building as an alternative worth considering. Other qualities about the building's form and appearance were perceived to be important.

The character of the building as it presently exists (see photograph) might be thought unexceptional. There is little outstanding about the building other than its shabbiness. Its interior during the summer was bare concrete floors, the great expanses broken by concrete mushroom columns every thirty feet. The exterior relationships of the building make it a commanding visual feature along Amherst Street and from the boulevard along the river a block away.

The Webster building was seen, then, as a sound "skeleton" from which designers might develop an environment for the School. The report of the summer project

goes at length into major structural and mechanical modifications needed to rebuild the building. The study of site relationships suggested street landscaping and narrowing, and an intensification of activity to liven the area's alley-like transitional character. If the renovation were to take place, the project participants expected the School to change the adjacent street and open spaces through lively visual effects and pedestrian-generating activities. Students who were less taken with the building's location tended to depreciate as well the possibilities for visual and spatial innovation in and around the building.

In the report, problems of adding an additional fifth story, air conditioning, new elevators, additional columns for library loadings, interior partition systems and lighting are discussed. The concept of linking ground-floor corridors to protected pathways from the central campus and to the Kendall Square subway area was touched on in some meetings.

Beyond these studies, some faculty and students became intrigued by the character of the existing building as a skeleton for innovation. Contrasting with the functional and mechanical aspects of the project, there appear to be a series of symbolic images which the imagination of these designers projected onto this grimey industrial building.

The richness of these mental images perhaps might account for the interest they sustained in the building, in spite of the lack of enthusiasm in the School at large.

For instance, in originally considering the Webster building before the summer project, the head of the architecture department recalls:

...before this building came up, we had discussed with some of the people in humanities the possibility of building jointly a shared environment. The idea was to have a great many activities clustered together within a building system that was flexible and that could be constantly changed about and experimented with. There might be apartments above, large studio workshops on the ground level, maybe some shops along the street, the usual run of library facilities, seminar and lecture rooms and so on. The Webster building, when it was suggested to us, seemed to me to offer a modest version of that conjecture.... (K)

He also notes that other persons in the administration seemed to feel that the architecture department might be able to find opportunities for innovation with this building:

When I first spoke with Howard Johnson (president of MIT) about the Webster building, he seemed excited about us moving there....

A planning faculty member also notes that the architecture department might generate a particularly "vivid" kind of renovation, given this sort of building.

Another senior administrator brings up an equally important, if less obvious advantage in renovating an existing industrial building, rather than building wholly anew on a cleared site:

History seems to suggest that architects themselves and students of architecture are less willing than any other groups to be put in some other architect's package. We have seen that at (the Architecture school) Yale, an extreme case where a building that is very much admired and praised when it is new is found entirely intolerable by the inhabitants, at least partly because they are architects. Paradoxically, it seems that architects are the least tolerant of architecture and most in need of a neutral kind of environment, which doesn't impose itself on their thinking, or prevent them from devising their own solutions to their problems.... They are more ready to be skeptical about the presumed merit of a piece of architecture, because of their knowledge of what goes into that. (J)

(d) Functional and symbolic implications of location

The issue of location became perhaps the source of greatest disagreement among the project group in considering the Webster building. Those students who found the location distasteful also found the building too small and spatially uninteresting. The faculty saw, on the other hand, that the location provided opportunities for growth which in the Building 7 area had become constricted.

The location of the building has obvious advantages and disadvantages. While it would bring the social science library and the economics, management, and political science classes close to planners and architects interested in these areas, it was far from undergraduate dormitories and the student center on Massachusetts Avenue. The bus line serving Massachusetts Avenue connects with more housing

areas than does the subway line at Kendall Square. In general, the Webster building's location tends to substitute academic access to social science resources and growth prospects on adjacent sites for somewhat more desirable transportation connections, a more lively and amenable undergraduate area, and academic access to engineering sciences.

Among project participants, all these variables were perceived as important. In contrast to the spring study's dislike of the corporation environment emerging nearby, the summer participants didn't attach much value to that problem.

A faculty member feels that student resistance to moving to the Webster building results from the location of building 7:

I suspect that one of the reasons for lack of enthusiasm about moving to Webster in the student body is this sense that the lobby of Building 7 is kind of the center. It's the Saither Gate (U. of California Berkeley) of MIT, really. Across the Avenue is student turf, and on this side is faculty turf, and this is where they meet. It's a marvelous thing to have your teachers and classes right here, which obviously you would lose if you moved as far away as Webster. Something would go out of that relationship (between student areas and the academic areas), especially for the undergraduates. (J)

He sees the present location near central committee rooms and administration offices as being for him convenient:

There are a lot of meetings, as you know. I find that people like Bill Pounds and Bob Bishoff (administrative heads of departments near the Webster building) are trekking over here at considerable inconvenience. Some of the meetings do occur at the faculty club (near the Webster building). Most of them are in this vicinity. (J)

Apparently there might be an implicit need for members of a large institution to cluster together in a single contiguous spatial complex.

Particularly, administrative leaders seem to perceive such clustering to be essential to their effectiveness. This administrator is centrally located in terms of his immediate policy-making setting. A school location outside the campus might reduce his ability to argue the School's needs within the administration. For administrators, past and present locations of the School of Architecture and Planning perhaps condition their present attitudes toward future locations for the School.

Until 1938, the School of Architecture and its fledgling City Planning Department were still located near Copley Square in buildings where the Institute had begun in 1865. Being in Boston and away from the administrative and academic centers of the Institute might conceivably be linked to reasons that the School did not develop, prior to this period, innovative approaches to architectural design.

Persisting difficulties, then, in establishing and maintaining an academic and professional program of high quality while the School was located outside central facilities of the Institute may have occurred. Administrators with a long time perspective might value subconsciously existing locations within the Institute campus because they are associated with academic improvements.

On one end of campus, the Webster building offers the advantages of being close in its proximity to other departments and to such facilities as the faculty club. It offers the additional attraction of being in an area of unfixed character, not yet dominated by decades of other architect's design.

These advantages weigh in favor of the Webster location. However, some students perceive that other political forces might influence the Webster building's choice as a future location for the School. The administration which suggested this building to the School has an interest in moving low-priority departments and activities to that end of campus, they speculate:

I take more classes at Sloan than in any other department--so that would have been convenient.... The stuff they would build over on that end of campus would be low-priority stuff, compared with the computer buildings and so on that are over on this end. I think the administration puts low

priority uses over on that end of campus. The buildings themselves might be as complex and dense as these over here; but humanities and social sciences which tend to be over in that direction are supportive faculties, functions, not the central ones. The architecture department is a marginal one, I suppose the planning department is, as well. (H)

This student believes that the marginality of these departments is associated not only with their intellectual interests--i.e., not engineering or "hard" science--but also with particular social and political viewpoints which occur frequently in them.

I would imagine that planning (department) might be becoming more central, except that it's got all these "left-wing fanatics" in it.... (The administration) is probably thinking, "We would much rather have urbanists who are moderates, reasonable people." (H)

The implication might be that moving to the Webster building for this School would be, politically, relegation of less important faculties to less central facilities. However, this student feels that that would be an unjustified inference, in that "the School has been bitching for more space for a long time, and that's the only space that became available." (H)

Finally, planning faculty also saw political implications in the Webster building relocation. However, they saw the problem not as one of moving to a less desirable location, but as one of moving in lockstep with the Department of Architecture. Their perception of a swift

relocation of the two departments was that it would have pre-empted consideration of different administrative groupings for the Department of Urban Studies and Planning. They inferred that, in so moving, their programs would be linked for the near future with architecture.

Planning faculty apparently were not necessarily against such a linkage. However, they did not want to be forced hastily into such a commitment, before other issues, such as a potential for sharp increases in departmental resources, had been resolved by the central administration. Their perception of the Webster building option was that it intertwined too closely with other goals of the Department to be a choice without costs, as well as benefits. Adopting the attitude of good administrators in such situations, they simply wanted to defer decisions with heavy consequences until more information had accumulated.

CHAPTER V: ORIENTATIONS

Orientations toward significant reference groups

Orientations toward the future

Orientations toward power

A synoptic comparison of the three orientations

Until this point, the summer project has been examined as a set of events, as a set of perceptions of those events, and as a set of social perceptions of actors monitoring one another. In this section, a more economical form of exposition will be attempted.

The generalizations that will be aimed for will be at a second level of abstraction. They will be referred to as orientations. Collectively, the orientations comprise separate dimensions of value systems, which, in turn, are seen to mediate perceptions of the planning process. Three such dimensions, it is suggested, might account for much of the disparity among perceptions and values of actors: orientations toward significant reference groups (1); toward the future and the relative proximity of the time horizon (2); and toward institutional power and the means of affecting decisions within the institution (3). This chapter uses each dimension in turn to help understand conflicts in roles and perceptions.

ORIENTATIONS TOWARD SIGNIFICANT REFERENCE GROUPS

An hypothesis may be suggested that allows differences in perception to be accounted for by differences in orientation to significant reference groups.

Actors oriented strongly toward local advancement will invest greater value in a planning process

which produces a final product which makes the process appear "successful."

The corollary of this hypothesis can be stated:

Actors oriented strongly toward cosmopolitan or non-local reference groups will be less interested in local advancement. Therefore, they may be expected to invest less importance in success in a planning project at the local level. They may, however, invest considerable weight in assessing that project.

(a) Cosmopolitan vs. local orientation.

A single explanatory variable has sometimes been used to explain differing attitudes and perceptions of professionals in organizations. It distinguishes between persons primarily oriented to a non-local peer group of professional colleagues, versus those oriented to the values of a peer group immediately around them within the organization.¹

The impact of these contrasting orientations makes itself felt in a professional's career advancement. If his advancement, locally or non-locally, depends on achievement in terms of values of a peer group outside the organization, his orientation is said to be cosmopolitan. If, on the other hand, his advancement depends on promotion within an immediate organizational hierarchy, his orientation may be said to be local.

This dimension, while germane to the differing perceptions which have been documented here, has only limited explanatory value.

Firstly, this particular locale, this university, constitutes a highly visible arena for each actor's non-local reference groups. That is, advancement within MIT--gaining a degree, a higher position, or other indications of good performance--apparently accrues advancement on career ladders outside the institution. Not only the faculty and the students at MIT are aware of an audience beyond the Institute. The administration itself may be said to be "cosmopolitan-oriented."

It might be suggested, therefore, that each of the social groups focused on in the Webster building project--students, faculty, and planners--have cosmopolitan professional reference groups which they are differentially aware of and responsive to. The impression is that, the more senior an actor is within each of these three sub-groupings within the MIT organizational hierarchy, the more likely is he to refer to cosmopolitan standards and values.

One may specify some examples from the study group. Older students tended to take a more dispassionate view toward their perception of failure, personal or otherwise, within the project setting. Younger students invested greater effort into the project, became more "subjectively" or emotionally involved in it, and tended to articulate

stronger feelings of frustration and antipathy. Among planners, the more senior actors expressed relatively less desire to lay the blame for some perceived inadequacy in the final product on specific faults of students or faculty. Among faculty participants, a senior administrator expresses some doubt about the ultimate usefulness of the project's results. Another faculty participant seems interested in the degree of usefulness others see in his contribution to the report.

If the report's success affects what one sees to be others' perceptions of one's competence, that report is invested with greater importance. If, however, one has moved within the local hierarchy to a high position, the report may be viewed as of little consequence to one's future. Yet, one's assessment of it will become important. The assessment will be conditioned by a wider view of institutional change and planning, perhaps. Thus, a senior faculty member compares the present use of the Webster building to auxiliary academic buildings around University of California campuses. Planners who sponsor the report can write it off as an "unsuccessful" or "premature" experiment.

There are local reference groups of two sorts: the institution, which is of direct day-to-day importance to

the actor; and the local urban community. Few MIT people live directly adjacent to the Institute's boundary areas, which are largely working-class neighborhoods. However, one may conform to cosmopolitan orientations emphasizing "community responsibility" or "community integration," for instance, by advocating the rights of such neighborhoods within MIT's campus planning process. The urban-design group, for instance, took such a position in arguing for an integration of city uses within those of the campus.

(b) Orientation toward an MIT community

From the basic distinction between local and non-local reference groups, it can be suggested that the perception of a personally relevant "community" within MIT is linked with an emphasis on equal-status, or collegial relationships, rather than hierarchical relationships within that organization.

Actors, it has been noted, may be referring to values and perceptions learned from a local or a non-local cosmopolitan community. That is, they may have different reference groups which brings about perceptual and value conflicts.

Apparently, actors identify with local communities within and outside the organization. According to one's

point of view, a university may be a corporate hierarchy.² It may be an organization to its employees. Or, to its decision-makers, it may seem a collegial peer-group.

The effects of these different perceptions may be expressed in the form of hypotheses:

Actors who perceive a local "community" in the organizations tend to see it in terms of collegial rather than hierarchical relationships.

The corollary to this proposition can be stated:

Actors who do not perceive a local "community" within the organization see social relationships in that organization as mainly hierarchical.

That is, they find their communities non-locally in collegial peer groups outside the organization. From these proposed distinctions, a range of reference group types can be suggested as a two-dimensional typology:

	local	cosmopolitan (non-local)
organizational	e.g., institutional work place	e.g., professional association, club
non-organizational	e.g., friends and family	e.g., professional acquaintances

One's collegial peer group, or "community," may be perceived within any one of these four cells. One's hierarchical peer group, or "organization," may occur either locally or non-locally.

It is in these differing perceptions of MIT as a "community" where planners within the administration most uniformly differ from students and junior faculty (but not senior) involved in the project.

A chief planning officer, for instance, speaks of his "constituency" as the faculty of the Institute. He regards the 16,000-plus population of the Institute as a small "city." He sees the community not only as a social unity but as an arena of political controversy, in which different interest groups contend for resources.

A junior faculty member (not within the project group) perceives, however, that the use of the term "community" obscures the nature of decision-making within the Institute. He would agree with an alternative term: For him, MIT is an organizational hierarchy. It is a private university with affiliated research and development companies. Its principal policies are dictated by a clearly perceivable central hierarchy, where communication moves up and down a chain of command. Because it is a "good" organization, alternatives among major policy

decision are widely discussed. But final decisions rest with a group of administrative officials and representatives of outside interests perhaps unrelated to the changing population of students, faculty, and staff that constitute the main work force of the organization.

As perceived by disaffected students and junior faculty, MIT is run by a Corporation representing corporations producing defense and consumer products, government agencies and other elite social groups within the managerial segment of American society. For them, its Chairman with his advisors and assistants constitutes the single greatest influence in the affairs of the Institute.

In this view of the world, if MIT were a true community, what would be its characteristics? Firstly, its economic base would consist of more than a single institution or corporation in which everybody works or studies. Its social base would include, in a residentially diverse set of neighborhoods, people of different income classes. There would be sub-cultures which are non-academic. It would house not only students and faculty, but a spectrum of workers, non-MIT commuters to jobs outside the campus, social-welfare households, and so on. Politically, American society assumes that a properly constituted community should have a system based on the "one-man,

one-vote" principle. Each adult person would have, in theory, equal say in the course of community decision-making.

Radical faculty and students point out that the campus houses only a small segment of the persons who work within it. Its activities focus on a single set of academically-related activities. Tradition appears to exclude the normal "higgledy-piggledy" of small shops, street uses, and eclectic social life that characterizes small communities of 16,000. Economically, there is no market mechanism where anybody can "own" inalienably a piece of this environment. Every space is held in trust, for temporary occupancy is the rule, rather than the exception. Decisions are made with student and faculty participation, but not control, which would follow from a one-man, one-vote system. Important focal decision-makers at the top levels of the socio-political hierarchy exercise, so to speak, "disproportionate" influence on events.

In sum, a correlation appears to exist between the rejection of MIT as a community of involvement and an emphasis on non-local peer groups and their values. In place of an organizational community, actors with this orientation find their communities in family and friends outside the institution and among cosmopolitan peer groups.

ORIENTATIONS TOWARD THE FUTURE

During the summer project, as Chapter IV discussed, actors expressed goals for the project which varied considerably. While some emphasized the short-term needs of making more space available to the School, other actors voiced concern for its eventual social environment. These last goals might be called remote goals. One inference to be explored is that the length of tenure within the organization--how long one expects to be associated with it--may be an important variable in explaining remote goals.

Some propositions can be articulated to intensify this linkage:

Actors with long tenures in the organization will tend to have greater short-term responsibilities. These responsibilities will cause them to give priority to short-term needs, though they may invoke long-term goals to justify their positions.

The corollary follows:

Actors with short tenures will invoke remote goals often unrelated to the local organization. Alternatively, they may adapt to their foreshortened future horizons by emphasizing short-term satisfactions within the organization.

The planner interested in innovative analytic techniques from the project group may, in one sense, be thought to have fairly remote goals. Identifying himself with the long-term future of the organization, he will perceive immediate goals in terms of that future. For him, the

outcome of the project in proving or disproving the desirability of the Webster building for the School is possibly indifferent. His essential goal, one might infer, is to sustain his own legitimacy and influence within the organization. Any outcome of the project, short of massive disruption to its continuation and completion, will probably serve his purposes equally well.

At the opposite end of this dimension, the student's goals may be thought of as comparatively short-term: making money, learning something, taking part in work which remains interesting. He is looking for a short-term payoff and visibility in keeping with his length of tenure. But some students, as has been pointed out, have longer term concerns as well, not related to the local organization. If they oppose the Webster building as a location for a School of Architecture, they may do so to make other kinds of points: that students should participate in decision-making; that more exciting uses may be found for those kinds of capital resources.

Apparently, then, all actors have both remote and close goals in the future. The planning process serves these various goals in a different manner. While for some it may serve as a source of wages, for others it may signify a small element in a complex strategy devised to

reach remote goals. But even those who emphasize its ability to satisfy short-term goals may alter their contributions to it to fit some fairly remote purposes. These purposes may or may not be in the interests of the long-term survival of the local organization, however.

In general, then, it should not be assumed that only administrators have long-term goals in the planning process. However, the long-term goals of students lay outside the local organization. Students could display a complex sense of the future, as well, as in one student's emphasis on planning the interior of the Webster building as well as possible. He places a professional sense of his responsibilities over personal distaste for its location.

A student employed in the project but treated as a student, rather than an employee, continues to assert his own sense of the future. Even though employed by the organization, he may not identify the long-term survival of that organization as a goal relevant to himself.

Planners, on the other hand, do have a stake in the survival of their organization. It is in their direct interest to emphasize remote and complex goal-sets which determine survival.

As a predictor of the goals to be pursued by the actor, then, length of tenure is a fairly useful indicator.

	organizational	extra-organizational
short-term	e.g., space needs satisfied	e.g., income and amenable work
remote	e.g., optimal social environment for School	e.g., association with high-level professional school; altering dominant values in major educational institutions

As length of tenure increases (the expectation of remaining within the organization), organizational goals of both the short-term and remote types may receive increasing attention from the actor. If one's tenure is short, his orientation to the future will cause him to pursue goals beyond the organization and within peer-group contexts which are non-local.

ORIENTATIONS TOWARD INSTITUTIONAL POWER

So far, differences in perception among actors have been linked with differences in their reference groups and in their length of tenure within the organization. A third dimension will be suggested to account for variations in perceptions of actual decision-making in the institution during the project. It is argued that:

Actors who perceive power as unity and concentrated perceive the possibility of radical recommitment of resources and of change in the organization.

These actors, it will be recalled from the discussion of reference groups, emphasize the hierarchical character of the organization over its collegial character.

Actors who see power as diffuse and problematic perceive the possibility for limited and marginal change within the local organization.

This third dimension, it should be noted, does not have the operational character of the other two to establish predictors for perceptions of reference groups and of future goals, one needs to have data only on (a) social position (student, faculty, administration) and on (b) length of tenure (short-term vs. long-term). This third dimension is less convincing as a predictor of perceptions, because it itself is made up of perceptions. However, as a set of perceptions, it cannot be expressed richly enough in terms of the other two dimensions. As the analysis of the summer project indicated, orientations toward power and authority in the institution apparently prefigured many aspects of disagreement among students, faculty and administration.

However much some students involved in the project mention radical political reasons for their dislike of the project's course of events, their motivations for working on the project relate to personal plans and needs.

Those who disagreed with the aims of the institution saw at least the opportunity to improve a single program emanating from those aims, in this case a program for converting a building to Institute uses. Those who generally agreed--or, rather, did not feel that they had a basis for disagreement--saw a chance to learn from the project.

Some students are oriented toward power arrangements in the institution in ways different from other students. It will be argued that the net effect of these perceptions on work effort was not great. The students who ended up with a greater sense of frustration about the project were those who took seriously the stated aims of the project and its faculty sponsors. The students who throughout the project were critical of the project and its sponsors, even while they were co-operating with them, ended up with relatively less personal strain and frustration. Clearly, there is an adaptive advantage to a disaffected or alienated interpretation of institutional power arrangements. When a program goes bad, one can write off its faults to inherent contradictions in the structure of institutional power.

The students who remained less critical of the "system" were repaid in bad currency for their enthusiasm.

When they sought to please faculty supervisors, they were assigned menial tasks. When they produced as well as they could on these menial tasks, they were often rewarded with faint praise or castigated for their shortcomings.

The "anti-Establishment" group working on the interior module system had a better bargain. While their income did not differ from those who took the stated agenda seriously, they got a chance to alter and expand that agenda to do things they felt should be done. Their "charter" for these alterations and deviations emanated from the traditional role of architectural innovator. They were working for the "system," but using it to accomplish its stated goals with only minimal concern for conforming to the spirit of those goals. They would work on the Webster building but, in so doing, accomplish what they would have been doing in any case: inventing changeable interior systems which might work within any interior.

The programming group were excluded, on the one hand, from this sense of anti-system innovation which prevailed among the interiors group. At the same time, they left themselves most open to exploitation by their superiors who used them as menials. It was their choice, perhaps, to place themselves in this difficult position in which,

under the circumstances surrounding the project, little satisfaction for them would accrue.

Those who concurred in the stated agenda and system of work in the project can be referred to as consenters. Those who from the beginning resisted the Webster building can then be called dissenters.

The dissenter group, because they controlled their own work and did so because they disagreed with the work agenda, were less frustrated and attained a greater sense of satisfactory completion. Their aims were more or less successful. The Webster building has an interior partition system which is more flexible than a conventional rigid wall system. The building as a future location for the School looks no more likely in spring 1970 than it did in spring 1969, when they first began to oppose immediate relocation to it. They got a summer's employment to work on things in a way they preferred.

Consenters were successful only in the sense of having gainful employment for the time period. They contributed to the final report but got only limited roles in developing its form and recommendations. They continue to feel that the summer was a personal waste of time. Their expectations relate to those of the traditional professional, deferring to his elders in the "system." They don't always expect to win.

The dissenters expect to win only by subverting the goals of the system as stated and replacing them with their own modifications or opposites. There is a much wider range of successful outcomes for them, for any outcome short of precise conformity to the stated goals may in a sense be linked to their self-defined role as dissenters.

The dissenters see the top administration at MIT as representatives of "obsolete" power arrangements in Western society. While they agree that this administration is intelligent and perhaps sensitive and liberal, they argue that their social position as agents of corporate capitalism condemns them to promoting unjust social arrangements and inept architecture. When asked to support such assertions, these dissenters can point silently to existing MIT environment with its concrete barrenness, parking lots, and nearby slums.*

The orientation toward power within the administration and the senior faculty who share administrative responsibilities appears to be shaped by other forces. They see

*The nearby campus of Harvard University might be thought to refute the idea that "repressive institutions" produce barren environments. However, a dissenter will point out that new buildings being put up by Harvard are as severely institutional as anything that MIT has sponsored. Perhaps one can presume that existing amenities at Harvard were produced by now-extinct benign institutional arrangements.

power as an unclosed situation of limited knowledge, scarce resources, and constant accommodation to influences from outside the "system." They tend to agree with the dissenters that their power in terms of wide discretion is limited. If changes in social arrangements and environmental character are sought, they must come through long processes of persuasion, quiet experimentation and piecemeal reform. Administrators also feel that while MIT indeed is in the service of government and industry, it may also influence those institutions positively.

Decision-making, as such, they appear to regard as problem solving. To an outside observer, the "problems" that are chosen to solve may appear conventional. However, the administrator perceives great limits on the capacity of an established "system" to learn new patterns. To innovate in a large institution is always to work at the margin of an ongoing set of commitments.

Administrators see the system as very highly differentiated in its parts. Where major changes are sought, the degree of discrimination in what and how to act must increase proportionately. They tend to value most proposals for action which selectively identify opportunities to alter critical variables.

Thus, power arrangements represent very different situations for students and for administrators. What to students is a clear-cut line between those who have it and those who don't, for administrators is a broken web of continuing responsibilities, tension and uncertainty. From their longer experience administrators can hope for students to come eventually to share their perceptions, as fashions change and persons age. The students, on the other hand, hope for a general collapse of existing institutional arrangements or for the development of counter-institutions with different charters and agendas.

In sum, two sets of linked perceptions account for power orientation. As a two-dimensional typology, actors may be classed thus, following the original propositions:

consent to project goals as given	dissent from goals as given
--------------------------------------	--------------------------------

Perception of
power as:

unitary and
concentrated

diffused and
fragmentary

A SYNOPTIC COMPARISON OF THE THREE ORIENTATIONS

Three dimensions have been suggested to account for differences in perceptions among actors. Actors differ in their significant reference groups, their length of tenure in the organization, and their understanding of institutional power. In turn, each of these dimensions apparently cannot account for all the perceptions that might be linked with it. For instance, one's group orientations do not predict the weight one assigns to technical success in the project. Some students and some faculty care greatly about that sort of success, while others have a more ambivalent view of it. Similarly, a short length of tenure in the organization does not exclude the possibility of pursuing rather remote goals in terms of it. A dissenting and critical view of power arrangements in the institution doesn't mean that one loses interest in doing a professionally competent job, even though it might serve to buttress those power arrangements.

It is suggested, on the other hand, that most perceptions that influenced interaction in the project group can be accounted for through a combination of the three orientations. Moreover, the three orientations can as well be understood in terms of each other, as expressed in the following table (5-1).

Using the three examples of perceptions above, caring about technical success may reflect an orientation toward professional peer-group competence, even though that conflicts with one's critical view of the local employer. A set of remote goals may similarly be tied with a non-local professional peer group, even if one's stay locally is quite limited. Yet, being competent and being long-range in one's thinking does not imply conforming to the standards laid down by the local organizational hierarchy. Thus, one can remain a dissenter from that hierarchy and at the same time sustain one's sense of competence in relation to a cosmopolitan peer-group.

The table infers that, paralleling this example, orientations may be linked in such a way that they are projections of one another. Collectively they might be said to make up a metaphorical model which might roughly indicate the sorts of conflicts that could result from interaction among persons whose characteristics can be specified according to these three dimensions.

Table 5-1. ORIENTATIONS INTERPRETED IN TERMS OF EACH OTHER

ORIENTATIONS TOWARD:	ARE ACCOUNTED FOR BY:		
	significant reference groups	goal-distance in future	institutional power
significant reference groups	-	3.	5.
goal-distance in future	Synoptic proposition 1.	-	6.
institutional power	2.	4.	-

1. The more one emphasizes reference groups outside the local organization (cosmopolitan peer-groups), the more likely one is to emphasize remote goals which are non-meaningful locally, not necessarily to the exclusion of locally meaningful remote goals.*

2. Non-local significant reference groups correlate with critical attitudes toward local authority and social hierarchy.

3. The significant local reference group ("community") will share a similar length of tenure and, thus, a set of goals equally remote.

4. Perceptions of the need for local change and its relative speed correlate with the length of tenure. I.e., those with the briefest tenures will be most oriented to rapid change in the local organization.

*These propositions are developed only as illustrations of the possibilities of projecting orientations in terms of each other. The suggested relationships, while drawn from this study, are put forward only to demonstrate the possibility of these interconnections.

Table 5-1. (continued)

5. Those who perceive local power arrangements as accessible and influenceable will tend to emphasize to a less extent cosmopolitan peer-group identifications.
6. Those who see local power as accessible will tend to become interested in remote goals within the local organization. Inversely, those who see local power as concentrated and unitary will find their remote goals beyond the local organization.

This table expresses for each of the orientations a proposition making it a function of the other two dimensions. The implication is that at this level of analysis none of these three dimensions can be shown to be more "fundamental" than the other two. Perceptions not accounted for by one of these dimensions may be accounted for by one of the others. All perceptions of the actors in some sense or another may be traced to any of the three orientations. For instance, students' mistrust or cynicism about administrative motives apparently is explained in some degree by their peer-group identification, their length of tenure within the institution, and their orientation toward power as diffused or concentrated.

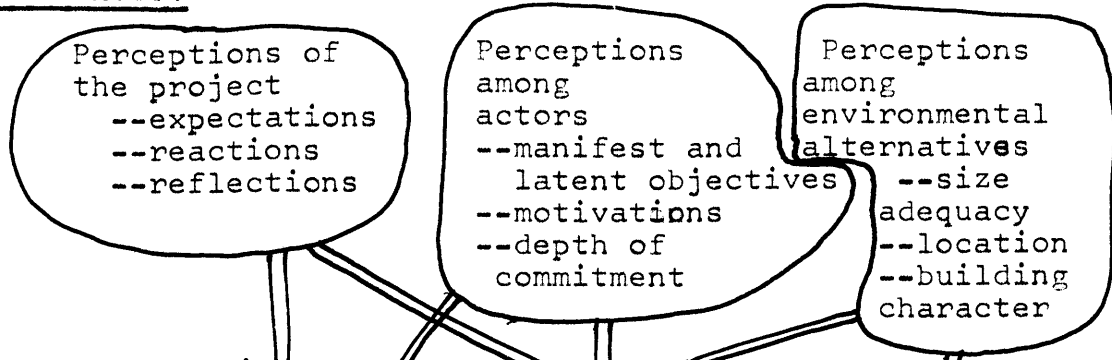
What, then, of the attempt of this chapter to go beyond the phenomena of the planning process to grasp

what appear to be basic explanatory features of it? As metaphorical reflections, the concept of orientations provides a more highly focused means of understanding this social setting. On the other hand, orientations do not appear to fully predict in a precise analogue dynamics of the planning process. But through specifying length of tenure, perceptions of institutional power, and significant reference groups of participants, one could explore alternative chains of potential conflicts and perceptions that might result from their collaboration.

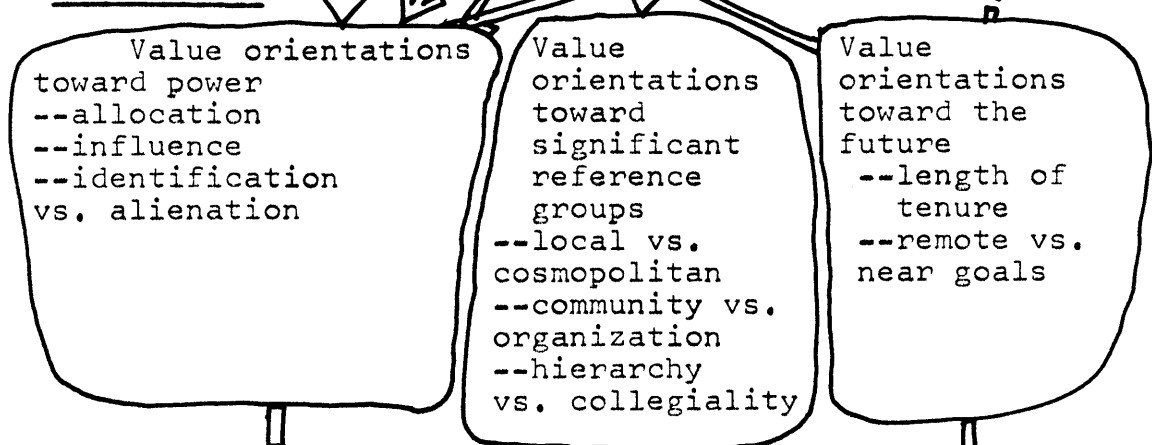
These orientations perhaps constitute observables which project actors should be mutually aware of early in their collaboration. Projects could begin with an explicit sharing of information about each other's orientations and predispositions. This kind of exegesis might allow a project group to move more rapidly toward a goal consensus, if that consensus is desired. It might also permit expansion of the goal framework to include procedural innovations latent to that process.*

*See the final section of Chapter VI on Institutional Innovation for a brief consideration of this possibility.

First-order inferences:



Second-order inferences:



Third-order inferences:

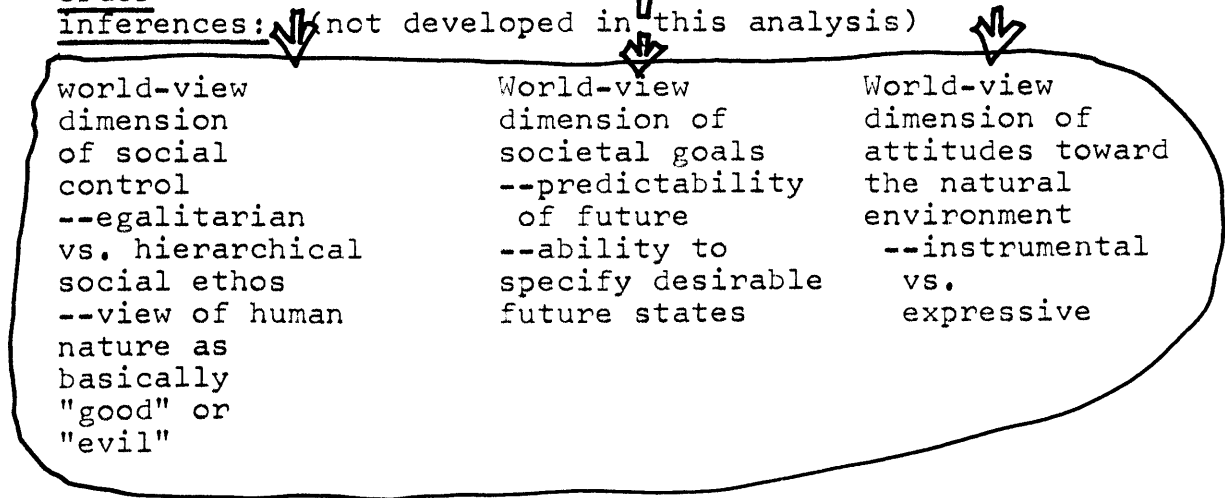


Figure 5-1. Orientations as inferences from perceptions.
 Figure 5-1. This chart suggests some connections between perceptions and orientations. It further suggests a third level of inference, that of world-view, which has not been attempted in this study.

CHAPTER VI: CONCLUDING OBSERVATIONS

The Project in Retrospect

Some Speculation about Campus Planning

The Monitoring of Campus Planning

Institutional Innovation

THE PROJECT IN RETROSPECT

From the perceptions sampled here, apparently persons involved in planning bring to that social setting a variety of non-congruent purposes. These intentions, in the interaction over time, slide like goldfish past one another. Each person gets to accomplish something, but not all, of what he had hoped for at the beginning of the process.

The planning process appears to converge on choices which include a little of each person's purposes. The collective architectural image is a committee product. Through conflict over goals, the group ends up with something which can accept bits and pieces of everybody's contribution. As Herbert Simon has asserted, aspirations over time tend to shrink and reshape themselves to fit actual achievements.¹

Some students within the project group had hoped for a study of fundamental purposes and goals in the School. Others pointed out a need to study alternative uses of the capital that would eventually be raised. Planners hoped to get some new ideas for studying environmental needs on the campus. Some faculty leaders originally sought to expedite a rapid move to the Webster building.

Instead of any of these goals becoming dominant, the project group tended to fragment into small task groups,

each of which had a different cluster of goals shared among its members. The report drafts embodied a mixture of the different goal sets. They also served the purpose of legitimizing expenditures on the project, and, thereby, the planners and their planning process.

Goals were not consistent with one another. While some students had asserted the need to study other locations, faculty and planners saw in the Webster building a satisfactory solution to a need for a new location with potential for long-term expansion. Faculty leadership not directly involved in the project continued to hesitate over irreversible decisions regarding location until other decisions about departmental and School programs were arrived at. During 1969 and the first part of 1970, there continued to be no decisive indication about what directions the purposes and structure of the School would be taking.

One's goals and perceptions of the planning process apparently are influenced but not predetermined by one's social position within the organization. To those outside decision-making circles, some purposes and decisions seem to be communicated to obscure other purposes. In a vacuum of inconsistency, students may become cynical and develop their own "agendas" for the organization.

The social positions of actors, it has been argued,

bring about different interests.* These interests are linked to different values and orientations. When a social process is jointly undertaken, different perceptions of that process become apparent. An interest links with a similarly structured value system; the ensuing conflicts in perception are representative of basic conflicts in values and interests among actors.

In the case studied here, students have different values from faculty and administration, in part because they are students with limited organizational tenure. Their orientations condition their experience but are mediated by pre-existing values and outside reference groups. Taken together, values, orientations, interests and perceptions bring about conflict among roles.

To bridge these role conflicts, a clear resolution of principal goals of the project would have been required. Goals remained unresolved and the project might thus be thought of as premature. Promoted by the incidental coming together of funds, a building, and the need for additional space, it could not, unfortunately, be terminated successfully. That kind of termination apparently awaits resolving

*The term interest, as introduced in Chapter I, refers to social and economic needs and preferences of each social role within a network of such roles.

the future size, purposes and philosophies of the School.

SOME SPECULATIONS ABOUT CAMPUS PLANNING

The present disposition of the Webster building is the result of some trade-offs among available spaces, evidently. The School obtained space in Building 9 that had been occupied by the Urban Systems Laboratory and thereby took care of its short-term needs. USL in moving into the Webster building also got its short-range requirements for space satisfied. An important element in this trade-off is that the School was allowed to expand without having to make a decision to relocate, which remains difficult until other decisions are reached.

There might be inferred a kind of "Gresham's Law" in this situation. The "good" planning of the comprehensively concerned project group did not engage the opportunity to move to the Webster building. It was therefore overridden by the "bad" planning of opportunistic incrementalism, which could deal with the immediate opportunity and, as importantly, not get involved in unresolvable discussions of goals.

The perceptions of the location of the Webster building indicate the influence of internal political factors. Students and faculty prefer being close to other departments and service facilities. Administrators value close

access to central administration meeting places and offices. Thus, in a growing institution, there might be a strong tendency toward contiguous spatial expansion.*

Newer functions of the institution find themselves situated at the developing periphery of the campus. Each additional activity has a propensity to locate as near as possible to the central functions of the institution. A locational decision would have a high probability of searching for space as close to the campus center as possible. Thus, through incremental decisions, the campus becomes a growing empire within the city.

The campus growth pattern exhibited at MIT is seen to have advantages which are social, academic, political and economic. If alternative patterns of growth or use were to be sought, compensating mechanisms to replace these "economies of agglomeration" would have to be devised.²

Comprehensivism and campus planning

In an organization such as a private university, governed from the top down, the ideal of comprehensive planning with its democratic ethos suffers rather poignantly. To some persons MIT is apparently no more a "community"

*See Chapter IV, Part 3, for a discussion of locational perceptions and priorities among the project participants and other members of the School.

than is a General Electric plant. A planning officer notes that MIT, unlike most campuses, retains control of space within a central planning function, which is directly responsive to the Committee on Space Resources and Programming headed by the Provost. A department occupies space only at the discretion of this Committee, apparently. If a department is slipping on the totem pole of influence, it might be pushed out of desirable locations, as well. It might thus be thought deceptive to speak of a new "home" for the School of Architecture and Planning, if indeed space is considered a perpetually fluid resource of the central administration.

The planners at MIT perceive themselves as comprehensively responsive to a large number of "constituencies" within their hypothetical "community." On the contrary, it would appear that their role is to help program, build and allocate space as indicated by the administrative hierarchy around them. This administrative hierarchy uses space as a scarce commodity. Evidently it might be used in a complex of political interaction and intrigue.

If campus planning at MIT is comprehensive in its responses, then it has overcome some difficulties which appear endemic to that theory in other communities. Some interest groups in every community get left out in

political allocations. At MIT, these groups may be the lowest-paid members of the organization, such as secretaries and janitors. Or they may be the least powerful departments. But the planner, as co-ordinator of all needs, can be responsive to these in terms of scarce resources only when the central administration decides that he should be.

ON THE MONITORING OF CAMPUS PLANNING

From time to time in this study, inferences have been drawn which may critically reflect on the actors in this study. It is important to emphasize that the intention of this study has not been to "evaluate" those actors or campus planning at MIT through this single case.

Instead, the aim has been to understand through collaboration a social process which focused on campus planning. The results of that process, it has been argued, were inevitably limited by the circumstances in which it was carried out. The actors communicated with each other from social positions (roles) which may have brought about conflicts in perceptions and values. These conflicts, it has been suggested, are endemic to such a process, given the different interests of the actors.

Incidental to this analysis, other perspectives from which the project might have been formulated have been

expressed as aspects of different perceptions of the participants. Perceptions embody the substance of this analysis. In these perceptions, actors evaluate each others' roles and contributions to the task. These evaluations, whether from the researcher who collaborated or from other actors, stand only as one more form of perceptions.

People involved in a shared task see things differently. To document this perhaps banal truism in the form of an abstract model was the aim of this research. This documentation or portrayal might hopefully provide some useful insights into the dynamics of that work process.

INSTITUTIONAL INNOVATION

This study forms part of a larger process of communication within MIT. The process of carrying it out may have heightened self-awareness among the actors. By highlighting the stubborn complexities of shared work, perhaps future projects similar to the Webster building project will be improved.

In particular, persons involved in formal studies of environmental needs within the institution need to develop a sophisticated sensibility about several levels of objectives. On a basic level, there are technical objectives. That is, there are stated concerns, or terms of reference which make up the charter for the project. We have seen

that confusion over these basic directions can leave a perception of shared "failure" among participants.

At another level, one may ask whether the project in its novel structure--"a community planning for its own needs," as one planner expressed it--succeeded. That is, was the environment for decision-making about architecture affected? The evidence of the reports is that the project did alter the decision-making environment. By involving a combination of faculty, students, and administrative professionals together in a joint endeavor, several considerations about location, capital investment, and development of adjacent areas were introduced into the decision process. The interior-design group suggested and built parts of a flexible interior system which was low-cost and visually interesting. Planners were exposed to some of the current concerns of academic architecture. Thus, at this level--as an experiment in campus planning--its results could be deemed successful. Future experiments can hopefully learn from the results of this one.

Apart from the short-term concerns of building, environmental design functions in a larger social and economic framework. The differences in perception exposed by the Webster project and rehearsed in this study can be important in broadening the political base of design projects.

Moreover, this pluralization of viewpoints in design may increase the acceptability of that project to a larger number of constituencies. The likelihood of technical innovation--inclusion of novel design approaches--is also increased.

Formal environmental studies, then, can be continued with a sensitivity toward various levels of innovation that their procedures may bring about. Those procedures should be designed with these objectives in mind. At the same time, other forms of environmental action projects can test out incremental and spontaneous public participation in change. During spring 1970, the Institute corridors and lobbies for the first time show some vivid effects of such popular involvement. Continuation of such experiments and of innovative planning studies promises well for a socially pluralized process of campus design.

FOOTNOTES

Chapter I.

1. William Birenbaum, ex-provost of Long Island University, writes of the forces and interests contending over physical planning priorities in urban universities in Overlive: Power, Poverty and the University (1969), especially pp. 43-63.
2. Cambridge chapters of Students for a Democratic Society have been vigorous in criticizing the development of an "Imperial City" of defense research, universities and government agencies. For a discussion of this point of view, see James Ridgeway, The Closed Corporation, (1968) (pp. 182-190 summarize the influence of Harvard and MIT on Cambridge).

Chapter II.

1. J.R. Seeley has written movingly of the inextricability of social research processes from the psychoanalytic history of the researcher.

See: J.R. Seeley, "Crestwood Heights: Libidinal and Intellectual Dimensions of Research" (1964). See also the psychiatrist Ronald Laing's engagement with the "science of social phenomenology" in: Ronald D. Laing, The Politics of Experience (1967), p. 5 and following.

2. The researcher has been involved in campus and institutional planning projects at Ohio University (1965) and in Ontario (1968), where preliminary studies of social environments for a regional center for hearing-impaired children were carried out. Graduate work has centered around social anthropology and architecture.

3. The social anthropologist Erving Goffman's seminal study of a mental hospital is a classic case of a sociological model presented as abstract and value-free. In fact, the analysis emphasizes the dehumanizing aspects of hospital routines without giving a compensating image of the compassionate intentions of the staff and the constraints under which they are forced to work. See Erving Goffman, Asylums: Essays on the Social Situation of Mental Patients and Other Inmates (1961).

4. The cultural historian Thomas Roszak has argued persuasively, if polemically, against the concept of scientific detachment and its social implications. See: Thomas Roszak, "The Myth of Objective Consciousness," in The Making of a Counter Culture (1969).

For a sociologist's consideration of the problem, see: Alvin Gouldner, "Anti-minotaur: the Myth of Value-Free Sociology (1969).

5. A basic influence in devising this approach has been Anselm Strauss' and Barney Glaser's work on inductive sociology in case studies.

See: Barney Glaser and Anselm Strauss, The Discovery of Grounded Theory: Strategies for Qualitative Research, (1967); Howard S. Becker, "Problems of Inference and Proof in Participant Observation," (1958); Howard S. Becker and Blanche Geer, "The Analysis of Qualitative Field Data," (1960); Allen Barton and Paul Lazarsfeld, "Some Functions of Qualitative Analysis in Social Research," (1961); Alvin Gouldner, "Anti-minotaur: the Myth of a Value-Free Sociology," (1969).

Chapter III

1. This historical account draws chiefly on Samuel C. Prescott's adulatory but entertaining history of MIT's first fifty years. See: Samuel C. Prescott, When MIT was "Boston Tech"--1861-1916, (1954).

A survey of the sequence of buildings and styles that developed on the Cambridge campus after 1916 can be found in: C. Shillaber, "Architecture of MIT Buildings: Part II," Technology Review, Volume 56 (May 1954), pp. 343-48.

2. See references under footnote 3, Chapter I, for expositions of the radical critique of university expansion in Cambridge.

3. For a protagonistic review of recent MIT policy in regard to Cambridge, see: Editors, "MIT as Cambridge Citizen: Arrogance, or Beneficience?", Technology Review (January 1970), pp. 81-83.

4. Dean Lawrence Anderson of the School of Architecture and Planning, MIT, concisely summarizes the development of the School over the last century in a section of the final report of the Webster building study project.

(At this writing, that report is still in draft form.)

See: L.B. Anderson and others, "Space Needs of the School of Architecture and Planning," (November 1969) mimeograph.

Chapter V

1. The study of professionals in organizational settings has become an intensively researched area within sociology. The cosmopolitan-local model of professional orientation is taken from Blau and Scott, Formal Organizations (1962), pp. 64-74. See also the papers by Becker and Carper (1956); Goode (1957); the classic papers by Gouldner (1957-58); Litwak (1961); Merton (1961).

2. See James Ridgeway, The Closed Corporation (1968), for a study of American universities within their community setting. Birenbaum (1969) also takes a critical position.

Chapter VI

1. See Herbert Simon, "Rational Choice and the Structure of the Environment," (1962), for a description of the limited information required by a simple food-getting organism in an environment. The implication is that the information needs of even complex organizations may be more limited than the elaborate planning apparatus established by those organizations would indicate.

2. University planners in Great Britain in recent years have experimented with concepts of urban university environments which interpenetrate them with the rest of the inner city. See, for instance, Wilson and Womersley, Town Planners, Manchester Education Precinct (1967), the final report of a planning study.

REFERENCES CITED AND BIBLIOGRAPHY

Letters following each reference indicate that the citation in this context mainly pertains to:

- (A) MIT environment and its planning
- (B) university environmental planning
- (C) the sociology of urban planning and the design professions
- (D) the sociology of professions and institutions
- (E) sociological methods

1. Africa Research Group and Old Mole Staff, "How Harvard Rules," Cambridge, Mass., pamphlet April 1969. (A)
2. William Alonso, "Cities and Planners," Daedalus, vol. 92 (4): 824-839. (C)
3. Alan Altshuler, The City Planning Process: A Political Analysis, Ithaca: Cornell University Press, 1965. (C)
4. Lawrence Anderson and others, "Space Needs of the School of Architecture and Planning," Draft Report, MIT, November 1969. (A)
5. Editors Architectural Design (London), August 1968: Issue on advocacy planning. (C)
6. Allen Barton and Paul Lazarsfeld, "Some Functions of Qualitative Analysis in Social Research," in S.M. Lipset and N.J. Smelser, editors, Sociology: The Progress of a Decade, Englewood Cliffs, N.J.: Prentice-Hall, 1961. (E)
7. Howard S. Becker, "Problems of Inference and Proof in Participant Observation," American Sociological Review, vol. 23 (Dec. 1958). (E)
8. _____ and James W. Carper, "The Development of Identification with an Occupation," American Journal of Sociology, vol. 61 (Jan. 1956): 289-298. (D)
9. _____ and Blanche Geer, "The Analysis of Qualitative Field Data," in R.N. Adams and J.J. Preiss, eds., Human Organization Research, Homewood, Ill.: Dorsey Press, 1960. (E)

10. Norman Beckman, "The Planner as Bureaucrat," Journal of the American Institute of Planners, vol. 30 (1964): 232-327.
11. William Birenbaum, Overlive: Power, Poverty and the University, New York: Dell Publishing Co., 1969. (B)
12. Peter M. Blau and W. Richard Scott, Formal Organizations: A Comparative Approach, San Francisco: Chandler Publishing Co., 1962. (D)
13. Michael Brawne, editor, University Planning and Design, (A Symposium Based upon a Meeting at the U. of Sussex, 1964), London: Architectural Association, 1967. (B)
14. Nicholas Bullock and others, A Theoretical Basis for University Planning, Cambridge, U.K., Land Use and Built Form Studies, Report 1, Cambridge University School of Architecture, 1968. (B)
15. F. Stuart Chapin, Jr., "Foundations of Urban Planning," in Werner Z. Hirsch, ed., Urban Life and Form, New York: Holt, Rinehart and Winston, 1963: 218-233. (C)
16. Robert A. Forrester, Planning for the Visual Form of MIT, Cambridge, Mass., Unpublished M.C.P. thesis, Department of City and Regional Planning, MIT, September 1965. (A)
17. Barney Glaser and Anselm Strauss, The Discovery of Grounded Theory: Strategies for Qualitative Research, Chicago: Aldine Publishing Co., 1967. (E)
18. Erving Goffman, Asylums: Essays on the Social Situation of Mental Patients and Other Inmates, Garden City, N.Y.: Anchor Books, 1961. (D)
19. William J. Goode, "Community within a Community: the Professions," American Sociological Review, vol. 22 (1957): 194-200. (D)
20. Alvin W. Gouldner, "Cosmopolitans and Locals," Administrative Science Quarterly, vol. 2 (1957-58): 231-236 and 444-480. (D)

21. _____, "Reciprocity and Autonomy in Functional Theory," in Llewelyn Gross, ed., Symposium on Sociological Theory, White Plains, N.Y.: Row, Peterson, 1959: 241-270. (D)
22. _____, "Anti-Minotaur: the Myth of a Value-Free Sociology," in W.G. Bemis, et al., The Planning of Change, New York: Holt, Rinehart, Winston, 2nd ed., 1969: 604-618. (E)
23. Everett Hughes, Men and Their Work, Glencoe, Ill.: Free Press, 1958. (D)
24. _____, "Professions," Daedalus, vol. 92 (4): 655-668. (D)
25. Herbert H. Hyman, "Planning with Citizens: Two Styles," Journal of the American Institute of Planners, vol. 35 (no. 2, March 1969): 105-112. (C)
26. Kenneth Kenniston, The Uncommitted: Alienated Youth in American Society, New York: Dell Publishing Co., 1965. (E)
27. Lawrence S. Kubie, "Some Unsolved Problems of the Scientific Career," in M.R. Stein and others, eds., Identity and Anxiety, New York: Free Press, 1960: 241-268. (D)
28. Ronald D. Laing, The Politics of Experience, New York: Pantheon, 1967. (D)
29. Eugene Litwak, "Models of Bureaucracy that Permit Conflict," American Journal of Sociology, vol. 67 (1961): 177-184. (D)
30. Robert K. Merton, "Types of Influentials: the Local and the Cosmopolitan," in E. Banfield, ed., Urban Government, New York: Free Press, 1961, 390-400. (D)
31. Arne Musso, "Models of Campus Planning," in Proceedings of the Joint International Conference on Artificial Intelligence, vol. 1 (3, January). (B)

32. John R. Myer and others, E-40: the Environmental Context, folio of drawings and text. Draft November 1969. (A)
33. Christian Norberg-Schulz, Intentions in Architecture, Cambridge, Mass.: MIT Press, 1964. (B)
34. Carl Oglesby, "The Young Radicals," in William R. Ewald, Jr., ed. Environment and Change: the Next Fifty Years, Bloomington: Indiana University Press, 1968: 153-166. (B)
35. K.C. Parsons, Cornell Campus: A History of Its Planning and Development, Ithaca, New York: Cornell University Press, 1968. (B)
36. Howard V. Perlmutter, Toward a Theory and Practice of Social Architecture: The Building of Indispensable Institutions, London: Tavistock, 1965. (B)
37. Samuel C. Prescott, When MIT Was "Boston Tech"-- 1861-1916, Cambridge, Mass.: Technology Press, 1954. (A)
38. Editors, "Advocacy Planning: What It Is, How It Works," Progressive Architecture, (September 1968): 102-115. (C)
39. Janet S. Reiner, Everett Reimer, Thomas A. Reiner, "Client Analysis and the Planning of Public Programs," Journal of the American Institute of Planners, vol. 29 (November 1963): 270-282. (C)
40. James Ridgeway, The Closed Corporation: American Universities in Crisis, New York: Random House, 1968. (A)
41. Thomas Roszak, "The Myth of Objective Consciousness," Chapt. 7 in The Making of a Counter-Culture: Reflections on the Technocratic Society and its Youthful Opposition, Garden City, New York: Doubleday Anchor, 1969: 205-238. (C)

42. W. Richard Scott, "Professionals in Bureaucracies --Areas of Conflict," in H.W. Vollmer, Donald L. Mills, eds., Professionalization, Englewood Cliffs, N.J.: Prentice-Hall, 1966: 265-275. (D)
43. John R. Seeley, "Crestwood Heights: Intellectual and Libidinal Dimensions of Research," in Arthur J. Vidich and others, Reflections on Community Studies, New York: Wiley, 1964: 157-206. (D)
44. Carolyn Shillaber, "Architecture of MIT Buildings," Technology Review, vol. 56 (April and May 1954): 297-302 and 343-348. (A)
45. Herbert A. Simon, "Theories of Decision Making in Economics and Behavioral Science," American Economic Review, (June 1959): 253-283. (D)
46. _____, "Rational Choice and the Structure of the Environment," in Models of Man, New York: John Wiley, 1962: 261-273. (B)
47. Benson R. Snyder, "Adaptation, Education and Emotional Growth," in L. Pervin and others, eds., The College Dropout and the Utilization of Talent, Princeton: Princeton University Press, 1966: 155-175. (D)
48. Students for a Democratic Society, "The Cambridge Project: Social Science for Social Control," Cambridge: pamphlet, Oct. 1969. (A)
49. Editors, "MIT as Cambridge Citizen: Arrogance or Beneficence?," Technology Review, (Jan. 1970): 81-83. (A)
50. Wilson and Womersley, Town Planners, Manchester Education Precinct, Manchester, U.K.: Manchester University Press, 1967. (B)

ACKNOWLEDGEMENTS

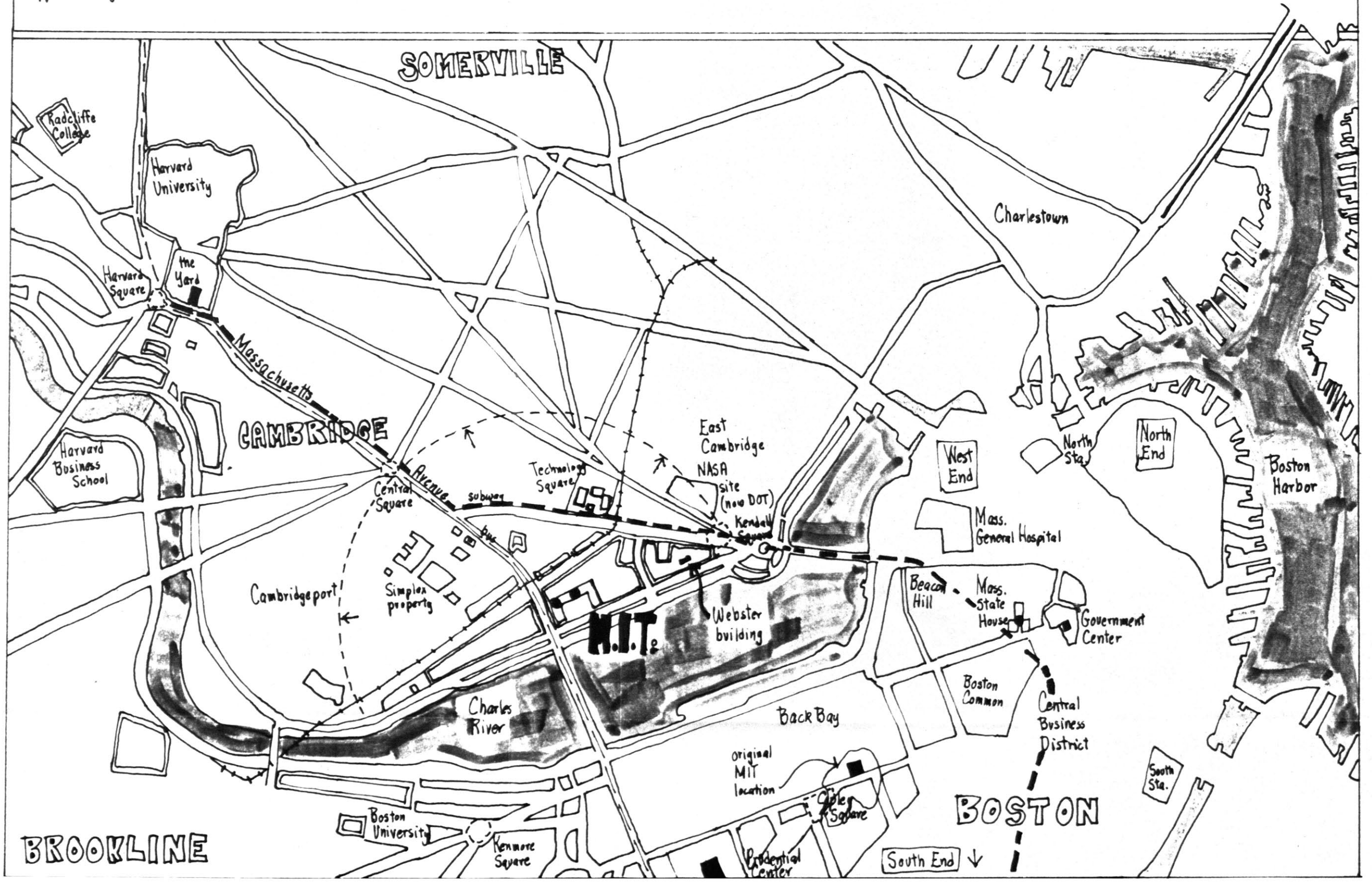
I am grateful to Dr. Ben Snyder and Dr. Merton Kahne for their support and persistent enthusiasm during this study. They and my adviser, Bill Porter, have abetted the eclectic attitude behind the research design, as well as suggesting many changes in the manuscript. The flaws that survive rest on my shoulders. The participants on the Webster building study and other MIT people who allowed this inquiry to pry into their private reflections about the architectural design process have my gratitude as well.

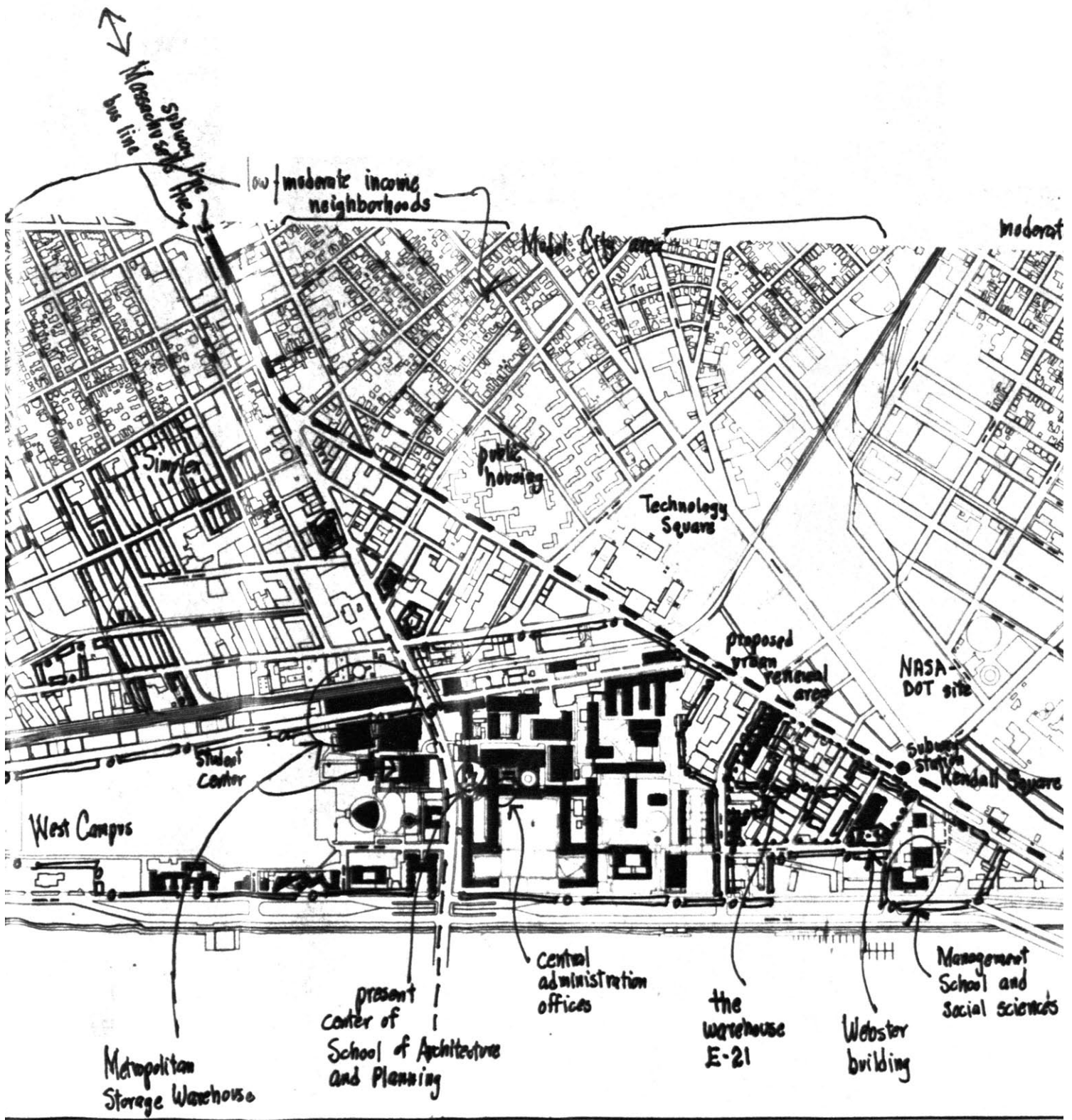
Portions of the data on which this study is based were collected through facilities of Research Program in Social and Educational Psychiatry, Education Research Center, MIT (National Institute of Mental Health grant number NIH-5R12-MH-16347).

MAP A:
Inner Boston Region
and MIT's Location,
1865 to 1969



Approximately 1800 feet to inch





Subway station
Massachusetts bus line

moderate income neighborhoods

public housing

Technology Square

proposed green retention area

NASA-DOT site

Subway station Kendall Square

West Campus

Student Center

present Center of School of Architecture and Planning

Central administration offices

the warehouse E-21

Webster building

Management School and social sciences

Metropolitan Storage Warehouse



THE BUILDING