Let’s talk about the day-to-day work of thesis and the issue of time. In your presentation you said that thesis at Notre Dame should be a yearlong experience instead of a semester. Do you still feel this way and why? What would more time have allowed you to accomplish?

TH: I think thesis was one of those things for a lot of people that grew. At first they had just begun to think and to explore issues in a building and things like that. There were a lot of people in my class who weren’t exactly excited about their building or their problem at first just because it looked like a lot of work and we were doing all these other things like looking for a job and all sorts of things that are coming upon you graduation as a fifth year student.

But I think through the process and I don’t know that this is across the board, but some of the issues that came up really caught fire with some people and people really became compassionate about their building or a social issue that they were studying through their building. And in that way, if there was more time, I think a lot of people would have continued their study into really looking into the systems in a building, the true siting and surveying, and things like that. I think a lot of people really were taking that first step into the profession from the thesis. So in that way a year would be more conducive to having time for writing and thinking, then schematics and drawing, and then really getting into the heart of thesis. So in that way it really would be good.

On the other hand, if you’re a student who’s not as inclined towards a problem or you find that the problem is too big or too vast, or the issues that you’re exploring are taking you in another route, then maybe you wouldn’t want to do that for a year, maybe a half of a year. You’d say I want to explore something else. Maybe that’s great. Maybe it’s a set of issues that leads you to another set of issues. So I don’t know about a yearlong thesis. I think at the time it felt like I could have taken it farther if I had more time. But I think it almost would become maybe a personal decision.

I know that the Notre Dame thesis was at one time a first semester ordeal. You went through thesis the first semester and then second semester you had the opportunity to do thesis continuation where you would have to add it and do the things I was just talking about and taking your thoughts and your building a step further. And then you could also do a competition studio or study another building or things like that. So at one time it was an option but over the years it seems that the professors thought it’s more useful as a final design exploit than something where you run out of steam.

Did you see that happen?

TH: I didn’t see a lot of that. It all depends. By the end of your fifth year there are just so many other issues confronting you like where you’re going to move, what job you’re going to take. When I graduated the market was really good, so people were faced with eight, nine opportunities for jobs and everywhere in the country – maybe even abroad. So there are so many other variables acting on your life. And though architecture for most people who are truly into it are consumed by it, there were other things even related to architecture that were going on. I would say that probably by then we were really pushed to get drawings finished and to present everything that we could in our thirty or forty minutes we got to present. So I think it’s a very personal thing. So that’s hard for a program to structure when it becomes such a personal pursuit.

Could you give me an example during your working process when you made some mistakes? How did you regroup and redirect yourself?

TH: Well, it’s kind of interesting because I was very focused on working on the neighborhood aspect and the master planning aspect. I decided what buildings I thought would be a manifestation of the actual thesis itself – the statement. And I guess when I moved away from looking at the overall context and had to get serious about picking a building… I wasn’t exactly… it took me a long time to come to that point. And so I had to play catch-up with the building itself. And that...
was okay because the building I ended up choosing wasn't a large building and the systems weren't as complex as some of the other more building oriented problems that my classmates had chosen. But yeah, there were times when you knew you were behind.

The way my studio was structured was that every Monday was like an office meeting. Every Monday was a full studio critique. So basically your Monday studio...those hours were gone. You weren't going to get to work during those four hours. Those four hours were about learning about each other's projects and how you could apply those ideas to your own and helping each other out. They were not about personal gain and putting your headphones on and just drawing. Those were what the other two days of studio were about.

And so when you're in that context you have to be really careful about how you use your time. And you have to produce a lot in that week to get something out of the next Monday's session. And I don't think there was a person who didn't get something out of a Monday session throughout the course of the year. I mean, you had other things come up. You had other papers due. You just weren't inspired. You were running into big problems with your building or whatever and so you didn't have a lot to show for yourself in a week. It was stressed. How many weeks were left?

And it was, I think, a way...since everyone was amidst of their own personal process it was some sort of gauge as to...we would be like, okay, this week, there should be some focus by this time on the building itself and at this week there should be some focus on actual selecting the systems, how they integrate your construction method, your structure. And so along the course there were benchmarks that he had set up. But it was hard to always meet those benchmarks (smiles) for one reason or another. As most designers know, one thing will lead to another and you find yourself on a tangent really quickly.

For me it was always these tangential things. For me, actually, it was getting maps for a long time. Because I was studying a place that was a slagheap there's not a whole lot of maps or surveys of that land even though now it's under construction. A master plan is under construction for that site. There wasn't a lot of that. A lot of it was private information. So, for me, map gathering went into almost February, which was really not a good idea (smiles) because you really need to be drawing by mid-February a building and not just a site plan. And so, trying to, like you said earlier, trying to integrate the research part with the actual design and building part, it was smooth in theory and in retrospect, but at the time there were a lot of fits and starts. And that could put you really behind. And so, by the last few weeks you really pushed to get your drawings done. But that's good to get it done.

The Pennsylvania State University
Christopher Renn (CR) and Daniel Mayer (DM)

Do you think you could have taken more risks in your thesis work?

CR: Absolutely.

DM: I think so.

What would have allowed you to take more risks?

CR: It is always hard to convince yourself.

DM: I'm saying this in hindsight because this is what I've learned from the year. This is my own critique of myself. I had that sort of that realization late in the game. It was six weeks before the final presentation and I realized I had just played it safe with every move that I was making and it really watered down what had a lot more potential.

CR: So in that sense do you think it would have been more powerful had you not taken on so many issues?

DM: I was overwhelmed by the number of issues in my project, but I think this is what made it worthwhile. It was so complex that I couldn't possibly make every-factor equally resolved.

CR: I never felt that way with my own project, but I never made a building, per se,
so it wasn’t… I felt very unfinished in terms of design when I was done which is always the case. But I could see what you are talking about in extreme cases in other projects. That doesn’t necessarily invalidate the project. Some people explored a building very well. But when they talked about it they were talking about something else all together, but that didn’t invalidate what they had explored physically.

DM: Yeah, I think the lesson that I got this semester about thesis, which is the most important part, is that you don’t just take that step once which has always been a problem of mine in past years. I had a professor who was able to make me try to design a building and then you go back. You repeat and do it again and do it again. I think the misconception that I had coming into this is that I do research for a semester and then design a building and make it work but it’s not.

The one thing that he said to me is that you have all of these ideas, you have plenty of ideas and you are never going to know which of them is important until you have tried to design a building. And once you try to solve the simple problems of this site and this program it’ll tell you what part of your research is important and what you need to continue. Otherwise you just continue to start to spread out and spread out and gather so many ideas. Actually making the building allows you to evaluate those and put them in order. It’s really important to do both at the same time.

CR: I think what I was starting to get at is that Dan and I are a lot alike in the way that we do approach research and the way that we think about a project. We both, to a fault almost, sometimes try to intellectualize things or conceptualize things in a certain way before like a post-rationalization. What I was getting at when I was talking about whether having an idea and the building connected, whether that invalidates a project, I was thinking about students who went through rigorous processes of design. They were constantly re-asking the question and reinterpreting what people were saying about the project. Usually when they were finished there was a really powerful project that said a lot of things. They maybe didn’t say the things that they were necessarily talking about for a year but explored a lot of issues through the process of making. Maybe all this talk is just talk (everyone laughs).

I want to ask you about failure during the work process. How did you turn yourself around and get back on track when you reached difficult points?

DM: Yeah, I definitely had a point like that…

CR: Yeah, like every day (everyone laughs).

DM: It was the “red light green light” critique which was just previous to our spring break. There were so many different phases of this project that I had moved onto the phase of designing this building and left behind other more interesting things that I had done earlier. When I presented at the critique I brought along everything that I had done and the criticism was more or less, this is so interesting. Why have you done this? You know that I had gone off the track and I realized it was true and I knew it was true even before anything was said to me. I just sort of pinned up and said, what have I done with this project? I sort of ran it into the ground. And I basically went home over spring break with the intention of somehow breathing life back into it. I worked really hard over spring break drawing and building models.

Was it the critique that allowed you to turn the thesis around?

DM: Yeah, it was the criticism. It was standing back and taking a look at everything pinned up on the wall. I think it is easy to get into a pattern where you are doing something and not comparing it to the things that you are saying about it. Once you have a critique and you listen to what you say, you have to ask yourself if that corresponds to what you are doing, and at that point I really realized that it wasn’t.

CR: I don’t know. I kind of felt like the opposite in a lot of ways. First of all it was at the “red light green light” crit when the scale issue came up. One juror said, what you are doing isn’t even a project. It’s way too small, way too timid, and you need to be a lot more bold with it. You need to do a lot more with it in order for it to be a project. And then another juror responded within a ten minute conversation with, you are doing way too much here. This is way out of scale. You should be dealing with a much smaller set of parameters. So within that critique I sort of realized that neither of them were wrong but that I hadn’t clarified something. There was something that I missed. I felt knocked back real far.

DM: It was almost the opposite because you had done something that you felt
CR: But I think the things that got me through some of those points were architectural research in a sense that it didn’t have anything to do with intellectualizing it. It had to do with, like Dan said, doing something and then that gives you clues about what you need to do or what is important. My studio professor had to say to me, just do something. When I come back you need to have done something. That was probably the best advice that anyone could have given me at that point because I probably would have sat there and continued in circles but by doing something it…then you make a decision and then you have to figure that out.

Describe a typical work day during the last three weeks before the final design thesis was due.

DM: My typical day would start at one or two in the afternoon. I would get up and did I have class?

CR: Not for those last two weeks.

DM: Yeah, I skipped my first. If I had any classes during the day I would skip my class and then I would come into the studio and work here. I would take a nap at some point during the evening, eat dinner in town just across the street and work until four or five in the morning and then go home. I maintained a pretty good amount of sleep getting six to seven hours a night, but it was always from six in the morning until noon that I slept.

CR: It was so regimented. You were in complete control of that. I’m going to sleep six hours a night for this week and then I have to cut it back to five hours a night. You were just so conscious…it was like you get up in the morning, you have coffee, probably two cups until you are awake, and then you are working all day. I knew how much I slept, exactly five hours, and there were periodic points when I would have planned to go get coffee. I would look forward to those moments and then at the end of the night I would go home at four with a friend from studio and we would watch a stupid t.v. show for half an hour and drink a beer just so you could wind down before you went to bed or else you would just lay there and not be able to go to sleep.

DM: I think there was a definite…it was a sort of a temporary routine. There was comfort in getting up everyday and knowing what you had to do. I mean there wasn’t any…it’s a weird thing. People always think that architecture students are so disciplined and so driven and I don’t think it’s discipline at all. It would take me a lot of discipline to say I am going home at six o’clock to eat dinner. The lack of discipline is staying in studio and working on my project – that sort of obsession.

CR: I went back and forth in terms of stress and stuff. I went back and forth a lot in terms of how I conceptualized what it was that I was doing at the time because there were times that I was really down about what I had to do and at times I was really excited that I got to. I was working on this project for a whole year and I had the opportunity to just spend two weeks with almost no distractions, well with minimal other things that were required of me and, you know, just work. All of us sort of talk about some day I am going to have my own studio where I can just work and we had that for a year.

DM: It was a ton of…lots and lots of time you know. The hours were crazy but it wasn’t like going to work at an insurance company or something. I was going to work on my baby and that’s an opportunity that not a lot of people get. I felt I should really take advantage of that. This is my thesis and I’m going to make it the best I can and that’s why I worked on it so much.

How much did you rely on each other in the thesis studio? What did you get out of critiques from other students in your class?

CR: I think it was different for everybody but I got a lot out of it. It’s weird. For example, I was talking to a student one day and I was looking at their project and I suggested something. That student came back to me later and said you said that and it was such a good idea, but I couldn’t do that because you had said that and so now I figured out a way so that I can do it. After she left I thought, why would she ever not do that because I said that because it wasn’t her original idea? I feel like I did half of Adam’s project for him but he did half of mine (laughing). When somebody looks at it with fresh eyes they see things that you don’t because you’ve been so close to it. So there is a small support group that you build for yourself. I knew that if I had a formal question I could talk to Billy or Brad and if I had a question about…you just had certain people that you went to.
I worked with Dan a lot. I just worked with certain people a lot probably because we had similar attitudes about working. The dialogue of studio and the value of that and the culture of studio is valuable because you have the opportunity of all of these amazing people around you that are...

DM: ...it was probably more helpful for me to critique other people’s projects than it was for them to critique mine. I mean they would tell me things that...people tell you things that you can see but you need them to tell you in order to recognize the problem. But I would look at someone else’s project and see similarities to my project and say, oh wow, this is a different way to look at that. This is a different approach. I was always finding my own project in other people’s projects.

Southern California Institute of Architecture
Liz Falletta (LF) and Jonathon Cantwell (JC)

Did you rely a lot on your critics during your working process?

JC: You have to develop a culture of collaboration or a culture of working together, working around other people. Part of this idea of originality, part of that mythology, comes from the idea of the heroic architect. One of the ways that we were operating, in at least the last year or so at Sci Arc, and I started doing it long before that, was that you work with other people and there is no one person working on it but there are three or four. A critic becomes as much a part of that design team and has as much say as the other people, maybe not as much, but the way in which the project becomes more valuable than the individual efforts.

Is it a paradox, then, that Sci Arch is known mainly through practitioners who have benefited from the star system? Does this work for or against group culture and team effort in your school? How do you rectify that?

JC: They did not do it by themselves, though. None of them did it by themselves. They surrounded themselves with people...they worked directly with people that were also involved in that. And yeah, the star system is the way we culturally identify people but it doesn’t have anything to do with architecture. It has to do with the way in which we identify figureheads in any kind of discipline or any kind of profession. But if you looked at any of those people, they were building on the work of those around them, and they may have been guiding it but they weren’t doing it alone.

Yale University
Mike Tower (MT) and Andrew Mazor (AM)

There have been cases where a student has a brilliant thesis proposition but can’t translate that proposition into architecture. Did you experience this or could you comment?

MT: But it’s everyday you go through that experience. When doesn’t that happen even outside of school? You look at what Peter Eisenman struggles with – trying to materialize. What are material thoughts?

AM: Perhaps it’s never. Perhaps the theory and the architecture maybe never meet. But it is this sort of...

MT: ...it doesn’t mean that you give up.

AM: I know. But it’s the pursuit of getting to that point and it’s how well you manage the duality between the fantasy or the thesis and the architecture – the real. Because that’s what they’re going to critique mostly in the end. Well, the critique or the argument, I know, of course, we spend a lot of time on that during thesis but you want to attack something. Because after this is all done, when you have to present it again or when you have it in a book form, the text isn’t there. Your discussion isn’t there and the ideas are probably written down. What holds true is the image on the paper.

MT: Architecture is still a visual medium and that’s what makes it a risk for a lot of people’s feelings. That’s not necessarily a bad thing. And I also think that some failure is important in the testing of those ideas. What you realize, what I think I realize, is that some of those expectations of architectural form, architectural
program, a manifestation of those ideas, are often polluted as well and they may be rejected at first but they stand to be judged over time. Those ideas aren’t necessarily wrong. But I think it’s of the most importance to try and test them, to build them, to make them. You can’t talk your way out of a thesis. You shouldn’t. People try to but we all love to sometimes when we are afraid of failing but...

(Andrew smiles)

...could you describe a moment when your process clearly failed?

MT: Well, I’ve not personally had that problem (everyone laughs).

Clearly there was a crossroads where you had to begin again, you had to move into a different direction. Could you just give me an example?

AM: I think it happened a lot in almost every crit you have because you have an idea of about where you want to go with thesis and then you’re questioned on some things. And you’re like, okay Rob, you missed that and then I have to rethink that. I think it’s not a... I think it happens a lot and perhaps it’s only with...okay, you know, that now I’ve gone through thesis I think that my approach to questioning things is much sharper. I think there always has to be failure. I think you need the failure as part of the process. But a specific moment? I think that it’s more of a daily occurrence (everyone laughs) than it is one specific moment.

MT: I might be able to give a specific moment. I’m trying to think. Our mid-term review I think it was. We were making some statements and trying to say, well half of the semester is going to be this and I went in a direction that sort of made sense but you know just wasn’t right. It was too direct. It was too automatic in terms of the translation of some of the analysis that I had done and its final manifestation. I knew that deep down but I needed to materialize it first, to kind of expunge it, to get it out of me to discuss it. I kind of knew it going into it.

I realize I might have even said it going into a critique like, here’s the body of work I’ve done. Here’s the research. Here’s the analysis. Here’s where it’s going. Here’s some and here’s where I think it might be. I don’t think it’s necessarily right but this is what all of this work gets you if you’ve lived with it and you realize you need to live with it a little bit longer and make a more informed decision. You gain an understanding over that time over those mistakes. You realize, oh, it’s not that at all. It’s something else.

AM: But that’s the beauty of the university though. Then you’re there to get the critique, then you realize perhaps your failure, and then you have the opportunity to correct it.

MT: It’s about doing the work. That’s a really important thing -- those jumps that you make that are certain leaps of faith that you make...

AM: ...not until the end, of course not.

MT: The point is though, that I was trying to make, is that things are not always so clear or logical. It comes from a deeper understanding of the material you’re dealing with. And that can never be quantified. If it was someone would have done it already. And it might not have been very interesting. You might not have given much to it. Some things are, if that’s what we did I don’t think we’d want to be architects exactly. I don’t think it’s so rote.

AM: What I found interesting with all the five thesis projects is that they were all simple in approach, but they quickly got so complex after just looking at it and during the thesis to discuss their work. The failure or the tripping along the way was absolutely essential.

MT: It’s just a part of the work but you have to be doing it. You have to do the work.


Cooper Union
Yael Erel (YE) and Tao Sule (TS)

How does the design thesis work at Cooper? What are the mechanics of it? What are you required to do before you begin the design thesis?

YE: This last year, which was our thesis year, most of the first semester was
a class project, an actual construction project. The second semester was an individual thesis project in which the thesis was to bring up a theme...where we have to deal with a question or a statement that we put forward. And we have to test that statement with a product. So what we were asked to do initially was to pose a statement, a thesis statement, and then suggest a project that would test that statement.

**How long did it take for you to pose this statement? Were you given some flexibility?**

**TS:** Well, it’s one year. Your first semester is this class project which, I think, well...there are differences than before [when Hejduk led department] because it was a different kind of structure. But I think the first semester was intended as their point. They call it thesis preparation. So I think they want us to contemplate what our thesis means, specifically our thesis in architecture, but that is the first semester.

Near the end of it we are supposed to consider what our own positions are on architecture. On the second semester we, that is, we prepared for it. Ideally, one could say that it took us a year. But the first semester, because it was not necessarily specifically to your own interest, the first semester part of it was generally thinking about what is the meaning of the idea of the thesis and what is the meaning of the architectural thesis, specifically.

**Culd you talke about your work process and how you began design thesis?**

**YE:** For me, the initial act was to clarify what the question was as the question. Because I knew I wanted to do this thing...I had an image in my head. In order for it to be a thesis I wanted to figure out the question and what it is really looking for...to find, maybe, some theoretical anchors so that I...basically reading not only about the physicality of form but what was it that I was looking for?

The physical stuff, the first drawing act, was a shift between my research and an analysis of this research through drawing. And through the work itself I realized what I was looking for. Through the work of analysis, for me that was a good way to start to just get something going, was to get away from Xeroxes and just start drawing and inter-operate more and more into my drawings of the sun and then some sketches of these very loose ideas I had in my head that I actually did through photographs because I couldn’t draw them.

I basically worked with tape, scotch tape, and pieces of paper and then photographed them because everything was so loose in my head that I needed to somehow bring it out in the loosest way I could. And then I incorporated drawing and photographing together. So that started bringing actually, technique drawing or some other dimension to my drawings that later I used through different contexts or through different contents through physicality of the drawings and the models. The first initial drawing act took me like a week and a half. Between writing and thesis statement and doodling to actually drawing is like a week and a half or two weeks but it was, like, site studies...very small site studies – trying not to stress myself.

**What was your work process and beginning point during design thesis?**

**TS:** What became very, very important were these photographs I had taken when I went to Brazil. And the photographs had a very, very tactile quality to them. It was also a very sharp distinction between the kind of highly theoretical and theological readings I was investigating – syncretism and regionalism beliefs systems and then the image so...it was very important to construct an image in my imagination of a quality – not even a place or a thing just of a quality.

So my very, very first act that was of significance, I should say, was when I set up my drafting table and drew and I colored a form. I drew a form that had a relation, nothing necessarily. I mean, in the end, it had a very strong relation to what I was thinking of. But at the time, actually, it had a relation to the idea of syncretism but it was a loose relation. It was a very specific form and I was drawing it to build it. I was coloring it to capture the quality.

I don’t think if I hadn’t done that, if I hadn’t had that image it would have been very difficult regardless of any kind, regardless of...that sort of thing you think you need to produce something physical. That led me to a kind of peculiar battle that was taking place in the act of making theses things. On one hand there is a kind of purely...there was a phenomenon and...and on the hand, it was a default and these two things...there was a confrontation sometimes. Sometimes one was cutting the other sometimes. It was kind of discourse between these two.
What critiques do you have about the way design thesis is now structured?

YE: What happened last year, [9/11] which was a unique year in the United States, in New York specifically, was that we...everything kind of got out of whack. And so our schedule was thrown off by two, three weeks. Even if it hadn't been thrown off I would have appreciated more individual time to work on our project and less group project, for me, because I thought that I got to a point in my project where I really wanted to get to actual construction and detail and I really didn't have the time.

If you talk about a thesis project that is almost philosophical all going into architecture, it is a little too much to get...you don't have enough time to get there and around a semester...a bit more maybe...around a semester. So I would have wanted more time. Maybe I sound like a baby. Maybe if I had a year I would have wanted more time. I don't know, but the way I envisioned my goals I didn't get exactly what I wanted. I am very happy with it. I am not sulking but...

I am not saying the [group] project totally was...it probably helped me to clarify issues I was dealing with anyway, but I would have like more focused time on the actual project in order to get to something that I consider a full thesis graduating.

I am not saying that I would have liked to have my project be less general. I would have wanted to go into be more specific and precise -- things that everybody didn't have time to do. But still, I think the value, if there was a value to it, I think relationships that I had through the [group] project led into better relationships throughout the school year.