SOME MANAGEMENT CONCEPTS FOR DEVELOPING THE URBAN FUTURE

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INTRODUCTION

The purpose of this memorandum is to present a thought piece related to the management of a major research program aimed at developing a sweeping analysis of the future of urban settlements.

Interest in urban problems has been growing rapidly. One measure of this interest is the rapid growth in the number of university urban research centers during the past decade. Figure 1 shows how these centers have proliferated in the period from 1940 to 1969, the most rapid growth taking place during the last half of the 1960's. More centers appeared during that time than in the preceding 25 years.\(^1\)

Figure 2 shows a profile of the major purposes of these centers, as cited in the descriptions of the various centers.\(^1\) These purposes reflect the traditional university purposes of research, education, and service, along with other commonly understood purposes such as consulting, providing information, and publishing. Coordination is prominent, because such centers often involve various divisions of the university. Planning also appears as one of the principal functions. While many other purposes are cited, they do not appear with sufficient frequency to qualify as major ingredients of purpose for the centers considered collectively.

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\(^1\) This information was extracted from University Urban Research Centers, Second Edition, 1971-1972, edited by Grace M. Taher, and published by The Urban Institute.
FIGURE 1. GROWTH OF UNIVERSITY URBAN RESEARCH CENTERS
FIGURE 2. PRINCIPAL PURPOSES CITED BY UNIVERSITY URBAN RESEARCH CENTERS
A rapid buildup, such as that occurring in the late sixties, probably means that the universities created a new set of academic roles staffed by persons who may well not have contemplated filling such roles. The buildup was probably a response to the perception of the critical need for attention to urban problems, rather than the sudden emergence of a solid intellectual base for working with such problems. A response of this kind is not necessarily calculated to produce lasting intellectual development, but seems more likely to involve the university in the immediate problems of the city or community in which the university is located. Not one of the centers listed the development of urban theory in its statement of purpose. Three of the centers mention methodology in their statements of purpose. The most definite statement of this type came from Stanford University Institute for Public Policy Analysis; it reads, "Study issues and methodology relating to the formation and implementation of public policy".

Most of the centers have very small staffs. A typical arrangement is one where the staff coordinates research that is done in the academic departments of the university. Such an arrangement tends to favor small projects with a very specific focus.

Several rather sizeable urban projects have been initiated outside of universities. Some of these have been aimed at developing computer models of various urban problems.

While the federal government has made vast expenditures during the past 20 years on projects aimed at urban problems, there are few who claim that these were highly successful. It does not appear that these expenditures were related in any way to the development of urban theory or urban methodology.
The following set of adjectives can serve as a taxonomy of descriptors for many of the projects that have been conceived to develop solutions to urban problems. Not all would apply to most projects, but some would apply to almost any project.

- Underfunded
- Shallow
- Understaffed
- Egocentric
- Unintegrated
- Naive
- Politicized
- Abbreviated
- Self-serving
- Ill-defined
- Overcommitted
- Untargeted
- Overemotional
- Overinstitutionalized
- Myopic
- Unbalanced
- Underplanned
- Far Out
- Academic
- Unmanaged.

Isn't it about time to develop the large urban program of research that is needed to give the people who will be governing our cities in the next half century the information they need to do their job in a form they can understand, integrated in such a way that it will help them in planning and decision-making? Isn't it about time to recognize that the management of such a program is a major concern in getting it started, and to proceed to develop a management plan for carrying it out? And shouldn't this plan be so conceived that the "death-wish" taxonomy of adjectives given above would not apply to it?

**SMALL PROJECTS VERSUS LARGE PROGRAMS**

Most people who are involved with research have experience with small projects. This experience is generally unsatisfactory if viewed as a management guide for carrying out large programs. While the same
factors may be involved in small projects and large programs, the scale and emphases are so different that the only safe way to proceed is to re-
think the situation from scratch.

Table 1 presents a comparison of the small project and the large program in terms of six factors of concern in each. These are staffing, budget, sponsors, institutions, quality of product, and schedule. This table is intended to bear out the remarks in the foregoing paragraph.

While the large systems programs of the past have often involved a very few sponsors, perhaps one, it does not seem likely that the metropolitanization program will be this fortunate. Instead, it seems likely that it will have to begin with a few sponsors who take a fairly substantial risk. If the program demonstrates high-quality work and good management, new sponsors may start to be interested and attracted to support the program. It appears, therefore, that Phase 1 of such a program should emphasize quality of product above all else. This emphasis presumes that the product will be relevant to the metropolitan concerns, and that the management of the program functions effectively to help assure good quality.

One of the few things that might be used administratively as a trade-off factor for quality is schedule. Good people are almost always busy, and can't divert their energies at the drop of a hat. Therefore, if quality is sought, it may be necessary to allocate funds to such people for use over a period of time that includes an adjustment period for them, allowing them to plan well ahead to carry out a task effectively. This means that early schedules should stress independence of the various tasks to avoid requiring product before the stamp of quality can be put on it. Another thing that can be done is to employ iteration effectively. Thus,
<table>
<thead>
<tr>
<th>Factor</th>
<th>Small Project</th>
<th>Large Program</th>
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<tr>
<td>Staffing</td>
<td>Probably the top priority concern. Good staff will be able to handle most of the difficulties. No staff change expected during the project.</td>
<td>Still of concern, but not the highest priority--staff will be large, and key individuals are important--staff will change over time.</td>
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<tr>
<td>Budget</td>
<td>Easy to estimate, and if budget must be apportioned over several activities, the difficulties are not great.</td>
<td>Will be large, and allocation of funds to competing possible activities becomes a principal concern.</td>
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<tr>
<td>Sponsors</td>
<td>Usually a single sponsor, and the sponsor's principal functions may be to fund the project and evaluate the product.</td>
<td>There may have to be several sponsors, they may start and stop sponsoring at intervals, they may require a voice in allocations to activities, and will have to be informed periodically on progress.</td>
</tr>
<tr>
<td>Institutions</td>
<td>Usually only two involved, and then they are involved via proxies, namely the project monitor and the small project staff or director. Normal routine is usually adequate to take care of business aspects.</td>
<td>There may be several institutions involved, each bringing a peculiar set of constraints involving legal restrictions, institutional idiosyncrasies, different objectives, and unique capacities.</td>
</tr>
<tr>
<td>Quality of Product</td>
<td>If evaluated, it is usually done after the project is over, when it is too late to do much about poor quality.</td>
<td>A critical concern, especially in the early stages, because the quality will be a primary factor in developing additional sponsorship and high morale needed to keep the project going to completion.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Usually fixed.</td>
<td>Of continuing concern, involving substantial planning and decision-making.</td>
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if an initial product is not up to standards, a second try can be made based on critical comment, etc.

This suggests that the early allocations should be spread out over a number of relatively small tasks, so that the risk is not too high on any of them, and that the probability of getting some quality work done is enhanced. The counter-argument that larger sums focused on just a few tasks would be more productive leads into the question of institutional performance versus individual performance. It is believed that nothing makes for quality so much as clear-cut responsibility of an individual who is dedicated to do good work. Here it is argued that the individual who accepts the assignment is much more important than the institution. In fact, it is felt that, wherever possible, funding should be to individuals rather than to institutions, and when not possible, personal contacts should be made to ensure that institutional funding is clearly viewed as a mechanism for getting funds to a particular person who bears the responsibility for the quality of the product.

In short, a strategy for funding has just been suggested, which deals with the recipient of the funds, and is aimed at helping to assure a quality product.

**MANAGEMENT STRUCTURE**

While quality of product is the principal concern in Phase 1, management structure is one of the key enabling ingredients. We are going to show a proposed management structure, and talk about why this structure holds the potential for being successful. It is felt here that outstanding individuals will not assure success of a large systems
program. Instead, a management structure that helps free these individuals to function in pre-assigned, carefully defined roles in which they are comfortable, is absolutely essential to success. Moreover, the management structure can compensate to some extent for individual weaknesses. Sharp role definition helps assure that individuals will not have to deal with much of the confusion that would otherwise be prevalent in a large systems project, of the type having to do with who is responsible for what. The people ought to be free to carry out their assigned roles, so they will know ahead of time what they are responsible for, how their performance will be evaluated, and what to do next.

It is believed that checks and balances have to be built into such a program. This cannot be done if role confusion exists, because there is nothing to check or balance. Role confusion is a screen for masking incompetence.

The following are seen as essential subdivisions of a program management function:

- Administrative management, having complete authority over budget allocations
- Technical management, having complete responsibility for technical definition
- Reconnaissance, having responsibility for developing and maintaining awareness of what is happening elsewhere that has relevance to the program, and communicating this to the other functions.
- Program leader, who staffs the other functions and keeps them moving, and makes changes when necessary.
An initial layout for the management functions is given in Figure 3. No embellishment will be given in the text, since it is believed a complete discussion of Figure 3 would be too long for purposes of this first cut. However, it could be the basis for a group discussion.

Figure 4 shows some other ideas relevant to a metropolitanization program, including the nature of the audience and some of the kinds of things that would have to be done.

**FLEXIBILITY PLUS A RIGID FRAMEWORK**

I believe very strongly in rigid frameworks, where the rigidity is in terms of role responsibilities. Such frameworks lend themselves to flexibility, because additions or changes can be made without forcing a total re-education of all staff. Sharp role definition in management should be restricted to those essential functions that require very clear-cut responsibilities. All remaining possible functions are what give program leadership maneuverability. For example, while Figure 3 shows no "interdisciplinary team" working on task assignments defined by the Technical Management Group, such assignments could readily be added to the picture when they are called for.

Moreover, the structure allows great flexibility as far as budgeting is concerned, which is important when it is anticipated that new sponsors might be added over time. The structure can be retained, while time assignments and new staff can be added as needed with appropriate anticipation.
FIGURE 3. PROGRAM MANAGEMENT STRUCTURE

--- Staff and sustain Technical Management Group and Administrative Management Group. Change group composition as needed.
--- When appropriate, involve new potential sponsors.
--- Control meetings of Task Performers with advice of Technical Management Group.

MUST HAVE PHILOSOPHICAL OVERVIEW OF URBAN SITUATION AND GOOD JUDGMENT--ALSO NEED TO KNOW HOW TO GET SPECIALIZED CONSULTANT ADVICE AND WHEN TO GET IT. MUST TAKE (2) VERY SERIOUSLY; ALSO (4).

Notes
1. Can begin as part-time assignment, and grow as circumstances permit.
2. Needs one organization to serve the effort logistically--i.e., handle paperwork, serve as legal entity, etc.
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**Reconnaissance Project**

1. Establish worldwide knowledge of who's doing what that's relevant.
2. Try to feed into Technical Management Group to avoid duplication or to suggest Task Performers (much not integrable, probably)

**Technical Management Group**

1. Generate Work Statements
   - Task Definition
   - Schedule
   - Budget
   - Proposed Responsibility for Work
2. Anticipate Integration
3. Integrate Task Reports
4. Monitor Task Efforts
5A. Approve Task Reports
5B. Define Responsibilities for all Managers
6. Circulate Selectively for Iteration
7. Recommend Changes in its Makeup.

**Administrative Management Group**

1. Finance Program
2. Review and Approve Work Statements
3. Issue any Formal Contracts, Grants, or Consultant Agreements Needed, and Approve Payment
4. Disseminate Results
5. Recommend Changes in its Own Makeup.

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(1) **PRODUCT** - Reports. Urban Evolution, next 40-50 years.

(2) **USERS OF PRODUCT**
   - Government Officials
   - Educators, Researchers, and Students
   - Business Executives
   - Lay Public
   - Media.

   May need different strokes for different folks

(3) **CONTENTS OF PRODUCT**
   
   B. Forces of Change Exerted by Concepts.
      Recipients of Forces.
   C. Counterforces and Recipients.
   D. Consequences of the Above.

(4) **TYPICAL TASKS**
   
   - Identify Relevant Concepts in Various Fields
   - Collect and Structure Relevant Data
   - Assess Quality of Concepts and Data
   - Assess Timing of Relevance
   - Identify Forces of Changes
   - Classify Components of Forces
   - Identify Origins of Forces
   - Identify Recipients of Forces
   - Estimate Intensity of Force Components Versus Time
   - Identify Counterforces
   - Classify Components of Counterforces
   - Identify Origins of Counterforces
   - Identify Recipients of Counterforces
   - Estimate Intensity of Counterforce Components Versus Time
   - Identify Possible Conflicts
   - Estimate Conflict Emergence Time
   - Invent Means to Resolve Conflicts
   - Identify Other Constructive Actions
   - Identify Key Roles in Possible Positive Action and Spell Out Acts in Some Detail
   - Portray Data Base in Ways It Can Be Assimilated Rapidly by Users.

**FIGURE 4. TECHNICAL PROGRAM CHARACTERISTICS**
HOW TO PROCEED

First of all, a name for the program is selected by an ad hoc planning staff. Then, an initial budget estimate is made for a specified period. If this budget is big enough, it may permit naming one person to be program leader, another to be named as a member of the technical management group, one or two to be named as members of the administrative management group, and another to be named as a member of the reconnaissance group. All these assignments can be part-time. Some will require more time than others.

As soon as the budget is approved and initial staff chosen, the reconnaissance begins immediately, and documentation starts to be developed for reference use by the rest of the program management people. The technical management group starts to define tasks on paper, and to establish the format desired for product on each task with the requirements of eventual integration in mind. If possible, outlines of the final products of the whole program are developed. When the technical management group has identified and defined tasks, and uncovered people who could do them, it presents formal recommendations to the administrative management group who consider them very carefully, and may approve budget allocations to tasks. These tasks are then begun by the task performers, who may be located anywhere.

Technical management definition can continue either full-time or part-time while task performers are at work. When results start to flow in, these can begin to be integrated, and such iteration as is required among task performers can start. As an array of quality product
develops, the administrative management group begins to develop additional sponsorship. If some members of that group are precluded from fund seeking, it may be done by a subcommittee comprised of members whose institutional constraints permit such fund seeking. Sharp role definition is needed here as well, so no member of the management group suffers from violation of his own institutional constraints.

The technical management group probably should be housed in one location. The administrative management group probably cannot be, and will represent several institutions. Both groups would employ outside assistance as needed.

**DECISION REVIEW**

No major decision in a program of this type should ever be made without a proper review. Every member of the technical management group, and every member of the administrative management group should understand this principle. It is based on the experience that, in complex programs, communication is never satisfactory. If decisions are made without adequate review, it is almost a 100 to 1 bet that the decision will be poor, and will cause energies to be diverted from their proper focus, engendering chains of occurrences that upset program activity. Since most groups don't know how to conduct this kind of review, the principles should be developed and adhered to. Lasswell's "decision seminar" ideas help suggest the kind of setting in which such reviews can be conducted.
The foregoing is a thought piece, with just enough detail that I hope it will stimulate further development until it evolves into a plan for how to get a large metropolitan program started. I hope this plan will put at least as much emphasis on the management aspects as it does on the technical aspects. In fact, the technical aspects could be covered by just a few pages that spell out in considerable detail the objectives of the program without constraining the technical management group in terms of how it goes about selecting specific studies to meet those objectives. Sequencing in Phase 1 is less important than quality of product.