

InterVIEW/READ 21

Potentialities in Doctoral Research in Architecture

I have been working on mapping the doctoral thesis in architecture in parallel to a mapping of architectural theories. I believe that doctoral programs are now the most important places for the renewal of theories in architecture. [...] There are many PhD programs in architecture globally, and I participated in several symposia in Europe. [...] The idea of a doctoral thesis in architecture has grown exponentially in the last two decades. [...] I encourage my doctoral students to believe that they are the future theoreticians and not be shy of dreaming of that possibility. [...] There are epistemological tensions in architecture, and there are debates on what knowledge means, and that would be enough to create a spectrum of thesis in most disciplines. Still, there is more happening in architecture, precisely because it is both a discipline and a profession.

Dr. Jean-Pierre Chupin

Architect, Professor, Canada Research Chair in Architecture, Competitions and Mediations of Excellence Coordinator, Laboratoire d'Étude de l'Architecture Potentielle, (LEAP) Montréal

PhD individualisé en architecture

Université de Montréal

March 26, 2020, Montréal & Ottawa, Canada

[Federica Goffi] Could you discuss the history of the PhD individualisé en architecture at Université de Montréal, and your role in the program?

[Jean-Pierre Chupin] I have been directing students for more than twelve years in this program, seen as the prototype of a forthcoming PhD in architecture. Six doctoral theses have been defended up to now, and I presently supervise four PhD students.² The individualized PhD in architecture at the Université de Montréal (UdeM) is a temporary administrative structure.

UdeM started a doctoral program in environmental design (PhD en aménagement) in 1969. The project of a PhD in architecture has been on the table since the mid-1990s. Professor Irena Latek assisted by Louis Martin, now a Professor in Art History at Université du Québec à Montréal but then a PhD student at Princeton University, with Sanford Anderson and Peter Eisenman, were working on the first PhD program in architecture, as a joint program with

McGill in collaboration with Professor Alberto Pérez-Gómez. At that time, there was only a Master in History and Theory of Architecture at McGill. I was part of the second generation of students entering the master program in 1988 with a Master thesis in 1990 on Philibert de l'Orme (1514-1570).³ In 1998, I was back in Europe, teaching in Toulouse and Lyon. While my colleagues were working on the new joint program, also supported by Phyllis Lambert and the Canadian Center for Architecture, McGill received the agreement of its own doctoral program in architecture in 1998, leaving Université de Montréal on the side.

Traditionally, at Université de Montréal, students willing to write a thesis on architecture had to register in the umbrella program of the PhD in Environmental Design or Doctorat en aménagement. I graduated from this program in 1998 with a thesis on analogical thinking in architectural pedagogy. I was hired at UofM in 2000, and we received our first grants in 2002 when I started the lab, LEAP (Laboratoire d'étude de l'architecture potentielle). As soon as 2003, Georges Adamczyk, then Head of School asked Denis Bilodeau and me to start gathering data for building a dossier on a doctoral program in architecture. The project went through a series of resistances at the faculty level mainly because the deans feared that a new program would create a void in the existing structure since many candidates have a background in architecture. The university agreed to have an individualized program in 2007, and we decided to delay the dossier to allow for a series of thesis to be produced. In 2014, a new attempt was again halted because there was a crisis with the professional master programs that required attention and deliberations. The project of a PhD in architecture at Université de Montréal is also facing paradoxical resistances from within the school of architecture for various reasons that would be too difficult to summarize. This situation is telling of how difficult it is to recognize the value and specificity of architectural research, even for architects themselves.

[FG] Thank you for sharing that. It was exciting for us to begin these interviews about the PhD programs and bring out the stories that will become histories. There are challenges in establishing PhD programs in architecture, as we have learned from other programs too. Our PhD Program in Architecture at Carleton is in the eighth year. We opened a dialogue with other institutions and scholars to be aware of the broader context of research directions while pursuing our work. It is useful to deconstruct program histories to build an understanding of the diversity in approaches. What may be right in one place is not right in another, and there is a need for a real sense of openness in research.

Can you talk about the research areas at UdeM? What does it mean to follow an "individualized path?" What distinguishes your approach from others?

[JPC] The notion of an "individualized" PhD is mainly administrative. We comply with a series of rules common to all postgraduate programs at the University of Montreal. For example, there is a requirement of two years of training and coursework that can be refined. Before the end of this period, students have to pass a comprehensive exam (Examen de synthèse), after which students enter the writing phase. The Comprehensive Exam entails two questions, one of an epistemological nature: "What is your mastery of theories related to your research question in the field? Is the research question original enough to deserve a thesis?" The second question is methodological and opens the discussion on the various ways and methods of producing knowledge most appropriate to the research question. The two series of questions of the comprehensive exam are written under the guidance of the thesis director by a committee comprising an external member. We ask students to provide a well-executed analysis and relate the study to other cases or empirical materials and deliver two papers of more or less twenty pages in two weeks. It is a challenge, and we make sure that students are well prepared for it. I usually recommend that the students put together two series of texts of

no less than eighty pages of well-referenced and well-read studies prior to the comprehensive exam. At this point, the thesis director and the student have to agree on the formulation of the research question and its role, the title of the thesis, and how to produce original knowledge. I guess you have something similar at Carleton University?

[FG] In our program, the Comprehensive Exam is taken in the second year. Students write a paper in forty-eight-hours as a response to a question chosen among those written by the advisors and deliver a promising new argument. Despite what may seem a tight time frame, the exam is a catalyst to take a position and discover a core element of the dissertation proposal.

When it comes to research approaches at UdeM, is the contribution made primarily through writing, or are there other mediums involved in the process?

[JPC] The PhD at the UdeM is defined as a piece of writing. I take a respectful distance from research-creation in doctoral studies, but this does not mean that students have to forget and set aside their acquired visualisation skills. Other forms of making can be included, such as analytical drawings, analytical model making, and everything else that can be part of the research path. Still, it is evaluated through a coherent and well put together piece of writing. It is a production of knowledge that can be transmitted and read by someone else. It is essential and mandatory to do it that way. It does not stand on its own as a work of creation. It has to be disseminated to serve other researchers, and ideally, part of the thesis has been submitted to peered-review journals.

[Devon Moar] "What can, or should be, a doctoral thesis in architecture?" Do you believe this question needs to have an answer?

+ [Nicolas Arellano Risopatron] Can you also discuss your definition of theory in the context of the "vectors for a theoretical cartography"?⁶

[JPC] As you know, I have been working on mapping the doctoral thesis in architecture in parallel to a mapping of architectural theories. I believe that doctoral programs are now the most important places for the renewal of theories in architecture. This project of a "compass of theories and theses" started in 2013 when we organized an international symposium, IDEA@UofM (International Doctoral Encounters in Architecture at UdeM), with doctoral students from the US, Europe, and Canada, on the pretext of ornament, algorithm, and analogies (Figures 1, 2, 3). It was organized with Aliki Economides, who is now teaching at Laurentian University, then a doctoral student with Antoine Picon at Harvard University. We received a very good series of papers from some of the best and most representative PhD programs. While observing PhD students struggling with ideas of ornament, algorithms, analogies, new or creative operations in architecture, I got the idea of a theoretical compass to figure out not only the diverse ways in which to write a thesis in architecture but, above all, what it means to do that. I did not have a preconceived definition, apart from that thesis should produce new knowledge in the expanded field of architecture. In other words, I have always believed that a dissertation should help other thinkers to reflect on the discipline. There are many PhD programs in architecture globally, and I participated in several symposia in Europe. I was invited to Paris the same year, and two-hundred doctoral students presented in parallel sessions.⁷ I became convinced that we needed a compass to figure out if we were lost as a discipline still trying to enter the world of doctoral programs sixty years after Peter Eisenman's dissertation.8 The idea of a doctoral thesis in architecture has grown exponentially in the last two decades. I was invited to present at the Collège de France in front of the Lab directors in France's major symposium when the new Research Chair was given to Jean-Louis Cohen.⁹ I was presenting my compass in the context of presentations on the diversity of research laboratories in architecture. The compass is grounded on a simple idea. There are countless theories, a full spectrum of writing, and there is no reason why what a doctoral student can produce should not fit somehow within a general mapping of theories in architecture. A doctoral thesis is a contemporary version of how to construct a theory in architecture. I encourage my doctoral students to believe that they are the future theoreticians and not be shy of dreaming of that possibility.

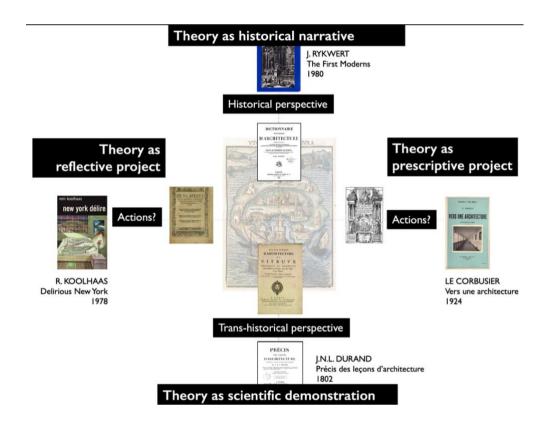


Figure 1 Diagram of the compass of theories and theses by Jean-Pierre Chupin (2020). © Jean-Pierre Chupin.

Once we overcome the arrogance of believing that we can produce theory in one way or another, can we distinguish all these theories? There are a series of anthologies collecting texts about the definition of theory. One collection of ideas about theory tells you more about how the person who put together the anthology defines theory than what theory is.

There are epistemological tensions in architecture, and there are debates on what knowledge means, and that would be enough to create a spectrum of thesis in most disciplines. Still, there is more happening in our discipline and profession precisely because it is both a discipline and a profession. In most schools, we look at it mainly as a profession, but in the context of a university, we should look at architecture first of all as a discipline. While it is true that architecture produces projects and buildings, it is also true that architecture has produced knowledge and writings for a long time. The compass is made at the intersection of two axes of tensions, perspectives, aims, or "views" (spectare) and "actions" (projects). The first axis

opposes retrospective and prospective theories. The second axis opposes retroactive and proactive theories. Let me be more explicit; there are historical disciplines based on arts, sciences, techniques, modern scientific sciences, human sciences, social sciences, engineering sciences, etc., that can deal with architectural objects. That is why we have books like *The First Moderns* by Joseph Rykwert.¹¹

At the same time, a couple of hundred years ago, there were attempts to produce knowledge with disregard for a historical perspective, like the Précis des Leçons d'Architecture by Jean-Nicolas-Louis Durand (1760-1834), which was written for engineers at the first Ecole Polytechnique.¹² Napoleon ordered Durand to produce the first course on architecture that would not be a Beaux-Art dissertation, to transform architecture into a scientific discipline. Whether we like it or not, there is a spectrum, and tension, because they do not fall in the same category. On one side, you have the Dictionnaire Historique de l'Architecture (1832) by Quatremère de Quincy (1755-1849),13 which is closer to a historical perspective. On the opposite side, Vitruvius' work written almost as a political and pre-scientific demonstration would offer a transhistorical perspective. 14 Vitruvius was trying to demonstrate his science, which is an art, but also a science of its time. You can consider classical texts that are landmarks and address these tensions. That is our first axis (retrospective versus prospective). On one side, you have theory as a historical narrative, demonstrating how any good historian is a storyteller. On the extreme opposite, there is theory as a scientific demonstration, which poststructuralists will consider another form of storytelling. Usually, the historian does not want to demonstrate and does not have to because historical facts are organized descriptively. On the other end, if you have a scientific demonstration, you must prove that you grasp the phenomena. The historian does not want to have power over facts; the scientist would like such power on facts or a model to predict or anticipate phenomena.



Figure 2 Illustration of the compass of theories and theses by Jean-Pierre Chupin (2020). © Jean-Pierre Chupin.

We are in a complex situation because there is also a phenomenon of prediction of knowledge. We can look at Alberti on one side and Palladio on the other. Why did I not put Palladio on the North of the compass? Palladio is not writing as a historian, nor as a scientist, nor is Alberti. The vertical axis is about vision as knowledge production articulated as a meditation on things. It is research and theory as a meditation. But the horizontal axis of the compass is about action because, as architects, we are not just looking at things; we want to act on them. There is an obsession for action that often overwhelms the possibility of meditation and reflection.

However, Alberti's way of acting and Palladio's way of acting are not the same. On the left side, we have Alberti's work as a reflective project, while Palladio defines theory as a prescriptive project, telling you how to design the best architecture you can. We should distinguish Alberti as a reflective theorist and Palladio as a prescriptive theorist, and here we are, with four quadrants. The second axis opposes retroactive theories and proactive theories.

In the twentieth century, Rem Koolhaas is not writing the history of New York or a scientific demonstration. He is writing the retroactive manifesto of New York as a reflective project, but it is also a form of action. He is even inserting his projects in the book. He is not distancing himself from the object of study, which is what Le Corbusier did, even if whenever you are, toward something that is the sign of prescription. Towards a New Architecture is a proactive theory.

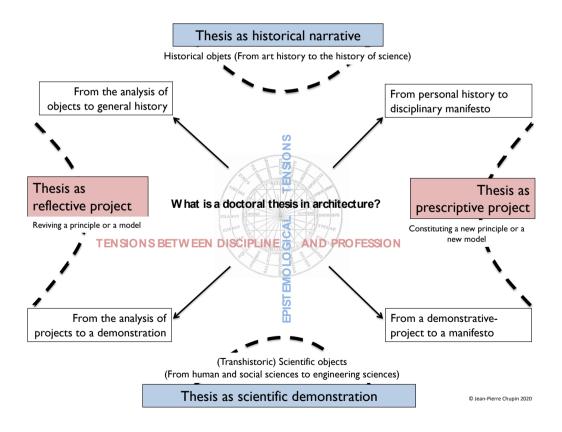


Figure 3 Diagram of the compass of theories and theses by Jean-Pierre Chupin (2020). © Jean-Pierre Chupin.

At this point, we have theory as a historical narrative, theory as a scientific demonstration, theory as a reflective project, theory as a prescriptive project, etc., and we have intermediary tensions. For example, with François-Auguste Choisy (1841-1909) or Gottfried Semper (1803-1879), one moves from the analysis of objects to historical generalization. Or we could say that Eisenman is not writing the history of the Casa del Fascio. He does not even care about the fact that it was the Casa del Fascio. He is analysing a modern project and turning analysis into a demonstration. As for *S,ML,XL*,¹⁷ we can say that it is a portfolio and a manifesto using the architect's projects as demonstrations. It is analogous to *Transparency* by Colin Rowe (1920-1999) and Robert Slutsky (1929-2005); ¹⁸ they use a series of projects as demonstrations

The strangest quadrant, the last one, is when an architect goes from personal history to disciplinary manifesto. Here, you have Rossi's *A Scientific Autobiography*, ¹⁹ but even Etienne Louis Boullée's (1728-1799) *Essai sur l'Art.* ²⁰ It is a reflection taking place at the end of his life in the middle of the French Revolution, on what he believed architecture is about and how he would imagine its future.

Such a compass of theoretical writing in architecture acknowledges that we face a full spectrum of different theoretical writings that should not be confused. There are probably other ways to describe and classify them. There are a series of pitfalls because it is a two-dimensional compass when you could perhaps imagine a three-dimensional model. Still, however you organize them, there are retrospective, prospective, retroactive, proactive approaches to theory and a series of variations.

Now, to answer your question about what a doctoral thesis should be, the answer is, I do not know. This is precisely the task of a thesis director to ask the student what she or he expects the doctoral thesis to become and in which quadrant it will "produce new knowledge"? Do you want your thesis to be a historical narrative, a scientific demonstration, or a prescriptive project? Do you want your thesis to start with your personal history and tell the world that it will teach us something about the evolution of the discipline?

[Amanda Lapointe] Is the concept of "potential architecture" related to architectural theory, or is it a principle in your practice?

[JPC] The notion of "potential architecture," that I coined almost twenty years ago when we first imagined the LEAP lab, is another way to talk about the architectural project that is architecture in ideas, architecture in the making, and not only built architecture. When you study architecture competitions, 95% of projects will, by definition, never be built, yet they mean something in terms of knowledge exchange. Any project is a potential architecture. We were trying to explain in a grant proposal that an architectural project is a series of potentialities at the crossroad of intentions and culture, intersecting two realities: the world of ideas and the world itself. "Potentiality" is an excellent way to study architectural knowledge. We added a simple hypothesis: even the worse project in a competition should be looked at as if you have got an idea, and we know that some competition projects are Game Changers. My own "architectural practice," apart from teaching and writing, includes preparing grant proposals to support students' research. I set aside traditional professional practice when I decided to follow the doctoral path. The terminology of "potential architecture" sends a message in grant proposals that specialists in other fields will read; an architect's main activity is not to build but to produce projects. "Potential architecture" is also related to a passion for OULIPO that I shared with our dear friend Marco Frascari (1945-2013). The Ouvroir de littérature potentielle (workshop of potential literature) was a group formed by a series of intelligent and funny novelists and artists, like Raymond Queneau (1903-1976), Boris Vian (1920-1959) and even Marcel Duchamp (1887-1968), who believed that you could produce writings through a set of rules. Creativity does not come from the clouds only; it can also come from a playful consideration of constraints. In architecture, it is perhaps even easier to understand that imagination can be defined through a set of rules and constraints.

Tschumi's project for *La Villette*, for example, was not only a competition entry but also initiated a revolution within the discipline. But even the worst competition project should be looked at as if it were a complex situation, that is to say, a complex way to look at a phenomenon that can produce specific knowledge of the situation waiting to be transformed. I am not saying that the architects who did these projects are conscious of the production of knowledge. I am saying that scholars can reveal the knowledge that lies within potential architecture. You can be sure that people like Koolhaas are conscious of what they are doing, which is why they are so important. Still, you cannot postulate that whenever an architect draws something, she or he knows that it is a new concept that will revolutionize the discipline. On the other hand, whenever an architect offers a well-thought proposal, the entire discipline can benefit from it. I guess this explains the success of our online database: the Canadian Competitions Catalogue.²¹

[Kristin Washco] I wonder if you could speak about "research-creation" or "research by design" in architecture and their role in academia today, in relation to your compass?

[JPC] It is important to remember that, particularly in Canada, research-creation came into play institutionally at the exact time when art schools felt the pressure to demonstrate that they were producing knowledge. It became an issue for funding agencies, and hence for universities. New PhD programs needed to be developed, and grant proposals needed to be written for tenure track purposes. Art schools that traditionally managed to escape the more 'scientific' way of producing knowledge felt that they had to catch the train. I was a member of the Social Sciences and Humanities Research Council (SSHRC) first committee for research-creation, and we had little clue that the phenomenon would be so wide. There were debates because the people defending research-creation were not well equipped to explain what they meant by research-creation.

Music is undoubtedly one of the disciplines in which research-creation has been explained and defined the best. A doctoral thesis in musical composition is different from a thesis in the history of music, the history of instruments, the history of ideas, etc. Musicians or scholars in musical disciplines are clear about it. It is getting better in architecture, but it has not been theorized as it should, and too many loose definitions circulate presently for this approach to be credible.

In my compass of theories and theses, research-creation does not fall in the vertical axis of knowledge production but on the horizontal axis of projects. Most research-creation projects do not produce a historical narrative, perhaps some do, but they do not fall within theory as a demonstration either. They reflect and intend to transform at the same time. Research-creation has to be located somewhere on the horizontal axis. Some projects are more reflective than others, and some are prescriptive. That is where you have, for example, computer sciences, but digital studies and digital design or algorithmic projects fall at the bottom right quadrant when theories go from demonstrated project to manifesto. They offer a demonstration; they are about the future but fall short to run cross-references or provide reflective considerations. What we often see with research-creation is a mixture of reflection and action where action—if not activism—is the priority.

My take on this is that unless you are an excellent researcher *and* a talented creator, and I mean both, you should not pretend to engage in research-creation. We are still waiting for

people to clearly tell us what they produce for the discipline when they engage in researchcreation.

I believe that we can produce research by design, but this implies a methodology and a rigorous contribution to knowledge. Research-creation should not be a way to escape from the burden of writing or in architecture, a way to escape from history, the technology of architecture, or social sciences. Presently, most of what is referred to as research-creation is more concerned with action in the usual sense of a "pro-ject" than in research or even in creation.

[FG] Research-creation should be about the depth of the inquiry and understanding the relationship between design and research.

[JPC] We can reflect on design and research and what their relationship is. I have been on grant committees where I was the only architect, and I was on the higher research committee for my university for a long time. We need to acknowledge that in Canada, there are only a few people who have dedicated a reasonable amount of energy to producing serious research or applying for grants in architecture, and the fact that a lot of new scholars look for research-creation opportunities is not a very good sign. Again, let me stress that research-creation requires one to be as good in research as in creation and not average in both.

[Marco Ianni] Can you comment on how critical is the role of the PhD advisor? How should that relationship be in terms of mentoring the student, and is there a danger in close guidance?

[JPC] It is a difficult question because there is a risk of identifying too much with our students' difficulties. The role of a PhD advisor is crucial. This is where experience matters. If you have not been through the burden of writing a doctoral thesis, it is hard to give advice, and worse, it is difficult not to feel the need to write your thesis through the students you supervise, which I believe is the worst that can happen. Students need someone to accompany them, and the advisor is there whenever one needs help to figure out where one is with the work. A student may wonder, "Why am I raising that many questions? Why do I feel so unable to choose one research question in particular and decide what I want to contribute to?" That is when you need someone who has been through this and can tell you that it is fine to have too many questions. For example, some questions are helpful to get a better knowledge of the situation, and some questions will be beneficial for the discipline. If you raise far too many questions, it may just show that you desperately need to know your subject better. But when you can put your finger on a clear research question in which your tutor believes too, together, you start digging, and the relationship is very fruitful, beautiful even.

When a student is convinced to have found an innovative question, I usually ask: "Can you please come back next week with two theses that have already been written on this question?" If you believe that your question has never been raised, then you are probably fooling yourself. Students end up finding authors who already dealt with their questions but differently, and this is when I encourage them to refine their questions and decide what part has not been raised. The relationship with doctoral students is a privileged one for a professor. Students sometimes come from far away to study under your guidance, in your environment, and the responsibility cannot be overstated.

[FG] Could you discuss your position as a Canada Research Chair and your current research focus?

+ [KW] Can you describe your role as LEAP coordinator and how it overlaps with or informs the PhD program at UdeM? Can you speak about the Canadian Competitions Catalogue (CCC)? Why is it important to document these projects? Did you begin this research with a particular use or result in mind, and how has it transformed over time?

[JPC] The CRC is the result of twenty years of involvement in architectural research in Canada, and it should define my involvement during the next ten years. It is not easy to explain why I was given this CRC if we do not cover the Canadian Competitions Catalogue (CCC). Up to now, we only have documented about 50% of all competitions organized in Canada since World War II, which is also the result of twenty years of grant proposals and hard work. It all started with a research project funded by the Social Sciences and Humanities Research Council in 2002. We had made the hypothesis of architecture competitions as empirical and comparative situations. This was a way to address the SSHRC classical questions like: "Why is your corpus meaningful, and how are you going to gather the data?" Indeed, it was all about data and research. I was trained as an architect in Europe, in France, and the UK, and I was involved in many competitions in the 1980s. I thought I knew the subject well, which I did not, actually, but I also realized that no one had ever attempted to start a list of competitions in Canada. I started to gather information, looking at the Canadian Architect journal, and compiling data in an Excel sheet with some students. I had no idea where I was going with that information. In 2003, after about a year, I started considering a database with the help of Simon Doucet, then a computer scientist at the Faculty of Environmental Design at UdeM. We began with the first research database, and then a second one, and so on. It was exciting for the students and the research assistants to be involved with this collective project.²²

I am currently trying to build a database of award-winning projects in Canada, including thousands of projects to gather and analyze data. I thrive on collective projects. The CCC has become a national resource available online. It is a way of giving back to the community. The fact that public funds finance the work is essential for the dynamics of research involving students in the school of architecture because they are not doctoral students in social sciences trained to do research; they have been trained to design projects. I used to hire master students for the CCC, but now I am hiring second-year and third-year bachelor students, and they are proud to build the national resource of competitions in Canada.

Federica is involved in my next project, along with many others, which makes the hypothesis that awarded buildings and projects constitute a fantastic repertoire of good practices that we need to disseminate and understand better. It is not just a collection of images of the winning projects. We need to document projects and use comparative analysis, which is the best method across all the axes of my compass, even if it is still poorly theorized in architecture. Alongside Comparative Law, Comparative Literature, Comparative Biology, etc., comparison in architecture should be better theorized. I am presently trying to do my share on this. When you have a catalog of projects, you have an amazing potential for comparison.

Talking about potential, the Laboratoire d'étude de l'architecture potentielle (LEAP) started at Université de Montréal in 2002, but it now gathers four Montréal based universities.

In the last two years, I was involved in building the Canada Research Chair in Architecture, Competitions and Mediations of Excellence. I reached a point where I should pass the management of LEAP to a committee. I am proud that it is one of the rare research teams in contemporary architecture in Canada and North America, as Jean-Louis Cohen once acknowledged. There are many studio labs in schools of architecture in Canada, mostly pedagogical labs; some are technological, like the Carleton Immersive Media Studio (CIMS,

Carleton University), which is a fabulous infrastructure. Yet, many architecture schools are still waiting for their scholars to work together.

There are two types of research chairs. Some Canada Research Chairs are meant to attract young scholars or to develop a new field. There are a handful of Research Chairs associated with architecture, and most of them are junior chairs. Two of my colleagues from McGill, Dr. David Theodore (CRC in Architecture, Health, and Computation), and Ipek Tureli (CRC in Architectures of Spatial Justice) are wonderful representatives of a new breadth of scholars. There are about 1800 Canada Research Chairs and just five in architecture. As long as we do not push for the recognition of theoretical research, we will have difficulty recognizing our discipline.

[KW] Through your work and familiarity with competition projects, you are uniquely situated to speak to the difference between a competition design and a theoretical project and what their relationship might be. Should competition designs be studied as theoretical projects, or what is the difference?

[JPC] It depends on what you mean by a theoretical project. If by theoretical project, you mean a project dedicated to the discipline of architecture rather than architecture as a profession, then the answer is easy. Competition projects have an epistemological status because they are "potential architecture." Of course, most competition projects are professional devices, but simultaneously, we are in a discipline that has often relied on ideas competitions to establish new paradigms. In the French language, there is a better word than competitions. It is the word "concours," which means working together, collaborating. Professional architects will tell you that whenever they enter a competition, it is their research development time, and some decide that they will enter competitions to refresh the firm's work. They know that something else is happening, and it is not just about winning. It exceeds the professional act. I would call it a theoretical project, but with a broader definition of theory. If an architect realizes that a project will teach something new, it will be called a theoretical project. In that sense, a majority of projects through competitions can bring new knowledge. For the best competitions and the best projects, the phenomenon is rather transparent, but scholars and researchers need to bring out the knowledge and make a difference. It is a form of production of new knowledge through comparison.

When you study the architectural judgment in a competition by comparison with architectural judgment in an award, you are faced with a difference. It seems to be a much more refined process for competitions and a much lighter one for awards. I am presently trying to gather scholars across Canada to build an extensive database of awards (The Atlas of Research on Exemplarity in Architecture. AREA).

[DM] I have the last question, and I would appreciate your take on it. Do you see language as a barrier, a challenge, or an opportunity in architecture, or is the meaning of the work lost with translations?

[JPC] There is always something lost in translation. In my career, as a scholar in architecture, I started by translating, and I strongly believe that translation is one of the best first steps of theorizing. Something must be happening for people who can navigate a few languages. It is clear that one does not speak well all the languages, but one can refine some ideas and hypotheses through various languages. There is a close connection between translation and theory if we consider that most historical writers in architectural theory have been translators.

When I was studying in France and then in England in the mid-1980s, I read Alberto Pérez-Gómez's Architecture and the Crisis and Modern Science.²³ I bought the book and planned to read it during my military service with a simple dictionary, a pencil, and a notebook. It was in English and loaded with references, and like most master students, I knew very few of them. Every evening, I sat in my dorm room with ten people, trying to concentrate while playing cards, and I started translating the book, page after page. At that time, I did not know anything about research or theory. After a few weeks, one of my colleagues said that I was wasting my time since there must have been a professional translator working on this book somewhere. This was a turning point for me. Why should I go on? Of course, I could go on for my own sake, but I contacted a series of publishers instead. This was not easy. At one point, I talked to Pierre Mardaga, director of the Belgium eponym editions in Brussels. I sent him what I had done, and a few weeks later, they agreed to sign a contract. It took two years to complete the translation of this complex work.²⁴ I had to go to Paris to the Bibliothèque Nationale to check the quotations in the original books in French. There was no internet, and I was a complete beginner in the theory and history of architecture. I learned a lot through these two years of hard work, and more importantly, I accumulated hundreds of theoretical questions.

One of my PhD students wrote a very good thesis on the theory of architectural details through theories of translation.²⁵ He built on Robin Evan's theory of translation from drawing to building.²⁶ You can say that translation is a good metaphor for what we are doing in design, but it becomes a methodological analogy, and you should look at every detail in the theory of translation. It becomes interesting when you realize that the detail is the hinge in terms of joining ideas (another fruitful intuition of Frascari).²⁷ I believe that translation is as close to theorizing as it gets, and I would advise that whenever you pick up a text that you like, you should try to translate it; even a bad translation is a good exercise in theorizing.

¹ Interviewers in order of participation: [FG] Dr. Federica Goffi, Professor, PhD and MAS Program Co-Chair, Azrieli School of Architecture and Urbanism (ASAU), Carleton University (CU); [DM] Devon Moar MAS student ASAU, CU; [NAR] Nicolas Arellano Risopatron PhD student ASAU, CU; [AL] Amanda Lapointe MAS student ASAU, CU; [KW] Kristin Washco PhD student ASAU, CU; [MI] Marco Ianni PhD student ASAU, CU.

² Fraga Do Amaral, Izabel. 2010. "Tensions tectoniques du projet d'architecture : études comparatives de concours brésiliens et canadiens (1967 – 2005)." PhD Dissertation. Montréal: Université de Montréal. (Dir. Jean-Pierre Chupin). Helal, Bechara. 2017. "Les laboratoires de l'architecture : enquête épistémologique sur un paradigme historique." PhD Dissertation. Montréal: Université de Montréal. (Dir. Jean-Pierre Chupin).

Kowal, Stefan. 2017. "Architecture et cartographie à la lumière du numérique : naissance du Système d'information géographique du Canada." PhD Dissertation. Montréal: Université de Montréal. (Dir. Alessandra Ponte).

Destombes, Louis. 2018. "Traductions constructives du projet d'architecture. Théoriser le détail à l'ère de la modélisation intégrative (B.I.M.)." PhD Dissertation. Montréal: Université de Montréal. (Dir. Jean-Pierre Chupin).

Abenia, Tiphaine. 2018. "Architecture potentielle de la Grande Structure Abandonnée (G.S.A): catégorisation et projection. Université de Montréal/ Université de Toulouse." PhD Dissertation. Montréal: Université de Montréal. (Dir. Jean-Pierre Chupin / Daniel Estevez).

Adrienne Costa. 2019. "Enjeux disciplinaires et professionnels de la représentation architecturale en coupe à partir de l'étude comparative d'un corpus de l'internationalisme critique (1975-1995)." PhD Dissertation. Montréal and Toulouse: Université de Montréal and Université de Toulouse. (Dir. Jean-Pierre Chupin / Rémi Papillault).

³ Chupin, Jean-Pierre. 1990. "De Philibert, de l'Orme et de Rabelais. Analogous treatises: a Companion." MArch Thesis. Montréal: McGill University. (Dir. Alberto Pérez-Gomez).

⁴ Chupin, Jean-Pierre. 1998. "Le projet analogue : les phases analogiques du projet d'architecture en situation pédagogique." PhD Dissertation. Montréal: Université de Montréal. (Dir. Alain Findeli).

- ⁵ Chupin, Jean-Pierre. 2018: 37, 36-51. "Un compas des théories dans l'océan doctoral en architecture." In *L'architecture entre pratique et connaissance scientifique* (Collège de France), edited by Jean-Louis Cohen. Paris: Éditions du Patrimoine (Recherche et Architecture). *Originally in French.
- ⁶ Chupin, Jean-Pierre. 2017. "Un compas des théories dans l'océan doctoral en architecture." In *L'Architecture Entre Pratique et Connaissance Scientifique*, edited by Jean-Louis Cohen. Paris: Editions du Patrimoine.
- ⁷ Chupin, Jean-Pierre. 2014 "Dans l'univers des thèses, un compas théorique." In *Les Cahiers de la recherche architecturale et urbaine* 30-31 (Trajectoires doctorales 2): 23-40. Paris: Les Éditions du patrimoine. See also: Chupin, Jean-Pierre. 2015: 28-36. "Vertiges et prodiges du contresens (Le projet comme traduction)." In Flora Pescador and Vicente Mirallave. *Recherche par le projet / Research by design*. Lyon: ENSA Lyon + ULPGC.
- ⁸ Eisenman, Peter. 2006. "The Formal Basis of Modern Architecture." Cambridge, UK: University of Cambridge, 1963. Baden: Lars Müller Publishers.
- ⁹ Chupin 2018: 36-51.
- ¹⁰ See, for example: Evers Bernd and Christof Thoenes, eds. 2003. *Théorie de l'architecture de la Renaissance à nos jours: 117 traités présentés dans 89 études*. Cologne: Taschen. Hays, K. Michael, ed. 1998. *Architecture Theory Since 1968*. Cambridge, MA: MIT Press. Nesbitt, Kate, ed. 1996. *Theorizing A New Agenda for Architecture: An Anthology of Architectural Theory*. New York: Princeton Architectural Press.
- ¹¹ Rykwert, Joseph. 1983. The First Moderns. The Architects of the Eighteenth Century. Cambridge, MA: MIT Press.
- ¹² Durand, Jean-Nicolas-Louis. 1809. *Précis des leçons d'architecture données à l'école Polytechnique*. Paris: École Polytechnique.
- ¹³ Quatremère de Quincy, Antoine-Chrysostome. 1999. *The Historical Dictionary of Architecture*. Translated by Samir Younés. London: Andreas Papadakis.
- ¹⁴ Vitruvius. 1931. *On Architecture.* Edited from the Harleian Manuscript 2767. Translated by Frank Granger. Cambridge, MA: Harvard University Press.
- ¹⁵ Alberti, Leon Battista. 1988. *On the Art of Building in Ten Books*. Translated by Joseph Rykwert, Neil Leach and Robert Tavernor. Cambridge, MA: MIT Press. Palladio, Andrea. 2002. *The Four Books on Architecture*. Cambridge, MA: MIT Press.
- ¹⁶ Koolhaas, Rem. 1978. Delirious New York. A Retroactive Manifesto for Manhattan. New York: The Monacelli Press.
- ¹⁷ OMA, Rem Koolhaas and Bruce Mau. 1995. S,M,L,XL. New York: The Monacelli Press.
- ¹⁸ Rowe, Colin and Robert Slutsky. 1997. *Transparency*. Basel, Boston, Berlin: Birkhäuser.
- ¹⁹ Rossi, Aldo. 1981. A Scientific Autobiography. Translated by Lawrence Venuti. Cambridge, MA: MIT Press.
- ²⁰ Boullée, Etienne Louis. 1794. Architecture. Essai sur l'Art. Manuscript. Paris : Bibliothèque nationale de France.
- ²¹ www.ccc.umontreal.ca, accessed November 28, 2020.
- ²² On the history of the Canadian Competitions Catalogue see: Chupin, Jean-Pierre. 2009: 523-544. "Documenter les concours, concourir à la recherche, archiver l'évènement / Documenting Competitions, Contributing to Research, Archiving Events." In *Architecture et archives numériques (L'architecture à l'ère numérique : un enjeu de mémoire)*. Genève: Éditions Infolio. Chupin, Jean-Pierre. 2015: 232-253. "The Canadian Competitions Catalogue. Digital Libraries of Projects as Collective Legacy." In *Architecture Competitions and the Production of Culture, Quality and Knowledge (An International Inquiry)*. Edited by Chupin, Jean-Pierre, Carmela Cucuzzella, and Bechara Helal. Montréal: PAB. Chupin, Jean-Pierre. 2017. *Competing for Excellence in Architecture (Editorials from the Canadian Competitions Catalogue, 2006-2016)*. Montréal: Potential Architecture Books.
- ²³ Pérez-Gómez, Alberto. 1983. Architecture and the Crisis of Modern Science. Cambridge, MA: MIT Press.
- ²⁴ Chupin, Jean-Pierre. 1988. *Traduction française de l'ouvrage du professeur Alberto Perez-Gomez (Université McGill):*L'Architecture et la Crise de la Science Modern. Bruxelles: Éditions Mardaga (Collection Architecture + Recherches 30).
- ²⁵ Destombes, Louis. 2018. *Traductions constructives du projet d'architecture. Théoriser le détail à l'ère de la modélisation intégrative (B.I.M.).* PhD Dissertation. Montréal: Université de Montréal. (Dir. Jean-Pierre Chupin).
- ²⁶ Evans, Robin. 1997. Translations from Drawing to Building and Other Essays. Cambridge, MA: MIT Press.
- ²⁷ Frascari, Marco. 1996 (1981): 500-514. "The Tell-the-Tale Detail." In *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory* 1965–1995. Edited by Kate Nesbitt. New York: Princeton Architectural Press.