DIRECTIONS IN STUDENT HOUSING

by

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ABSTRACT

A history of various ideas and issues pertaining to university residence is reviewed with special regard to questions of antecedent traditions, what makes a residential college different from one which merely houses students, how housing and dining combine with formal education in the socialization process, the balance between free choice and point of view, and changing notions of the purpose of student housing. Attention is paid to different residential environments whose study may be helpful in thinking about MIT's own housing system, and suggestions are offered for the future direction of residential planning.

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We may have much to learn about dormitories.

--Richard Cockburn Maclaurin
President of MIT, 1915

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I. INTRODUCTION AND PREFATORY REMARKS

If the world's universities were ever to agree on the matter of student residence, it would be unfortunate. Too many compelling questions would become moot and disappear. The plurality of traditions and compromises among traditions is part of what makes college residential life dynamic. The disparity between the goals and objectives of student housing and the realities of residential life are everywhere evident and serve everywhere to prompt the universities to question the fundamental questions of education and the universities' role in its implementation. The variety of residential traditions observable today provide much of the richness in the student's choice of institutions and tell much about each university's commitment to the student.

Lest the reader surmise from the pages that follow that the only patterns of residence worth studying are those of Princeton, Harvard, and MIT, let the short summary below attest to some of the other ways of thinking about housing today. There are two diametrically opposed schools of thought about student housing that have evolved from nine centuries of European experience and the monastic traditions which preceded the new urban schools of the twelfth century. Succinctly, one represents the university's recognition of an obligation on its part to house the students together as part of the effort to create a community of scholars, and the other represents

the university's recognition of no such obligation whatsoever. The two extremes, best represented by Oxford and the German universities, evolved slowly and leave a broad middle ground for other solutions to the problem.

In some cities, Vienna and Paris for example, the metropolitan authorities themselves take on much of the responsibility for building and operating student homes. The Cite Universite in Paris is one of the largest such undertakings in the Western world. In the Scandinavian countries the national student unions, modern counterparts of the "Nations" of students in the medieval universities which were formed to coordinate student economic power in a system where students had no political power, are the prime movers behind the construction of student housing. With extensive state support, they have over the past fifteen years achieved some great successes and plan for even more active construction in the future. In Sweden housing for about 40 percent of the country's university students had been built under student sponsorship. In Finland the student union has become the single largest real estate developer in Helsinki.[1]

Oxford, so often acclaimed as an ideal among ideals by American university planners is not without its problems, some of them resulting from its tremendous growth in the twentieth century. In the past fifty years more colleges have been founded there than during any other period since the thirteenth century. The Report of the Commission of Inquiry

describes the Oxford system of legally and financially autonomous corporations known as the residential colleges as follows:

> "In the college system, the life of Oxford is broken into small units, each endowed with powers of initiative, decision, and management in educational and social matters. In particular, the college takes prime responsibility for undergraduate teaching, and this is discharged through the tutorial system. Oxford has thirty-one colleges of varying size, almost all within the range 200-500 taking fellows (the academic staff) and the students together. Twenty-three are for men (undergraduate and postgraduate), five are for women (undergraduate and postgraduate), two are for men and women (postgraduate only). The remaining college, All Souls, is for men, but its membership is restricted to its fellows: it has no junior members. When we refer specifically to the twenty-eight colleges which admit both undergraduates and postgraduates, we use the term 'traditional' colleges."

The Report began its introduction to the University's problems with a harsh, terse paragraph:

> "Oxford's collegiate system, as it was in the past, introduced an unfair distinction into academic life between those who shared in it fully and those who lacked college attachments. It has also been argued that the college's preoccupation with undergraduate tuition has so upset the balance of academic activity that research has suffered. Professor Darlington went so far as to state that the colleges were corrupt and self-perpetuating

> oligarchies iniminical to original thought. Less extreme critics worried that Oxford's teaching staff had too much security and that it was 'in-bred.'"[2]

In the absence of a generally accepted and appicable theory on the purpose of university housing, the tendency to attribute to such housing all manner of conjectural qualities has proved irresistable. Student residences are justified or decried according to a stunning variety of viewpoints about the role of the university and the nature of student life. Clearly student housing bears strongly on the type of community in which the students live, if not on the entire mode of education, but it is much less clear that a housing system can ever be held accountable for the problems of social interaction and formal instruction. Yet, by projecting various fantasies of how the university ought to be onto the programs for student housing, this is what many researchers and planners implicitly do.

There is a certain deliciously professional tendency to examine different cases of design and planning for student housing, analyze data from surveys and questionnaires, and produce a model. The great fault of models is not that they are context-free but that they appear to simplistic researchers to be universally applicable in their idealized form, regardless of indigenous local conditions. They are too often excuses for an abdication from the professional role of original thinking and critical analysis. One can

smell the abuse of a model at play wherever a study reads like an overlong prescription or a program for new construction on campus overflows with vacuities and truisms.

While good planning requires both an intimacy with the immediate circumstances and a general comprehension of the whole field of similar problems, research on student housing is often overly concerned with the former while campus planning and programming have generally bent toward the latter extreme. While integrity in all the sciences, including and perhaps most especially the social sciences, dictates that basic assumptions and pertinent background information be made explicit, most writers shy away from this thorny requirement. This monograph, if it accomplishes nothing else, will at least try to be balanced and honest in these regards.

Who writes university housing studies, anyway? Does this tell anything about the content and direction of the reports? Sometimes the authors are straightforward about their background. The Princeton report was unanimously approved by the committee which wrote it, a body which called attention to its own diversity in a special paragraph.[3] Of five student members, one woman was a freshman, there were one female and one male sophomore, and one female and one male junior. The two sophomores ate at Commons and the freshman at Wilson College, during the first year of the committee's existence. The freshman is now a

sophomore at Wilson College and the other two are now juniors, one a member of an open club and the other of an independent coop. Of the two former juniors/current seniors one belongs to a selective club and the other to Stevenson Hall. The five Princeton alumni of the thirteen faculty and administrators all belonged to selective clubs as undergraduates. The professors came from the fields of geology, civil engineering, Slavic languages and literatures, architecture and planning, Near Eastern studies, and religion. The even-handedness of the report is partly a reflection of their far-ranging interests and backgrounds.

Harvard's researchers were two gentlemen working for the Office of Instructional Research and Evaluation. Although they don't directly identify themselves by their professional roles, at one point they lapse into the first person plural in discussing the faculty's responsibilities in faculty-student relations:

> "What they [the students] want most -- the single, outstanding feature that would greatly improve House life -- is simply more faculty contact. This is not an impossible demand. Ingeniously and wholeheartedly we should be able to respond to them."

Perspectives reads throughout like an appeal from the students' advocates in the faculty to the administration, and the advocate/authors are skillful in their presentation of

(largely) uninterpreted data to state their case.

The Ryer Committee's membership was almost entirely composed of successful MIT alumni, most of them still closely associated with the Institute or on the faculty, plus the Housemaster of Burton, three graduate students, a senior member of the Dormitory Council, and several others serving ex officio.

The thirteen members to the CSE at the time of the first Interim Report were not identified by rank or role or school or living group affiliation, so it is not possible to attribute the report's guarded liberalism to anything more specific than the general mood of the times.

John Graves was a professor of philosphy during his tenure as chairman of the CSE from 1971-2. He is a Princeton alumnus and, as noted, he was also the Senior Tutor at Burton before the renovation. Of the fourteen other signers of the Second Interim Report, four were identified as professors and one as a dean from the Dean for Student Affairs office. Professor Graves's sympathy for the oppressed and isolated and his humanism are perfectly evident in the language of the report. His broader interest in educational reform at MIT can be recognized in his piece "The B.A. Degree: General Education at MIT" (see appendix C). The general boldness and openness of the report are concordant with the tenor of the most tumultous, soul-searching period in MIT's history. The Graves Report is but one legacy of an era that also gave us the March

4, 1970 moratorium on research, the I-Lab protests and Creative Renewal in a Time of Crisis: Report of the Commission on MIT Education. Of the others named, one, Steven Wallman, went on to become Undergraduate Association President. Wallman was eventually to write a thesis on a study of undergraduate organization.

Richard Sorenson and Lawrence Speck were Dean of Residence and Tutor at MacGregor respectively. More revealing is that earlier in their lives they were both fraternity men. This more than anything else explains the choice of paradigms that eventually found its way into brick and mortar in New House. Future MIT researchers would do well to explain their backgrounds for the sake of objectivity.

I myself spent my first two undergraduate years in a suite in Burton House, the first year basically fending for myself and the second as a member of a medium-sized (at various times between five and eight members), and diversified coop. For the last three years I have been living off-campus in Cambridge in what could be regarded as a small coop. My high regard for the options of cooperative and independent living are rooted in my own experience. I can well sympathize with anyone else who opts to live off-campus to be away from the "total Institutional environment" of the campus. This thesis represents a synthesis of my own observations on residence and the analytical tools of architecture and planning, my two majors here at MIT.

Student housing is so intriguing because it is called upon to do things no other housing system is asked to do, and under a very different set of constraints. Indeed, if anyone ever formulates a general theory or model of housing, the acid test of its universality would no doubt be its usefulness in aiding campus planning. Somehow the residential experience is supposed to complement the formal process of education by being a retreat from it, supportive of it to some extent, or wholly integrated with it. Somehow the residential experience is supposed to alter the student's expectation of the part of his standard of living relating to housing and his perception of his place in an institutional environment by encouraging to some extent either conformity or independence. And the residential experience somehow must shape the way in which students see themselves as a group by leaving them to their own devices and relying on peer pressure, by exposing them to the more mature influences of the resident faculty or tutors, or as has been occasionally proposed, by completely integrating the student into the university environment by housing a cross-section of undergraduates, graduates, faculty, staff, and administration together.

The student population itself is typically distinct from the clientele of most other housing systems. Undergraduates are generally held to be more homogeneous with regard to age range, socioeconomic status, educational achievement, social interests and creativity than most populations, although the

same researchers are also quick to note the greater individuation of many students. Students are also more transient than the general population. In addition to frequently moving from place to place, students are more apt than most others to adopt as a class major changes in social, political, and cultural outlook. Student housing, to be responsive to those who inhabit it, must be more supportive of a wider range of individual tastes while being symbolic of this homogeneous group, must serve these contradictory tasks simultaneously, and not only must be able to do so at any given period of history but must also be flexible enough to accommodate radical changes in the style of student life over time as well. Small wonder that environmental programmers often just throw up their hands in despair and leave the designer to interpret such generalities as "flexibility," "interaction," "diversity," "homogeneity," and "change."

The notion that patterns of student residence may be important in the education of the whole student is neither obvious nor indisputable. At the most fundamental level the argument that residence should be taken seriously rests on the assertion that "it is in...idle hours that an intelligent person becomes an educated person."[5] There is a faint air of subversion to such a statement. It would seem almost unthinkable to structure a university around the student's free time. Yet we must realize that for all the valuable knowledge gained from the modern academic workhouse, it is the

older tradition of the academic playground which produces the truly seminal contributions to our culture, our Einsteins, Byrons, and Shelleys. The Chairman of the psychology department of London University, Kathryn Tidrick's mentor and a rare modern supporter of the older way, believes that students should spend no more than 35 hours per week on schoolwork. Here at MIT a freshman can be expected to spend up to 60 hours per week in class,[6] in lab, or at study, and, with a unit system keyed to the number of hours of work expected to be needed for each subject, can be put on "Warning" by the Committee on Academic Performance for completing only 30 units -- an amount only slightly less than what would have been expected of him in London. More indicative of the low regard for private idle time at MIT is the lack of any upper limit on the number of working hours for which an upperclassman may register. A typical student completing a bachelor's degree program in the standard four years would have to spend 45 hours per week at formal schoolwork <u>on average,</u> while the not uncommon four year double major requires an average of 60 hours per week. "In moments of extreme discouragement," writes Tidrick, "I almost long for the anarchic freedom of the old unreformed English public schools, where boys were whipped through Latin but had time, if they were so inclined, as Byron was, to read 'huge amounts of History, Biographies,...all the British poets, French, dozens of English and French philosphers, 4,000 novels.'

Allowing for some Byronic exaggeration, it really doesn't sound like a bad education."[7] At MIT the discouragement of many students is matched in its extremity only by the abysmal quality of their social life, their manifest apathy, and their defensive, masochistic pride in the ability to sacrifice leisure time and all else in the effort to prove worthy of the Institute's requirements.

If there is any specter haunting our civilization today it is that of the New England schoolmaster telling students to quit their idle banter, limit their extracurricular life, and get back to work. But it is precisely in these moments of "idleness" that the fragile process of individuation has its best chance of success. What ordinarily occurs in the course of formal instruction, apart from the transfer of knowledge and values, is a sort of coercive institutionalization -- the rendering of active young minds into (at least temporarily) passive ones. It is only in idleness that the perception absorbed in the classroom is given the chance to yield insight. The role of housing, where students almost invariably spend most of their non-classroom time, can be reevaluated and redirected only in the context of a broader readjustment of the structure of normal education.

Cold institutions are, fortunately, only rarely run by cold people. MIT has done its share of honest soul-searching in its long efforts to make itself a better place for an undergraduate to live. The Institute has built living

quarters on campus according to a greater variety of ideal models than have most other universities, and has explored many more in its different reports on housing. But to better place the discussion of MIT housing in historical perspective, other universities' examples are needed. Two other universities, Princeton and Harvard, have recently committed a good amount of effort to the investigation of their housing systems. The most comprehensive recent study by Harvard, Perspectives on the Houses at Harvard and Radcliffe, is a general progress report on fifty years of experience in the House system. The Princeton study more specifically examines the role of eating patterns and group affiliations as keys to the problem of social cohesiveness versus segmentation. Neither Harvard nor Princeton very closely resembles MIT, beyond all being highly selective schools, and many of the recommendations may not be appropriate to the MIT environment, but the problems and methodologies are illustrative. First, Princeton.

II. PRINCETON

The Princeton study is an interesting example of how campus dining is tied to a number of more complex social issues. It asks the questions of how the university might best reverse the seemingly innate tendency of college students to fragment into isolated groups and what the university's exact justifications for acting in this area are. Princeton's problems resemble MIT's insofar as Princeton is also an elite school with a highly diversified set of living and dining arrangements and with clear patterns of social isolation among the living groups.

Identifying the Issues: Current Situation with Demographics

The Second Interim Report of the Committee on Undergraduate Life confronts a complex series of issues with a clearly chosen viewpoint and offers solutions which follow logically from its investigation. Presently Princeton enjoys probably the widest possible range of social, dining and residential options for its undergraduates, from Commons to the various eating clubs, to dormitories, to residence halls to the societies to on- and off-campus independence. Many of those and other facilities relating to the undergraduate environment date only to 1960, and others only to 1968, so this variety is relatively new. Students have a great deal of

choice among different options, but there is a traditionally selective character to some of these options which gives rise to great social distinctions among various components of the system. Moreover, there is a sharp split between underclassmen -- freshmen and sophomores -- and upperclassmen, with regard to social grouping.

Freshmen currently[8] eat on a dining contract which allows them some choice of facilities. Of the 1138 freshmen, about half, or 562 eat at Commons, while most (424) of the others eat at either of two residential colleges, the Princeton Inn and Woodrow Wilson College, or the New South Society. Another 37 belong to Stevenson Hall's kosher dining plan. Sophomores are also on a dining contract but tend to choose from a wider selection of options. There are 1031 sophomores on dining contracts with 522 on Commons, 236 between the Princeton Inn and Wilson College, 26 at New South and 41 in Stevenson's kosher facilities. But an additional 74 belong to Stevenson's non-kosher plan and 132 belong to the Madison Society. A small number of underclassmen are independent and an insignificant number eat at Clubs.[9]

There is an obvious and immediate difference between underclass and upperclass choices with respect to the dining contracts throughout the entire Dining Facility System. Only 13 upperclassmen eat at Commons, 138 at the colleges, 63 at the Madison Society and a mere 2 at New South. Although there are more juniors and seniors combined at Stevenson/non-kosher

than there are sophomores, there are noticeably fewer members from each of the upperclass years, 38 and 58 respectively, than the 74 sophomores there. Upperclassmen are even underrepresented in the kosher plan, where one would expect to see the most consistency over the four undergraduate years. There are 14 juniors and seniors at Stevenson/kosher. In sum, only 10 to 20 percent of upperclassmen use the dining facilities provided by the University.[10]

A substantial portion of the upperclassmen choose to cook for themselves, that is, to be "independent." Of these 722, most (601) choose to remain living on campus while only 121 opt to reside elsewhere in town. Together, the independents make up 25 to 30 percent of all upperclassmen. The remaining 55 to 60 percent of juniors and seniors belong to Princeton's non-university affiliated eating clubs. The many clubs can be loosely divided into two groups, those which are "selective" and those which are "open." A few of the selective clubs are also closed to women. Some 1235 upperclassmen belong to the clubs, with an almost even split between the open ones (622) and the selective ones (613).[11]

This distribution with respect to class year is only one source of fragmentation within the undergraduate body.[11] There are distinctions between the distribution of men and women, whites, blacks, and other minorities, and students receiving different amounts of financial aid, or no aid, in almost all facilities and options. As examples, underclass

women are more likely than underclass men to eat independently and are even more likely to move off campus; this general trend continues for the upperclass years, although upperclass women are much more likely than upperclass men to move off. While only 0.1 percent of underclass men join clubs, no women at all do so. Women are significantly underrepresented in the selective clubs at 20.6 percent of their memberships, while choosing open clubs more frequently than men. For women, who form 33.8 of Princeton undergraduates, to also form 37.5 percent of the membership of the open clubs, almost twice as many women must perforce choose the open clubs than choose the selective ones. At the University Dining Facilities, differences between men's and women's choices are less extreme, but women do tend slightly more toward the colleges than Commons.[12]

With regard to race, blacks are somewhat more likely to eat independently -- although they tend not to move off campus -- than are whites, and are grossly underrepresented in both open and selective clubs. While 7.6 percent of Princeton students are black, only 1 percent belong to open, and 1.4 percent to selective clubs. Blacks form a disproportionately large percentage of users at all University facilities except Commons. Wherever blacks are over- or underrepresented, so are other minority groups, only less so, with the exception that ethnic minorities other than blacks are marginally underrepresented at Stevenson Hall/non-kosher and the

societies. Princeton lists 8.4 percent of its students as members of "other minorities."[13]

As at many elite universities, most (65.1 percent) students receive no financial aid at all. Some 14 percent receive up to $4000 and 20.9 percent receive more than that amount. Those receiving the most aid are slightly more likely to choose to eat independently. Both categories of financial aid recipients (those receiving some aid and those receiving lots) are overrepresented at the University Facilities and underrepresented at the clubs. Those same groups also prefer the open to the selective clubs to about the same extent as the undergraduates as a whole, while those receiving no aid are both overrepresented in the clubs and choose, or are chosen by the selective clubs more frequently than any other demographic group on campus except the total male population.

Addressing the Issues

Clearly there are patterns of disproportionate representation throughout the dining system, but what standards of the school does this violate? What are the implications of things like club membership? And what other problems did the Committee on Undergraduate Residential Life deal with in its recommendations for reform?

The Committee had to consider quite a variety of facts, ideals, and viewpoints. The patterns of fragmentation were

analyzed and criticized, and it was also noted, for example, that more women would have liked to join the clubs than were actually able to do so. Financially strapped students often couldn't seriously consider many clubs because of their higher board rates. Generally, however, the clubs remained a highly regarded option because of their smaller scale and better facilities. One major problem of the clubs, and one shared with the University, is that because of the lack of constraints on upperclass choices, the tidal changes of student preferences over the years for one set of options or another puts great pressure on all parts of the system. In other words, the general popularity of the clubs of the University Facilities does change over time, and the changes can be erratic and drastic. This makes the planning of capital expenditures for the University difficult at best and has forced the closing of some clubs. The endemic instability of the system does no one any good. Further points of fact are the overcrowding in the dormitories and the unequal distribution of public recreational and social space.

The process by which the selective clubs choose their membership, known as the "bicker," has been a perennial source of tension and contention since President McCosh banned the fraternities at Princeton in 1876 as an evil influence, and probably some time before that too. Dean for Students William D'O. Lippincott noted in his own report that the bicker had at times been fairly compared to a slave market,[14] and that yet,

because of a lack of social alternatives, it was often seen as compulsory. The bicker arose only because the clubs were so immensely popular -- at one point 75 percent of all upperclassmen ate in them -- and the clubs in turn arose in answer to a very real need. Like other 19th century colleges, Princeton's food was reported to be abominable. At one point students attempted to burn down Nassau Hall, then the only residence, in protest -- a move paralleling the famous Bread and Butter Riots at Yale.

Dean Lippincott wrote of "the plight of the bicker 'failure,' and the dubious position of the bicker 'success' -- with the latter's resultant self-imposed conformity or loss of individuality; and finally, the paradox wherein the University has the objective of an open society and the clubs operate as closed, selective organizations."[15] This begins to address the general issue of a fragmented University. If the University is to contribute to the growth of a free citizenry and if the social experience of the university itself is to have any value, then there must be a free exchange of ideas among equals. Countless reports on the university in society and on individual universities have been written about just this theme; it would be difficult to surpass in eloquence or idealism any of these treatises here -- and it shouldn't be necessary. It <u>is</u> necessary though to realize the ideals of the university reports -- this is the planner's work.

The Princeton Committee was careful, before arriving at

its recommendations, to note that "the advantages of the 'optional' approach lie mainly in the number and variety of choices it provides to students, and in the extent to which it accommodates different styles of undergraduate life, allowing self-selected groups to go their own separate ways."[16] The Committee took the view, however, that rather than simply doing what appeared to by "right" -- and there are many things about the freedom of choice which "are "right" -- they would plan according to how they felt the University might best fulfill its commitment to produce the best-educated alumni possible by making the best use of the diversity among the students themselves. A basic problem with the existing system of self-selection is that wherever a group sets itself apart from the whole, what may seem to those within the special group as a simple boundary will inevitably be perceived by those on the outside as a barrier. After carefully weighing such dichotomies it was decided that there was something structurally wrong with a system which produced this fragmentation, and that structural reform, with all its attendant pain and dislocation, would in the long run be preferable to shallower reform of the individual components of the existing structure.

Recommendations

For the freshmen and sophomores a total of five

residential colleges were proposed.[17] The Princeton Inn would remain essentially as it is, Wilson College would be expanded some to accommodate 400-500 underclassmen, and Commons would become, with some renovation, the social and recreational center for another two colleges, to be assembled from existing dormitories. Another college would have to be built to house a fifth group of 400-500. There would be about 50-75 advisors living among the 2,250 or so underclassmen. The colleges were seen as a "coherent social environment" with an identity and a supportive system of Housemasters, their staffs, and Faculty Fellows which altogether offered a better academic and social meeting ground than Commons. Individual and group interaction is much more likely to follow from shared facilities like libraries and game rooms than from dorms which lack both. The Committee also called for an expanded program of intramural sports to encourage underclass interaction. With regard to the all-important question of scale, a college of 400-500 was seen as being small enough to support a range of close friendships and large enough to allow for an expression of the diversity of talents, backgrounds, and interests of all the students.

The two existing colleges, with all their advantages, have been unable to retain nay large number of upperclassmen. No emphasis was placed on encouraging upper and underclass interaction by sharing residential, social, and dining arrangements. Instead it was emphasized that with tighter

control over sophomore living arrangements, sophomores would become better acquainted with members of the preceding class year, their own year and the year after theirs by the end of a two year residency in one of the colleges.

A second set of reforms serving the upperclassmen was also outlined. The system envisioned would be one where nearly all juniors and seniors belong to one of the clubs and the independent option would be greatly limited, i.e. to about 300 students, primarily seniors. The clubs together with Stevenson Hall would serve about 1,900 of the 2,150 to 2,200 upperclassmen, and the 155 or so on-campus independents would be grouped in those dormitories with decent facilities for cooking. The more important features of the upperclass reforms involve a new relationship between the University and the clubs, which are independent legal entities.

Voluntary collaboration between Princeton and the eating clubs would enable more efficient planning and management of all dining services by guaranteeing a stable membership at the eating clubs as they become more of an integral part of the dining system. The University would also take over part of the responsibility for maintaining at least the exteriors of the clubs' physical plants. Since there would obviously be some conflict between the selective, exclusionary character of some clubs and the University's stated goal of encouraging mixing among diverse students, one of the conditions for such a collaboration would be that all clubs be equally accessible

to all students. Apart from this stricture, both parties would have to agree to the essential independence of the clubs in matters of style, internal managemnt, and personnel, although the University would require a "clear understanding" of procedures at the various autonomous units.

Comments on the Recommendations

Thus has the Committee sought to correct certain social and economic imbalances by changing the program of the undergraduate residential experience. With sound management, planning, and expansion, it should be much easier, but will the new plan really change social qualities of student life? Artificial barriers to social mixing such as race, sex, and economic class can be eliminated, and apparently will be -- but simply juxtaposing all the different demographic groups is not the same as creating automatic bonds of friendship among them.[18] An entirely new set of tensions and patterns for self-selection and the formation of cliques may well arise to replace the old ones. The Committee recognized this and further saw the limitations of forcing new acquaintanceships on students. The most they hope for is the chance for a new, broader sharing of ideas in the best sense of a liberal arts school and the possibility of new friendships, given the removal of impediments imported from the outside.

Yet some proposals support some objectives while

contradicting others. The idea of a two-tiered system for under- and upperclassmen retains and enforces a different kind of artificial barrier between students. Princeton, in an era of somewhat higher political awareness not too long ago, was among the first universities to adopt a 4-1-4 calendar with the month of January set aside for the students' own political activity. This reform, later adopted by MIT and renamed the Independent Activities Period, was originally called the Princeton Plan. We have all seen how quickly the political character of the plan has faded. For better or for worse, many people's social and political outlook is shaped in their four years of college. Assuming that the university wishes to see some continuity between the processes of maturation of one generation of students and the next, then an important channel to be kept open for communication would be that between the oldest and the youngest, the seniors and the freshmen. Of all the possible paths, this one would seem to be the most difficult with the seniors socializing primarily with each other and the juniors in the eating clubs. Freshmen may become entirely oblivious to the nature of the campus life a scant two years before their arrival.

Three other contradictions also stand out. The clubs seem to answer the need for great intimacy (even though a typical club might have 125 members, or three to four times the membership of a typical MIT fraternity) and allow groups of friends to join in a retreat from a mass, institutional

society, but even though in the future all students would have equal access to all clubs, some problems remain. There is no reason to suspect that the patterns of self-imposed conformity would be any less oppressive within each club or that the perceptions of each club from the outside would be any less dependent on status. Equal access to a choice of closed societies is not the same as the creation of an open one. Nor does it seem that the Committee has any great qualms about maintaining a system of closed (from each other) autonomous clubs for the upperclassmen, or about the possible negative effects of effectively requiring upperclassmen to join one.

The suggestion that applications for club membership be done by having the students submit a list of four clubs without ranking them by preference may be a way of reducing the selectivity, but the inevitability of previously formed groups of friends pooling or coordinating their applications will probably perpetuate at least some of the cliquishness of the clubs.

If residential colleges seem such an excellent matrix for underclass education, there is every good reason to make them available to all freshmen and sophomores, even to require them to live in them. But there is no special re son to assume that once a student enters the junior year his preferences automatically switch from an attraction to an environment of informal support from the Housemaster-Tutor system to one of unmitigated peer pressure. The program for reform at

Princeton was designed with a minimum of capital construction in mind, yet it still seems possible to expand the residential colleges enough to accommodate at least those few upperclassmen who would wish to remain part of one. Finally the Committee has taken an interesting stand on the question of the students' free choice. There is evidently a perceived need to impart something of the character of Princeton University to each of its alumni by directing to some degree their patterns of residence and group interaction, even at the expense of their not having learned to exercise much of their own choice in these matters, informed or otherwise. This need is most apparent in the low regard for independent living held by the Committee, in its image of independent living as a last resort of severely limited availability. Implicit in this last conundrum is the conflict between free choice and point of view. It is a fascinating dichotomy to which we shall return in the discussion on MIT housing.

The Princeton study has made a set of recommendations based on the recognition of formidable institutional, traditional, and financial constraints and social forces. The proposals set forth in the study seem entirely appropriate to those particular local criteria as elucidated in the report. The implications for MIT planning will have to be examined as carefully as were the original plans for Princeton. No one at Princeton is blind to the possibility that the new proposals may bring on new problems or that the simple maintenance of

the status quo would not be without its advantages. Late news has it that the University will indeed proceed with the enactment of the new reforms beginning this fall. It will be interesting to follow the results.

III. HARVARD

Harvard has a House system built upon certain assumptions and roles which have been borrowed in part by MIT; an assessment of their successes and failures might well serve as a guide for analyzing their counterparts at MIT. The Houses represent the University's essential agreement on purpose and operation; the question therefore becomes, "What slight differences in the factors in the system and among the Houses make life better or worse in a particular House?"

Harvard is another institution which has recently sponsored a serious critical internal study of its residential system. Unlike Princeton, whose residential system represents an amalgam of widely divergent traditions, the House system at Harvard is a single coherent statement of the intentions Harvard has for shaping the undergraduates' environment. The oldest Houses are now past their fiftieth year of service and the experiment has been accepted as an essentially immutable fact. The Harvard study is therefore much less concerned with sweeping structural changes or in the redefinition of the values and first assumptions behind undergraduate residence as it is with an explanation of past success -- with certain qualifications -- and ameliorative measures for the great future success of the Houses. Emphasis is placed on isolating the distinguishing characteristics of more successful Houses and applying the lessons to the whole system of Harvard and

Radcliffe housing.*

Quoting Leo Tolstoi's remark, "Happy families are all alike; every unhappy family is unhappy in its own way," the study concentrates in a refreshingly innocent way on the basic need for happiness in the home. In its determination to resolve the admittedly mild problems of House life, the study lends as much insight into the workings of a College basically at peace with its residential objectives as studies of other Universities lend to the understanding of their struggles to define their objectives in accordance with their own needs.

History of the Houses

Few schools have stated the purpose of undergraduate residence as positively cogently as has Harvard in seeking to develop the Houses for "the pervasive influence on students looking to their total competence as human beings."[19] From the beginning the Houses were proposed in an almost visionary light. Drawing on the earlier, ill-received ideas of President Eliot for a series of college-like residential

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*The term Harvard Houses applies generally to all the Houses at Harvard and Radcliffe. Wherever distinctions are intended to be drawn between the two schools, the term Quad Houses is used to refer to those in the Radcliffe Quad and River Houses to stand for the Houses closer to Harvard Yard.

Houses,[20] President Lowell in 1909 said, "The task before us is to frame a system which, without sacrificing individual variation too much, or neglecting the pursuit of different scholarly interests, shall produce an intellectual and scholarly cohesion, at least among large groups of students, and points of contact among them all." With time and reflection additional interest in contact between students and faculty and students and tutors were also included. Lowell's vision was not much better received by the College than was Eliot's, but his tenacity proved greater. When after World War I the new needs of a growing school prompted people to consider better ways of defining Harvard as a community, Lowell's ideas began to find greater sympathy. The 1926 Report of the Student Council Committee on Education stressed the importance of introducing the student to a wider spectrum of acquaintances and friends -- "men who are not duplicates of ourselves" -- and even went so far as to say that "the real center of the College would be the dining hall and the common room" Until that time Harvard, like most American colleges, adhered to the German anti-residential tradition, and the 1926 Report was a bold break with the past. Whether American disillusionment with German intellectual leadership after the war or the increasing enrollments was the greater influence behind the sudden change in attitudes remains debatable, but the effect of their confluence at that point in history is undeniable.

As good fortune would have it, one man, Edward Harkness, provided enough money in gifts for the idyllic dreams to be set into bricks and mortar, and construction on the first few Houses began in 1928.[21] When Lowell and Dunster opened in 1929, however, there was still enough anxiety on the part of the alumni about weakened College and varsity team loyalties that the administration was kept busy that year allaying those fears. A certain mythology has arisen about the decade of the 1930s in the Houses, that this was the Golden Age. Surely the Houses did acquire their unique reputations and airs of selectivity during this period -- images which are now generally agreed to have been outlived by the Houses -- but by most contemporary accounts undergraduate life seems to have continued as usual, despite the Houses and occasional amusing, heavy-handed experiments in demonstrating for the students the excellent high manners of their cultured faculty.

The Houses were built for the upperclassmen -- at Harvard the term includes sophomores as well as juniors and seniors -- while freshmen continued to be housed in more conventional dormitories in Harvard Yard. When the Houses were first built, there was no exact idea of how students should be placed in them beyond a vague plan for matching "or rather not mis-matching" students by personality, background, and interests. In the absence of clear policy in this matter, each House had every opportunity to invent or acquire for itself an individual persona, or more accurately, particular

vocal minorities within the Houses appeared to speak for their Houses in the influencing of freshman choices for the next year. Gradually, as the composition of entering classes changed -- the entering freshmen of the class of 1968 were the first group with more than half of its members coming from public high schools -- the intensity of the elitism in the House selection process diminished and other factors became more important to the freshmen.

Problems and Suggestions

To be sure, there are still huge differences in the popularity of the different Houses among the freshmen, perpetuated by myth and the shared perceptions of groups of friends even though these are often not enforced by much direct information. The criteria for House choice now seem to be the perceived popularity of the House, its location, and where one's friends want to live. The irony of the importance placed on perceived popularity is amply demonstrated by two phenomena. The first is the discrepancy among the Houses with regard to the number of first-choice freshman applicants. Of twelve residential Houses offered as choices to the freshmen of the class of 1976, the most popular House was listed by 80 percent of the applicants to be among their first five choices while the least popular House was chosen by only 9 percent.[22] The second through eleventh most popular Houses were listed

among the top five choices by 72, 65, 59, 56, 54, 36, 26 20, 12, and 11 percent of the freshmen in order. The disparities between most and least popular are dramatic, with an average deviation from the mean of about 22 percent. Figures like these imply an exaggerated set of expectations and fears among the students, especially since a vast body of data indicates that students in the Houses tend to be about equally happy.

The second fact contributing to the irony of House choice by popularity is the answers given by upperclassmen to questions about how they perceived their alternatives.[23] Students were asked (1) if any other Harvard (River) House would be worse or better than their present arrangements, (2) if any other Radcliffe House would be worse or better, and (3) if after their sophomore year they wanted to transfer. The answer forms were structured so that a "1" indicated the strongest possible negative feeling and a "7" the strongest positive feeling. The students' average answers to the three questions were 3.5, 2.4, and 2.9, indicating a general sense of having achieved the best possible world or at least an acclimatization to their environs.

To qualify these answers it should be noted that 70 percent of all freshmen were assigned to their first choice, 23 percent to another of their top five choices, and only 7 percent to a choice ranked lower than fifth. For a worse case in which it would not be possible to satisfy so many of the freshmen, the study half-whimsically suggested a system not

unlike that used by professional sports teams where the House with the fewest first choice applicants would get their first draft choice.

Satisfaction with the experience of the House itself and with the contribution of the House to the appreciation of the Harvard experience do not depend much on assignment to the student's first choice. Some who were assigned to fourth or fifth choice Houses were more enthusiastic about them than were some first-choice residents. Incoming House members soon discover that but for a small, active group that fits the House reputation, each House has more in common with the others than it has distinctions. Asked to rate their satisfaction with the location of their Houses -- the other important criterion for selection -- on a scale of 1 (very satisfied) to 7 (very frustrated), students gave a mean answer of 2.6, and on a similarly phrased question recorded a mean of 3.3 for their satisfaction with the contribution of their House life to the experience of Harvard as a whole. More than a few students evidently agree with such quoted sentiments as, "This was the House no one wanted to enter, and once in, no one wanted to leave," and "When I got here...the first thing I wanted to do was to try to get out of it. I couldn't get out of it and now I couldn't think of a nicer House to be in."[24] Feelings such as these are too well spoken to be simple rationalizations.

Lack of distinctions among the Houses can also be seen as

a problem. David Riesman and others would like to see Houses with stronger individual identities, possibly attracting students with their special strengths in particular cultural fields, instead of the older status-oriented selectivity. The difficulty in this proposal is the need for the Houses to bring in and retain star attractions. There are few enough as it is among the Masters and as the Committee commented, "there are just so many Yo-Yo Ma's in each generation."[25] There are also conflicts between this idea and the University policy of exploiting the students' diversity to each student's gain.

Learning that students are happy in their environment, though, tells little about how the environment maintains that happiness and even less about views of the Houses other than the students'. The Harvard Houses are not made unique or successful by the satisfaction of the students alone.

President Lowell had a definite model in mind when he conceived of the House system. In many respects the House system is an outgrowth of the Oxford-Cambridge residential colleges adapted to Harvard's needs, without the decentralization of the whole undergraduate College into the Houses.[26] In the Oxbridge schools all that is required for graduation are passing grades on final examinations; at Harvard grades are necessary, but another dimension of informal education, of which House membership is the central part, is called for. At Oxbridge the residential experience is so central to most students' education that no explicit mention need by made of

it; at Harvard the University's centralized formal instruction -- lectures and laboratories, research and recitations -- is still the main focus of undergraduate education, and a special effort is required to maintain an awareness of the Houses' role.

Housemasters, Tutors, and Students

Harvard Houses differ from dormitories primarily in the roles played by the Housemasters, staff, and tutors. Dorms everywhere can and have acquired reputations and mythologies as distinct from each other as the Houses'. True, the Houses are generally more lavishly appointed than typical dorms elsewhere, and have facilities for in-House drama and other cultural activities usually absent in college housing, but it is the structure of faculty-tutor support which makes the Houses unique -- the cultural infrastructure merely makes them better. There are some seminars offered in the Houses, and in recent years it has even been possible for students to receive regular academic credit for them, but these are not intended to fully imitate the entirely in-House teaching at Oxbridge. In-House instruction is an interesting subject and will be discussed later.

Rules, regulations, and job descriptions tell nothing about what Housemasters and tutors do or how well they do it, for there are no such codes. The study of House dynamics can

only proceed from the attitudes, expectations, and feelings of the human components. Interestingly enough, there is little agreement among students about the tutors and less still in mutual understanding between tutors and students. Perspectives describes many of the aspects of the tutor-student relationship, the student-tutor relationship, and the problem of faculty contact.

Students at Harvard are an independent lot as college students go and tend to expect relatively little help from the tutors, and to rate them as being of marginal importance, but because they see themselves as getting even less than they expect in contact and support. their appreciation for the tutors takes on a more negative tone than might arise from the simple perception of their irrelevancy to student needs.[27] Tutors are seen as only marginally important as friends, and progressively less important as participants in serious discussions, as people who know the ropes, as agents to encourage a sense of community, as academic counsellors, as participants in House activities, as pre-professional counsellors, as providers of examples of different options in life, as leaders of in-House academic programs, and as links to the academic departments.[28] On the average, tutors are slightly less likely to be part of dining table conversations than they could be given the ration of students to tutors in the Houses, although they were highly rated by the students for their willingness to share their academic and intellectual

interests when provided with an opportunity to do so. On average, slightly less than half the tutors were seen as being part of several House activities or of being exceptionally sensitive and open, but on the other hand slightly less than half were also considered to be usually invisible or to be capable of offering help only in their field of expertise. Of the various ways the tutors could be more useful, the most popular suggestion was that they should simply be easier to meet.

Actually, on the question of how to improve the tutors' role in the House, students were asked to pick two of a list of ten suggestions.[29] The second most preferred improvement was more House courses introduced by the tutors, followed by more parties, more professional help, the introduction of a House tutorial in the student's own field, more of a willingness to share interests, more tutor involvement in general House activities, more academic help, more personal help and a sense of equality between students and tutors. Only 9.6 percent favored this last recommendation. Another 13.7 percent saw no need for improvement. Of a separate list of twenty-one things that might improve the general quality of House life, such as reduced crowding, a higher ratio of women, more money, and better libraries, students favored more than anything else the opportunity for more faculty contact and an increase in the number of resident faculty, but considered more resident tutors to be of less value than any other change

except in food and security.

At this point the composition of the House staffs should be clarified. There is a hierarchy of sorts functioning in all the Houses extending down from the Master or Co-Masters of a House who are drawn from the ranks of te senior faculty. Below them are the Senior Tutors, faculty members with a long-term commitment to a House and below them in turn are the resident and non-resident tutors. At some time in the past most of the tutors came from the faculty. Today 77 percent are graduate student Teaching Fellows, 5 percent are assistant professors, 1 percent are associate professors, and 1 percent are full professors. The rest are presumably graduate students not on teaching fellowships. Seventy-seven percent had no previous connection to the House. Seventy-two percent had not been in their Houses more than two years and only 7 percent had been there longer than four. Five of thirteen Houses had no tutor with more than two years' experience. The rapid turnover of tutors exceeds even the predictable one-third annual turnover of the upperclassmen in the Houses.

Aggravating these problems is the absence of an orientation or training period for new tutors.

It is not at all surprising, then, that these tutors, with their minimal introduction to the life of the House, their high transience, and their lack of enough time to become bette acquainted with either the students or the ways of the House should be regarded as of such low importance by the students.

There are widely separated extremes of opinion not expressed in the school-wide averages. Some students find some tutors to be the best of friends and others find other tutors to be cynical, using their posts as sinecures. Tutors are not seen as the first resource by students in trouble and the original image of the Houses as places where students and tutors and faculty could get together for "dinner table education" is yet to become a reality.

What is surprising, given the students' views, is the attitude of the tutors toward the students and their own roles.[30] They tend to think of themselves as successful in providing formal instruction and acting as a bridge between the students and the Houses, the departments, and the University. To judge from the obstacles to their greater success that they themselves enumerate, they are evidently quite enthusiastic about the House system and their part in it. As they see it, the problems in tutoring include poor coordination between the departments and the Houses, poor coordination among themselves, both student and senior faculty apathy, the difficulty of responding to the students' sense of isolation, add a general lack of appreciation for their work. Other problems listed are mutually explanatory. Tutors feel that they have to spread themselves too thin and at the same time sense a lack of privacy. It follows that if they seriously apply themselves to the assistance of many students in a House they will have little time to themselves;

furthermore even if they spend a huge amount of time evenly distributed among all the students, any one student would still only benefit from having become acquainted with the tutor for an amount of time proportional to the tutor-student ratio while one of a well coordinated staff of tutors will have spent a vastly greater amount of time becoming acquainted with the House as a whole. Still other complaints, if both true, not only reinforce each other but contradict the feeling of commitment evident from the other comments. Specifically, tutors see some among their number as just not caring while listing separately as a complaint the homogeneity of the tutors. One cannot be sure of what was originally meant by this homogeneity, but if it includes attitudes, then the tutors would appear to be making a veiled confession.

Tutors also take cues from the senior faculty and the Masters. It is the Master's style more than anything else which sets the pact and style of the House; nevertheless it is through the tutors that the students most directly perceive the House staff as a whole, and student-tutor contacts are too few and too inconsequential for most people's fulfillment. A student might know seven tutors by name and three well enough to casually drop by and visit the dozen or so in each House.

In an informally defined role a tutor must be best at discovering where and how best to apply himself. Excerpted here from Perspectives is one conscientious tutor's description of how he faces a common daily problem:

"The most important routine decision a tutor makes is simply where to sit down at every meal. You get your tray and then scan the dining hall to spot the place where you can contribute most. You look for certain constellations of people which are incomplete and need your contribution. I look for people eating alone, or in twos, or in any group with a conspicuously empty chair. I avoid couples who are dating each other or tables that are very full and lively -- these groups are already rich and would find your entry an intrusion. Your aim, rather, is to make the table you sit down at rich and lively. It is important to resist the temptation to sit down just with people you find easy or who contribute to you. In particular sit only rarely with other tutors or with crack students with whom it is most interesting to talk. It is the less articulate ones who will be most pleased with your presence and who find it hardest to get attention. Tutoring may be the most informal teaching, but it is still teaching, a discipline in which you aim first to contribute and then to gain. The obligation to be on your best form, cheerful and interested, even at meals when other people can relax is certainly the greatest emotional demand tutoring makes. Your reward is less the immediate one of company, such as you would have with full peers, than the satisfaction of making those you eat with into peers. You evaluate their conception of themselves, of the possibilities of knowledge and life in general, and you take pleasure in the liveliness that results from that. There is a lot of charity in it. At this informal extreme, teaching is mostly caring."[31]

To encourage caring tutors to share more of their time

with the students, some Houses have made it a requirement that there be no more than two tutors at any table at meals.

Education in the Houses

Some of the problems of student-tutor and tutor-student relations follow from the recent history of education in the Houses. Originally tutorials were offered on an individual basis for students on the Dean's List, but as the percentage of students on that list increased dramatically after World War II -- to 34.7 of Harvard in 1953-4 and later to 75.8 of Harvard and 85 of Radcliffe -- the tutorials became group affairs.[34] Another trend following the war was the great increase in the time professors spent on their own work. The resources for enriching personal attention diminished while the demand increased.

Moreover, there has never been a consensus on what character instruction in the Houses ought to take. Arguments have been put forth for most or none of the teaching to be in the Houses, and more moderate proposals have included House sections and seminars. The students tend to feel strongly that the departments should retain most of the responsibility for education while the tutors, just as strongly, tend to support a greater role for the Houses.

House courses have by now become a regular feature of House life and Houses usually have several different small

seminars with enrollment open to members of other Houses. Students tend to regard them as highly as any other subject taken. On questions about the educational value of the course and the quality of the professors, guest speakers, the inherent interest of the subject, and the accessibility of the instructors, responses were consistently quite positive. The atmosphere of the Houses provides a welcome alternative to the physical discomfort of the lecture hall and offers more of a chance for active student participation and good discussion after class. These benefits by themselves may be seen as ample evidence of the worth of the Houses. But there are qualifications to the successes. Students enrolled in the House courses did not discover any closer association with others in the course, nor did they find themselves sharing meals with classmates with any greater frequency. House courses did not lead to appreciably more contact between students and tutors or senior faculty. They did not substantially increase the students' sense of community. As a whole, students favored preference to House members in course enrollment, and students from other Houses did not tend to develop closer ties with the House offering the course or to associate more with classmates residing in the House. There is a general feeling that the experience of in-House education is a good, productive one and that there ought to be more courses offered so that more students could enjoy the benefits of the small scale and greater vitality of presentation. The

problem is that the good points of the House courses are enjoyed by the students individually rather than collectively.

So committed is Harvard to the idea of the House as the center of undergraduate life that there is even one designed for non-residents, Dudley House. Dudley is complete with a staff of tutors and maintains a sense of community among its members comparable to the residential Houses.

IV. GRADING AND HOUSING

The Harvard study mentions only in passing that the House system appears to have no effect on a student's grades or other measures of academic success, and the Princeton report mentions this not at all. Although MIT keeps figures on grade point averages by living groups, none of these figures appear in Institute housing literature. Reports from Scandinavia to Berkeley similarly ignore this issue. One report on the University of Delaware,[33] however, concludes that after a comparison of participants in an experimental Living-Learning Residence hall with a control group in conventional housing arrangements, no significnat difference in grades appeared between the two groups, although of those students who dropped out, fewer form the Living-Learning program did so because of academic underachievement.

On other academic matters, Living-Learning residents tended to be better read, more likely to go on to graduate school, and knew more of the instructors by name. They were more concerned about good grades and felt more dissatisfied with their most recent grades, but also felt that "too many students on campus are too intellectual." As a community the Living-Learning students were more likely to share problems, help the faculty with errands and services, and were generally more relaxed about matters of propriety. They were also less likely than the control group to make a regular occasion of

gracious dining, evidence that dining need not necessarily be the key to a cohesive residential community.

V. MIT

To this background we may now add the history and objectives of MIT's residential system.

MIT is a school still searching for that unity of purpose in housing that Harvard has had for over half a century. Each new report or study of MIT housing raises different questions and addresses different issues. Each dormitory, too, represents the product of a different set of concerns and a way of thinking about problems. With no coherent statement of purpose that might accurately describe -- there have been several good essays at prescription -- house life at MIT, it is equally fair to ask, "How well has each house answered the intentions behind it?" as it is to ask, "How well does the entire system of on-campus housing, in all its diversity, answer the preeminent ideals of the system?"

History to 1956

Since MIT moved from Boston to Cambridge in 1916 it has gone through nearly every conceivable approach to student housing known in America short of the residential house/college, but including some stopgap measures not even contemplated elsewhere. In its first incarnation as Boston Tech, MIT entirely a commuter school with students living either at home or in nearby rented apartments. The first

fraternity was founded in 1882 and became the first of a large system of MIT-affiliated independent living groups. Over fifty such groups, mostly fraternities, have been founded since then and thirty-three survive today, including the MIT Student House and the Women's Independent Living Group.

As if conceived as a bad sign of things to come, MIT promised some students housing in Cambridge when the school was relocated to its new campus there in 1916. Unfortunately there wasn't any dormitory open for residence until Fall 1917. The Institute is not usually one to renege on a promise, and these students were provided, barracks-style, with space enough for a bed and trunk, housing on the first floor of Building 1, where they stayed for two semesters.[34]

Senior House, then called the Faculty Houses, was completed in time for the new campus' second academic year. The L-shaped building was designed as a set of six separate living units together housing over 220 students. The four middle units, Atkinson, Holman, Nichols, and Runkle were dormitories from the start and the two end units, Crafts and Ware, were originally designed for fraternity use.[35] Reportedly the fraternities then housed more students than each of the dorm units, although it is difficult to understand how this possible by looking at Senior House today. Each of the four middle units now houses over forty students while the end units each house only about twelve. Nevertheless other fraternities found the Cambridge arrangement appealing, so

much so that when East Campus -- then called the Alumni Houses -- was built, more fraternities than could possibly fit applied for space. The Institute judiciously decided that both East Campus and Senior House would thenceforth and in their entireties be dormitories.

The Boston Evening Transcript, in a premature appraisal of Senior House's success, had this to say on December 11, 1915:

> "There will be a group of houses, four stories in height, so oriented and arranged that every sleeping room will have the advantage of exposure to the sun. One of the interesting preliminary investigations in connection with the planning of the new Technology has been the accurate computation of sun positions and elevations during the school year and upon this [sic] have hung the arrangement of the various study and lecture rooms and the placing of the president's house and dormitories."

Under the sub-headline "Safety First -- From Fire":

> "One important feature of the construction will be the absolute safety from fire. The whole group will be of reenforced [sic] concrete with monolith stairways also in concrete...The so-called 'stairway' system has been chosen for the dormitories, each house being clustered about its stairway, which serves only the occupants of that house. It has advantages over the 'hotel' system, where the rooms are along corridors or hallways with a number of different stairways for general use. The type selected gives more the aspect of a home; a smaller number of students will be obliged to pass a given door with whatever of disturbance this may imply, and

the small units, as has been said, afford a much greater factor of safety against fire and its consequent panics."

The article goes on to describe how "in the general dormitories there will be no living room, for this will be supplied by the Walker Memorial, a short distance away, but the fraternity houses, having their own mess and social company, will be provided each with its little social hall." Most of the rest of the piece addresses the architecture of the building, and one reproduction of an architect's rendering bears the caption "Showing the Advantages of Building a University at One Stroke -- Dormitories and Laboratories in Architectural Harmony." There is, almost in spite of the tone of the article, a note of warning at the end: "'We may have much to learn about dormitories,' says President Maclaurin."[36] Indeed.

And so, in warm sunlight and fear of fire, the MIT residential system is born.

Senior House was only capable of housing about a fifth of the undergraduates at that time, so to begin to match the increasing demand for on-campus housing. Bemis Hall, the first of the East Campus group, was built in 1924 (and occupied in 1925). Four years later Walcott and Goodale were added to Bemis to complete the east parallel of the Alumni Houses and by 1931 the three units of the west parallel, Munroe, Hayden, and Wood, were finished to complete the group. With the

Depression, off-campus housing became much cheaper and for the first and only time in MIT history there was a glut of dormitory space; 90 rooms, or about one quarter of East Campus, were unoccupied at one point. In answer to this problem President Compton had first half, and then all of East Campus converted into MIT's first graduate residence. When in 1938 Riverbank Court, now Ashdown House, was renovated as a more satisfactory graduate dorm, East Campus reverted back to an undergraduate house with a special reservation for seniors. This may seem odd today because seniors are now the least likely of the undergraduate classes to want to live on campus, but MIT does have a tendency to run counter to some trends in housing.

East Campus is architecturally MIT's least distinctive house. Each parallel was designed as a double-loaded corridor with (originally) all single rooms on each side. The rooms are equipped with a sink and little else. The basically simple concept has a few modifications like the separate stairways serving each of the three house sections of a parallel, and a few genuine quirks, such as the wiring system which runs vertically, grouping the rooms in columns instead of horizontally on floors, built into it.

From 1943 to 1945 the dormitories were reserved for students in the armed forces. Immediately after the war the influx of new students was such that the demand for housing could only be met by converting Building 20 into a

barracks/dormitory -- the second great stopgap measure in MIT housing. The Ryer report describes this arrangement as having been "very satisfactory from the financial point of view, but study conditions were so poor that special study rooms had to be opened in the main educational buildings for evening and weekend use."[37] Building 20 remained in service as a dormitory until replaced in 1951 by the newly purchased Riverside Hotel, now Burton House, in a third historic stopgap. In the intervening years three more components were added to the housing system. Westgate was opened for married students with children in 1946, with priority going to veterans. Also in 1946 the first women's dormitory, with 17 students and a House Mother, was opened in Boston.

The most heralded achievement of the period was the completion of Baker House in 1949. As had been the case with East Campus ten years earlier, Baker was so popular that preference had to be allotted to seniors, juniors, sophomores, and freshmen in descending order. Baker has been employ described in architectural books and magazines;[38] the praises need not be recounted here, but some discussion of its features, in comparison with other houses will appear later. More important to the study at hand, the opening of Baker House marked the commitment by MIT to become a residential campus. Baker the first dorm built or bought after the war for a purpose other than merely providing shelter at affordable rents when this was not available in the

surrounding area.

No major reports or official pronouncements preceded Baker House, and no detailed program was carefully assembled and given to the architect. Alvar Aalto, then on the Architecture Department faculty at MIT was given a program which simply called for housing for about 300 students and a central dining hall.[39] The year of its opening, however, was also the year of the Lewis Committee's report on education at the Institute. without referring to student housing in any direct way, the Lewis Report (and other speeches and presidential addresses of the time) began to discuss MIT's future role as a university (albeit one "polarized around science, technology, and the arts") This new humanistic emphasis was a radical departure from earlier notions of a monolithic Institute of Technology or "The New Technology."* The Baker House Client Team Report of 1976 fondly recalls 1949 as the year MIT took the "first step toward a fully residential campus, similar to Harvard, Yale, Oxford, and Cambridge." The extent to which MIT has actually pursued these models is debateable, but the implicit

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*There is an amusing anecdote dating from the days when MIT called itself the New Technology. A professor in a discussion of the freshman core curriculum angrily protested the suggestion that the students be required to take a basic course in English composition, "and if this is required pretty soon they'll be teaching Latin!" In fact MIT now does offer Latin.

understanding, found in both the Client Team Report and the discussions around 1949, was definitely that there is an important link between student residence and education in the fullest sense of the word. MIT and its housing system, then, had to be mutually supportive if either was to flourish.

The Ryer Report of 1956

The Report of the Committee on Student Housing (the Ryer Report) of 1956 was the first official statement of the objectives of the housing system. Since no one reads appendices, we read here from the Report itself:

> "The purpose of education, whether in kindergarten or in university, is three-fold: to aid young people toward the attainment of intellectual competence, toward the development of personal and social responsibility, and toward the formation of patterns of behavior, thought, and spirit which will best foster their living happily and generously. Systems of education, whether a kindergarten class or a university graduate school of two thousand men, are expressions of society's recognition of its duty thus to aid its younger members in the earlier stages of what is in actuality a life-long endeavor.
>
> "In the university years, from matriculation as a freshman to admission to the doctorate, formal curriculum together with the enhancement of initiative through seminar, conference, research, and thesis is the basic means toward accomplishing the first element of the threefold purpose of education.

This curricular education of course contributes substantially, though less directly, to the other two elements. For the nourishing of these in the early years, primary reliance is on the family and the domestic environment, with a secondary resource in the formal and informal programs of the schools. In the university, because of a greater range of facilities and a more nearly mature student body, the informal programs comprising myriad extra-curricular activities makes a greater contribution than can in general be expected of the informal program in the primary, intermediate, and secondary years.

"At many educational institutions, of which MIT is one, a still more powerful non-curricular agency can be used to facilitate realization of the full purpose of education and particularly of its second and third elements. This agency is the residential system. [emphasis added]

"The residential system in a university can differ pronouncedly from that of a secondary school and should so differ if it's full potentialities as an educational instrument are to be realized. Indeed, it can be soundly argued that unless a university is prepared to bring about the difference and vigorously seek full realization of the potentialities, it had better relegate the housing of students to a concessionaire corporation which will operate utilitarian low-cost hotels for students on a strictly controlled commercial basis. A university is not and should not be an operator of apartment houses, boarding houses, trailer parks, motels, hotels, or restaurants as such. Nor should it undertake to operate dormitories on a rigidly proctored lights-out-when-the-bell-rings basis. This

may be all very well in a school for boys which is in many senses an extension of or an extrapolation from parental home regimes; the time for it is past when the university has been reached.

"Time is too short, men are too few, and money is too scarce to permit diversion of university energies into mere real-estate ventures or into a program of paternalism. A university is debarred from any of the courses that have been summarized. It is justified in undertaking the conduct of a residential system only insofar as it makes that system serve the purpose of education. [emphasis added]

"To make it do so, the university must maintain in its residential system opportunities for the assumption of responsibility and its commensurate authority for self-government by students, for the growth among students of the ability to live and let live (including self-respect and respect for the other man's inherent right to be left alone when he desires), for the development in students of the capacity to understand strange or opposing points of view, customs, and preferences, and for the fostering in students of the kind of simple decorum expected in the manners, dress, and speech of educated men."[40]

Speculation on how sincerely the authors of the report expected any housing system to improve the manners, dress, and speech of an MIT alumnus is certainly possible, but one cannot miss the point of residence as a liberalizing, humanistic experience. The vision outlined above is certainly a far cry from the stopgap solutions or the coordination of dormitories and laboratories in architectural harmony which preceded it. The great virtue of the Ryer Report is that it became the

fundamental statement of purpose of residence for a school which had hitherto lacked one, which had until then responded to needs primarily with ad hoc solutions.

The report made numerous specific recommendations based on the conclusions it drew about then-current problems. It saw the split between East and West campus housing clusters as a general evil with special and unnecessary impositions on the undergraduates. It proposed upgrading and expanding East Campus and creating a Graduate Center in East Campus and Senior House[41] after rejecting the idea of reserving those houses for a separate freshman center. Noting the absence of on-campus housing for women, the Committee proposed that a section of the apartment house at 100 Memorial Drive be reserved for women.[42] Nothing ever came of either proposal. East Campus was ultimately only partially remodeled to provide more lounge space, and not expanded at all. It remains a second-rate physical plant compared to most other dormitories. McCormick provided, in two stages of construction, most of the space required for women's housing on campus.

The Report's projections for easing overcrowding in Burton House were later revised for the 1970 renovations, although the recommendation that the Burton and Conner sides of Burton House be separated and a single dining hall built to serve both parts of the building was ultimately incorporated into the design. The idea of separating Burton and Conner was tied in with the idea of appropriate scale. The Committee thought

that the optimum population for a dorm floor should be about 40, and that any new dorm should not have more than about 200 students in it. Right from the beginning this ideal compromised. Burton, it was thought, should only be remodeled from its then-current capacity of 590 down to 460. Furthermore the report envisaged a new west campus dorm, on the site where MacGregor was ultimately built, for 400 men. Ashdown was proposed to become a pair of undergraduate dorms of about 200 men each within the single building once the graduate students were moved to the new Graduate Center on the east side of campus.

No one either before or since the Ryer Committee ever thought that MIT could or should provide dormitory space for all undergraduates; and the Committee's report was not the only effort in MIT's history to make a virtue of that fait accompli of the fraternities. At most the report called for on-campus housing for as many non-fraternity men as possible and urged cooperation with individual fraternities which expressed a wish to relocate to the Cambridge campus.

In support of residential campus life the report touched on an additional three topics. First, the call for a new west campus student center renewed.[43] Second, that dining should be made a central part of house life. The goal was for each house to have its own dining hall and for students to be required to take meals in their own houses.[44] At the time, only Baker had its own dining hall, so the report recommended

that mandatory Commons be eliminated for all non-Baker residents until the Ashdown and Burton-Conner dining halls were completed. Of course, in the years since 1956 many students have become attached to modes of dormitory living not dependent upon or centered around in-house Commons dining, and the advisability of a return to such mandatory Commons in any form is best reconsidered in light of the value of these lifestyles.

Third on the list was the matter of Faculty Residents. The Housemaster-tutor plan that now exists at MIT evolved gradually. Starting in the early 1950s, Faculty Residents -- the term then used for the Housemasters -- were chosen for each of the houses. Baker was the last house built without a provision in its original design for a Faculty Resident. By the time of the Ryer Report, Senior House, East Campus, Baker, and Burton, following the lead of Ashdown, all had one. All the report really had to say was that it was a good idea to have one and that future dormitories should include in their designs enough space for the Faculty Resident with additional guest space. The problems arising from the lack of earlier consideration of a Faculty Resident system, to say nothing of the expansion of that system to include tutors (Graduate Residents) and Senior Tutors are evident from the figures on the amount of space available for each of them in the various dorms. Baker and East Campus provide the least space for tutors and Baker and Senior House had the lowest ratio of

tutors to students even before the latest period of overcrowding began in 1976.[45]

It remained until the Committee on the Student Environment's An Interim Report on Housing for Undergraduate Men at MIT of 1963 for a more expansive discussion on the Housemaster-Tutor plan.

The Committee on Student Environment Report of 1963

The CSE examined a situation not very different from that seen by the Ryer Committee seven years earlier. Its visions and objectives were not noticeably different from those expressed in the earlier report, even where it didn't actually quote or paraphrase the Ryer report's ideals. Rather than coloring in a new square in the Institute's checkered history of undergraduate housing, the CSE took up the banner first raised by the Ryer Committee, added facts, figures, and specific suggestions to aid future planning.

The two major changes in on-campus housing during the period between 1956 and 1963 were the conversion of Bexley into and undergraduate men's dorm for about 140 residents and the growth of the Housemaster-Tutor plan. By the time of the CSE's first Interim Report, Institute planners had come to know a stopgap measure when they saw one, and Bexley was grafted onto the housing system with no illusions attached. It was calculated that the 90 spaces to be made available in

the fall of 1963 and the 50 more to be added the following fall would answer the short-term housing demand. At the time it was neither Institute policy nor within the capabilities of the Institute to provide on-campus housing for either the 11 Boston-area commuter freshmen or the 31 transfer students of the fall of 1962. There were also 23 more freshmen in temporary housing and another 84 students on the dormitory waiting list, for a total of 149 undergraduates in need of on-campus housing.

With an eye toward major future construction plans, the CSE accepted Bexley as a short-term solution to what were seen as short-term problems. The idea of Bexley Hall remaining as a student residence for sixteen years, or more, must not have entered any serious discussion. The CSE did not "believe it would be advisable to attempt to remodel this old, poorly located apartment-style dwelling to meet our longer term requirements"[47] of housing students according to the objectives of the Ryer Report. There are contradictions, however, in this view of Bexley when it is compared to other facts and lines of reasoning in the report. Bexley may be old in comparison with some other housing, but Senior House is older and Ashdown older still. Bexley's age at the time of its annexation is a lesser point, since one might presume similar rates of degradation for the three buildings just mentioned, in the absence of any major renovation applied to them. In fact, all three eventually were renovated -- Ashdown in 1972,

Senior House in 1973, and Bexley in 1976.

Reversing the policy proposals of the Ryer Report, the CSE supported the idea of maintaining groups of undergraduates on both the east and west sides of campus was defended, the CSE made reference to the improved quality of the Kendall Square area following the opening of Technology Square.[48] This is patently wishful thinking. Kendall Square was then and remains today a desert and a blighted eyesore. Whatever else may make the eastern end of campus a tolerable place to live, Technology Square can scarcely be counted among the better reasons. Bexley's location, in and of itself, does more to recommend itself as the site of a small undergraduate dormitory than most other available spaces at MIT. As to the apartment style of the building, the human scale of the windows in its well-articulated facade and its suite arrangements have not gone unnoticed by other reports,[49] which have noted the symbolic ties between the physical form to the reputed individualism of the residents and the cohesiveness of small groups of residents within. If the overriding consideration of Bexley's future come from other planning decisions involving the west campus as a whole, then Bexley's virtues as well as the obstacles it offers with regard to campus planning should both be considered in its eventual replacement. If the present site and overall structure of the Hall are deemed adequate to the task of housing students, then much greater attention should be paid to the physical plant.

Time and steady decay are not substitutes for decisions in planning.

By 1963 the tutoring system had expanded to include Senior Tutors (faculty members) in Burton, Baker, and Senior Houses and graduate Resident Tutors throughout the dormitory system and in eight fraternity houses as well. To judge by the recorded history, the system just evolved that way because of the obviously heavy demands placed upon one Housemaster by 300 or so students in a dorm.

The tradition of autonomy and self-government in the dormitories borne of years of unsupervised residence posed certain facts for contemplation and not all bad ones. The resultant definition of the Housemaster's role after the CSE's recommendations was that of a mature example in a "non-directive, cooperative effort"[50] of working with students. There was a strenuous effort to avoid specific job descriptions for any of the actors in the system. Rather, those in resident advisory roles were called upon to exhibit such laudable aspects of character as maturity, friendship, experience, and understanding and to allow the benefits of this example to become available through only informal contact and association, by just "being there" for the students' sake.[51] Faculty entrusted with the responsibility to informal guidance were themselves advised to dissociate themselves from the affairs of house discipline and formal education. The former task was to remain the province of the House student

Judicial Committees or the Dean's Office, depending on jurisdiction and severity, and the latter was to remain strictly the job of the departments. The CSE strongly advised against instruction in the Houses, and only softly suggested the possibility of holding seminars in them.

The idea, as described, of informal student-faculty contact in the Institute houses seemed good enough except for the twin problems of the ratio of mature older minds to students, by which the latter were supposed to be stimulated, and the necessity of providing enough of an incentive for those maturer minds to want to live among undergraduates. At the time of the report East Campus and Bexley had no space for Senior Tutors. They still don't. The graduate students serving as tutors were expected to live almost exactly as undergraduates, in regular single rooms and sharing bathrooms and galleys with the approximately 30 students under their tutelage. The spaces reserved for Senior Tutors and Tutors were suitable for single men (at most) despite the CSE's desire to see more married couples living among the undergraduates.[52] With so little in the way of creature comforts to attract tutors to the houses, the turnover rate was understandably high, even among the Housemasters. After reviewing the facilities for the support of the Housemaster-Tutor plan the CSE hoped that married Senior Tutors would be willing to stay for two to five years, and Housemasters would only have to be chosen "on time scales approximating decades

rather than years"[53] given some improvements in the living arrangements. Tutors were expected to continue to serve for only one or two years and under the same type of conditions as they had known before 1963. (See appendix A for comparison of living quarters with other schools.)

The standards for Masters' quarters proposed by the CSE included the general attributes of an upper-middle class home with a large living room, dining room, and kitchen, a garden, a library, about four bedrooms, and provisions for children and large social gatherings. All this to fit into 21,500 to 4,000 square feet. Senior Tutors' quarters were proposed to be a more moderate-sized version of the same family-style environment with perhaps two bedrooms. Graduate student Tutors were to be given nothing special beyond a double room to themselves. One good recommendation, based on the examples of Harvard and Yale, has never been put into practice. The idea was to support a program of "visiting" faculty with no specific connection to living groups. There were to be four two-bedroom apartments -- two on the east and two on the west side of campus -- for faculty members wishing to spend a year or two among the students.

Long-range planning was a matter of concern to the CSE as much as its recommendations for the immediate improvement of the housing system. The report called for a massive remodeling of all of MIT's permanent (thus excluding Bexley) men's houses with the resultant loss of 185 beds. (The Com-

mittee was working under the assumption that Burton would be remodeled to house 460 students instead of the then current population of 545, and as opposed to actual new capacity of 360.) These 185 plus the 140 temporarily housed in Bexley plus a projected annual growth rate for the undergraduate body of 5 to 10 percent by 1975 -- the actual growth rate was much lower -- led the CSE to call for the construction of new housing on the west campus for 650 students over an extended period of time. The CSE also had its own idea about the scale future student residence should take. In a manner not articulated in the pages of the report, the committee arrived at the conclusion that the ideal size of a dormitory should be between 250 and 300 beds.

More important to the future of MIT housing than this guesswork were the other general planning guidelines. Apart from the points already mentioned about the Housemaster-Tutor plan, the CSE called for the ultimate end to the MIT policy of refusing housing for Boston-area residents and transfer students, called for the requirement that all nonfraternity freshmen be required to live on campus, and called for every effort to be made to bring on-campus housing up to "such quality as to attract almost all upperclassmen to live on campus as a matter of individual preference." Many suggestions toward this end followed, including additions to East Campus and the modification of its long corridors, the redesign of dining facilities in Walker to serve more

specifically as Commons dining for East Campus and Senior House, a host of small improvements in the physical plants of all the dormitories, and creative schemes for financing it all.

Legacy of the CSE Report

The ideals of the CSE report ultimately found their way into the program for MacGregor House. By August 1965, the MIT Planning Office had compiled A Program for Undergraduate Men's Housing for the first of four 300-bed west campus dormitories. By the fall of 1970 MacGregor was ready for occupancy. Several features apart from its distinctive high-rise design make it unique among MIT's undergraduate houses. Perhaps because of the great emphasis on the Housemaster-Tutor plan in the CSE report, MacGregor was designed to support more tutors for a given number of students than any previously built men's dorm or the West Tower of McCormick, which was already designed and built by the time the CSE report was published. The ratio of tutors to students in the New West Campus Houses completed in 1975 was to be even greater. MacGregor has 5,475 square feet of space for the Housemaster, vastly more than any other house, and has considerably more space for its Senior Tutor as well. To date it is only the fourth house to have been built, or renovated, with any space at all for a Senior Tutor. MacGregor allots an average of 418 square feet per

tutor, more than most dormitories but less than Bexley, Burton, or New House.[54]

In the hierarchy of social groupings from house to entry to suite to room, MacGregor House's design emphasizes the individual room more strongly than any other house, and the entry more strongly than most.[55] All but a very few rooms were designed as singles, with more living area per student than any other men's dorm of that year -- only the Burton House renovations of 1970-1 would subsequently provide more area. MacGregor also had more commons area per student than any other contemporary men's dorm -- only New House came to provide more when it opened in 1975. The importance of the room as unit was perhaps best accentuated in the Program's directions for Communications Systems:

> "Each bedroom-study will be connected to by a call system to the main reception desk in the House....Each bedroom-study will have an outlet for connection to the building-wide television antenna. Consideration should be given to the long range possibility of connecting the bedroom-study to a central information storage-retrieval reproduction center (library). It may be possible for the student to 'dial' for lectures that he would like to hear again (tapes), microcards (books), and other audio-visual material. Hardware, as such has not been designed but the likely components are a receiver and cable connections. For this reason it might be advisable to combine known system requirements (electrical) into a single conduit with sufficient

room for additional lines. The conduit should be located close to the desk area."[56]

While one may forgive the program for its overindulgence in multisyllabic periphrastic constructions (words), the danger of completely isolating the student in his single room -- by implicitly encouraging several extra measures of detachment from human contact in favor of dependence on one or another electronic medium -- is too clear to be missed.

Along opposite lines, the MacGregor program included a series of ten lounges -- one for each entry -- to somehow reinforce the thirty students' sense of being "an association of scholars." These lounges are excellent spaces for full scale entry-wide parties and gatherings, but four persons playing cards or ping-pong seem utterly lost in the undifferentiated vastness of the room. There is also a House Common Room, complete with fireplace, piano, seating for about fifty people, and magazine racks.[57] The intention was to provide an atmosphere for small informal gatherings, especially before and after meals. Perhaps what the program envisioned was an MIT version of the piano area at Adams House at Harvard. However intended, the students have reacted to the preciousness of the gesture with their own equally precious sobriqet for the room, the TFL -- for Tastefully Furnished Lounge. In another place or at another time the House Common Room/TFL might have been better received, but in a high-rise complex (with many of the usual problems of high-

rise living) of single rooms with relatively isolated entries, the inescapable distinctions between high- and low-rise sections and only the dining hall as a social magnet, the lounge is a mere token and a misplaced one. As a component of the program, the lounge aspires to the gracious living of the salon, a archetype simple not associated with the archetype of the high-rise tower. The TFL may be one of MIT's leading examples of wrong turns in architectural syntax. MacGregor's disappointments are balanced in part by its better attributes. The views from most of the tower rooms are truly spectacular, and the house has a full complement of activity spaces. There is a division of opinion among residents and others about whether or not too much of the architect's attention went toward achieving esthetic distinction instead of addressing the objectives of community and interaction.

Other Important Developments, 1963-1973

MacGregor was not the only major accomplishment of the period from 1963-1970. McCormick Hall, already mentioned, was opened in two stages in 1963 and 1968. The first tower was designed along fairly conventional lines and the second one had the rooms collected into suites, about two to a floor. McCormick was made possible by the sort of large, free gift that made the Harvard and Yale houses possible and that other planners dream about. It is distinguished chiefly by its

luxury. With 275 square feet of living space and 53 square feet of commons space per student, McCormick leads every other dormitory in these categories.[58]

During this period East Campus and Burton-Conner were both renovated by MIT's own Marvin Goody. The latter dorm was renovated far more extensively than the former. In 1968 East Campus was remodeled from its earlier 417 bed capacity with no lounge space to its current capacity of about 380, with the difference going toward new lounge space along the hallways.

The Burton renovation represented a contribution less heralded than MacGregor but an equally important one nevertheless. When Burton was reopened in the fall of 1971 after a full year of construction, MIT had an entirely new form of on-campus residential life. The new Burton House was divided, unevenly, between the Burton side and the Conner side with the Housemaster's suite on the first floor of the Conner side and the Senior Tutor's on the first floor of the Burton side. Floors in Burton House are numbered in the European style, with a street level floor and the first floor above it. At 3,052 square feet for the Housemaster and 1,442 for the Senior Tutor, Burton ranks second today only to MacGregor. There are spaces for graduate tutors on each of the second through fifth floors on both sides of the building; with 504 square feet allotted to each tutor, Burton is on a par with Bexley and second only to New House. The real difference, however, only begins to become apparent in the large allotment

of living and common space (exclusive of the dining hall) per student. When these two categories of space are aggregated, Burton provides more space per student than any other dormitory except McCormick.[59]

But these figures tell only a small part of the story. The important difference is not that the residents of Burton have more space, but that the organization of the space was planned so as to support small group interplay at a level better than any other similar experiment at MIT. Although one tower of McCormick is grouped into suites, and groups of six to eight rooms in MacGregor are nominally designated as suites, Burton House is a distinctly suite-oriented living group. Burton suites can actually be locked to the outside while those in MacGregor cannot. Throughout most of the dorm, for at least the first six years after the renovation, the social units in the House were suites of form three to eleven students, as opposed to an entire floor, the collections of rooms around each of the four courtyards, a side of the House, or the entire House. Key to the success of most suites are the full kitchens with adjacent dining areas, which facilitate a cooperative lifestyle for many residents. Although there are also coops in other west campus dorms, no other residence has decentralized cooking and dining facilities of quite the quality of Burton's and no other house can claim to have fostered its uniquely cooperative spirit. While the coops are (or, more properly, were -- the number and size of Burton

coops seems to have decreased in recent years) by no [illegible] confined to the members of a suite, or inclusive of all [illegible] members of a suite, they are invariably identified with a particular suite. Coops frequently extend to cover other daily matters besides cooking and dining,

Coops offer a measure of real-world freedom from the constraints of institutional schedules such as Commons and a taste of the real-world problems and benefits that come from the sharing of work and living space among small groups -- at least for the more independent residents. The time and effort that go into shopping, cooking, eating, cleaning, coordinating chores, splitting bills for the telephone, newspapers subscriptions, and the innumerable other aspects of living are in themselves an education in social form and personal maturation too often postponed until after graduation, or completely lost in our atomized society. The coops provide a solution to the needs of many students who wish to remain in the dorm but who find themselves alienated in the context of an undifferentiated mass of several hundred other students in a dorm, or the Commons dining facilities. The economies of scale in institutional dining at MIT dictate that dining halls be built to serve 300 or more students, or most of the Commons subscribers from two full-sized dorms. The coops offer tempting economic benefits for members, especially in comparison with Commons. Well-managed coops can and have provided members with a wider variety of better food for one-

third the per capita cost of Commons. While the best balance between economy and social cohesion can be found in groups of six to nine members, both smaller and larger groups have been known to thrive. Coop members debate the optimal coop size as actively and endlessly as Baker residents debate the qualities of individual rooms. Burton residents argue over rooms too, but this is another matter.

The casualties of the cooperative style in Burton are the introverted and the shy who can be found eating by themselves, often in their own rooms instead of the dining area in the suite lounge. They are caught in a double bind by being simultaneously outside the coops, which can appear from the outside to be very cliquish associations, and without a sizeable number of friends from the dorm with whom to go down to Commons together.

In recent years, as mentioned, coops have decreased in size, number and importance and other patterns of groups affiliation identity and tension have arisen. Issues relating to room choice have always been present to some degree. In the earlier days when coop membership was more of a sine qua non of Burton life the haggling over room assignments was more controllable, due to a system of priorities whereby an upperclassman could be assured of a better room in his own suite but found it more difficult to move to a better room in another suite. While this system lent stability to suite-based coops, it also bred some resentment on the part of

residents who moved into less desirable suites in their first year and found themselves more or lessstuck there for the next three. The abolition of suite priority on most floors (room assignments in Burton have always been a floor affair, and the number of moves between floors has always been insignificant compared to the number of room changes within a floor) not only preceded the decline of the coops but brought on a more anarchic room assignments process. The relationship between the abolition of suite priority and coop decline may not have been one of cause and effect, and the ensuing anarchy in room assignments is not all bad, but altogether they can be seen as symptoms of a less purposeful floor life. Floor identity has assumed an important role only for a few floors, and most residents in the dorm now find themselves with neither a strong suite/coop association nor strong floor ties. This situation is comparable to that of MacGregor House, where entries also only occasionally exhibit a group identity and where suites are rarely the home base of an active coop. Compare these two examples with Baker House's annual House-wide room assignments lottery where the entire House is the source of group identity, the floors are relatively unimportant, suites are unknown and most individuals not on Commons have not formed coops.

The lesson to be learned from Burton House is that the physical structure of a living group can be very supportive of a particular style of on-campus independent living with at

least as much potential for fostering individual growth and social maturation as that of communal dining. The qualifications to this assertion seem to be a predisposition to independent cooperative living, a supportive, if informal, governmental infrastructure on the floor, and the absence of other strong sources for group affiliation. The erstwhile intense sense of community shared by five to ten members of a coop has been replaced by a tepid and diluted sense of community among the thirty to fifty members of a floor.

MIT went its non-directed way for a number of years, including in its repertoire of actions a number of stopgaps for women's housing before the East Tower of McCormick was opened, a few renovations, the inconveniences of the Burton-in-exile period, four years of Random Hall functioning as an annex of the dormitory system from the fall of 1967 to the spring of 1971 (since the fall of 1977 it has once again been pressed into service), and producing a fair number of minor committee reports and theses.

The Graves Report of 1973

While the other studies of MIT discussed the system and its participants in general and ideal terms, the Graves Report asked how well the housing system works when seen in terms of the lives of the individuals and small groups in it. Broad concepts such as the Housemaster-Tutor plan and Dining were

explained with regard to their local effects and the individual distinctions among the actors.

Philosophically, the next great leap forward came with Undergraduate Housing in the 1970's -- Second Interim Report of the Committee on Student Environment in March, 1973. There report is also called after the chairman of the CSE at the time of its publication, John Graves, who, interestingly enough, was a Senior Tutor at Burton House. The Graves Report articulated a new sensitivity for the life of minorities and isolated groups in the residences and a new sense of pluralism as the guiding principle of a housing system whose diversity had already become a manifest fact. It also sought to establish more of a quality of voluntarism in answer to the equally manifest disaffection with certain mandatory features of the system. The use of administrative force in student affairs was anathema to the committee. Where the 1963 first Interim Report introduced its recommendations with an eye toward the goal of uniformity among the houses, the Graves Report sought to enhance diversity among them. The same complement of facilities and support services in the houses that the earlier report thought was meant to make the house sufficiently indistinguishable -- that a student could spend all his residential and recreational time in one house and not feel the need to move to another -- was endorsed in the later report for an opposite purpose. Consider the following as criteria for the success of the residential system:

> "In order to achieve this we must provide the broadest possible range of facilities and opportunities for social and living styles, as well as personal contact. Furthermore, these must be offered in an open, free, and non-compulsory way where each individual student then decides what response is most appropriate for him or her. Students should have ample information about these facilities and ample opportunity to use them, but should never be forced to do so. Under these circumstances a student may be content to ignore many of them, and thus it is not a failure of any part of the system if it is valuable only to a minority.[60] [emphasis added]

Included among these facilities was the Housemaster-Tutor system. The Graves Report added little to the structural guidelines beyond the reaffirmation that the senior and junior faculty and graduate residents (the terms preferred by the committee to Housemaster, Senior Tutor, and Tutor) should not be given itemized checklists of their duties or specific job descriptions. Instead it offered a hierarchical ordering of the functions of the system, in order to clarify the roles and avoid the misconception that "tutors" were meant to help solve homework problems or coach the academically weaker students. The four functional missions of the tutors (the term is here used to include Senior Tutors and Housemasters as well) were described as academic, social, education, and advisory.[61] The first is the narrowest sense of tutoring, and although it remains an important one, it was stressed that the tutors should not be too closely matched, in their own or the

students' eyes, with their particular scholastic strengths. The second entails the tutor's role in sparking and coordinating all those activities which lend a feeling of community to an entryor floor-sized unit, especially when there is no larger force for social integration like Commons or smaller closer communities like suite/coops. The third consists of the tutor's responsibility to share his intellectual and cultural interests and to provoke students into articulating theirs, as in a good bull session. Education here differs from the narrower matter of academics by the connotation of open-ended questions and discussions borrowed from a liberal arts atmosphere. The fourth is the personal attention and caring for the special needs of individual troubled students. The committee felt that the problems of blacks, Chinese, Indian, and other foreign students, women living as minorities in predominantly male groups, gays, and others would best be addressed by an advisor of similar minority status. Therefore the Graves Report recommended better coordination between the Housemaster-Tutor system and the Freshman Advisory Committee and various other special interest support groups and counselling counselling.

Wherever possible, individual free choice should take precedence over administrative fiat of peer group pressure; the Graves Report counselled against mandatory Commons and even the requirement that all freshmen live on campus or in the fraternities, arguing that freshmen should have the same

rights as upperclassmen, including the right to move off campus to escape MIT's "total Institutional environment," and that freshmen would find few good reasons to move off independently, anyway. The report proposed a hierarchy of priorities for housing students, with freshmen getting first attention, followed by continuing upperclassmen, transfer students, persons who temporarily withdraw from school and thereby temporarily forfeit housing privileges, persons who move out of the dormitories without dropping out as students and then wish to move back in, and, finally, fifth-year undergraduates.

The Graves Report shared the general concern about the appropriate scale for student housing. The committee thought that a house of roughly 300 was too big for some needs and too small for others. It ended up by recommending that future housing be of the order of 150 beds, broken down into groups of 30 to 50. The committee's data, however, show no clear Institute-wide consensus among students on the optimal size of living groups with which it is possible to identify (see appendix B for statistics).

The Graves Report spoke to the problem of identity, including class and school identity as well as that associated with the local living group, but not in a conventional way. It dutifully noted the lack of graduating class identity, school spirit, and community in most dorms, and it duly noted how, in the past, institutions like Field Day, the Junior

Prom, and active house government supplied much of these qualities. But, to its eternal credit, the committee did not seek to revive these activities, and went even further in seeking to shake up some other entrenched patterns of MIT living. Taking the opposite tack of the 1963 report, the Graves Committee put itself on record as sharing most students' disinterest in the petty, parochial, "sandbox" issues of house politics,[62] encouraging students to put their political energies to work on the large issues of the day -- rather than treating the dormitory as a laboratory microcosm of that larger world. The Graves Report found the two rationales for house government -- the house as microcosm and student government as something to keep student politicians busy -- to be weak ones. Most of house politics concerns room assignments, and the report found a way of killing two birds -- pointless government for its own sake and lack of school identity -- with one stone, an annual Institute-wide room assignments lottery.[63] This plan, never put into effect, would have had individuals or groups of friends reassigned to new residences arbitrarily. In support of this proposal, the committee also argued that the freshman makes his housing choice in a very short period of time and on very little information, and, once settled, becomes effectively isolated from other living groups by inertia and integrated into his own house largely by simple habituation. It was argued that education means growth and growth means change, and that a

change of domicile might open up the possibility of a social or attitudinal change. All this supports one of the report's main theses, that

> "...the main social goals which are both desirable and feasible are to give each student the maximum opportunity to find an individual life style that will be best suited to his own temperament, needs, and goals, and will enable him to reach his highest potential as a scholar and person, while at the same time doing this only in a community where others have similar needs and rights. Secondly, we must maximize the social interaction among these diverse students, in the hope that through such meaningful interaction students will come to tolerate, to appreciate, and finally to learn from the individual peculiarities of each other."[64]

The essence of the Graves Report, then, is that students must be given every chance to gain a cosmopolitan education and a fully developed right of free choice, without the impositions of petty regulations or social inertia. These are majestic values, but they are not always in harmony. The report also suggested some compromises in instances where higher goals conflict, as in the case where the housing lottery might disrupt the established and coherent life of a coop or other living unit dependent on a special physical environment (or where an individual has become especially attached to his physical environment after spending time in its decoration) such as allowing for "squatter's rights" in the housing system. The Graves Committee was stronger than

any other before or since in its support of campus diversity; it was the only major study at MIT to recognize that Bexley, like the other dorms, answered a particular group's own needs, and the only study to counsel against using any new housing construction as a pretext to convert Bexley to other uses.

No one writes long studies which tell how to design housing right unless someone else is also interested in designing and building some housing. If the child of the first Interim Report was MacGregor House -- at least MacGregor was seen in retrospect to be closest to the ideas of the 1963 report -- then the child of the second Interim Report, in a perverse sort of way, was New House. The Graves Report devoted relatively little space to the discussion of the new dorm. What it did outline was a house of about 150 beds composed of units of 30 to 50, or two such houses totalling 300 beds, with no central dining hall. No mention was made of suites or kitchens, although a nearby restaurant was hypothesized. Each of the smaller units was to have a Tutor and there would be a faculty resident of unspecified rank for each 100 students. The floorplan was to allow for a maximum of flexibility, so that students "could change their style of living without having to move to another dorm."[65] This last point sounds more like the voice of the first Interim Report, and the contradiction with other points in the Graves Report -- especially the Institute-wide lottery and the emphasis on change of residence to encourage personal growth -- is not

explained.

Sorenson, Speck and New House

The documents most directly responsible for the design of New House were the 1971 Lawrence Speck thesis, to which the Graves Report alluded at one point, the Sorenson-Speck Report which appeared in 1973 shortly after the Graves Report, and the MIT Planning Office's Program: Undergraduate Housing, West Campus of July 1973. (New House itself was opened for occupancy in the fall of 1975.) The first was essentially a design thesis supported by a minimum of historical analysis. The third takes most of its goals, objectives, and building program from the second. The second item, in turn, can be briefly summarized because of its general naivete and the simplicity of its salient points.

Sorenson and Speck had some quite ambitious dreams for the future of the west campus area. A fair part of their report just talks about the sort of things they would have liked to have seen in a commercial zone of the order of Harvard Saure, Kenmore Square, or Coolidge Corner in that particular sector of Cambridgeport on MIT-owned land.[66] Most of the rest of the report is an architectural program complete with estimated square footages for specific spaces, based on Speck's earlier thesis and a loose reading of the Graves Report.

The two authors seem to have only remembered the

selections from Graves which agreed with their own aims. In Graves, they found the magic numbers 30 to 50, and proceeded to develop the rest of the program for New House based on a module of about 50 beds. Their proposal developed the idea of a series of independent modules in the shell of a larger dorm. Each of these modules was to be entirely self-governing with regard to all internal affairs, including room assignments. There were to be clustered kitchens for reasons of efficiency and sharing the social experience of cooking and dining among a group of residents larger than a suite, but not necessarily including an entire module. Rooms were to be arranged so that each resident would find it equally easy to casually meet each of the other residents of a module but would not find it so easy to separate into suite-sized fragments. Taking a cue from a poll which recorded that 31 percent of the freshmen who got singles in MacGregor would have preferred a roommate, the report called for a mixture of doubles and singles.[67] Adapting a minor suggestion from the Graves Report that an experiment (which failed when it was tried one year in the Eastgate apartment tower) that housing a cross-section of the entire MIT community together be given a second chance, Sorenson and Speck proposed that one module be designed to house married and single undergraduate and graduate students; nothing ever came of it.

New House itself is difficult to assess because of the great differences in the quality of the residential experience

among the six modules. From the point of view that MIT needed and needs a place for groups of about 30 with an atmosphere distinct from a fraternity's, some parts do seem to work well. The living groups with a distinct unifying theme -- Chocolate City, Russian, French, and German Houses -- appear to find their dorm modules to be of a comfortable size and adequately programmed to meet their needs as a group. But there is another large contingent of New House -- nearly half -- who have no strong theme to their living groups, and they suffer a certain disaffection with life in the dorm. True, a few have found some group identity, adopting such humorous names for their living groups as Vardebedian House (after Woody Allen's short story "The Gossage-Vardebedian Papers") and the New Three Stooges (in New House 3 -- the modules are called alternately by their addresses and their number, as the names of the major contributors do not seem to be catching on). But these non-theme-affiliated residents share no real sense of community. Social interaction is largely confined to the House module. The ground level arcade connecting the six house units functions more like a no-man's land to be traversed quickly than an interior street where residents from different living groups can casually meet.

Kitchens are sometimes successful in drawing members of non-theme living groups together, especially in the kosher circles. The language houses, who, unlike the others had a voice in the planning process, have some kitchens above the

street level, enhancing their isolation from the rest of the dorm. Lounges in the living groups are conveniently located and New House's roof decks are a feature which other living groups might do well to adopt.

In sum, the New West Campus Houses do some things well and others quite poorly. The one objective it was specifically designed for -- supporting a separate community of 30 to 50 students -- is achieved for those groups who already have a strong central theme. The different living groups do coexist without benefit of a house government or even a house desk staff. Mere coexistence, however, can be found in any apartment house, and runs counter to every statement of purpose since the Ryer Report. One assertion of the Graves Report may be tested against the experience of the non-theme-affiliated students -- that three autonomous groups of fifty students will find the larger 150-men living group sufficiently large to encompass a good cross-section of MIT's diverse student body. The assertion fails miserably for three reasons.

First, there is no magic number of students which can automatically serve as the optimal size for a house. Second, non-theme New House lacks, by intention, physical support for tighter, more cohesive living groups smaller than a whole module. Third, everything imaginable was included in the design to segment the modules from each other, including separate mailboxes and separate mailing addresses, ro inviting

commons area, and a minimum of house-wide facilities. While this description is also true of Bexley, a dorm of a similar overall capacity to non-theme New House divided into four entries with separate addresses, mailbox areas, etc., it is also true that Bexley retains a much stronger image and identity. This may be due to the orientation of the entire building around a central courtyard and the quasi-suite plan as much as to the general flamboyance of life there.

It is probable that a strongly identified living group of any small scale -- a suite of three or an entry of fifty -- can only maintain their collective identity in the fact of a larger, if weaker, competing source of identity -- a floor or a whole dorm -- in the absence of some unifying force, such as everybody speaking German, sharing racial solidarity, or a commitment of fraternal brotherhood, or a cooperative lifestyle. The larger structure of New House offers no such secondary source of identity. Even the individual fraternities' members benefit somewhat from the secondary identity derived from also being part of a fraternity system.

The future success of New House would be best assured by eventually filling the other modules with more special interest groups like Spanish House; these groups would find the structure supportive of their needs, and might find that larger House-wide secondary source of identity as the special interest or language dorm. Besides, the experience of Russian House's temporary arrangement on the second floor of Conner

was generally considered to have been unsatisfactory for Russian House's neighbors.

Next House

The democratization of planning that began with the language houses and New House was greatly expanded for the current planning process for Next House. Even though the final program for the architect has not yet been prepared and the plans for construction have been postponed,[68] a sketchy outline can be discerned from Next House -- A Report from the MIT Program Planning Group. This document is a distillation of the nearly incomprehensible Fact Pack which in turn is a compendium of the resources and deliberations of the program planning group plus various opinions and materials submitted to the group. The planning group consisted of representatives from the administration consultants, faculty residents, dorm presidents and other student politicians from all parts of the dorm system except McCormick (and Bexley, which has no elected officers), the InterFraternity Conference, two graduate students, and three undergraduate without any official cachets.

It would be impossible to discuss the quality of next House before it is built and occupied -- planners share with politicians the dubious responsibility of having the first describe how something will work and then why it didn't -- but

some ideas do emerge. Next House will be a synthesis of lessons learned from MIT's long experience in housing. It will house about 300 students in total. The basic living group will be one half of a floor of 60 to 80 residents, with rooms also clustered into suite-like arrangements for eight to twelve students. As in Senior House, the room clusters will be flexible; two adjacent singles, for example, might be converted into a double and living room. The rooms will be of a variety of shapes and ceiling heights for the sake of diversity, and for similar purposes doubles and singles will be arbitrarily clustered, so that clusters will not be duplicated in composition. Floor segments will be be centered about a core of common facilities -- lounge toilet, circulation, and the graduate resident tutor.[69]

Central features of the entire house will include a "link" area with connections to New House, the entryway social area, the Dining Hall, the desk area, the Housemaster's quarters, and Amherst Alley. Social areas in addition to the one by the entrance will also include one lounge on each floor large enough to accommodate half the floor and smaller lounges for the room clusters. A strong house government/management is anticipated by the provision of a desk/communications center, manager's office, government office, government office, and recreational storage. Perhaps the most significant part of Next House will be the Dining Hall. It is intended primarily as the social center for the house, secondarily for some New

House residents, and finally as a general west campus dining center. As of this writing the Committee on Dining has not published its final proposals, but there is a widespread feeling that MIT will place greater emphasis on Commons dining, even if it does not return to mandatory Commons for the dorms. The planning group recognized a need for more west campus dining facilities, even with the MacGregor and Baker facilities operating at full capacity, and the reopening of the Burton kitchen.

At the end of this chronological survey of events and ideas, there are questions still unanswered. Let us examine a few.

VI. CLOSING COMMENTS

One of the great open questions is the matter of tutor selection. Throughout the housing system there are those who, in spite of the warnings of the Graves Report, use their jobs as sinecures, care little about student welfare, and interact with them only when invited or required to do so. This group is an unfortunate result of a selection process geared to match tutors to living groups more by the qualities they already share than by the potential academic/social/educational/advisory contributions of the candidate for the job. There are too few genuinely stimulating tutors in the system. Students should be encouraged to look for qualities in their tutors that perhaps they might not have already found among their peers. The selection process is, not unjustifiably, viewed as a game from the point of view of the tutors as well as the students in the living groups. Excerpted below is the feature article of the Graduate Student Council magazine The Graduate issue on "Playing the Resident Tutor Game."

> "...The fat man facing me took a deep drag on the cigarette dangling precariously from his mouth and said, 'Are you sure you want to become a house tutor?'
>
> "Heavy beads of sweat broke out on my forehead. One particularly active drop rolled down my nose. I reached for a tissue. He continued to speak.
>
> "'The kids like you. They want you to be tutor...'

"I had made it! Months before, I had expressed my interest in the graduate resident system to Alice Seelinger in the Dean for Student Affairs Office. She had provided me with the facts and the forms. The students had invited me to a house meeting for the all-important 'interview.'

"'Do you speak physics?'

"'What do you think of Velikovsky?'

"'What if you woke up at 4 A.M. to find half the dorm dying of food poisoning?'

"They liked my answers. Years of chloroform and pyridine had not dulled my higher senses.

"'Plotkin?' Lost in my thoughts I had failed to notice the fat man's growing impatience.

"'What is your answer?'

"'Yes, I'll take it.' It was the first time I saw him smile.

"There's no mystery to becoming a graduate resident. Each year some seventy graduates live in dormitories and fraternities at MIT, sharing food and thought with undergraduates less experienced at the game.

"There's no exceptional requirement that you must fulfill in order to be a graduate resident; singles and marrieds are equally acceptable. In return for your enthusiasm and advice, you receive room and board and a chance to learn about yourself from a few hundred able teachers.

"Not an Einstein? You say you're majoring in Chem Eng and don't know Barth from Barthelme? No problem. Just like the rest of us you have limitations, and there are always people around to fill in your bare spaces. In fact the dean's office has created new pathways between grad students and

the tutorial services in specific departments. So, if you don't know something, remember: somebody does..."

Freedom of choice and point of view are antagonistic goals in a diverse, pluralistic residential system such as MIT's. The variety of options available to undergraduates here is remarkable. Each new addition to the style contributes to the variety because each follows a different set of precepts about the role of residence in education and how best to act the role. But each time a new statement on the residential system is published, it is as if to say here is the point of view of MIT. The cumulative effect over time of these many points of view is the lack of any point of view for the whole system. It is not that this lack is a bad thing, in and of itself, but the inescapable impression one discovers from the history of MIT housing is that MIT is forever chasing after that one residential style best suited to its educational aims, just beyond the horizon. Again, there is nothing wrong with perpetual searching. It is more than the price of education; it is the essence of it.

Trouble begins with the realization that MIT really doesn't know what it want in the way of housing. Since the Graves Report, and for a long time before it as well, no one has really sought to breed a "rah, rah" school spirit at the Institute, let alone sought to make the housing system an agent toward this end, and yet there remains an unspoken de-

sire to make the residential experience here as distinctly an MIT experience as the life of the Harvard Houses is distinctly a Harvard experience. MIT has consciously borrowed some of the aspects of the Houses that make them work, without wishing to import the whole system. Without a unifying paradigm for housing, MIT will either continue to develop new options -- a good thing to do if it wishes to abandon the pursuit of a particular point of view -- or it may develop and adhere to a particular point of view -- a good thing to do if it is willing to say unequivocably that it values something called an MIT education over the education of individual MIT students in their freely chosen and variegated residential environments.

One way or another MIT will have to fact the question "For whom will the next house be built?" This question develops by studying the more basic question, "How well can any housing serve any student?" -- and then recalling how well each previous experiment in housing has served each previous group of students, which is what this thesis has been doing for most of its length. Since MIT is not likely to find the One True Way in student housing before it builds the next house, I would like to recommend that it seek to provide housing for those least well served by existing housing. Many students who move out of the housing system do so for the simple reason that they do not wish to see only MIT faces and hear only about MIT problems at home or on the trip home. Their effect

on the private housing market has been studied at length,[71] and MIT recognizes as one of its reasons for providing its own housing the need to keep as many students as possible off the private housing market so as not to exacerbate the rent problem or antagonize the local community.

At the same time, neither the cities of Boston and Cambridge nor the federal or state governments nor any student union is likely to sponsor its own independently-controlled student housing. But the number and proximity of the many schools in the area suggests a different answer. The schools within five miles or so of the Charles River Basic could contribute, proportionally to their abilities, to a fund for student housing in the area independent of any one school. The fund in turn would build and administer housing open to students enrolled in any of the member colleges. Together they would be a cosmopolitan community like the Cite Universite on the outskirts of Paris, but with more of the style of the Latin Quarter, because of the location of the housing in the metropolitan center. MIT itself may never be a true university in the sense of giving equal emphasis to all fields of learning, but an MIT-enrolled student should be able to enjoy a more truly universal residential experience while studying at the school "polarized around science." The full benefits of residential education, so often lost by those who move off campus alone or in small groups, would be retained and amplified by the contribution of each student's different

school background in a sort of unaffiliated residential college. Students constrained by the existing range of options at all schools doubtless have much to share with each other, if only they had the chance.

Such a new concept is necessarily simple and utopian in its wording. Many problems nevertheless suggest themselves even before the details of the plan can be filled in. How far can one go in mixing the independent students of some very different schools before the mixture becomes dissonant? Does even the concept of a metropolitan student housing system to parallel the separate system of the colleges obviate the independence sought by the students who leave their colleges' housing in the first place? Can such an independent system really be a community unto itself, and, if so, will this sense of community entirely replace the student's sense of community with his classmates? Will this new system act in any way to erode a particular school's sense of unity and purpose, even for those of its students who remain on-campus? All one can do at present is to realize that possible detractions to such a system do exist while planning it to meet its attractive merits.

The waste of such invaluable resources when they could be shared is an expensive error for any one university. The proposed meeting of independent minds would be in the highest spirit and tradition of the University.

APPENDIX A

MIT's facilities were compared with Winthrop, Kirkland, Eliot, Leverett, and Quincy Houses at Harvard, two colleges at Yale, and dorms at Boston and Tufts Universities on the matter of space allocations for Masters, Senior Tutors, and Tutors. MIT's Burton, Baker, and Senior Houses each had less space, by far, for the Housemaster than the Harvard and Yale units. Yale colleges had 5,000 square feet of space for their Masters and the Harvard Houses between 8,000 and 10,000 while the MIT houses had between 1,350 and 2,150 square feet set aside. B.U. offered only 1,250 square feet per Master and the Tufts dormitory had no Master in residence at all. MIT houses also consistently had tighter quarters for Senior Tutors and Tutors in comparison with the other schools' housing units, except that the Burton Tutors' quarters had slightly more space than those at the Yale colleges. B.U. and Tufts both lacked a graduate tutor system and B.U. also lacked Senior Tutors. (Source: CSE Report, p. 25)

APPENDIX B

Percentage of students registering a clear identification with a particular subgrouping of their living groups:

living group	% identifying with floor or entry	% identifying with smaller unit	% identifying with entire house
Senior House	52.0 (entry)	26.4 (floor in an entry)	--
East Campus (1)	75.3 (floor)	19.2 (part of a floor)	--
Baker House (2)	--	77.8 (part of a floor)	8.4
Burton House	18.2 (floor)	53.8 (suite) 14.7 (part of a floor)	--
McCormick Hall			
(East Tower)	89.3 (floor)	--	--
(West Tower)	--	91.1 (suite)	--
MacGregor House	52.5 (entry) (3)	35.6 (suite) (4)	--

(1) little inter-floor mixing, less between parallels

(2) residents of the east end have more ties with other floors

(3) especially in the tower entries

(4) especially in the low-rise entries

Bexley residents' identification were apparently not solicited.

(Source: Undergraduate Housing in the 1970's, page 66)

APPENDIX C

from thursday, Vol. I, No. 2, April 24, 1969
"The B.A. Degree: General Education at MIT" by Prof. John C. Graves, Ad Hoc Committee for the B.A.

Since the defeat of the CEP proposals to modify the General Institute Requirements, it has become clearer that a single set of degree requirements can no longer fulfill the needs of a growingly diverse -- albeit science-oriented -- student body.

While there is a valid desire that the BS degree from MIT "mean something," and that that something be rigorous professional training, there are increasingly more students at MIT whose educational object is simply broad education and not professional training. For those students a different set of requirements is needed, and to try to fit these students within the same curriculum as the pre-professional students may serve only to dilute the professional training of MIT without ever fully satisfying those other students who are not pre-professional.

We call our proposed alternative path the Bachelor of Arts. It might allow MIT to retain the strong characteristics of its pre-professional degree while actually strengthening the non-professional programs by giving them needed

flexibility.

Let two points be immediately clear:

-- The conflict here is not between Science and Humanities, but between pre-professional and general education. One thrives on rigid academic discipline, but the other on openness and flexibility. On this basis, in fact, the science departments might themselves opt to continue their BS programs, as in course 21.

-- Second, this proposal does not intend to make MIT less polarized around science, but in fact <u>better</u> polarized around science. This proposal does not envisage creation of new departments and programs, but rather more efficient use of already existing facilities. Additionally, we stress the importance of retaining the current admissions criteria for all students. These criteria are the surest and largest step that MIT can take in insuring that even those who elect to study the humanities at MIT are basically conversant in science. It is wrong to think that unwanted requirements which teach unwanted and isolated skills are what will further that polarization. In too many cases, they only alienate the student.

What kind of student would seek a BA from MIT? As mentioned above, he may even be a science major who is intent in his major but only as an academic involvement unrelated to his possible career. He may want to go far enough to get some sense of the excitement and possibilities of his major field,

but see no need to fill every gap that might be important for an active professional. He may develop a coherent program embodying his special interest which cannot be fitted into any presently recognized departmental program. Or he may simply want a set of courses that will be personally meaningful and educationally valuable to him. He wants his undergraduate education to be at least partially an end in itself, even if this hurts his graduate school chances.

The Bachelor of Science degree, given this alternative path, could and should remain essentially unchanged. Departmental requirements combine with the Institute requirements to reflect both graduate school and professional demands, insofar as one can anticipate what the profession will require when our present students are actively engaged in it. Students would be well advised to follow them closely even if they were not required.

For the pre-professional student, the Institute requirements play a valuable dual role: They provide a solid background from which a student can move quickly and easily into a variety of departments and careers, while protecting him against any excessive specification which might reduce later flexibility.

The curriculum for the proposed BA degree would be tailored to the needs and interests of the individual student, not to the external demands of the field. It would work as follows:

No particular subjects would be required and there would be no attempt to specify programs in detail, though a student certainly might follow some that already exist. Instead he would work very closely with at least one advisor, who would follow the development of the student's program over a long period of time. A student's freshman advisor might stay with him throughout his full four years.

During the first term of his senior year, a student's overall program would be reviewed by a committee. This committee should include the student's advisor and two other faculty members. The student would be invited and perhaps even expected to defend the educational value of his program before this committee. If he were concentrating within a particular department, the committee would be appointed by that department. If his program were essentially interdepartmental, it would be appointed directly by the Committee on Academic Performance.

This committee could then take one of three actions: (1) it could accept the program as it stands as worthy of a BA degree, provided the student's grades are satisfactory; (2) it could set specific additional requirements, which presumably could be completed during the student's last term; or (3) it could reject the program, in which case the student would at least have to stay an additional year and have a new program passed before he could recieve the BA degree.

In order to avoid such rejections, general guidelines (as

opposed to specific requirements) would be laid down in advance, and be well publicized to students and their advisors. Three main factors should be included in any legitimate program:

Concentration -- a student should select some field of interest and explore it in depth, including several advanced subjects. The amount of concentration might depend on the depth of the field.

Diversity -- the student should expose himself to a wide variety of disciplines to broaden his knowledge and interests, including at least 36-48 hours of both scientific and humanistic subjects outside his field of concentration.

Independent work -- the student should be required to write a thesis, as the culmination of original research in his field of concentration. In order to do this, it is reasonable that he should have some prior laboratory work, if "laboratory" is taken in a broad sense. Since the program is tailored to the individual, this opportunity to demonstrate his mastery of the tools and techniques of the field on a problem relevant to him should be especially valuable.

Finally, the requirement of 360 units overall would be maintained, as well as any requirements on grades. Since the subjects taken would be the same as those for BS students, and the grading standards would be the same, procedures for probation and disqualifications before the review of the overall program would remain as they are now.

Suitable grounds for rejection would then be (1) Lack of depth -- the student has just spread himself all over the board, taking introductory subjects in a dilletante fashion, and never going deeply into any one. (2) Excessive specialization -- the student has taken almost all his subjects from a particular department or school, and has made no effort to broaden himself, (3) Passiveness -- the student has just taken subjects in which he learns the results achieved by others, instead of trying to come up with some of his own. With a good advisory program, all these could be anticipated and avoided well in advance.

There is no reason why the names of the two degrees should be closely related to the subject matter, nor is there any reason why MIT should use the two-degree mechanism to perpetuate the myth that the arts (or humanities) and sciences are radically different disciplines or cultures. The appropriate basis for distinction should be between professional training aimed at mastery of a field and liberal education directed toward the needs of individual students. This distinction can be made within any department. There is no reason why any of the existing BS programs should be given up if a new BA were created.

There is no reason to believe that the creation of such a degree will lead to a noticeable shift in student interests away from the natural sciences and engineering. Given the present admission policy, one can safely assume that entering

freshmen will continue to have a very high competence and a strong interest or bias in favor of the sciences. It is not required science subjects that engender this interest. On the contrary, many students here who leave science or even turn against it do so because they were required to take courses which they found uninteresting and irrelevant, and which prevented them from having a chance to learn other things which might have been worthwhile.

In any case, a student is likely to do more work, learn more, and get more of lasting value out of a course that he has freely chosen than out of one he has been forced to take. If anvthing, it may produce more students who can think creatively in the sciences rather than mechanically cranking out problem sets.

There is no reason to worry about the quality of the BA programs. Candidates for each degree will be enrolled in the same subjects, and thus subject to the same specific academic demands. The degree guidelines can be used to ensure that each program is demanding, and cannot be used as a haven from rigor. The point is that the demands be tailored to the needs of the individual so that they challenge him and bring out his creative abilities. In any case, the quality of the BS degree will not be affected in the slightest. In fact, it should be strengthened.

The BA degree may take some time before achieving proper identity in the academic and outside worlds. But any student

who may be worried about the professional value of the BA degree can always remain in the BS program.

It is worth noting that the Bachelor of Science degree itself originated in a revolt against overly rigid curricula. During the first half of the nineteenth century, American colleges developed a standardized and tightly defined program leading to the Bachelor of Arts degree. It reflected a belief that certain subjects, most notably Latin and Greek, had an intrinsic cultural value which made them necessary for any man who dared call himself fully educated. During the 1850's the first programs in science and technology were developed, and it was argued that the "general college requirements" in classical studies were time consuming and irrelevant for students following the new curricula. However, the academic establishment of that era refused to water down the precious BA degree by granting it to students who had not taken the required courses. The compromise reached was the creation of a new BS degree, free from the old requirements, at colleges like MIT and RPI, which concentrated on the new programs. For some time afterwards the BS was still regarded as an inferior degree, and at places like Yale and Harvard students were subject to social as well as academic discrimination. However, in time the degree acquired full status, and there is no real distinction between the two today. It would be ironic indeed if the defenders of the BS were now to be cast in the role of academic conservaties, or if MIT were to miss an

opportunity to take the lead again in innovative education.

The BA has the side advantage of serving as a proving group, where proposals for new BA programs can be tried out on an experimental basis before deciding whether to include them permanently.

The proposal above should not be confused with the suggestion that MIT should move toward abolishing the General Institute requirements in favor of greater departmental autonomy, where ultimately departments or at least schools might set their own standards for undergraduate admission and 4-year departmental requirements. This would be a disaster. It would not create a university of any sort, but a multiversity of competing schools, physically together but wholly independent of each other. It would break down whatever sense of community remains at MIT. It would force students to commit themselves academically long before they have had an opportunity to discover their real abilities and intersts and would make it harder to change later. There would also be a natural tendency for departmental curricula to become increasingly rigid. Our proposal keeps a common set of standards but a plurality of opportunities in each department.

FOOTNOTES

1 - Housing Students in Scandinavia, page 8
2 - Report of Commission of Inquiry, Introduction
3 - Committee on Undergraduate Residential Life Report, part V
4 - Perspectives on the Houses at Harvard and Radcliffe, page 79
5 - K. Tidrick, New York Times, April 1, 1979
6 - based on MIT Bulletin, degree requirements
7 - Tidrick
8 - Committee on Undergraduate Residential Life Report. Specific figures are for fall 1977. Rough percentages refer to typical recent years.
9 - ibidem, Table A-2
10 - ibidem, Table A-3
11 - ibidem, Table A-6
12 - ibidem, Table A-4
13 - ibidem, Table A-5
14 - ibidem, Appendix B
15 - ibidem, Appendix B
16 - ibidem, Part II
17 - ibidem, Part III
18 - Princeton Alumni Weekly (see Appendix A)
19 - Perspectives on the Houses at Harvard and Radcliffe, page 43
20 - ibidem, page 4
21 - ibidem, page 5
22 - ibidem, page 58-9
23 - ibidem, page 59
24 - ibidem, page 58
25 - ibidem, page 54
26 - ibidem, page 44

27 - ibidem, page 46
28 - ibidem, page 61-2
29 - ibidem, page 64
30 - ibidem, page 69
31 - ibidem, page 71
32 - ibidem, page 22
33 - An Evaluation of a Living-Learning Residence Program, Pemberton
34 - Ryer Report, page 16
35 - ibidem, page 17
36 - Boston Evening Transcript, December 11, 1915, page 4
37 - Ryer Report, page 18
38 - e.g. Architecture Plus, July 1973, and Experiencing Architecture by Steen Eiler, reprinted as appendices in the Baker House Client Team Rep't.
39 - Baker House Client Team Report
40 - Ryer Report, page 19
41 - ibidem, page 10
42 - ibidem, page 12
43 - ibidem, page 43
44 - ibidem, page 44
45 - Baker house Client Team Report
46 - CSE Report, page 9
47 - ibidem, page 8
48 - ibidem, page 44
49 - Sorenson-Speck Report, page 38
50 - CSE Report, page 22
51 - ibidem, page 20
52 - ibidem, page 23
53 - ibidem, page 24
54 - Fact Pack, page 60
55 - CSE Report, page 35, "Individual Rooms -- The Importance of Privacy"
56 - A Program for Undergraduate Men's Housing, page 83

57 - ibidem, page 69
58 - Fact Pack, page 60
59 - ibidem
60 - Undergraduate Housing in the 1970's, page 22
61 - ibidem, pages 43-48
62 - ibidem, page 65
63 - ibidem, page 85
64 - ibidem, page 21
65 - ibidem, page 117
66 - Sorenson-Speck Report, page 25
67 - ibidem, page 55
68 - The Tech, May 1, 1979, page 1
69 - Next House, pages 8-9
70 - The Graduate, November 1977, page 6
71 - University Impact on Housing Supply and Rental Levels in the City of Boston

BIBLIOGRAPHY

General Background:

University Impact on Housing Supply and Rental Levels in the City of Boston, Boston University Urban Institute Occasional Papers, Melvin R. Levin and Norman Abend; B.U. Urban Institute, February 1970

Student Housing, Educational Facilities Laboratory Report; EFL, September 1972

Campus Planning in an Urban Area -- A Master Plan for Rensselaer Polytechnic Institute, Doxiadis Associates, Inc.; Praeger, 1971

College Students Live Here -- A Study of College Housing, EFL, Harold Riker and Frank Lopez; EFL, 1961

A Graduate College for MIT, Bush-Brown Committee; MIT Planning Office, 1961

Dorms at Berkeley, Sym van der Ryn; University of California, 1968

When MIT Was Boston Tech, Samuel C. Prescott; Technology Press, 1954

Housing Program: Residential Location of MIT Students, Fall Term, MIT Planning Office, 1971

Material more specifically germane to this thesis:

Housing Students in Scandinavia, John Hands and Roger Bingham;

London Student Cooperative Dwellings, 1973

Creative Renewal in a Time of Crisis -- Report of the Commission on MIT Education, November, 1970

Report of Commission of Inquiry, Vol. I (of two); University of Oxford, Oxford University Press, 1966

Report of the Committe on Student Housing, Edwin Ryer, chairman; MIT, June, 1956

Report of the Committee on Student Housing, Edwin Ryer, chairman; MIT, June, 1956

An Interim Report on housing for Undergraduate Men at MIT, Committee on Student Environment, John Graves, chairman; MIT, March, 1973

Sorensen-Speck Report, Richard Sorenson and Lawrence Speck; MIT, 1973

Fact Pack, New Dorm Planning Group 1978-79, with Dober and Assocaites, 1979

Next House -- A Report from the MIT Program Planning Group; Dober and Associates, 1979

Program: Undergraduate Housing, West Campus; MIT Planning Office, July, 1973

Baker House Client Team Report; March, 1976

A Program for Undergraduate Men's Housing; MIT Planning Office, August, 1965

The Beds of Academe, Howard Adelman; Praxis Books, 1969

An Evaluation of a Living-Learning Residence Hall Program, Impact Study, University of Delaware, Carol Pemberton (undated, ca. 1969-70)

Committee on Undergraduate Residential Life: Second Interim Report, Princeton Weekly Bulletin, Special Issue; Princeton University, 12 December 1978

Perspectives on the Houses at Harvard and Radcliffe, Dean K. Whitla and Dan C. Pinck; Office of Instructional Research and Education, Harvard University, September, 1974

Articles:

"Ground Down by U.S. Schools," Kathryn Tidrick; New York Times, Sunday, April 1, 1979 (Op-Ed page)

"The Cold Hard Facts of Graduate Residency: Confessions of an Inside Dope," author not credited; The Graduate, "Playing the Resident Tutor Game," Vol. 4, No. 2, November 1977, page 6

"Corporation Postpones Building of 'Next House'" by Steven Solnick; The Tech, Tuesday, May 1, 1979, page 1

"Technology Builds Its First Real Hearth and Home"; Boston Evening Transcript, Saturday, December 11, 1915, page 4

"The B.A. Degree: General Education at MIT" by Prof. John C. Graves; thursday, Vol. I, No. 2, April 24, 1969