

What is the Topological Media Lab (TML) about? How do people affiliate with the studio-lab?

The TML is a laboratory for the critical studies of media arts and sciences.

The TML is a nexus and a home for art *research* (not art, and not technology development) with a family of themes with philosophical or critical value:

**ethico-aesthetic play,
distributed agency,
materiality,
gesture and movement,
phenomenology of performance,
critical studies of media arts and sciences.**

These themes are very generously and elastically construed so that a wide variety of work will find a partial or complete home in the TML.

These themes evolve over the years around the joint, long term substantial interests of the director and the international community of artists, writers and philosophers within which the studio-lab draws meaning. So in this sense, there is no rigid program but a set of research and “art-as-vehicle” that bear a family resemblance.

We explore these themes materially as:

works of art, performance,
engineered instruments or systems,
and most importantly, essays, papers, books, and documentary videos.

The TML provides an open space in which we can pursue such art research without having to constantly defend individual projects in institutional language (e.g. of disciplines, granting agencies) or in terms of the market. The Director and associate faculty or peer researchers help locate funding for groups of researchers so that individual members can pursue their work with more autonomy.

However, in exchange, we expect work of world class production quality, not student work, or class project work. This work should aspire not merely to tech art venues (such as SIGGRAPH, Ars Electronica, DEAF, Media Terra), but also to world stage or real world socially embedded situations.

Together we celebrate and ground the association between members of the TML by co-authoring papers that simultaneously constitute deeper critical engagement between mentor and students, and reward all parties for their scholarly (not work-for-hire) participation with publication. (“Scientific” papers are co-authored with the Director following laboratory practice for name ordering.)

The TML is not a production facility for individual art projects! It is a place for building sketches and experiments with larger ambition and impact, that requires the collective talent, expertise, and energy of a small team.

n+1 ethos: In building a long term relationship, in a small group of n peers, think about creating “n+1” works, one each in which you are the conceptual lead/responsible agent, plus at least one more project that you would not have accomplished on your own. “n+1” is a metaphor of course, so n may vary around the actual number of peers.

This is not a short affiliation -- expect to invest a lot, and to get a lot from this association.

Expect to take a year to get to know people, to learn not just how, but why do things, approach work a certain way.

What are some domains for this sort of art research?

theory

- concepts are *NOT* cheap: good concepts are as dear and as difficult to make as good things
- what's a good concept?
- imaginary is going somewhere beyond familiar continent, ultimately beyond sight of shore.
- theory is a way to make, evaluate concepts in the imaginary with as much discipline and rigor as matter-technology's "constraints" on making artifacts.

art

- for me is a way to create reasons to live
- yields ---> ethical-aesthetic gesture, ways of being with others:
yields grace-ful ways to live for us and for not-us
- maybe it's true that one doesn't teach creativity, but teachers can inspire and make space for it.
maybe creativity emerges when you realize that you are free. but then refinement is an aspect of disciplined art.

craft / technique

- learning how to work in a *collective* fashion. i'm building the TML drawing from the practices of the art studio, the engineering laboratory, as well as the pre-industrial atelier.
- improvisation and invention over practice, rehearsal, experience
- letting go of habit, why? because it could be art all the way down: everything is potentially subject to critique, everything could be put in play, so nothing lies black-boxed behind the skin of mere craft. even naturalized processes like physics of materials, computation, social structure may be in play.

Phases of learning

Of course not everyone experiences the same sequence if they've already got some of this coming in, but i think these are all important elements for the sort of art research that I would like to support.

unlearn

unlearn conceptual frames (in course work), for example, let go of cognitivism, computational equivalence, commodity and utility rationale, market logic predicated on scarcity calculus.

unlearn practices, habits (in studio lab). for example, let go of procedural programming, let go of ego-expression or ego-therapy as a mode of art practice.

apprenticeship in studio-lab-atelier

work on a warm-up experimental projects defined by professor, senior affiliate researchers

learn as understudy in a project designed by a senior affiliate

everyone in TML should be able to cover for another via job rotation, and develop capacity for collective work in depth

advantages:

intimately learn how to realize works beyond single-ego expression

internalize accumulated TML knowledge, technique

define research questions

enroll people, peers, team as necessary

answer the "so what?"

why would others care about the work?

what's the significance?

what, how does it matter?

how might the work give life, not crush it?

I'll ask you to answer this in order to live through your work in this world. I will help find or establish a sympathetic and knowledgeable audience.

Ethical strategy for TML

The TML stores group knowledge, a stew / apparatus structured by ongoing experiments, from which members take what they need in order to make experiments, and to which they contribute pieces of experimental apparatus that others can use in the future. the apparatus can be physical things, material samples, software, documentation, videos, reports, procedures, etc.

This requires some discipline and etiquette, which we'll evolve and refine as a guide for working practices.

The details we work out in the course of practice, adapting to the people, projects, and conditions in play. in general we must publicly acknowledge each other's contributions in this creative economy because that is the best, and at heart the only incentive we have to share our knowledge, insight, experience, art.

I ask you to develop and sustain on this ethos with me.

Social-cultural strategy

TML also holds aura in public culture. this aura grows with each individual work that makes a good impression or contribution in some local venue, and so is larger than individual social capital. Individual projects, can be tightly scoped or preliminary, yet members can inherit and leverage accumulated, shared aura.

References

Art practices

<http://sponge.org>

<http://f0.am>

To give some idea of the sorts of research that I'm pursuing or supporting, take a look at the TML's project pages:

<http://topologicalmedialab.net/>

especially the research blogs for actual conversation: <http://topologicalmedialab.net/academic/links/> notably <http://topological.posthaven.com> and <http://textures.posthaven.com>

and read these papers to get an idea of the level and scope of writing

<http://topologicalmedialab.net/xinwei/papers/papers.htm>

These are some of the people with whom we've worked:

<http://topologicalmedialab.net/affiliates/people/>

Who's who?

Four sorts of TML affiliates have evolved over the years: Apprentices, Research Assistants, Research Staff, and Peer Artist-Researchers. Student Apprentices and Research Assistants, who are in academic men-

tor relationship, receive credit, but not pay in such scholarly research work. Research Staff are paid to maintain and build group knowledge across generations of students and projects

Apprentices are newbies, often undergraduate students, who work in an existing project. Sometimes they work alone, sometimes, they work in a team. They bring an existing technical skill, whether it's web design, or sewing and soldering, or editing, and contribute expertly to a project that the Director assigns. The assignment is carefully chosen so the apprentice can contribute something right away and also learn some new skill or, even more importantly, become acquainted with the values and ways of work in the TML. This includes professional project production. This is also an opportunity just to get to know people, and see how socially people flock together or not. These students take project studios with the Director for credit.

Research Assistants are graduate students or junior visiting researchers who design, manage, and carry out research projects. They should have studied at least one year at a doctoral level with the Director and affiliate Peer Artist-Researchers, and expect to take the initiative to deepen and extend specific researches that respond to the general themes of the TML. They will work on each other's projects and will recruit and lead teams.

Research Staff are researchers and research managers who are paid to maintain the infrastructure, and, along with the Director, to maintain group knowledge, mentor the Research Assistants or Peer Artist-Researchers.

Peer Artist-Researchers are mature artists or scholars who the Director invites to bring projects to be hosted at the TML. These form an international network of fellow travelers who share an ethos, aesthetics, and philosophical inquiries that substantiate and extend the TML's research themes: distributed agency, materiality, and gesture.

Based on recommendations by current affiliates, the Director invites people to affiliate with the TML. The Director evaluates how students progress in their practical and reflexive apprenticeships, and decides when a student is ready to define and direct his own research projects. Usually that process is more subtle than simply making a formal decision, and comprises facilitating the student's refinement of her/his personal research plan.

What and How

- Study. Take classes, seminars for the how and why. Senior affiliates should start and maintain reading groups around current research topics.
- Projects, three kinds
 - individual project. acculturation, can we become comfortable working together? weight of contribution is not as important as learning the process and research values. can be web/video documentation.
 - someone else's project, defined by: professor, research fellow or experienced student; or group
 - self-designed
- Professional products
 - papers co-authored with advisor, and with peers as a way to reward our mutual investment of energy into the scholarly association.
 - papers with self as lead or sole author to establish presence, voice
 - ditto exhibits

- See accompanying document on Working Practices regarding how to author papers.

FAQ's

Q1. How does one submit a project idea to TML? Who determines whether or not the lab will support it?

A1. You should chat up your peers about your idea, and recruit at least one other graduate student to your project. You need to write up the project, guided by the template on the WIKI. Then discuss this with the Research Coordinator and the Director. The Director and on a more everyday basis, Research Coordinator, decide the relevance of the project.

Q2. What is an example of prototypical lab project? Why do some projects seem not to have an end?

A1. There is no average case.

The criteria for deciding what constitutes a TML group project

- (1) resonance with TML's research foci : distributed agency, materiality, and gesture;
- (2) good technical test of our responsive media technologies (for example the tgvu->tml continuous dynamics media choreography system);
- (3) feasibility, and fit with current in-house expertise, interest, and available energy.

Projects have an end, but a line of research may endure for as long as the question remains vitally unanswered. Some research lines will persist across generations of students. Projects should be defined and renamed to periodize or chapterize the work. Sometimes, what starts as a project may become a (set of) research line(s).

Q3. You say you are not doing art, but you claim to be producing works of art? What is the difference?

A3. The research is to explore phenomena and philosophically substantial questions, but in the mode of art "all the way down." (All layers of "craft" are subject to artistic interrogation.) These experiments are concrete, palpable, embodied installation events to be encountered corporeally. The experiments should aspire to at least the production values of studies and sketches by professional artists in visual and performing arts. They also should aspire to being built according to standards of professional team-based engineering and scientific lab work. Our in-house installation-events as *experiments* will not be built for an art gallery or a theater with a public audience. However, some public projects, with their own funding, will be hosted that bundles and showcases a harvest of the TML's research work and in-house talent. Those public projects often will be co-initiated and/or co-designed with a mature peer artist or scholar.

Q4. You say you are not doing technology development, but the research seems to be highly dependent on developing or using new technologies. How do you distinguish between the two?

A4. Unlike many applied engineering or tech-art labs, the TML starts with art research and philosophical questions, and then tries to build the apparatus in which to experimentally explore those questions. It does not take a given piece of technology from the industry, and try to find artistic applications with the technology (technology-led research is not research, or "art all the way down"). Instead, the TML works more like a low-budget version of a HEP lab, in which fundamental questions about high energy physics motivated the improvisation of new technologies that in turn inflected the sorts of theories and experiments that made sense.

Q5. How can I get funding support from the TML to realize my own project?

A5. Since TML is not a studio production facility, it does not host the production of individual projects. You must find your own funding for individual work. Individuals join the TML on their own to learn and to develop their own knowledge, and to refine their artistic and philosophical acuity in a community of talented and thoughtful artist researchers who share interests and expertise. Given that, the Director and Research Coordinator will work with affiliates of the TML to see when enough interest gathers in a common research cluster that bears a sufficiently strong family resemblance to the TML's overall themes of distributed agency, materiality, and gesture. TML people sharing interests can propose collective experiments. These experiments should be directed by the more experienced members of the TML.

Q6. Does the TML only create the space for the work? Does the TML (the Director) also fund the work--technician time, equipment rentals/purchases, service fees, materials, support, documentation, dissemination, marketing, etc?

A6. The TML has been established with such infrastructure grant for its start-up. Specific projects need to be supported by grants authored by the Director working with the Research Associates or Peer Researchers. While students should apply for individual grants (that the Director will support with letters of interest), a team of TML researchers who have organized a research cluster can work with the Director to author a larger grant that will support several graduate students for 3 or more years. (For example: responsive or soft architecture.)

*Sha Xin Wei • Topological Media Lab • Montréal • 30 December 2008 (Nov 2004)
Thanks to comments and questions by Harry Smoak.*

Guide to Working Practices

Motivation and General Guidelines

The discipline is that when you make something that nontrivially uses the TML's studio-lab knowledge or capital resources, you should also make it usable by someone other than yourself in TML. If it is materials knowledge, then write it up as a report, and post it along with samples and sources. Write and share reviews of conferences trips, films, performances and exhibits in the TML. For example, if you write a piece of software, then write a *clean usable interface*, and *document* it so that a student two generations after you can understand how to use it. Do the same with a material component.

TML technology: for a TML project, you may freely use code, media developed for any prior TML project, so long as you name all the prior authors, adding yourself of course, and TML. In turn, your media and code may be used freely by future generations of TML artist researchers. However, ***please wait until your fellow TML author has published his/her piece of work before referencing it or incorporating any part of that person's work in your own public work.*** To be freely sharable within TML, a work must first be published in some way that durably credits the author and TML, for example in a juried art event with (inter)national profile, or in a good professional journal. Some work may take years to publish, or may never be published, in which case you'll need to work with the author or with the Director.

It'd be a courtesy to ask for permission from your peers if you want to cite or recycle a part of her/his work. This way individuals will be able to speak, and be recognized, in their own voices, and also be able to share work collectively.

TML technology -- media, techniques, gear, space, resources -- may not be used for any non-TML project, except by permission from the TML coordinator, or the TML Director.

Professional ethos; I require that material practitioners, artists and designers, adopt ***citation practice*** from the scholarly community: if you use a technique or an idea or a piece of code from someone, you must explicitly name that person in your work. This is not about (for or against the notion of) originality, this is about rewarding and publicly acknowledging someone for helping you, and conversely being tangibly rewarded for giving your knowledge to a colleague. Here, tangible means social capital, reputation.

Humanities scholars have developed over the past 700 years a very precise and refined citation practice to trace by name and specific moment their flow of ideas. Why? because that's how we've learned to run a really-existing gift economy based on the circulation of works and acts of imagination. Precision is necessary because knowledge exchanges (and grows) in these small moments and denominations: the phrase, the paragraph, the 3 lines of repeatedly useful code, the 3 square inches of a fabric switch that shows a different way of thinking about connections, the hypothesis of a theorem, one video segment that provides just the right texture to seed your synthesis, or one idea. (Professional mathematicians will formally credit peers for even one expression, or one turn of logic.) Most importantly, you should credit your peers and mentors for the ideas they offer or the prototypes they demonstrate that seed your work. Of course, acknowledgments will be scaled to the significance of the contribution relative to the final work, and may be thresholded or filtered for the occasion with justification.

Social capital's etiquette depends on the field in which we exhibit the work: for example, in scientific practice, the students who do the work are listed in order of their contribution, and the professor who proposes / advises the experiment and provides the setting is named last author. In humanities or social sciences with 1-2 or rarely 3 authors, the authors are named in order of their contributed idea-weight. In math it's the same, with some attention to naming contributions at the level of theo-

rem statement, proof, and even a particular insight-step, because of the extreme density of the work. Smaller contributions are cited in acknowledgments and citations. I introduce this into material studio-lab-atelier practice as well.

In general we must acknowledge each other's contributions in this creative economy because that is the best, and at heart the only way we have to reward the sharing of knowledge, insight, art.

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EXAMPLES of CITATION and CREDIT or COPYRIGHT NOTICE *to be supplied*

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software: media

Video Editing, James Hsu © 2003, *Topological Media Lab*

software: code

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physical materials

Screen Design by Harry Smoak, *Topological Media Lab*

Screen Construction by Josée-Anne Drolet, Louis-André Fortin, *Topological Media Lab*

Policy for individual and group work developed with support from the Topological Media Lab (TML) and the TML Network*

The general policy is that you are free to copy, distribute, display, and perform the work, to make derivative works, and to make commercial use of the work provided that you attribute the work in a manner specified by TML. Derivative works may only be distributed under a license identical to this one ("share alike").

However, the work may NOT be used or cited outside TML until AFTER it has been published crediting the authors and TML in a peer reviewed journal, or used in a public, juried event of sufficiently international stature.

The process is to build reputation capital to help everyone who affiliates with the Topological Media Lab over the years.

Note on Appropriate Attribution

Generally appropriate attribution means adding your name to your work + "Topological Media Lab" and that you include all the prior authors for cited or included work by name as well. Contact the Topological Media Lab Director for further explication and citation examples as it pertains to the nature of your work.

*** Note on affiliation**

The TML comprises active, co-located members of the studio-lab.

TML Network comprises previous members and affiliated, non-local researchers and students.

Some of these conditions can be waived with permission from the Topological Media Lab Director.

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