From: Thresholds 12 (1996) on "What is Thesis?"

Design Thinking
An Interview with Imre Halasz

"Do you mind if I smoke?"... Professor Imre Halasz politely deferred to our sensibilities as we sat down with him in his office. Our meeting with Imre had coincided with the sad news that his dog of fifteen years had passed away ..."I was trying to quit."

When Imre Halasz arrived at MIT in 1958, an adaptation of the "Polytechnic" pedagogy structured the thesis process. This curriculum had evolved from the earlier Beaux-Arts tradition, and the thesis was tantamount to "jumping the hurdle." Based on what was considered demonstrated architectural competence – command of structures, construction, and program – thesis operated similarly to the professional exam taken today. An architectural project was the vehicle for this test, and was judged by a single thesis committee comprised of several faculty from diverse fields in the profession: "Design was not the major issue," Imre notes.

Imre cites numerous pressures which converged in the 1960's, inspiring change in the thesis process. "It was partly a student movement as well as a change in the administration's view of the whole program - there were a number of factors. I might be wrong, but I connect it mainly to the change from the five year professional program to the 4+2 or 0+3[1] professional program and therefore many educational issues had to be revised to adjust to the new framework." New focus on individual liberty and choice within American culture at large pressed

for decentralization within universities. Attitudes within the administration pushed for a model not "to make better draftsmen for the practice but instead to provide the kind of education which is broader or could be used in a very fast changing spectrum of the professional practice." While this model remains the generally accepted practice today, "we are still discussing what the thesis means."

1. Following the demise of the five year professional degree at MIT, the new M.Arch program supports two models: The 4+2, where a student with a four year bachelors degree in architecture attends a graduate program for two years plus thesis, or the 0+3 option, where a student with a four year bachelors degree in another subject studies architecture for three years plus thesis at the masters level.

"Initially, thesis [under the revised model] was a kind of intimate relationship between an advisor and a student based on a greatly decentralized position, as was everything at that time. And it was almost autonomous – there were no readers and no protocol, simply a close relationship between the student and the advisor." Imre points out, however, that problems arose with this new model. First, because of its inward focus, the thesis became dangerously isolationist. No final review or threshold awaited the thesis student – evaluation was left entirely up to the thesis advisor. "It was one on one, as they say in basketball." The second drawback of the new system was the transition to a one semester process. Previously, under the five year program, studios often continued over two semesters. Newly structured for more choices, "the single semester became the additive fragment of learning." This is the root of discontinuity which will later characterize the thesis process.

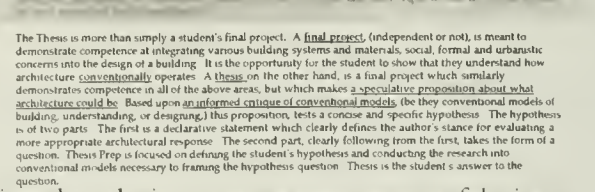
"The question was raised how that could be changed, for clearly thesis (for many) was a major effort and some crowning achievement of learning." To address this question, Imre sponsored two modifications to the M.Arch program in the late 1960's. The first incorporated thesis readers into the process; the second modification introduced the Thesis Preparatory course. "The first definition of thesis prep was that it was supposed to be a workshop, and the model was intended to re-introduce a thesis as a two semester effort."

While there was a constructive intent behind these modifications, their implementation created new problems. The advisor-centered methodology still dominated the process marginalizing the readers.[2] The thesis prep workshop also fell short of expectations, despite great efforts by several instructors. "It was never successful in the sense of its original intent." Imre further explained that built into the system

2. Committee members remain partially disenfranchised, with a clearly inferior role to the thesis advisor – readers do not sign and are not mentioned in the thesis document. This policy has just been changed so that future theses will bear readers' signatures.

was a discontinuity in advising, as students do not begin working with their advisors until beginning the actual thesis semester.[3]

Concurrent with the developments in process, the content of the thesis also underwent transformation and debate. "There was strong pressure from some faculty members that thesis could be practically any subject, that it did not have to develop the typical design of a building but anything which had intellectual merit and dealt with some didactic objectives was acceptable. The counter position was that the thesis had to be a building, a physical design of some sort." In reconciliation of these views, the current attitude in the Department of Architecture is "that design should be based on some kind of explicit view or theory, that somehow this duality of the two views converge and you see these strange theses coming out which are meta-theory as well as design."[4]



The Thesis is more than simply a student's final project. A final project, (independent or not), is meant to demonstrate competence at integrating various building systems and materials, social, formal and urbanistic concerns into the design of a building. It is the opportunity for the student to show that they understand how architecture conventionally operates. A thesis on the other hand, is a final project which similarly demonstrates competence in all of the above areas, but which makes a speculative proposition about what architecture could be. Based upon an informed critique of conventional models, (be they conventional models of building, understanding, or designing,) this proposition, tests a concise and specific hypothesis. The hypothesis is of two parts. The first is a declarative statement which clearly defines the author's stance for evaluating a more appropriate architectural response. The second part, clearly following from the first, takes the form of a question. Thesis Prep is focused on defining the student's hypothesis and conducting the research into conventional models necessary to framing the hypothesis question. Thesis is the student's answer to the question.

4. The contemporary document outlining thesis prep *(right)* seems to be the most definitive statement of policy on this subject.

Imre also identified the problem of stating a hypothesis as a necessary component of thesis. "Hypothesis is the set of facts which one collects and then tests in some process. Borrowing that model from the hard sciences seems difficult because it is not directly applicable to architecture as a work process, so I am suggesting that it should be an exploration of that design intelligence which develops throughout the learning process and can be demonstrated through a whole variety of ways."[5]

In light of all these issues, Imre began to lay out a possible set of criteria for the M.Arch thesis, explicitly criticizing the notion that it become "a major contribution to the state of the art."[6] "In the best of all possible worlds it should be the continuation of something the student has already investigated. There should be a very strong connection between the student's experience in school or maybe before school, a real exploration of personal values because studio does not, can not, do that very well." In a second point, Imre spoke of how faculty

3. In light of the shortcomings of the course, thesis prep has, over the years, devolved to its current status as a three credit course. The argument for the credit poor course has centered around the rigorous demands of the new curriculum, not around how thesis should operate. For reference, a studio is worth 18 credits and the thesis prep workshop, as mentioned, was originally worth 16 (studios at that time were 21 credits). The idea behind a "credit" is essentially a "credit hour," where a nine credit course should require nine hours of work per week.

5. An evaluation of thesis inevitably begs the comparison to how to conduct studios in general. The studio process will lead not to problem solving per se, but an investigation of issues and, in Imre's words, a "passion for making." In fact, this process of developing a sort of "design intelligence," may better be nurtured in a workshop environment. "I do believe we should have workshops instead of studios, which means there must be a clear bias stated, and described in terms of evolving that design intelligence."

6. Refer to the excerpt in note #4 that "A thesis ... makes a speculative proposition about what architecture could be."

research should have more relevance to thesis. "This way there is a continuity which does not exist now because we ask the students to come up with the topics.The students never ask 'what are you doing, can I join?' There should be a much stronger connection between research done by the faculty and the subject of thesis." And while the architectural thesis should require the student to address "something physical," Imre feels that the notion that "it require that it result in the design of a building is a bad one."

Not only can the focus of thesis be questioned, but Imre also points out difficulties in continuity of education. "In studio we have this socialized learning which is very good because there is a whole set of interchanges and hopefully the teacher has a few major objectives which are designed into the problem and very deliberately become the focus of the work. After that comes the thesis where a socialized process becomes isolated and where highly directed design thinking changes to a different kind of work. We are not preparing in the curriculum for that big jump. Initially, the idea was if one had this broad smorgasbord then the thesis is the opportunity where one can 'put it together.' In general it sounded nice and perhaps it's ok, but there is still a need to be more precise about what one puts together." A lack of understanding behind the intention of thesis is a major difficulty. "It should be more clear how thesis fits the whole package and therefore how it can become an integral part of our thinking. It truly is a very difficult problem – many times it has been suggested that we get rid of thesis altogether, which wouldn't be such a bad idea because at least that would free up more time for workshop explorations."[7]

7. Currently, NCAARB requirements for architectural education do not include a thesis component.

In addition, Imre hopes to see another adaptation in the thesis process beyond the suggested possibilities of opening the topic to carrying previous personal investigations further or working within a professor's research. He has also brought thesis students together in a "thesis workshop." He conducted one such workshop while teaching at Harvard in the mid-1970's and in another similar experiment last semester at MIT. "The connection in my workshop was simply to find a balance between the centralized idea of the studio where the master stands and tells you what's good and bad and the total decentralized model where you have an advisor but the advisor actually is not there to teach but to save you from drowning." Instead, the professor assembles the students and guides them in discussion. "It was my intention that they could work with each other, for example someone with perhaps more construction experience could help the others, and the group could be mutually supportive: we could meet together more often as well as individually."

It is through his 38 years of perspective on the program that Professor Imre Halasz has developed an understanding of this evolution of the M.Arch thesis. In his view, the difficulties with our current status remain unstated and unresolved. The current practice of ultimately generating a 'building,' he feels, is not working, yet other models have not been adequately pursued. Students need less rigid options yet clearer models of how they might accomplish a transition between studio, thesis, and practice. They should be encouraged to build on their own knowledge and experience or on the work of the faculty. They should also have the option taking a final studio or of joining (or forming) a thesis workshop in a continued pursuit of their own individual design intelligence. "It is design thinking we are teaching, and we should be growing while making the whole heuristic process evolve - it is open ended but not open ended by virtue of capriciousness but as the result of layered exploration of certain selected pieces chosen in the beginning. And those [pieces] (not programs, not places, not pre-determined problem solving ideas) should come from the willing confrontation by the student with their own values as well as those aspects of architecture which at that stage of their growth they were curious about."

MIT thesis students advised by Imre Halasz:

1996 Audrey Godwin Wendy Akemi Kameoka Carlos Mateo Ridruejo James Francis Rissling Andreas L. Savvides Alexander Peabody Stolz *1995* Albert Pui Lam Kong *1994* Radhika Bagai *1993* Zsuzsanna Gaspar *1992* Scott William Rabiet *1991* Judith N. Bookwalter John Lai Yen Louie Scott R. Pollack *1990* Chin Yuan Lin *1989* Noel Jonathan Brady Yuri Kinoshita Paul R. Ries *1988* Keith A. Campbell Belen Hermida Rodriguez Constantine Anthony Kriezis *1987* Gregory Faulkner Heidi Johnson Greta Jones Stephanie Wingfield *1986* Arto Harjunpaa Laurene Anne Hungle Kim Sammis Sandra Leigh Olson Snow *1985* James Beaudoin Colin J. Flavin Walter S. Rask Jeffrey Schantz *1984* Michael David Sorkin Albert Westley Spruill *1982* Rafael G. Olguin Jeffrey David Rhoads August G. Schaefer James A. Sobey Michael Sela *1981* Philip Dwens Belanger *1980* David George Cooper Fernando J. Lugo *1979* William Leslie Kasdon William Leete Rawn *1978* Ronald John Alex George Thomas Tremblay *1977* Constantine Nicholas Thomas Brian Hingpo Tse Robert Gregory Turner *1976* William Chalmers Agnew Claudia Miller Skylar *1975* Steven Coburn Hayes Vincent Samuel Hsu Charles Woodrow Styron *1974* Sandra Cutting Auchincloss Douglas Robert Coonley Martha Elizabeth Ondras Stokes *1973* William Edward Holland Barry Falk Zevin *1972* Robert Joseph Couch Terry Stelios Hartzides Isabel King *1971* Russ Van Vleck Bradley Mercia Elizabeth Lee David Curt Morris *1967* Scott Lee Danielson *1966* Ernst August Ibs Mazen Nicolas Manasseh-Hawa Nicholas Peter Negroponte Richard Warren Smith *1965* Jerry Gibson *1963* Richard Meredith Titus *1961* Joseph R. Blair William L. Kite Richard Ira Krauss R. A. Williamson *1960* Norman Drucker Johannes Philippe Holschneider Richard Baker Morrill Radoslav Zuk *1959* Valdis Martins Alers Neil Astle Paul R. Dermanis John M. Peterson

...Imre stands to attend to a knock on the door. Although he has officially "retired," Imre still schedules regular meetings with current and former students. He apologizes and offers to continue our conversation at a later time.

Professor Emeritus of Architecture, Senior Lecturer in Architecture at Massachusetts Institute of Technology, Imre Halasz was appointed to the MIT faculty in 1958 and has been a visiting professor at several universities in the United States and abroad. Halasz was educated at the College of Fine and Applied Arts in Budapest; the University of Leiden; and the Polytechnical University of Budapest, from which he received a Diploma of Architecture in 1950.