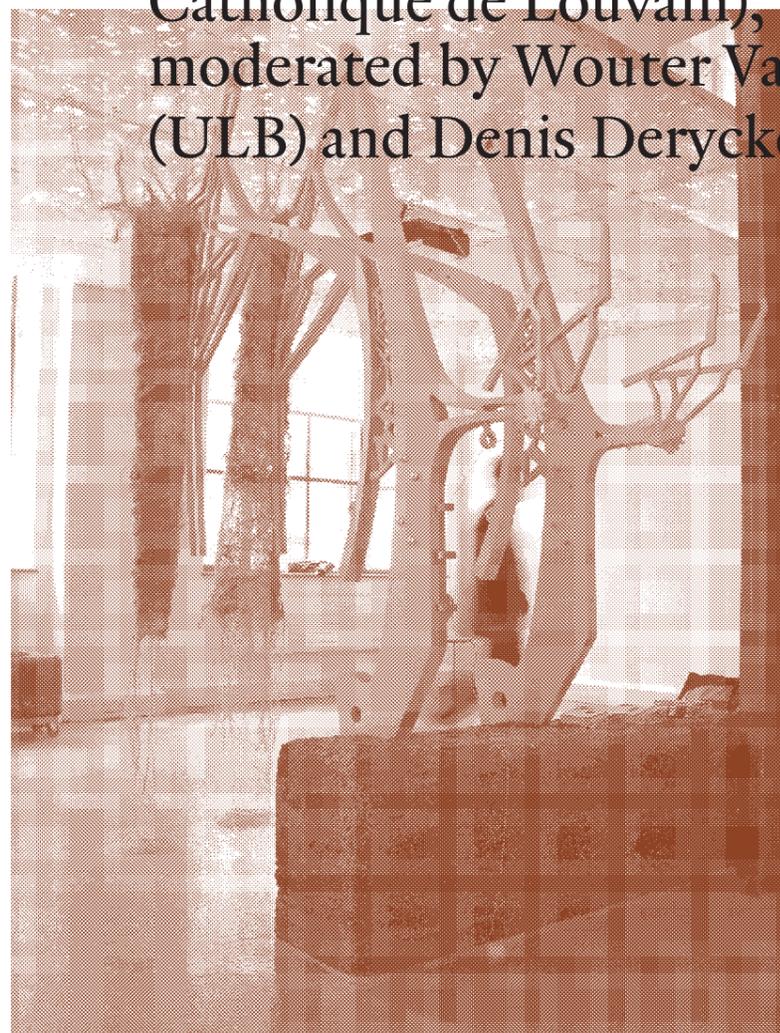


Murray Fraser Design Research in Architecture, Revisited

Public Lecture

Thursday 13 June 2019, 18h30.
Auditorium Victor Bourgeois,
Faculté d'Architecture
La Cambre Horta
Place Flagey 19, 1050 Ixelles

Followed by a roundtable on
PhD by Design methodologies
with Prof. Thomas Mical
(Auckland University of
Technology), Prof. David
Vanderburgh (Université
Catholique de Louvain),
moderated by Wouter Van Acker
(ULB) and Denis Derycke (ULB).



Sunbird Pavilion at the Dreamspace Gallery, London 2012. Designed by Palestine Regeneration Team (Murray Fraser, Nasser Golzari and Yara Sharif) © Murray Fraser

Friday 14 June 2019, 9h-17h
Auditorium Victor Bourgeois
Faculté d'Architecture
La Cambre Horta
Place Flagey 19, 1050 Ixelles

09h00 café & accueil
09h20 Quentin Meurisse (UMons) - *Compacts
typo-morphologies by use of local search
methods*
09h55 Carlo Menon (The Bartlett) - *When
Contents and Methods Tend to Overlap, is
Distance in Trouble?*
10h40 Olivier Sire (ULB) - *Urban security
and right to immobility - Research by
participatory design in Brussels*
11h15 pause
11h30 Alexandre Vandongen (ULB) - *Big-Data
Visualization: a Methodological Reflection
to Represent the Non-Visible of a Large-
Scale Archaeological Site*
12h05 David Erkan (ULB) - *Distributed
Learning, knowledge at the intersection at
education, research and practice*
12h40 lunch

14h00 Thomas Pearce (Bartlett) - *On the
edge of precision's own shadow. Parallax
as a design-research method between
reconstruction and reinvention*
14h35 Yogan Muller (ENSAV La Cambre/ULB)
- *In Praise of Practice-Led Research In A
Time of Growing Interconnected Complexity*
15h10 pause
15h30 round table discussion
16h45 drink

Panel of invited experts Johan De Walsche
(Universiteit Antwerpen), Murray Fraser
(Bartlett), Bernard Kormoss (ULiège), Thomas
Mical (Auckland University of Technology),
David Vanderburgh (UCLouvain)

Organizers Denis Derycke (ULB), Olivier Sire
(ULB), Wouter Van Acker (ULB)
Faculté d'architecture La Cambre Horta, ULB

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In Praise of Practice-led Research In Times of Growing Interconnected Complexity

Yogan Muller, Ph.D.

Introduction

Introduction & thanks...

It is not like architecture is a total alien field to me. In my work I have researched quite extensively the New Topographics, a group show of ten photographers that changed the course of landscape photography back in 1975 in the US. [[slides](#)]

I have brought a couple of proof prints and my thesis with me. We could always discuss their form and content afterwards.

Now, in this lecture, I am going to take Eduardo Viveiros de Castro and Deborah Danowsky's proposition as a working hypothesis [[slide](#)]: “We are living the times of inflexion points and peaking curves”. Yes, trigger warning ! the whole talk has this tinge of gravitas. A prime example of peaking curves is probably the 1971 Club of Rome report entitled *Limits to Growth*. Here is an updated plot of the standard run scenario [[slide](#)]. This is where we roughly are now...

So this lecture takes the current ecological crisis pretty seriously. What I set out to show is that the methodology of practice-led research is a fitting solution in a dwindling world.

To support my working hypothesis, I am indebted to Joseph Tainter's work dealing with complexity, energy, problem-solving and resilience. As Tainter posits [[slide](#)]:

“Over the past 12,000 years, we have responded to challenges with strategies that cost more labor, time, money, and energy [...]. We have done this because most of the time complexity works. *It is a basic problem-solving tool*. Confronted with problems, we often respond by developing more complex technologies, establishing new institutions, adding more specialists or bureaucratic levels to an institution [...].”

Interestingly, practice-led research inherently is a product of institutional complexity. At least in mainland Europe and in countries where the arts are removed from the academe, practice-led research emerged as an experimental solution to bridge the gap between the making, on the one hand, and the careful analytical study, on the other.

The lecture hinges on Viveiros de Castro and Danowsky's proposition, Tainter's

conclusions and the following three points : Legacy, Operational Space and Resilience [slide].

1. Legacy

Taking a glance at the bigger picture and to carry *Limits to Growth* over into the first part of my triptych, system dynamics have shown from the 1970s onwards that the world can be described as a series of interlocking threads, pivotal boxes, governing interfaces, feedback effects and so forth... Here is the *World3* model the scientists behind *Limits to Growth* elaborated [slide]. Clearly we inherit such a complex world from our predecessors and there is little doubt that since the 1970s the world has been growing more complex.

In such a world, frankly, I don't think that the sole exuberant expression of the subjectivity of an artist or the grandiose innovation of an architect is relevant in itself anymore. In fact my point is that we have made too many attempts to break free from the tradition, to relegate old ways of making or doing to “a lower degree of modernity” if you will. We have certainly been perfecting the outcomes: more polished, more eco-friendly, a better energy efficiency and so forth but, all in all, the way we proceed is still the same: we keep trying to break free or “shake the old dust off” and that tendency has clearly accelerated.

In contrast to the kind of presentism that pervades studio art programs and perhaps here too, what's interesting is how dedicated practice-led students are to study the history of their craft, their medium, an industry, a couple of brilliant architects or artists, etc... I figured it out for myself and also back in December 2014 when I conducted a series of interviews with my fellow practice-led PhD candidates. The survey revealed there is a real and passionate commitment to explore the genesis, the primetime and the transformation of a given activity. Now, dear fellow practice-led PhD candidates, doctors or supervisors, stop me if you did not set out to root your whole research effort in earlier chapters of history. That might not have happened right at the onset of your research journey but I bet it quickly dawned on you that without a sometimes deep understanding of what the assumptions on which your subject rests are, you are literally nowhere, there are no references to quote from, no tradition to rephrase, etc...

I am convinced that practice-led research produces serious outputs when it first attempts to articulate “making” with a survey of what came before. It is “just like”, if you will, a proper statistical review: to see trends, you need to garner data over an extended period of time.

Tremendous forces may have concurred to make a given subject important, original or urgent to today's scholars.

Hence, in the immense succession of human interactions that occurred before the present time and the current spike in the production of just about anything [slide]:

- (1) What's our take on the tremendous material reality¹ we have built for ourselves?
- (2) What space there is left to, *again shall I say*, lay new foundations?
- (3) What relevance our additional outputs might eventually arbor?

2. Operational space

As we've seen in the previous part, historical forays serve two main functions [slide]:

- (1) First, establishing something of a *lineage* of your own research pursuit;
- (2) And second, the *delineation* of what I call an *operational space* ; *that is NOT to say a safe space!*

More on that. It is a space defined by historical findings, the specificity of your craft or medium, one's own research track record and a working hypothesis. As we shall see, it is also defined by how a given subject interacts with long-term trends.

The metaphor of the operational space is a prelude to the actual space where to work and produce an output, something of a *proving ground*. Drawing from my research, I came to select Iceland as the main place for field work but not the whole country of Iceland, the Reykjanes peninsula in the southwest [slide] where I had great hopes to see the devastating effect of mass tourism on “pristine nature”. Such an industry heavily rests on a collection of landscape photographs that draw millions of visitors to “pristine nature”. The interface between nature and culture that first attracted me in the urban design that neighbors lava fields [slide] became less interesting while the whole action of photography on a purportedly pristine land [slide] became much more interesting and much more in line with the somehow voracious history of the medium. Hence, the epistemological locus between nature and culture became my operational space for which I found Iceland to be the best “physical” spot or *proving ground*.

Of course, in the light of the ecological crisis and the subsequent urgent need of action, providing that we are willing to act more forcefully now, the notion of operational space refers to the encompassing limiting factors we have to deal with. Take our carbon

¹ Isn't the world hyperbuilt, hyperphotographed, hypertechanical, hyperdesigned?

emissions for instance. Because most of our activities engender CO₂ emissions, it is widely recognized that in order to keep global warming below 2°C by 2100, we need to put in a lot of effort to curb our CO₂ emissions, starting right now. [slide] Recently, some calculations were released by Carbon Brief, a UK based platform. They made the headlines. [slide] It turns out the younger generations—which may someday become our students—have an estimated lifetime CO₂-budget of 95 metric tons which is just shy of 6 times less than someone born in 1950. [slide] Someone born ten years earlier, in the year 2000, can emit twice as much and yet this is still 3 times less than, say, their grandparents born in 1950.

Those are interesting working hypotheses for us, scholars, teachers, parents but also architects, landscape designers, urban planners, landscape photographers. How do we make our research efforts commensurate with those targets? How can we harness our energies to dial down a notch or two to be in good agreement with them? Or, to quote New Topographics photographer Lewis Baltz with my alterations in blue. Originally, this is what Baltz had to say about the landscape of southern California in the post-war period, the landscape of urban sprawl in essence[slide]:

“[...] A new 2°C world is being born and perhaps not a very pleasant world [...]. No one wants to confront this. [...] People pretends not to see it. [...] What I am interested in is [...] the effect of this kind of organization, the effect of this kind of living, the effect of this kind of building. What kind of people would come out of this? What kind of new world is being built here? Is it a world where people can live in, really?”

Hence, the operational space of practice-led research is a product of historical forays but also the succession of practical and theoretical endeavors on a proving ground as well as, hoping not to make too grand of a claim here, *an acknowledgment of our finite world*.

3. Resilience

[slide] “Complexity simplifies”. We've pushed the envelope far enough, haven't we? [slide]

“This illustrates the dilemma of complexity: it grows by small increments, each seemingly appropriate at the time, until cumulatively we can no longer afford to solve the problems as effectively as we once did.”

Tainter and Taylor go on to say [slide]:

“Citizens, [architects, planners] are largely unaware of this process because complexity grows by small increments, and because the cost is subsidized (primarily

through inexpensive fossil fuels). Yet the cost is still there, and the strategy of paying for complexity with fossil fuels has a finite future.”

Quoting Tainter and Taylor again [[slide](#)] :

“Once diminishing returns set in, a society must either find new resources to continue the activity, or fund the activity by reducing the share of resources available to other economic sectors. The latter is likely to produce economic contraction, popular discontent and eventual collapse.”

Such a “zero-sum game” is what seems to be slowly but surely setting in on a global scale. According to Tainter and Taylor's, complexity is the final product of a transformation chain that first and foremost depends on resource consumption which itself requires large energy flows. Diminishing returns as introduced by Tainter and Taylor are to me a proxy for what other scholars in the energy sector call EROI, [[slide](#)] or *Energy Return on Investment*, that is, *the ratio of energy delivered by the energy required to deliver that energy*. That ratio seems to be falling substantially at the moment. In the UK, Dr. Nafeez Ahmed's work deals with such a crumbling state of things [[slide](#)] quite extensively, not to open a heated political debate here.

Anyway, at the other end of the complexity chain, the diminishing returns may mean for us, academics, practice-led PhD candidates, supervisors, etc... that the public spendings in research is “prioritized”. [[slide](#)] The situation in Brazil is a prime example and a rather sobering one where the humanities are hit the most. A friend of mine is an art scholar at the University of Sao Paulo and beside the fact that the government basically suspended all Philosophy master thesis fundings, this friend recently told me that the Art department in his university is now regarded as a boondoggle by Anthropology or Sociology scholars in their own fight for survival... Back in Europe, this might not be on the horizon yet. However, we should not overlook those dire political responses, because if we should take a longer view, in a low-energy world it seems likely we will have to keep working in a seemingly contracting environment, in the broad sense of the term, and with reduced material resources, of any kind, not just funding. In such an environment, in the light of serious limiting factors, let's hope the good old self-indulgent projects will become irrelevant. Newspaper *Le Monde* again reported several days ago [[slide](#)] in an interview with a *chief resilience officer*, an emerging function, that indeed we already cannot afford those projects anymore.

Fluent in historical forays, in refined conceptualizations and in meaningful practical

operations, I posit practice-led research can absorb such shocks and hopefully stands its ground in the academe of a low-energy world. In fact, as an empiric and yet authentic manifestation of system analysis, practice-led research can well be the hallmark of research in the non-purely scientific fields, introducing forms that are commensurate with the world where the research takes place.

Thus practice-led research promotes resilience, that is, “the capacity to recover, [and] a way to achieve a sustainability goal” to quote Tainter and Taylor once again. In other words, practice-led research is in its very essence a methodology in the old greek sense of the word or, if you will, a *pathway toward sustainable research practices*.

Conclusion

To conclude, as a product of institutional complexity, practice-led research surely has yet to get over a lot of academic hurdles in order to become fully legitimate. I am confident it will.

As I've showed, practice-led research (1) first integrates something a grand historical narrative, (2) second, it is attuned to some of the tremendous forces that have shaped a given subject, (3) third it delineates a meaningful locus of operation in which the outputs are commensurate with the world where the research takes place and (4) fourth, practice-led research is a pathway to sustainability.

That is why I would like to praise practice-led research: in a time of growing interconnected complexity it produces [slide] *forms we can afford*.