

SCHOOL OF ARCHITECTURE / UNIVERSITY OF WATERLOO / TRD 1 / FALL 2015
Thesis Research & Design Studio
Arch 692_004
ARC 3021
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Listening to Design
Empathy, craft and the power of exchange

What is altruism and why is it important? Altruism's significance comes not from its empirical frequency, which is relatively rare, but because its very existence challenges the widespread and dominant belief that is natural for people to pursue individual self interest...It thus becomes important to consider altruism not just to understand and explain the phenomena itself but to determine what its continuing existence reveals about limitations in the Western intellectual canon, limitations evident in politics and economics since Machiavelli and Hobbes, in biology since Darwin, and in psychology since Freud.

Kristen Renwick Monroe, *The Heart of Altruism, Perceptions of a Common Humanity*

Often the hands will solve a mystery that the intellect has struggled with in vain.
Carl Gustav Jung, *Collected Works*, V 16, *The Practice of Psychotherapy*, par. 181

It's common to say that trees come from seeds. But how can a tiny seed create a huge tree? Seeds do not contain the resources needed to grow a tree. These must come from the medium or environment within which the tree grows. But the seed does provide something that is crucial: a place where the whole of the tree starts to form. As resources such as water and nutrients are drawn in, the seed organizes the process that generates growth. In a sense, the seed is a gateway through which the future possibility of the living tree emerges.

Peter Senge, *Presence*

Society is increasingly dependent on design because more and more of our world is designed. While our need to solve problems is understandable, less easily explained is our failure to address the deeper underlying causes and conditions we face; in a sense, we are taught to design but not how to learn from design. This studio seeks to balance self directed work with a framework that facilitates and invites meaningful creative investigation of your thesis through three interrelated explorations:

1. Empathy and decision making

The problems we face are complex and often underpinned by diverse streams of constituents interacting in ways that are difficult to anticipate. What role does empathy play in design? What new forms of collaboration are required in contemporary architectural practice?

2. Craft and the embodied brain

In spite of the sublime capacities of technology, buildings continue to be built by hand and are experienced through the senses. The mind lives in all parts of the body; how can architects access the potential of the felt sense body to make wise and creative decisions?

3. Design as generosity and social exchange

How do contemporary artists' and designers use the notion of "gift" as a medium for artistic and architectural production. In particular what is the role of generosity in the work of contemporary artists and designers and how is this a catalyst for insight and social change.

This studio is an invitation to create:

Humans did not discover fire - they designed it. The wheel was not something that our ancestors merely stumbled over in a stroke of good luck; it too was designed. The habit of labeling significant human achievements as “discoveries” rather than design discloses a critical bias in our western tradition whereby observation dominates imagination. Nelson, Harold & Stolterman, Erik. "The Design Way - Intentional Change in an Unpredictable World

A condition of contemporary architecture that is both alarming and liberating is that there are fewer and fewer agreements about what constitutes “good design”. Do we need a particular style? Should architecture try to help others? What is necessary? What is wasteful? What can a building contribute to the world? The creative experience has always been intense and unpredictable but today’s designer faces an ever-expanding range of options at every turn with no clear sense of cultural direction or support. I think the range of choices and lack of societal agreements have become a hallmark of contemporary architectural practice and have shifted the centre of gravity of the creative act from society to the individual. And this means that every architect now carries an increased burden to create authentically and to become responsible for the meaning and outcome of the act of design.

Though we live in a time of unprecedented access to technology, digitally based tools do not necessarily address issues of architectural awareness, insight or authenticity. This studio posits that the built world and the inner world are inseparable and have the potential to touch us through our relationship to the act of design. Assignments will be used to develop a core sense of empathy for your creative work and to bring a new kind of critical awareness to your approach to design.

In fact, most of the time, things do not turn out as we expect. But the potential value of unexpected developments is rarely tapped. Instead, when things turn out contrary to our expectations, we go immediately into problem-solving mode and react, or just try harder—without taking the time to see whether this unexpected development is telling us something important about our assumptions.

Peter M. Senge, The Fifth Discipline: The Art and Practice of the Learning Organization: First edition

This studio takes the position that architects have had a significant role to play in this process and will have an increasingly important role to play in the outcome of this struggle though their capacity to propose, en-vision and create places where the tension between our need for what is wild and what is built can be cherished and come alive.

You are invited to use the assignments of this studio to explore your creative instincts and learn how they can best flourish and best be expressed through your thesis. The aim of this studio is to provide a creative and research based environment that supports the development and testing of your thesis proposition. My hope is that you will complete the studio with a foundation for the development of your thesis.

Structure

The term is composed of a series of exercises arranged to focus and deepen the exploration of both methodology and development for your thesis. The first 4 assignments (S1, S3 & S4) are concerned with establishing the conceptual, material and creative setting for the work. The final 2 assignments (T1 & T2) are intended to bring these experiments and research to a meaningful and conceptual “whole” that clearly declares a territory, guide and timeline for future development of your thesis. The intention of this studio is that by the end of the term you will have assembled a well tested “first draft” of your thesis.

TRD 1 STRUCTURE

S1 Setting

Locates your work, intellectually, emotionally and physically in a place, theory or practice.

S2 Precedents

Examines what has come before; in other words what does my work rest upon?

S3 Rituals, Program, Narrative / Lit Review

Explores rituals of your thesis, intended program, and critical bias of problem solving.

S4 Site

Focuses on communicating through mapping exercises the material qualities of your site at four scales.

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T1: Thesis Presentation

A four-week exercise leading to a first draft of your thesis. Your presentation needs to incorporate all the design research developed during the preceding assignments. It also includes a plan for future development of your work.

T2: First Draft

A book summarizing your thesis composed of all the assignments of the term. While this document is obviously subject to change it is intended to serve as a foundation, structure and guide to your future self directed thesis work, providing continuity with and ultimately leading to, your thesis defense.

EVALUATION

You will be evaluated on:

Participation 10% - participation in the seminar, reviews, attendance and preparation;

Mid review (Setting 1-4) 40% - quality of presentation: structure, synthesis, depth, content

Final review (Thesis 1-2) 20% - quality of presentation: structure, synthesis, depth, content

Final thesis document 30% -

5% thesis statement and abstract;

10% depth of investigation (project and text);

5% structure and clarity;

5% references, bibliography, case study; timetable, milestones;

and 5% ongoing development of the thesis throughout the semester;

A Brief Note on Obstacles

It is easier to be better than you are, than to be who you are. The point here is that perfection belongs to the gods; completeness and wholeness is the most a human being can hope for.

Marion Woodman, Addiction to Perfection

In my experience a self-directed architectural thesis is a large and meaningful undertaking and naturally takes time to ripen and develop. The stress and pressure created by expecting to instantly arrive at a thesis is counter productive. I encourage you to trust your creative instincts and stay true to your self during the thesis process. Waiting for the perfect thesis abstract or perfect set of precedents is less useful than just jumping in and beginning. Getting exercise, proper sleep and eating well leads to working steadily and in turn trusting the creative process. You know your thesis is going well when you are enjoying the material you are exploring and learning as much from your mistakes as what rings true.

SEMESTER Schedule Fall 2015:

MONTH	WEEK	TUESDAY	THURSDAY
SEPTEMBER	0		9/9 This is a Wednesday TRD1 PRESENTATION + INTRODUCTION 1:30 [ML] Lottery Umbrella Topics
Orientation Week			
Classes Begin	1	15/9 S1 CONCEPTUAL FRAMEWORK// THESIS CLOUD Discussion "What is a Thesis" [?] Hand-out Assignment A1	17/9 W1 LITERATURE SEARCH WORKSHOP [EC] Effie Patelos [UW Musagetes Library] 10:00 - 12:00 DESK CRITS 02:00 - 04:00 Academic Integrity and Ethics [ML] 01:00 - 02:00 All School Meeting [ML]
DATAlab Drone Workshop, 21/9, 5-8 [Frank Sedar] InDesign Workshop, 21/9, 8-9 [El Khafif, Van Leur]	2	22/9 DESK CRITS	24/9 DESK CRITS
	3	29/9 S2 PRECEDENTS// DESIGN STRATEGIES Internal Review A1, Hand-out Assignment A2	01/10 DESK CRITS
OCTOBER	4	06/10 DESK CRITS	08/10 DESK CRITS
Drop/no penalty period ends 02/10			
	5	13/10 S S3 LITERATURE RESEARCH Internal Review A2, Hand-out Assignment A3	15/10 W2 LITERATURE REVIEW WORKSHOP [EC] Effie Patelos [UW Musagetes Library]
	6	20/10 DESK CRITS	22/10 L2 GUEST LECTURE DESIGN RESEARCH [NN] Before and afterwards Desk Crits
	7	27/10 S4 SITE ANALYSIS Hand-out Assignment A4	2 29/10 W3 WORKSHOP [Bridge, Ward Room, 226, Founder's Lounge]
NOVEMBER	8	03/11 W3 WORKSHOP [Bridge, Ward Room, 226, Founder's Lounge]	05/11 DESK CRITS
	9	10/11 MID REVIEW [L] Presentation of A1-A4	12/11 S5 PROGRAM// TEST DRIVE Hand-out Assignment A5
	10	17/11 DESK CRITS	19/11 DESK CRITS
	11	24/11 DESK CRITS	26/11 DESK CRITS
DECEMBER	12	01/12 DESK CRITS	03/12 DESK CRITS
Classes and Lectures end 04/12			
	13	08/12 S6 ARGUMENT//THESIS OUTLINE Assignment A6	10/12 DESK CRITS Exams Start
			11/12 FINAL REVIEW [L]
	14	15/12 OPTIONAL DESK CRITS	17/12 THESIS OPEN STUDIO [Bridge Storefront] Digital and Poster Submission
Grades due 08/12-03/01	15	22/12 DIGITAL SUBMISSION A1-A6 Exams End	24/12 Winter Break

The schedule is open for adjustments. Please see schedule announced in assignments. Changes will be discussed during class time. Further information: <http://gradcalendar.uwaterloo.ca/page/GSO-Academic-Deadlines-and-Events>
ML= Main Lecture Hall, EC= Eclass, FL= Founder's Lounge, L= Loft, WR= Ward Room, 226= Seminar Room 2026

S1. SETTING

The creation of something new is not accomplished by the intellect but by the play instinct acting from inner necessity. The creative mind plays with the objects it loves.
C.G. Jung

Be wild; that is how to clear the river. The river does not flow in polluted, we manage that. The river does not dry up, we block it. If we want to allow it its freedom, we have to allow our ideational lives to be let loose, to stream, letting anything come, initially censoring nothing. That is creative life. It is made up of divine paradox. To create one must be willing to be stone stupid, to sit upon a throne on top of a jackass and spill rubies from one's mouth. Then the river will flow, then we can stand in the stream of it raining down.

Clarissa Pinkola Estés, *Women Who Run With The Wolves: Contacting the Power of the Wild Woman*

Our dreams recover what the world forgets.
James Hillman, *Animal Presences*

Design is a matter of concentration. You go deep into what you want to do. It's about intensive research, really. The concentration is warm and intimate and like the fire inside the earth - intense and not distorted. You can go to a place, really feel it in your heart. It's actually a beautiful feeling.
Peter Zumthor

The goal of this assignment is to instinctively and intuitively locate your thesis across a broad range of disciplines, traditions and practices. Because a thesis typically draws from overlapping sources and approaches, this exercise encourages associations that draw from a wide and rich variety of materials. You are encouraged to not commit to a single position but to stay open to the potential for interactions, accidents and new possibilities as you develop the contents of each panel. The assignment favours the investigation and study of many different kinds of resources, employing a wide range of mediums. We are trying to discover a primary sense of where the thesis belongs in the world of culture, technology, architectural practices and types, materiality, psychology, and geography. Because every thesis is different you are encouraged to emphasize development of those panels that best support your thesis. Fidelity and experimentation are the crucial elements of the assignment.

Assignment:

Panel 1. Atmosphere

Dreams are neither deliberate nor arbitrary fabrications; they are natural phenomena which are nothing other than what they pretend to be. They do not deceive, they do not lie, they do not distort or disguise... they invariably seeking to express something that the ego does not know and does not understand.

C.G. Jung "Analytical Psychology and Education," CW 17, par. 189

Using the techniques of collage create an image expressing the atmospheric forces at work in your thesis. Much the way a dream can allows for surprising insights and unexpected possibilities, produce an image expressing a key interior or exterior space in the thesis. Write a brief summary of your image.

Panel 2. Body and Materiality

This thing up here, this consciousness, thinks it's running the shop. But it's a secondary organ. It's a secondary organ of a total human being, and it must not put itself in control. It must submit and serve the humanity of the body.

Joseph Campbell

Great places feel alive to us. This exercise is concerned with materiality and it's role in your thesis. Depending on your thesis it may literally have to do with the human body, comfort or physiological processes but it can also serve as a way to examine materials and the role of materiality and architectural detail in your work. Use and combination of text, images diagrams, models or materials.

Panel 3. Precedents and Architectural Type

Architecture is exposed to life. If it's body is sensitive enough, it can assume a quality that bears witness to past life.

Peter Zumthor

Select 6 precedents that inform your thesis. These may be drawn from any source for example: architecture, industrial design, film, literature, music, urbanism, technology or craft. Use text, diagrams, drawings and images to illustrate each precedent and briefly relate each to your thesis. Each precedent needs to illuminate a different facet of your thesis. This exercise is not intended to be an in depth study of each precedent but more of an overview as we will revisit precedents in S2.

Panel 4. Geography

It is not by accident that the pristine wilderness disappears as the understanding of our own inner wild natures fades.

Clarrisa Pinkola Estes

Use any combination of maps, diagrams, text (100 words) and drawings, to locate your thesis in a particular geography. Communicate the character and salient qualities of whatever you understand about your site. We will return to this topic in P4.

Panel 5. Imagination and Technology

The greatest achievement of the human brain is its ability to imagine objects and episodes that do not exist in the realm of the real, and it is this ability that allows us to think about the future. As one philosopher noted, the human brain is an "anticipation machine" and "making future" is the most important thing it does.

Dan Gilbert

The unborn work in the psyche of the artist is a force of nature...The creative urge lives and grows ... like a tree in the earth... We could do well, therefore, to think of the creative process as a living thing implanted in the human psyche.

C.G. Jung (CW 15, par. 115)

If your thesis rests on a specific technology or will be exploring a particular phenomena best expressed through science use this panel to describe these processes, histories and leveraging opportunities. This panel can also speculate on the potential of technology to impact your thesis.

Panel 6. Cultural / Psychological

Too much of the animal distorts the civilized man, too much civilization makes sick animals.

The Eros Theory, (1917) C.G. Jung, Collected Works V. 7, par. 32

Of course, a culture as maniacally and massively materialistic as ours creates materialistic behavior in it's people, especially those who've been subjected to nothing but the destruction of the imagination that this culture calls education, the destruction of autonomy it calls work, and the destruction of activity it calls entertainment.

James Hillman

Select 4 critical quotations from different sources to frame issues that underpin the intentions of your thesis. Note your sources and provide a brief explanation of the relationship of the quote to your work. Please include a portrait of each author.

Panel 7. Text

Asking the proper question is the central action of transformation in fairy tales, in analysis, and in individuation. The key question causes germination of consciousness. The properly shaped question always emanates from an essential curiosity about what stands behind. Questions are the keys that cause the secret doors of the psyche to swing open.

Clarissa Pinkola Estés

1. Working Title

2. Abstract of your thesis 100 words

3. A glossary of 4 key words with etymological origins pertinent to your thesis

4. Two key questions of your thesis.

5. Bibliography

The "Text" requirement is ongoing and an essential ingredient of your thesis. At each stage of TRD studio assignments S1, S2, S3 & S4 and please submit an updated copy of your thesis book based on the template provided:

Working Title

Abstract of your thesis 150 words

A glossary of key words with etymological origins pertinent to your thesis

Key questions of your thesis.

Bibliography

Template for TRD Book to be maintained throughout term.

Digital Submission due 10PM September 28

Suggested panel format 8 1/2 x 11 or 11x17.

S2. PRECEDENTS AND NARRATIVES

Without an understanding of myth or religion, without an understanding of the relationship between destruction and creation, death and rebirth, the individual suffers the mysteries of life as meaningless mayhem alone.

Louise Marie von Franz

"...no wonder people get neurotic. Life is too rational, there is no symbolic existence in which I am something else, in which I am fulfilling my role, as one of the actors in the divine drama of life".

CG Jung CW vol 18 p274 para 628

I think one of the important evolutions is that we no longer feel compulsively the need to argue, or to justify things on a kind of rational level. We are much more willing to admit that certain things are completely instinctive and others are really intellectual.

Rem Koolhaas

Our work always rests on the shoulders of what has come before. This assignment asks you to locate your thesis in the context of what has come before it. These precedents may be drawn from whatever discipline and practice you are studying, for example architecture, industrial design, film, poetry, city, landscape or education. The complex relationships between materiality, cultural, geography and space are always in play and need to be identified and transcribed. It is also important to align your thesis with a particular architectural type.

Assignment:

Select 4 precedents. Look at each of them through the following lens:

1.The Big Idea

Of course, a culture as manically and massively materialistic as ours creates materialistic behavior in its people, especially in those people who've been subjected to nothing but the destruction of imagination that this culture calls education, the destruction of autonomy it calls work, and the destruction of activity it calls entertainment.

James Hillman

Discuss “the big idea” (in a sense the thesis) of each precedent and use digital and written analysis to identify and explain in depth what is driving the primary architectural experience of each precedent. Ask yourself, “What is most alive in this project and how is this communicated?” Explain how the precedent does the job that it does.

2.Narrative

Follow the lead of your symptoms, for there's usually a myth in the mess, and a mess is an expression of soul.

James Hillman

What is the history of the particular architectural type of your precedents. Describe via image and or text what the problem is that your precedents solve and how this is accomplished. (100 words per precedent.)

3 Interdependence

We are here to awaken from the illusion of our separateness
Tich Nhat Hanh

Use diagrams to illustrate the interdependent factors of your precedents. For example on a resource level, a house made of wood depends on harvesting a forest, which in turns depends on a forest industry which in turn depends on healthy soil. Identify the interdependent factors of your thesis. What, if any, are the local and global implications?

4. Presence

the soul
 vanishes
the soul. vanishes, into the
shape of things

Robert Kelly, "The Blue."

Create an image that captures the presence of one of your precedents. Comment on the role "presence" plays in the selected precedent and why you selected it.

S2 Digital Submission due 10PM October 12
Suggested format 8 1/2 x 11 or 11x17.

S3. PROGRAM, RITUALS, RELATIONSHIPS / Literature Review

People don't resist change. They resist being changed.
Peter M. Senge

Creativity requires all of ourselves; our thoughts, personalities, histories desires and spirits. It is not sufficient to listen rationally to inert facts and ideas; we also have to listen to people in a way that encourages them to realize their own potential and the potential in their situation. This kind of listening is not sympathy, participating in someone else's feelings from along side them. It is empathy, participating from within them. This is the kind of listening that enables us not only to consider alternative existing ideas but to generate new ones.
Adam Kahane

Why do we focus so intensely on our problems? What draws us to them? Why are they so attractive? They have the magnet power of love: somehow we desire our problems; we are in love with them much as we want to get rid of them . . . Problems sustain us -- maybe that's why they don't go away. What would a life be without them? Completely tranquilized and loveless . . . There is a secret love hiding in each problem.
James Hillman, *A Blue Fire*

Assignment:

The intent of this exercise is to give a sense of dimension, organization and scale to the intentions of your thesis. This presentation includes a written text reflecting on the power of program to influence, bias and organize the outcome of your work. If your thesis is not "program" driven then the ritual or critical relationship of the thesis will be the priority.

Program: Compose the program for your thesis.

Ritual: Discuss the primary ritual that underpins your thesis.

Relationships: What are critical relationships your thesis addresses. This may include user groups, issues of jurisdiction, politics and or economics.

Lit. Review: Write a reaction to four key texts (details or phenomena) that critically influence your work and how they help position and organize your thesis.

S3 Digital Hand in due 10PM October 27

S4. SITE

People live on the ridges because the valleys are rocky or brushy and have no level bottoms. In the Sierra Nevada, a good human habitat is not a valley bottom, but a wide gentle ridge between canyons.... The stratigraphy of rocks, layers of pollen in a swamp, the outward expanding circles in the trunk of a tree, can be seen as texts. The calligraphy of rivers winding back and forth over the land leaving layer upon layer of traces of previous riverbeds is text.

Gary Snyder, *Practice of the Wild*

I had an impulse to cut open the earth...an initial violence that time would heal. The grass would grow back but the cut would remain...I didn't visualize heavy physical objects implanted in the earth; instead, it was as if the black grown earth was polished and made into an interface between the sunny world and the quiet, dark world beyond, that we can't enter...I chose black granite to make the surface reflective and peaceful. The angle was formed solely in relation to the Lincoln memorial and the Washington Monument to create unity between the nation's past and present...Later when I visited, I searched out the name of a friend's father. I touched it and cried. I was another visitor and I was reacting to it as I designed it.

Maya Lyn (on the Vietnam Memorial in Washington D.C.)

The early Celts believed in Thin Places, geographical locations in Scotland, throughout Ireland and the British Isles where a person experiences only a thin divide between past, present and future times; places where a person is somehow able, possibly only for a moment to encounter a more ancient reality within the present time; or places where perhaps only in a glance we are somehow transported into the future.

Wisdom of the Celtic Saints, Edward Sellner

Architecture is physical and metaphysical. The meaning of the built world comes from the mysterious intersection of these two forces. In telling the story of the physical site of your thesis we need to be attuned to both the details of the physical place and also to its less measurable aspects. If your thesis is not site dependent or does not yet have a site then your "site" investigates the nexus of elements that describe your topic.

1. Mapping

The map is not the territory, and the name is not the thing named.

Gregory Bateson, *Mind and Nature*

Can a geographical notion be turned into an architectural intention? Map your thesis at 4 different scales SMLX. Each map needs to be accompanied by a text explaining why the particular scale was chosen and how it serves the thesis. These mappings are intended to explain the measurable quality of the place.

2. Transformation

When you want to know how things really work, study them when they're coming apart.

William Gibson, *Zero History*

What is the impact of time on your thesis? Use a series of maps, diagrams, materials or drawings to locate your thesis at three time scales past, present and future. Each needs to

be accompanied by a brief text explaining why the particular time scale was chosen in relationship to your thesis.

3. The Felt Sense

The most beautiful thing we can experience is the mysterious. It is the source of all true art and all science. He to whom this emotion is a stranger, who can no longer pause to wonder and stand rapt in awe, is as good as dead: his eyes are closed.

Albert Einstein

Felt sense connects the mind with the body, language with feeling, discovering with knowing. Derived from the work of philosopher and psychologist Eugene Gendlin, felt sense allows writers (*and artists*) to attend to what is on the edge of their thinking. Sometimes, what can't be seen can be said. Sometimes what can't be said can be felt. Produce an image or object that points to the less visible, less measurable aspects of the site of your thesis. Include 100 word explanation of image.

S4 Assignment

This presentation forms a mid term review for TRD 1 and needs to be a complete summary of all the work that you have done so far in the studio and as such is a up to date statement of your thesis research and design ambitions and intentions. You will have an 6'x8' wall on which to show your work. Use any format that best communicates your work.

Presentation requirements:

working thesis title

updated abstract

updated bibliography

S2 Precedents and Narratives

S3 Program, Rituals, Relationships

S4 Site

Submission due November 9 at 10PM

T1. THESIS PROJECT

Creativity involves putting your mind to work. In a sense creativity is applied imagination.

Sir Kenneth Robinson Out of our minds; learning to be creative.

*The project idea came to me during a fishing trip in Lapland, after I'd just landed a big trout that was flipping about in the bottom of my boat. With my penknife I shaped a model straight away, using a piece of driftwood I had picked up on the shore. The fish theme emerged unconsciously. It's always hard for me to explain how a project takes shape. I can't say by what paths it comes together, what emerges first, whether form of function, exterior or interior. I would say that everything starts falling into place in a sort of global mental synergy. As it happens, in this case the fish shape harks back to the symbol used by the early Christians, who adopted the Greek word *ikthus* ('fish') as sign of recognition. The boat is also an important symbol for the project, expressing the idea of community traveling towards the same goal.*

Matti Sanaksenaho speaking about St Henry's Ecumenical Art Chapel, Turku, Finland

A burglar will get up at all hours to rob your house, but you will put off mowing the lawn.

Critical Path #158

Whitney Johnson discussing her book *Disrupt Yourself*

The imagination works with eyes open. It alters and is altered by what is seen. The problem is that if we admit this, then the relation between ideas and things turns mutable and inconstant. Such destabilization is bound to affect our understanding of architectural drawing, which occupies the most uncertain, negotiable position of all, along the main thoroughfare between ideas and things. For this same reason, drawing may be proposed as the principal locus of conjecture in architecture.”
Robin Evans

Assignment

Present a “first draft” of your thesis. The project needs to declare the scope, ambition and intention of your thesis. This needs to include a curated version of your S1 - S4 work. There needs to be sufficient documentation that the presentation can be understood without verbal explanation. Because every thesis is different, in consultation with staff, you will be choosing the format and medium that best communicates your thesis

Final Review will take place on Friday December 11.
Time of hand in TBA.

T2. Thesis Book

Creativity is a type of learning process where the teacher and pupil are located in the same individual.
Arthur Koestler

First Draft is a complete summation of the work done to date and includes forward looking timelines and the next steps of design and research you intend to complete.
The book can be seen as a document that will help guide and structure your TRD 2 work.

Submission Requirements:

Working thesis title
Abstract
Table of contents
Introduction
S1 Setting
S2 Precedents and Narratives
S3 Program, Rituals, Relationships
S4 Site
T 1 Thesis
Bibliography

Thesis Open Studio December 17
Digital and poster submission.

T2 Submission due December 22.

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- Pollan, M. (2006). *The Omnivore's Dilemma: A natural history of four meals*. New York: Penguin Press.
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- Senge, P. (2005). *Presence: Exploring profound change in people, organizations, and society*. London: Nicholas Brealey.
- Senge, P. (2008). *The Necessary Revolution: How individuals and organizations are working together to create a sustainable world*. New York: Doubleday.
- Sennett, R. (1977). *The Fall of Public Man*. New York: Knopf.
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- Summerson, J. (1946). *Georgian London*. New York: C. Scribner's Sons.
- Tufte, E. (1983). *The Visual Display of Quantitative Information*. Cheshire: Graphics Press.
- Tufte, E. (1990). *Envisioning Information*. Cheshire: Graphics Press.
- Tufte, E. (1997). *Visual Explanations: Images and quantities, evidence and narrative*. Cheshire: Graphics Press.
- Tufte, E. (2006). *Beautiful Evidence*. Cheshire: Graphics Press.
- Webster, H. (2011). *Bourdieu for Architects*. Abingdon: Routledge.

Zucker, P. (1959). *Town and Square: From the agora to the village green*. New York: Columbia University Press.

Zumthor, P. (1998). *Thinking Architecture*. Birkhäuser Architecture.

Zumthor, P. (2006). *Atmospheres*. Birkhäuser Architecture.

LISTENING & VIEWING

Jobs to be Done

<http://5by5.tv/criticalpath/146>

Children Full of Life - Important Documentary.. Very. (n.d.). Retrieved September 1, 2015, from <https://www.youtube.com/watch?v=1tLB1lU-H0M>

Davidson, R. (n.d.). *Transform Your Mind, Change Your Brain*. Retrieved September 1, 2015, from <https://www.youtube.com/watch?v=7tRdDqXgsJ0>

Frans de Waal *Moral Behavior in Animals* Retrieved Sept 10, 2015
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Free The Mind - Official Trailer (HD) Documentary. (n.d.). Retrieved September 1, 2015, from <https://www.youtube.com/watch?v=mJvGZmOhCDo>

Kahane, A. (n.d.). *Power and Love: A theory and practice of social change*. Retrieved September 1, 2015, from <https://www.youtube.com/watch?v=v8ScJqk25yo>

Senge, P. (n.d.). *Systems Thinking for a Better World*. Retrieved September 1, 2015, from <https://www.youtube.com/watch?v=0QtQqZ6Q5-o>

Stolterman, E. (n.d.). *Understanding Design Practice, Design Methods, and Design Theory*. Retrieved September 1, 2015, from <http://vimeo.com/67683008>

ADDITIONAL READING AND RESOURCES

Armstrong, K. (2011). *Twelve Steps to a Compassionate Life*. New York: Alfred A. Knopf.

Dorner, D. (1996). *The Logic of Failure: Why things go wrong and what we can do to make them right*. New York.

Ericsson, K. (1996). *The Road to Excellence: The acquisition of expert performance in the arts and sciences, sports, and games*. Mahwah: Lawrence Erlbaum Associates.

Goleman, D. (2014). *Focus: The hidden driver of excellence*.

Kabat-Zinn, J. (1991). *Full Catastrophe Living: Using the wisdom of your body and mind to face stress, pain, and illness*.

Levitt, A. (2007). *The Inner Studio: A designer's guide to the resources of the psyche*. Cambridge: Riverside Architectural Press.

Ricard, M. (2011). *The Art of Meditation*. London: Atlantic.

Senge, P. (1999). *The Fifth Discipline: The art and practice of the learning organization*.

TR & D GENERAL INFORMATION

Please read the syllabus and the information below carefully. Your thesis research is a unique opportunity to conduct your own research and to position yourself within the discipline. As such Thesis Research + Design 1 requests not only requirements defined by the school policy but tries to prepare students for their professional life. Commitment to your work, collaboration among the group, self-motivation, participation and attendance in time will be critical. If you run into problems during the semester or if you are concerned about your progress, please contact your instructor at any time via email or request a meeting during the class. This class is meant to provide all support you need to develop your thesis and research. The deadlines are imposed here in order to track your own progress in your thesis work. Successful time management will be an important skill for your success. Your thesis is a document that you will take with you for many years. It is likely the longest sustained individual research project you have undertaken so far in your architecture career and it may be the longest that you undertake in the future. You will be using it to get jobs, grant funding, future educational opportunities, and / or publications after graduation, so consider it as a key link between the long process of education you have undertaken and the career that stands ahead of you and make the most productive possible use of this rare opportunity for creative work.

Class Meetings

Lectures and class meetings will be held throughout the term at the beginning of studio days and at the end. Be prepared to meet every studio day promptly at 9:30 a.m. Please be punctual. Specific dates will be established as the term evolves, responding to class progress. Please check your email late evening on the day before or early morning on studio days for updates on meeting times and locations.

Reviews

Reviews are not evaluations but rather the opportunity for a more public discussion of your work. It is important for each student to participate, not only in the review of their own work, but also in the reviews of the work of fellow students. Participation in class reviews and discussions is required.

The Writing Centre

The Writing Centre works across all faculties to help students clarify their ideas, develop their voices, and write in the style appropriate to their disciplines. Writing Centre staff offer one-on-one support in planning assignments and presentations, using and documenting research, organizing and structuring papers, and revising for clarity and coherence. You can make multiple appointments throughout the term, or drop in at the Library for quick questions or feedback. To book a 50-minute appointment and to see drop-in hours, visit www.uwaterloo.ca/writing-centre. Group appointments for team-based projects, presentations, and papers are also available.

Please note that writing specialists guide you to see your work as readers would. They can teach you revising skills and strategies, but will not proof-read or edit for you. Please bring hard copies of your assignment instructions and any notes or drafts to your appointment.

For Distance Learners and Students at Satellite Campuses

Online appointments (using video and audio) are available to students who are registered distance learners, students on co-op, and students who study at one of Waterloo's satellite campuses. Simply request an online appointment when you book an appointment. To see what in-person services are available at satellite campuses, please see the Writing Centre website.

Maintain the Studio

Cooperate in maintaining the studio space. If you play audio material, use headphones.

Attend Lectures and Work In Studio

Work in studio on studio days. Be in full attendance in studio from 9:30-12:30pm and 1:30-5:30pm on studio days. If you are planning to visit the library or conduct off site research, please talk to your instructor.

Complete all parts of the work; submit your work on time

All assigned parts of the work must be completed. Punctual completion is required.

Accommodation for illness; not for travel

If you need to apply for accommodation of lateness or absence due for illness, make a formal application by using 'Verification of Illness' [VIF] forms or counseling letters, filed with the Architecture Office. Student travel plans are not considered grounds for granting alternative reviews and submission times.

Academic Integrity:

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check www.uwaterloo.ca/academicintegrity/ for more information.

Grievance:

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline:

A student is expected to know what constitutes academic integrity [check www.uwaterloo.ca/academicintegrity/ to avoid committing an academic offense, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71 - Student Discipline, www.adm.uwaterloo.ca/infosec/Policies/policy71.htm.

For typical penalties check Guidelines for the Assessment of Penalties, www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm.

Appeals:

A decision made or penalty imposed under Policy 70 (Student Petitions and Grievances) (other than regarding a petition) or Policy 71 (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for or an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm

Notes for Students with Disabilities:

The Office of Person with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require accommodations to lessen the impact of your disability please register with the OPD at the beginning of each academic term.

Penalty:

No extensions will be given on presentations scheduled in class, and students who fail to present will be given a grade of 0%. Students who hand in their work late will be penalized. There will be a -5% penalty for documents handed in after the deadline. An additional 5% a day will be deducted for each calendar day after the deadline.

