**Carnegie Mellon University School of Architecture**
**48-505 Studio X: Thesis | Spring 2008**

## Instructors

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Howard Davies' Bio
Principal/ Founder: Atelier Big City (www.atelierbigcity.com)
Cormier, Cohen, Davies Architects

Atelier Big City (Anne Cormier, Randy Cohen, and Howard Davies) is known for its innovative and often gregarious approach to architectural design. Two centres of interpretation built in eastern Quebec at Pabos Mills and Trois-Pistoles as well as a housing project on Paer Hill in Montreal (U2) demonstrate the group's desire to build provocatively yet also deal sensitively with issues related to site organization, construction, program, and budget.

The work of Big City, both built and un-built, tries to push the envelope of what we might imagine to be possible in the architectural project, converting restrictions and limitations into work that celebrates the latent potential and optimism of everyday life. Their work combines metaphorical/interpretative themes, with innovative material use and construction. The projects are structured on a strong conceptual approach based on the interpretation of program and siting strategies. Of particular interest to the group is the notion of public space in buildings and the importance of the architectural promenade, a spatial journey animated by relations established between elements of the program, and between the built project and its environment. Each project is an exploration in generating an architectural milieu of grand sensual stimulation through the use of very simple means: color, volume, material and structure. The work of Atelier Big City explores the potential for the creation of spaces in which the various themes of movement, structure, function, materiality, and form are dynamically employed.

Atelier Big City has received a number of awards and honours including the Prix de Rome in 1998 and most recently a Governor General's medal in 2006 for their innovative urban housing U2. Work by Atelier Big City has been exhibited and presented through lectures in North America and in Europe. Atelier Big City are committed educators at the university level. Anne Cormier teaches at the University of Montreal, Randy Cohen at the University of Quebec in Montreal and Howard Davies at both McGill University and Concordia University.

## 0.1 Introduction

*Thesis* A proposition to be maintained and defended in argument, formerly one publicly disputed by a candidate for a degree in a medieval university; hence: an essay or dissertation presented by a candidate for an academic degree as evidence of his or her knowledge of and individual research in a subject.

- Webster's New World Dictionary

An architect is primarily responsible for designing and overseeing the construction of buildings and urban spaces. Throughout this endeavor the architect may choose to use the vehicle of the building as a means for exploring and questioning aspects of their society: its beliefs, institutions, technology and science. Although this process can be fueled by discussion, readings and other types of research, for the architect, the form of this questioning is primarily visual, making use of drawing, model making and eventually actual construction as a means to speculate on the form and operation of potentially revolutionary buildings and urban spaces.

The project-based thesis offers the opportunity for creative understanding, spatial experimentation and architectural consolidation. This thesis should be enriched by a dynamic process of discovery during the development of the project. The thesis project grows out of this exploration and does not precede it. A well researched, clearly articulated thesis project will develop the student's individual architectural voice. Working from architectural theory, humanities, history, cultural criticism, philosophy, music, art, etc., the successful thesis project should challenge us to question our convictions about architecture and urban design. An architectural thesis demonstrating such creative understanding would be able to sustain critique at various levels of interpretation and enquiry.

While a precise definition may not be collectively shared by everyone, the following list of goals and recommendations may serve as some guidance as you attempt to formulate a legitimate thesis.

1. The thesis is a speculative proposition that one engages and tests through the design process.

2. A thesis is about architectural ideas that have been identified by the designer.

3. The thesis proposal can and should emerge from a body of research within a specific area of investigation.

4. One needs to identify an architectural issue(s) or topic that will sustain and engage the energies of you as a designer.

5. With the issue(s) identified, one needs to establish and limit the scope of research and analysis.

6. From research and analysis, one needs to establish a speculative proposition i.e. a thesis statement.

7. A program and site pertinent to a thesis should be chosen. The site must be one you visit as part of the Preparatory Phase of your thesis.

8. It is recommended that you do not abandon your academic training when attempting to formulate or execute a thesis solution.

9. It is recommended that you do not undertake a problem for which you cannot be reasonably objective.

10. To the degree possible, you should limit the scope of the thesis proposal to a scale that is compatible with your abilities and strengths.

## 0.2 Content

This studio will be divided into 5 phases.

1. Thesis Subject

For this phase students are required to identify and develop a subject for exploration as a project-based thesis in architecture. The "Thesis Subject" is the initial primary question (the "why") and a succinct outline of the necessary theoretical and historical context that situates this question within the architectural tradition. It must be stated clearly and concisely and the motivation for the question should be articulated. The statement must make reference to 3 primary research sources. These sources (which can be books, essays, research papers, films, etc.) will help establish the intellectual context in which you intend to develop your project. Your presentation of the "Thesis Subject" can be illustrated.

2. Preparatory Phase

The project-based thesis must rely on drawings, models and other representations to explore its ideas and ultimately to present its conclusions. The development of the premise into an architectural proposition requires a reflection on the manner and mode by which you will proceed. The choice and elaboration of each subject may set up the need for certain modes of exploration and research. This might involve particular strategies for representation, mapping and documentation. Identifying potential "Mode(s) for Exploration" is a key aspect of this preparatory phase.

A project-based thesis must be developed in relation to a given site. The given site must be comprehensively documented. A detailed site plan indicating the existing conditions must be prepared. Documentation of the surrounding context (with respect to scale and architectural vocabulary) can also be an important consideration.

A potential program for a project is identified. The program is discussed with respect to its significance in contemporary society and its evolution. The program must be presented numerically with a basic breakdown of its main components in square meters or feet. An important consideration for this preparatory phase would be to understand the relationship between the selected site and the intended program.

3. Preliminary Design Work

This phase will explore opening architectural moves and their overall project implications. The conceptual underpinnings of each subject must begin their translation into an architectural vocabulary during this phase. The basic tools can be schematic plans, sections, elevations and models but you may choose to see these as more of a summation for a variety of other modes of exploration and representation.

4. Intermediate Design Work

During this phase the preliminary design decisions are more thoroughly tested and refined. Representations can be made at a larger and more detailed scale. The project's materiality and atmosphere can be made clearer. Tectonic strategies can also be detailed in a more powerful relationship to the project's overall objectives.

5. Final Review / Exhibition

This phase can be both a summation / inventory of the work that has preceded it over the course of the project's design development as well as being a final opportunity to develop new representations benefiting from all the work that has already gone into the project.

## 0.3 Schedule

Monday, January 14th: Studio Introduction

Tuesday / Wednesday, January 22nd- 23rd: Review & discussion of "Thesis Subject"

Requirements: 10-15 minute presentation of the intended subject for the thesis. The presentation should point out the significance of the subject with respect to contemporary issues in architecture. While it is not required to have a fixed site selected for this review, proposals can be made.

Value 5%

Tuesday / Wednesday, February 19th –20th: Review & discussion of "Preparatory Phase"

Requirements: 10-15 minute presentation of the revised subject, project site and Finalized Program (in sq-ft broken down into the most significant components) A drawing must be prepared in which each program is superimposed onto the selected site such that the relationship between the scale of site and program can be clearly understood.

Value 5%

Tuesday / Wednesday, March 04th –05th Review & discussion of "Preliminary Design Work"

Requirements: 10-15 minute presentation focusing on preliminary design development. Key components of this presentation will be:

1. Preliminary orthographic drawings, scale 1:200 (1/16" = 1'-0") or approved other (site plan/ ground floor plan/1-2 sections in which the intended contextual relationships are indicated)
2. A presentation quality site / building massing model
3. Additional formal explorations are encouraged (models, 3-D views, elevational studies)

Value 10%

Tuesday / Wednesday, April 15th -16th Review & discussion of "Intermediate Design Work"

Requirements: 10-15 minute presentation focusing on intermediate design development. Key components of this presentation will be:

1. Intermediate orthographic drawings scale 1:100 (1/8" = 1'-0") or approved other (site plan/ ground floor plan/1-2 sections / 2 elevations)
2. A presentation quality site / building massing model
3. A wall section and or other forms of technical representation
4. Additional formal explorations are encouraged (models, 3-D views, elevational studies)

Value 20%

Saturday, May 03rd "Final Review / Exhibition"

Requirements

1. Final orthographic drawings (site plan/ ground floor plan/1-2 sections / 2 elevations) minimum
2. Site / building massing model
3. Larger scale building model(s)
4. A wall section and or other forms of technical representation
5. Interior / exterior perspective views
6. 500-1,000 word "Final Project Description" in which discusses the selected subject in relationship to the final project.

Note:

During the week of April 28th, you could seek additional help from your classmates in the first through fourth years to help with final thesis production. However, credit must be given to any items completed by your classmates.

Value 60%

Wednesday, May 07th Studio "Electronic Semester Documentation Due"

Requirements

1. (6) 8 1/2 x 11 pages which represent in words, models and graphics of your proposal.

You will receive an R for the course if this is not submitted by the SOA deadline.

Thursday, May 08th "Semester Review" Exhibition of Final Proposal

You will receive an R for the course if you do not display your work for Semester Review on the evening of May 08th for the May 09th Exhibition.

## 0.4 Studio

Each student is to maintain a desk in the studio where the majority of your work is to be completed. You are to have a drawing board and all related supplies and tracing paper for your critic's use. It is expected that as part of thesis studio you will utilize a balance of freehand drawing, analog drawings, digital and model making in your design process. Multiple study models which utilize the wood shop and or digital fabrication as part of their formation is expected. A presentation quality site model is required for the final presentation and is to be completed by the March 4th review.

You are expected to have at the start of each studio class new work in both graphic (if digital, it must be printed and not just on the computer screen) and model form that takes into account the discussions of the previous studio and/ or review. If a student has no new work both in model and drawing form for a studio, it will be considered an absence.

## 0.5 Attendance

This studio is the culmination of your undergraduate education. As a result, all students are required to attend every studio, the SOA lecture series, and other studio activity. More than three absences (excused or un-excused) will result in automatic failure of

the course. You are expected to be on time for the start of studio at 1:30 pm and stay in studio throughout the end of studio at 4:20 pm, or longer (see schedule). Lateness, excessive coming-and-going, and leaving will be considered absences. Any site visits will need to be scheduled outside of studio time.

The studio will meet Monday, Wednesday and Friday from 1.30- 4.20 pm typically. At five times during the course of the semester, you will have five critical reviews which will occur on Tuesdays and Wednesdays. You are expected to make time for your own presentation outside of studio time during these dates. See the schedule for dates.

## 0.6 Grading Criteria

Grades will be issued at five times during your progress. See the schedule for the percentages, expectations, and dates. Grades will take into account the progress leading up to the deadline. The grade received will be the one established by both instructors Damiani and Davies.

Criteria

**A** *Superlative* or exemplary work, initiative beyond the description of the studio and proposal. Student shows a significant understanding and clarity in a solution through visual, written and verbal means. Attended by an attitude of self-motivated exploration, open-mindedness, and a willingness to benefit from criticism.

**B** *Very good*, some exemplary work, a thorough understanding of the initial proposal and the solution. The proposal/ solution displays a conceptual underpinning, significant resolution and is well presented through visual, written and verbal means. Shows competence and mastery of skills gained in this and prior studios. Attended by an open, inquisitive attitude.

**C** *Satisfactory* or adequate work that meets the minimum requirements of the proposal and studio. Shows understanding of the proposal, with some deficiencies. Shows reasonable mastery of skills gained in this and prior studios. This grade is seen to represent an average solution.

**D** *Passing*, work that is complete, but does not show an understanding of the proposal or expectations, and demonstrates deficient skills. Work often attended with belligerent or closed-minded attitude with respect to criticism and self-motivation. Although technically passing, this work is unacceptable in a professional program.

**R** *Failing* work that does not meet the requirements of the proposal or course and shows a serious deficiency in skills or is incomplete. An R grade will also be received if no work is produced for more than three studio classes, you are absent for more than three studio classes, or there is any combination of three incidences of a lack or work or absence.

Grades of "Incomplete" are granted only for legitimate extended emergencies (with evidence) as stated in both the School handbook and the University handbook. Likewise, no work may be submitted after the completion of the published deadlines at the end of the semester as a means to improving your grade.

## 0.7 University Course Assessments

University Course Assessments are required for all students in this studio. For further information visit: http://www.cmu.edu/uca

## 0.8 University Standards

Students at Carnegie Mellon University are engaged in preparation for professional activity of the highest standards. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offenses under the University Policy on Cheating and Plagiarism and disciplinary procedures. Any violations will not be tolerated and can lead to suspension from the University. For further information visit:

http://www.cmu.edu/policies/documents/AcadRegs.html

## 0.9 Special Needs

Students with any documented medical, psychological, or learning condition that requires special room accommodations should see the instructors as soon as possible so we can make the appropriate arrangements.

In the event of any emergency or other special situation, please contact the instructors as soon as possible so we can make arrangements with respect to studio.

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EXPERIMENTS IN SITE + SUBJECT
DUE: Friday, February 1st @ 1.30 pm in both print and uploaded on the FTP site

(1) Site 1-2

As has been discussed, a site can help generate and focus the development of a thesis project. For example, the relative size of a site can establish the scale of a project proposal and the scale of a project can have a significant impact on the kind of development that will take place over the ensuing weeks. It is easy to imagine the differences between projects developed for a large urban site occupying several city blocks, a rural site isolated from development or an awkwardly shaped inner-city site partially occupied by an existing building. In addition, selecting a couple of sites for study can also help to inform the overall subject of the thesis.

Following the prescribed format, analyze 2 possible sites for your thesis project. If you already have a site selected for your project, you must propose a back-up. Don't be afraid to explore to sites in different locations and with different issues and potential. Include the following:

Position –topography:
Where the site is and its overall configuration.

History (Past – Presenct – Future)
What the site has been, what it is now, and what it will likely become.
A good source for historic PGH maps can be found at: http://digital.library.pitt.edu/maps/

Drawn analysis:
(As in the attached sample from "Made in Tokyo")
Plan at the scale of the neighbourhood.
Plan of the existing site.
A 3-D View.

Photographic documentation:
2-4 representative images.

Using a maximum of 500 words, discuss the sites potential in a thesis project.

Submit the above on a maximum of (3) 11X 17 (landscape format) PDF pages

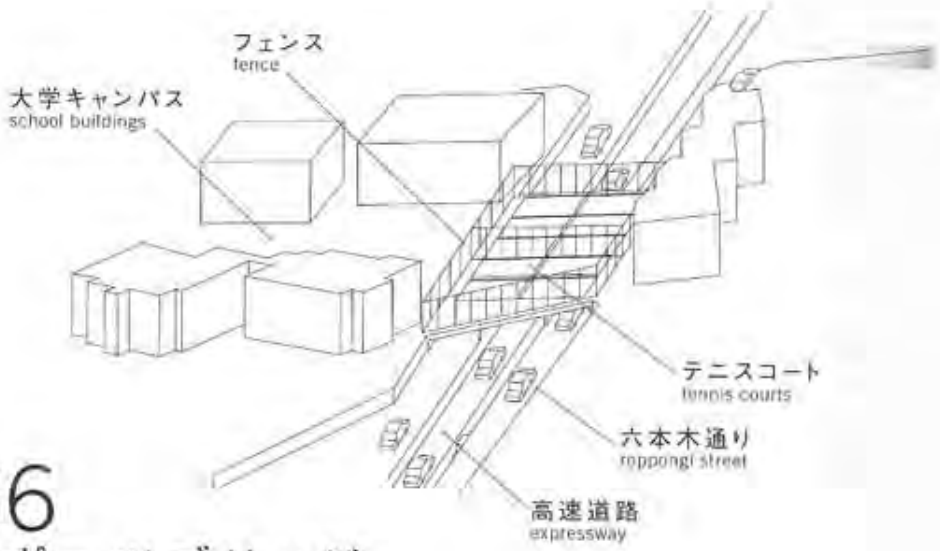
(2) Subject Abstract
Using 500 words or less, discuss a revised subject for your thesis project. Try and do this without mentioning a specific program.

(3) Site Abstract Inter-Play

On a single page (11X17 landscape format), try to express an interaction between your subject and a representation of one of your sites. This interaction might take the form of a collage, a 3-dimensional sketch or a mapping process.

Please keep in mind that as you develop ideas for (1) Site 1-2, (2) Subject Abstract, and (3) Site Abstract Inter-Play, you may find the need to alter aspects of each as possibilities emerge through your work. This is also an exercise, not necessarily a final site and subject selection-although that is always a possiblility.

機能＝テニスコート＋首都高トンネル
場所＝渋谷区渋谷
青山学院のグラウンドのまん中○首都高速と六本木通り
にうかんだテニスコート○夜はネットが光る○まさに都市
のテニス○排気ガスに注意

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スポーツブリッジ
sports bridge

function: tennis court + expressway tunnel
site: Shibuya, Shibuya-ku
- courts on the rooftop of Aoyama tunnel,
over Roppongi street and the metropolitan expressway
- tennis courts on the premises of Aoyama Gakuin private school
- the courts are next to the sports ground,
which is central to the primary, middle and high schools
- possibility of playing tennis whilst watching the stream of cars below

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from: Atelier Bow-Wow: "Made in Tokyo"

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DOMINO
DUE: Friday, February 8th @ 1.30 pm in print, model, and uploaded images/ text on the FTP site

(1) Introduction
The process of taking a "Thesis Subject" into more specific architectural focus is the primary component of Project– Domino. Each of your Thesis Subjects must have repercussions that can be developed and measured architecturally. In a design timeline, one creates from a base of intentions and understanding. Overwhelmingly the product of this creative process is a proposition for a new building, created out of an understanding of ideological intentions matched with a specific site interpretation. Domino will partially invert this process. Here, the process of finding an architectural focus will begin with a base condition, a building we will refer to as "Domino". The challenge will be to adapt the Domino to the particularities of your Thesis Subject and site.

(2) Content
Each of you will be supplied with the same base Domino Building (see supplied .dwg file). Starting from here you are required to propose and document a series of actions that examine the relationship between your Thesis Subject and the Domino. Each operation must be illustrated with (minimally) an image that maps the state of the Domino "before" and "after". The operations can accumulate, the Domino evolving with each successive action. While the content and sequence of operations will vary from Subject to Subject, there will almost certainly be overlapping ideas and consequences for each Domino transformation.

Possible Operations:
1. Symbolic – Aspects of the Domino are made symbolic by being transformed through a process that uses culturally or historically significant narratives.
2. Formal – Aspects of the Domino form are altered
- Sectional Cut – a vertical section of the domino is removed.
- Plan Cut – a horizontal section of the domino is removed.
- Façade Alteration-Removal – A portion (or all) of a façade is removed.
- Excavation –The underground levels of the Domino can be revealed.
- Addition – Volume(s) can be added to the domino
3. Structural Alteration – Elements of the Domino's existing structural system are replaced.
4. Planning Specificity – The organization of the interior to set up programmatic possibilities.
5. Ecological Alteration – The Domino is made green.
6. Urban Condition/ Porosity – The Domino is made public/ private
7. Public Space – The Domino supports a public space.

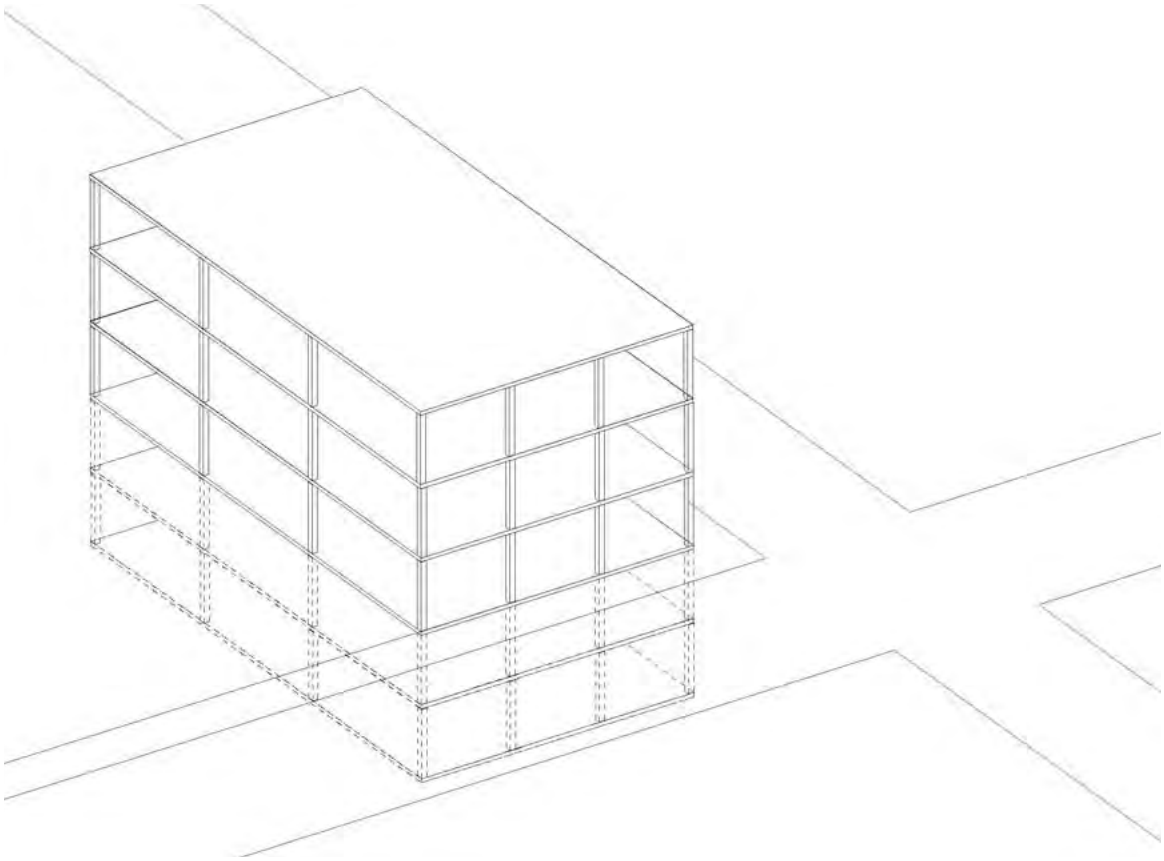
A minimum of 30% of the existing Domino building must be integrated within the final transformation.
As a method for directing each inquiry you might ask yourself how the existing Domino does or doesn't fulfill the potential of your given

(3) Thesis Subject:
Keeping track of the formal evolution of the Domino and the relationship between this evolution and the Thesis Subject is an important aspect of the project. Present the evolution of the Domino both graphically and in model form.

(4) Learning Objectives:
The Domino project is intended to stimulate the refinement of each Thesis Subject by inverting the more typical undergraduate design process in which a design proposition is imported onto a vacant site and developed. In the Domino project the "site" is occupied by the Domino building. The design process is one of adapting and modifying the Domino such that it is brought into dialogue with each Thesis Subject.

A second key objective will be the documentation of this process. A step by step explanation (presented visually, orally and in text) of the transformative process. Ultimately, this required explanation of process is intended as an aid to understanding the multi-faceted complexity of an architectural design and its relationship to research.

(5) Presentation Requirements:
-1:100 (1/8" = 1'-0") or 1:50 (1/4" = 1'-0") model(s) capable of explaining the sequential process of transformation between the given Domino and its dialogical transformation into an exploration of the architectural potential of the Thesis Subject.
- An annotated, sequential, 3-dimensional drawings documenting the process of transformation.
- A series of models documenting the process of transformation (photographed and composed on a 11x 17 page(s))
- Additional drawings and models as appropriate for the completion of the Domino exploration.
-Note: All are to be presented on a series of 11x17 pdf pages and enlarged 22"x 34" printouts.



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(1) Site Subject & Program
DUE: Monday, February 11th @ 1.30 pm in print, model, and uploaded images/ text on the FTP site

1. Readdress the the subject statement: Rewrite a concise summary (five sentences) of the Thesis proposal.
2. Revise: The site interplay drawing and annotate this drawing regarding the relevant issue(s) to be explored.
3. Revise: Revise the site/ subject drawings as they pertain to your revised subject statement.
4. Topic of Project: Develop a building program(s) and specific site area to be used as the vehicle to explore your thesis.
    A. You should use as a guide researched/ published building types to help determine the service and served spaces to your intended program. Source: El Croquis (various architects)
    B. Include rest rooms, mechanical, service requirements etc. when determining your program.
5. Model: Program/ site fit model. Create a physical model of the programmatic spaces in a way that takes into account the general actions and methods of the Domino assignment within the specific site area selected.

(2) Preparatory Phase Presentation
Due: Monday / Tuesday, February 18th –19th: Review & discussion of "Preparatory Phase"

Minimum requirements:
1. Re-submit/ rewrite the subject "statement"
2. Select and present the detailed documentation of the site (not an area of the city...a specific site) This must include a plan with topography, building footprints, roads, paths, site features, etc., (3) min. site sections and (4) elevations of the surrounding site context. These are to be drafted or digitally constructed as elevational/ sections with the correct line weight and to be presented at the same scale. Scale to be scale 1:100 (1/8″ = 1′-0″) minimum.
3. Presentation of relevant context through photography and social history, mapping and analysis
4. Program breakdown in sq-ft and/or sq-meters
This is to include the general to specific function(s) of the proposed programmatic elements quantified by area and quantitative analysis of the program.
5. Site/ Program Fit: Initial volumetric studies testing the suitability of the program(s) on the preferred site. This is to be done in a study model(s) (to scale) showing both the site area and program together.
6. Schematic organizational studies: Drawings and models (to scale) demonstrating strategies for placing the program and circulation onto the site.
7. Any additional items you find relevant to your specific thesis topic: site and subject experiment, domino studies, resources to generate program(s), annotated bibliography, credits, etc.
8. All of the above is to be provided in (2) 11x17 formatted booklets presented at the time of your presentation and uploaded on the FTP site.

Presentations: 10-15 minute presentations of the above followed by 40 minutes of feedback.

Value = 10% of final grade

(3) Building Code, ADA review, Zoning, Misc.

DUE: Friday, February 22nd @ 2.00 pm in print (for your studio reference) and as uploaded images/ text on the FTP site. Studio will begin at 2.00 pm on Friday. In addition, you are to post your thesis preparation booklet on the site as well (in a low res. format).

Assignment: In preparation of your preliminary thesis design process you are to research the following questions as they will pertain to your specific thesis program and site. Assemble the answers to these questions in a 8.5 x 11 format to use as a printed studio reference during your design process.

A. Code Review and Analysis

Using the The Architect's Studio Companion by Edward Allen (you should already own this book from the Materials and Assembly course) to research code issues (based on the International Building Code), and to help review and refresh your knowledge about building construction type(s), size and placement of systems components (etc). New and used copies are also available at the bookstore, and on reserve for the 4th year design studio in Hunt Library reserved area.

Starting Assumptions:
Area: Determine what is your building's approximate gross square footage.
Height: What is the potential height(s) of your proposed building(s)?
Stories: How many potential stories will your building contain?

(1) Review/ Answer the following:

- What type(s) of occupancy are contained within your program(s)?
- What construction types are allowed?
- What is the occupant load for each type of occupancy?
- What is the occupant load of the building?
- How many exits are required from each occupancy type?
- What is the rule for the minimum distance between two required exits?
- What is the maximum travel distance for each type of occupancy?
- What is the maximum length of a dead end corridor?
- Under what conditions may a required exit NOT exit directly to the exterior of the building?
- Do any of the construction type(s) determined NOT require fire protection?
- How many plumbing fixtures are required for each occupancy type?

(2) Review/ Answer the following:

If applicable to your thesis read the section on Mixed Use Buildings. Consider whether your proposal will be 1) Separated Mixed Use, 2) Non-separated Mixed Use, or 3) A single occupancy (or use group) with Accessory or Incidental Uses included. What are the implications for Construction Type?

- Read the section on floor openings (atriums).
- How is the width of various egress components determined?
- What is the minimum code compliant corridor and stair width?
- How many occupants can a 42"wide stair handle in a fully sprinklered building?

B. ADA review:

Review the ADA standard for accessible design for critical accessible guide lines which may inform your building's design.

Download PDF @ http://www.usdoj.gov/crt/ada/stdspdf.htm

- What is the maximum slope for an accessible ramp?
- What is its minimum width?
- When is an intermediate landing required?
- What other significant ADA items may impact your design?

C. Zoning Review:

Review the zoning regulations in the city you are proposing your thesis. Provide relevant zoning information for your building. You may be challenging these guide lines but it is important for you to understand what is the current zoning.

http://www.municode.com/resources/gateway.asp?sid=38&pid=13525

- What is the maximum building height based on the building type(s) based on your site location.
- What is the parking requirements for your proposed building type?
- What are the site setbacks, if any?

D. Special Conditions:

Does your site, program and/ or subject require additional research or design data? Such as:

- Does your proposal require building in a flood plain?
  If so, what is the elevation of the flood plain? visit sites web sites such as: http://msc.fema.gov/
- What are the important design perimeters for accommodating parking on your site?
  What are the maximum drive/ ramp slope, parking space size, minimum travel path widths, etc?
- Are their any minimum clearances required for truck, car, train, boat, etc. height clearance, building access, build ing service, etc.? Reference sources such as: Architectural Graphic Standards
- Define any unique programmatic items which require special considerations or design guidelines. Provide such guidelines as a resource.
- Any other important technical, structural, sustainable research, etc. which may help you with your design process.

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Initial Design Development

DUE: Interim deadline on Friday, February 29th: substantially completed presentation quality site model. Initial Design Development due Tuesday/ Wednesday, March 4th & 5th @ at your scheduled review time. In addition, you are to post the assigned drawings and models on the FTP site in a low res. format before you leave for Spring Break.

Strategic Organization:
Initial design development shouldn't get overly concerned with the small details of planning and organization. What we are after is a careful understanding of the relationship(s) between each project and its context. Working in a fluid but precise manner is important here. We want to establish the scale of the project relative to each site. Key programmatic areas should be organized in relation to the site and each other such that potential relationships are understood and evaluated. Obviously, making a decision to distribute one's program as a series of pavilions across a given site would set up a very different project –site relationship(s) than a strategy that assembles all of the programmatic elements into a single volume. Those of you with sloping sites might establish clear levels at which particular programmatic pieces would be positioned. Flow is important here, particularly for those of you dealing with projects that you pass through from one side to another. This type of schematic planning + organization must take place in both plan and section. The sectional views can begin to suggest a building's scale and its relationship to the surrounding (contextual) volumes. Those of you who have sites containing historic remnants and/or other buildings should include these in your studies particularly if you are matching floor levels or setting up spaces between your project and these existing conditions.

Deliverables:
-Schematic plans, sections and volumetric studies at an appropriate scale. These must be shown in relation to each site context, not in isolation. These studies must detail the intended schematic programmatic and spatial relationships in the project. These studies must be labeled, the ground level plan should contain a north arrow and point up etc.
-A site/ building model demonstrating the intended spatial relationships both within the proposed building and in relation to each context. Context is understood to include a sites physical form in plan and section (ie topography) as well as any significant structures adjacent to it.

Tactile Exploration:
At the same time as these strategic moves are being examined, it is also possible to explore your projects at a much more tactile scale involving materiality and assembly such that we might come to understand your intentions with respect to one's experience of the project and its intended atmosphere. Obviously, the gradual coming together of your work at both these scales will involve modification and adjustment at both scales so don't get overly concerned with the precision between work at these scale extremes. The goal is to initiate investigation and suggest possibilities. As a result, some of this work may not figure directly in the final project, but it will have served a purpose in your work's overall development and scope.

Deliverables:
-A single rendering (or a series of views) that present potential aspects of the projects spatial experience
(interior and/or exterior)
- A study model that explores the projects materiality
- A wall section taken through a significant section of the building annotated to show materials, structure and enclosure.

Relationship to the Subject:
Each of these explorations must be done in a manner such that we remain aware of your subject interests. Obviously, these relationships will be more evident in some representations than others.

Presentations: 10-15 minute presentations of the above followed by 30 minutes of feedback.

Value = 10% of final grade

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Design Development

DUE: Wednesday, March 26th

In addition, you are to post the assigned drawings and models on the FTP site in a low res. format by the beginning of studio on the 26th. This will be followed by a pin-up of this work on both Wednesday, March 26th and Friday, March 27th.

1 - A short restating of your thesis subject illustrated only with perspective images and axonmetric drawings/ diagrams (a minimum of 6) of your thesis work to date. These illustrations can only be things you have drawn or modeled.

2 - A developed site plan/ground floor plan + a detailed/annotated full cross or longitudinal section that demonstrates the project and its thesis intentions. These are required to be drafted including proper line weights, graphic techniques, etc. Partial sections will not be acceptable for this assignment. The site plan is to show paving, site features, landscape items, site lighting, parking, site drainage, terrain, building entry(s), building interior plan, circulation elements, north arrow, etc. The floor plan must correctly show stairs, elevators, ramps, rest rooms, structure, walls with wall thicknesses, building enclosure, etc. These drawings should develop the whole understanding of the project and its development; such as how does daylighting, artificial lighting, HVAC, structure, enclosure, etc. integrate into your design.

3 - A detailed, materially specific model designed specifically to present and explore your project's specific thesis interests.

4. You are to show your design process through freehand drawing studies, thumb nail sketches, study models etc. as part of this presentation.

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Design Development II & III

REVIEWS: Monday, March 31st and Wednesday, April 2nd (1.30-4.20 p.m.) & Thursday, April 10th and Friday, April 11th (time TBD)

1. You are to finish all of the required drawings and items that were requested from the last assignment. Many of you have not satisfied all of these requirements to the level expected and it is imperative you do so.

2. You are to continue your project's development based on this week's critique. You are required to modify the present work based on this critique over the weekend. We are expecting a real effort.

3. Next Monday and Wednesday, 4th year instructor Joseph German will review all the work as a critique. Gerard Damiani will be swapping studios with him in exchange for the effort on both days.

4. You are to present to him the thesis topic/ research as well as the project development both graphically and verbally. Each review will be 25 minutes including your 10 minute maximum verbal presentation. Instructor German will critique the work for project development with an emphasis on development as well as how it reinforces the thesis topic.

5. Following this review, you are to revise and develop the work based on Gerard's critique, Joseph German's review and the comments Howard Davies provides. New and revised drawings and models are required for Howard Davies' visit on April 10th & 11th. Additional plan, sections and perspective views are highly encouraged. Each review will be 35 minutes with a 10 minute maximum verbal presentation.

6. You are to provide via email (gdamiani@sdapgh.com) no later than Wednesday, April 9th the name of your invited faculty member for a pin-up and attendance to your final thesis presentation on Saturday, May 3rd.

7. You are to provide via email (gdamiani@sdapgh.com) no later than Wednesday, April 9th a preliminary list of the names of the students who will assist you in your project's final development during the last week.

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Final Review Requirements and Schedule

Due Friday, April 18th @ 4.30 pm on the studio FTP

1. You are to prepare a cartoon in an 11x 17 landscape format showing the arrangement of your final thesis presentation. Each item should be drawn as a simple (plug in) graphic that will allow us to understand what it implies. Label each drawing image alphabetically and list what model or models will be produced or shown at the final review.

2. On a second 11x 17 landscape format sheet, annotate in one or two sentences how each labeled drawing will reinforce your thesis subject.

3. On a third 11x 17 landscape format sheet, write a 500-1,000 word "Thesis Title/ Final Project Description" which discusses the selected thesis subject in relationship to the final project.

Excerpt from the course syllabus for reference:

## 0.3 Schedule

Saturday, May 03rd "Final Review / Exhibition" CFA 214

Requirements

1. Final orthographic drawings (site plan/ ground floor plan/1-2 sections / 2 elevations) minimum
2. Site / building massing model
3. Larger scale building model(s)
4. A wall section and or other forms of technical representation
5. Interior / exterior perspective views
6. 500-1,000 word "Final Project Description" in which discusses the selected subject in relationship to the final project.

Note:
During the week of April 28th, you could seek additional help from your classmates in the first through fourth years to help with final thesis production. However, credit must be given to any items completed by your classmates.

Value 60%

Wednesday, May 07th Studio "Electronic Semester Documentation Due"

Requirements

1. (6) 8 1/2 x 11 pages which represent in words, models and graphics of your proposal.
   You will receive an R for the course if this is not submitted by the SOA deadline.

Thursday, May 08th "Semester Review" Exhibition of Final Proposal

You will receive an R for the course if you do not display your work for Semester Review on the evening of May 08th for the May 09th Exhibition (CFA 214).

## 0.6 Grading Criteria

Grades will be issued at five times during your progress. See the schedule for the percentages, expectations, and dates. Grades will take into account the progress leading up to the deadline. The grade received will be the one established by both instructors Damiani and Davies.

Criteria

**A** *Superlative* or exemplary work, initiative beyond the description of the studio and proposal. Student shows a significant understanding and clarity in a solution through visual, written and verbal means. Attended by an attitude of self-motivated exploration, open-mindedness, and a willingness to benefit from criticism.

**B** *Very good*, some exemplary work, a thorough understanding of the initial proposal and the solution. The proposal/solution displays a conceptual underpinning, significant resolution and is well presented through visual, written and verbal means. Shows competence and mastery of skills gained in this and prior studios. Attended by an open, inquisitive attitude.

**C** *Satisfactory* or adequate work that meets the minimum requirements of the proposal and studio. Shows understanding of the proposal, with some deficiencies. Shows reasonable mastery of skills gained in this and prior studios. This grade is seen to represent an average solution.

**D** *Passing*, work that is complete, but does not show an understanding of the proposal or expectations, and demonstrates deficient skills. Work often attended with belligerent or closed-minded attitude with respect to criticism and self-motivation. Although technically passing, this work is unacceptable in a professional program.

**R** *Failing* work that does not meet the requirements of the proposal or course and shows a serious deficiency in skills or is incomplete. An R grade will also be received if no work is produced for more than three studio classes, you are absent for more than three studio classes, or there is any combination of three incidences of a lack or work or absence.

Grades of "Incomplete" are granted only for legitimate extended emergencies (with evidence) as stated in both the School handbook and the University handbook. Likewise, no work may be submitted after the completion of the published deadlines at the end of the semester as a means to improving your grade.

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Final Requirements Checklist:

1. Plotting deadline: Friday, May 2nd @ 10.00 pm. Any plotting done after this deadline is at your own risk.

2. Thesis Reviews: Saturday, May 3rd from 9.00- 6.00 pm, CFA 214

Once you have finished your review, it is required that you attend your classmates' final reviews. Please encourage your classmates and helpers to attend as well.

3. Thesis Reception/ closing comments: CFA 214 6.00- 7.00 pm.

4. Studio Documentation Due: Wednesday, May 7th @ 10.00 pm. (required for course completion)*

*Please refer to guidelines issued by the SOA on April 24th via an email sent by our department head, Laura Lee.
Note: you are now to prepare & submit (4) 11x17 sheets in the SOA format as mentioned in the above email.

5. Semester Review: CFA 214 Pin-up your final presentation on one 4x8 panel (stacked/ layered drawings are required) and display final model(s). Pin-up: May 8th from 7.30-8.30 pm/ Pin down: May 9th from 7.30-8.30 pm. Order to be the same as the one established for the May 3rd review. (required for course completion)

6. Stewart L. Brown Award: Submission due no later than 5 pm Monday, May 12th. (required for graduation)

7. CFA Studio clean up deadline: Monday, May 12th, 5.00 pm

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Tentative schedule: 40 min. each student

9.00 Leah Wolkovich: Khee Poh, Christine Mondor

9.40 Max Waldron: Khee Poh, Walter Boykowycz

10.20 (10 min break)

10.30 Cathy Chung: Christine Mondor, Omer Akin

11.10 Patrick Schnell: Christine Mondor, Jonathan Kline

11.50 John Eastridge: Steve Lee, Lowry Burgess, Charles Rosenblum

12.30 Lunch

1.00 Meredith Magin: Steve Lee, Mary-Lou Arscott

1.40 Emma Davison: Doug Cooper, Jeff Davis

2.20 (10 min break)

2.30 Brian Kish: Doug Cooper, Steve Lee

3.10 Josh Cummings: Kai Gutchow, TBA

3.50 Zach Hartle: Kai Gutchow, Christine Mondor

4.30 (10 min break)

4.40 Rebecca Shore: Laura Lee, Steve Lee

5.20 Adam Lackett: Laura Lee, Steve Lee

6.00 Closing comments/ Reception

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# 48-505 Studio X: Thesis Reviews | Spring 2008

| | |
|---|---|
| Day | Saturday, May 3rd 2008 |
| Time | 9.00 am- 6.00 pm |
| Location | CFA 214 |

Students and all SOA faculty are invited to attend this Spring's 2008 Thesis Reviews. For more information on the students and their projects, please visit: www.arc.cmu.edu/passport/thesis.html

| | |
|---|---|
| **Faculty/Critic** | Gerard Damiani, SOA Adjunct Professor of Practice |
| | Howard Davies: Visiting Critic, McGill University and Principal of Atelier Big City, Montreal, Canada |
| **Guest Critics** | Annie Lebel, Principal of Atelier in-situ, Montreal, Canada (www.atelierinsitu.com) |
| | Steven Fong, Associate Professor, The Faculty of Architecture, Landscape, and Design, University of Toronto |

## Students and invited faculty guests

9.00 Leah Wolkovich
*The Urban Market: Where City meets Ground*
Invited faculty guests: Khee Poh, Christine Mondor

9.40 Max Waldron
*"Residential Revolution: Assumptions About Privacy in Architecture."*
Invited faculty guests: Khee Poh, Walter Boykowycz

10.30 Cathy Chung
*Bridge to Harper's Ferry*
Invited faculty guests: Christine Mondor, Omer Akin

11.10 Patrick Schnell
*Suburban Ecologies: Ecology of the Blackland Prairie*
Invited faculty guests: Christine Mondor, Jonathan Kline

11.50 John Eastridge
*Unconscious Pittsburgh*
Invited faculty guests: Steve Lee, Lowry Burgess, Charles Rosenblum

12.30 Lunch Break

1.00 Meredith Magin
*Riverfront Revitalization: The Post Industrial Quagmire*
Invited faculty guests: Steve Lee, Mary-Lou Arscott

1.40 Emma Davison
*Bridging Urban Infrastructure*
Invited faculty guests: Doug Cooper, Jeff Davis

2.30 Brian Kish
*Reconnecting Homestead*
Invited faculty guests: Doug Cooper, Steve Lee

3.10 Josh Cummings
*Memetic Camouflage and Application*
Invited faculty guests: Kai Gutchow, Charles Rosenblum, Matthew Fineout

3.50 Zach Hartle
*Network Information Facility, University of Pittsburgh*
Invited faculty guests: Kai Gutchow, Christine Mondor

4.40 Rebecca Shore
*Slow Cities: Smart Growth*
Invited faculty guests: Laura Lee, Steve Lee

5.20 Adam Lackett
*AgriCulture Mon Wharf, Pittsburgh*
Invited faculty guests: Laura Lee, Steve Lee

| Student: | Project: | | Date: |
|---|---|---|---|
| | | | |

**Research topic:**

1. Has the research topic been clearly stated and justified? Yes / No

2. Has work begun on the architectural translation of the research topic? Yes / No

3. Is the architectural translation effective in developing the research topic? Yes / No

**Site:**

1. Has the site been clearly identified? Yes / No

2. Is there a site plan drawn to scale? Yes / No

3. Is there a working site model? Yes / No

4. Has the site and its surrounding area been mapped in a manner that effectively explores and develops the stated research topic? Yes / No

5. If the site is an existing building or contains existing structures how well have these been documented and understood such that they have been effectively included in the research development? Yes / No

**Program:**

1. Is the program identified? Yes / No

2. How well has the program been related to the intended research subject? Yes / No

3. Is there a detailed numerical breakdown for the program? Yes / No

**Organizational Studies:**

1. Has the planning and organization of the project started? Yes / No

2. If so have these studies been drawn or modeled to scale? Yes / No

3. Is a ground floor plan developed with particular attention to the points of interface between the project and the site? Yes / No

4. If the project has multiple levels (above and below ground) have these been developed in any significant way? Yes / No

5. Have sections been drawn? Yes / No

6. How descriptive are these sections in furthering our understanding of both the subject of research and the projects organization? Yes / No

## Spatial Work

1. Have 3-D studies (models, isometrics, perspectives) been started and how well have they been related to the subject of research? Yes / No

2. Is there any research looking at the overall environment or atmosphere of the project? IE Have we a sense of what it will look like, how it will feel? Yes / No

## Material Work:

1. Has the project's materiality been investigated in any way and how effectively has this been brought into the subject of research? Yes / No

## Overall:

1. Is the presentation well prepared? Yes / No

2. What was the quality of the 5-10 minute Verbal explanation? Good / Average / Poor

3. What was the quality of the Visuals? Are the drawings and models well done? Does it seems as though the project has set up a base of drawings and other representations on which the research will continue to develop? Yes / No

4. How well did the students respond to questions and provide information about their research? Good / Average / Poor

5. How useful has this presentation been for the development of the project? Useful / Not-useful

6. Based on the work presented in this review this project is: on the right track / average / behind

7. If I were grading this project based on this presentation I would give it : A+/ A / A- / B+ / B / B- / C+ / C /C- /+D / D / D- / F

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