



Towards Hybrid Knowledge: Research-Creation in the Arts and Sciences

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July 6, 2022

1. History
2. Theory
3. Approach (case study)
4. Questions

Questions:

1. Validation of creative practice v. producing knowledge objects.
2. Artistic material production v. Thesis writing
3. Methods / Evaluation of good/bad research v. art
4. Gap between artistic practice in the profession and university-contexts for practice

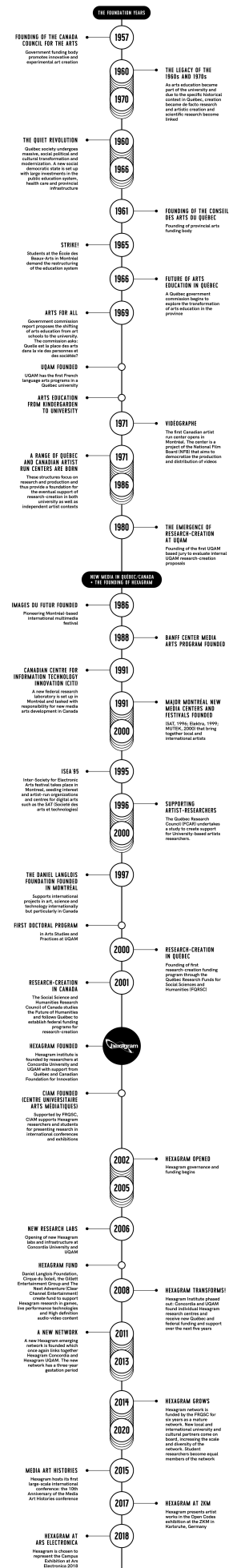
I. Lightning fast history

-RC established as a funding category by the Quebec research council (FRSC) in 2000 (ties in with the history of Quebec and Canada)

-In 2001, the Social Sciences and Humanities Research Council (SSHRC) run a study on the future of the humanities in 2010. Identified in the study is the need to link “the interpretive disciplines with the creative disciplines” to generate more robust interdisciplinary research.

Timeline RC Quebec/Canada

HEXAGRAM TIMELINE: WITHIN THE LARGER CONTEXT OF RESEARCH-CREATION IN MEDIA ART AND TECHNOLOGY IN QUEBEC AND CANADA



Hexagram as the premiere network for RC in Quebec and in Canada

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HEXAGRAM @ ISEA2022



CALL FOR PROJECTS – FALL 2022 PROGRAM

Context: In Quebec, where RC originated, its origins trace back not to bureaucratic policy contexts (i.e., Bologna) but rather to the creation of Quebec as a civil society as well as post 1967 Canada which supported (at least in the technologically-based arts what Michael Century (2022) has called an “alternative technological ethos” (as one basis for techno-scientifically driven RC).

Alternative Technological Ethos (as one model for how RC emerged in university contexts in Quebec and Canada in the late 1990s): “a common way of apprehending technology as a malleable material, open to revision to artists in use, and subject to both conceptual and functional reimagining.” (Century 2022).

II. What is Research-Creation?

Caveat: RC (like “art science”) is a contested object; “a pool of shifting practices and categories that are themselves relational and in formation” (Barry and Born, 2011).

Research-Creation

J.S. Lansing “Artificial Societies” (2002)

The successes of the natural sciences in explaining the physical and biological world have affected not only the content of explanations of social phenomena but the image of how we are to go about investigating them. Studies of human societies become “social sciences” with an apparatus of investigation and statistical analysis that pretends that the process of investigation is not itself a social process. . . .

I have considerable sympathy for the position in which sociologists find themselves. They are asking about the most complex and difficult phenomena in the most complex and recalcitrant organisms, without that liberty *to manipulate their objects of study which is enjoyed by natural scientists*. In comparison, the task of the molecular biologist is trivial.

Research-Creation

J.S. Lansing Lansing (revised):

The successes of the **arts and design in creating new social-technical-aesthetic-political imaginaries** have affected not only the content of explanations of social phenomena but the image of how we are to go about investigating them. Studies of human societies become “social sciences” with an apparatus of investigation and statistical analysis that pretends that the process of investigation is not itself a social process. . . .

I have considerable sympathy for the position in which sociologists find themselves. They are asking about the most complex and difficult phenomena in the most complex and recalcitrant organisms, without that *liberty to create and manipulate their objects of study which is enjoyed by artists and designers*. In comparison, **the task of the artist and designer is trivial.**

Plurality of definitions

Research-Creation

1. Developing research trend in Canada linking the interpretive disciplines (humanities and social sciences) with creative ones (art and design) that involves the creation of **knowledge** in and through **creative material practice** (circa 2002)

2. Research-Creation (RC) is a **Canadian**-pioneered **interdisciplinary research** field that combines **artistic** and **design** practices with the **critical** strength of **humanities**, the **material engagement** of the sciences and engineering and the **situated awareness** of the **social sciences**.

RC produces **new kinds of knowledge objects** for the humanities and social sciences (SSH) in the form of artistically-driven **events**, **experiments** and **interventions** that can powerfully engage not only peers but also **audiences outside the university**. It thus has the potential to produce new inventive forms of **public** engagement through original aesthetic perspectives on the burning social-cultural issues of our time (Salter, Simon, Jarry and Hedayati, 2022).

The Official Definitions:

3. FRQSC: The FRQSC (Québec Research Council for SSH) uses the term research-creation to designate any research process or approach that fosters creation and aims at producing **new aesthetic, theoretical, methodological, epistemological or technical knowledge**. All of these processes and approaches must include, to varying degrees (depending on the practices and temporalities specific to each project):

1) **Creative or artistic activities** (design, experimentation, technology, prototype, etc.)

AND

2) The **problematization** of these activities (critical and theoretical analysis of the creative process, conceptualisation, etc.).

As there can be no research-creation without give and take between the work of art and the creation process by which it exists, the Fonds requires that the creative or artistic activities and their problematization be carried **out by the same person**.

3. For the purposes of the Fonds, a research-creation approach is based on:
- A sustained creative or artistic practice;
 - The problematization of this creative or artistic practice;
 - The transmission, presentation and dissemination of the experimentation and/or results of research-creation projects of all types to students, peers and the general public.

Specifically, the research-creation activities carried out under this program must contribute to:

- The **development** of productions or works resulting from a creative or artistic practice, provided that they offer an element of renewal or innovation in terms of approach, process, technology, materials, form of presentation or experimentation, repertory or interpretative style. These productions must lend themselves to problematization leading to the development of new aesthetic, theoretical, methodological, epistemological or technical knowledge;
- The **training** of research-creation students;
- Greater **recognition** of individuals working on research-creation within their institutions and in national and international artistic and cultural environments and communities;
- The **enrichment** of the cultural heritage of Québec, Canada and/or the international community.

Conclusion: Creating/exhibiting art is only **one** facet of R-C research and training in the FRQSC's context.

4. SSHRC (Social Sciences and Humanities Research Council of Canada):

An approach to research that combines creative and academic research practices, and supports the **development of knowledge and innovation** through **artistic expression, scholarly investigation, and experimentation**. The **creation process** is situated within the research activity and produces **critically informed work in a variety of media (art forms)**.

4. SSHRC working definition of R-C for the purpose of creative advancements in academia by recognizing that university affiliated artist-researchers contribute to the development or renewal of their field while simultaneously training undergraduate and graduate level students (SSHRC Website 2013):

R-C involves approaches that form an essential part of a creative process or artistic discipline **that should address clear research questions, be theoretically and methodologically rigorous and produce work that meets peer standards** (Hughes, 2013).

4. Conclusion (and from direct experience on SSHRC assessment committees): The artistic work is **embedded** in a deeper scholarly inquiry that will contribute new knowledge to the humanities and social sciences **partly** by way of creative practice.

Contestation

RC is argued to be “a methodological approach rather than an academic discipline,” which provides “a strong vantage point from which to consider 21st century creative practices and practitioners as new disciplinary subjects and objects.”

RC is also claimed to be a “methodological and epistemological challenge to the argumentative form(s) that have typified much academic scholarship.”

Enough about knowledge! What about art???

Good Research? Bad Art!! (from Glen Lowry, "Props to Bad Artists: On R-C and a Cultural Politics of University-based Art")

"SSHRC established its research-creation program to target creative practitioners, yet word on the street is that it is rigged against real artists who make good art. Among professionals, there is a sense that despite the generous budgets and timelines, academic support comes with strings attached."

Good Research? Bad Art!!

Unlike bad art, which hinges on aesthetic concerns, bad research in the humanities and sciences tends to be easier to assess on methodological grounds.

Good Research? Bad Art!!

First, bad research cannot be reproduced or verified, and its findings fail to account for statistical im/probability. Improbable or unwanted results can produce scientific breakthroughs, which lead good researchers to generally seek to explain or replicate unexpected findings.

Second, bad research obfuscates or falsifies claims about data: refusing to maintain transparency vis-a-vis methods, analysis, and conclusions, it withholds and alters results.

Third, bad research prioritizes the motives of researchers or funders over those of society: drug trials that avoid double-blind review in fear of displeasing industry partners, despite obvious risks, for instance, or politically-motivated studies that seek devious ways to generate and interpret data that discredit global warming.

Bad research is categorically different from bad art. The conditions producing bad research can and have been instrumental in the production of great works of art.

Good research-creation pulls professional academics-artist-researchers along with others humanists and social scientists-outside zones of comfort and away from monitored disciplinary divisions or divisions of labour. It challenges us to think about what constitutes knowledge, how new ideas, ways of knowing, and forms of innovation draw on deep-seated cultural traditions

Three distinct Genealogies / Clusters of Research-Creation in Canada:

(1) RC is practiced outside scholarly spaces as networked artistic interventions:

- Activist art logic etched in “tactical media” legacies adopts new approaches to “do it yourself” media activism (Lovink & Garcia, 1997).
- Intersecting art, science and technology with activist-based socio-political issues, such critical acts rely on collective knowledge making to raise public awareness (Critical Art Ensemble, 2001; Da Costa & Philip, 2008; Meikle, 2002; Sützl & Hug, 2012);

(2) Social Science/Humanities-oriented RC that assume a gender, race and class-conscious ethics, adopting decolonial politics to occupy in-between spaces of the academy (Loveless, 2019; Rousell, 2021; Springgay & Truman, 2019). Such approaches encompass artistic practices compatible with academic ecologies; creative and process-oriented scholarly inquiries; and *pedagogy* fused with creative cultural production (Manning & Massumi 2014; Truman, 2021).

(3) The space between RC and Science & Technology Studies (STS) challenges the roles, research objects, and audiences within each field, diversifying perspectives on art and science, opening up science and technology to new types of questions, and generating sustained interdisciplinary engagements.

Such reconfiguration puts forth material, technical and theoretical parallel outputs epitomized in critical computational art/design (e.g., “postcolonial computing”) as well as recent inclusive research-practices in “third wave” Human-Computer Interaction and links between art, design and STS (Bodker 2015; Borgdorff 2020; Calvert & Schyfter 2017; Philip et al., 2012; Rogers et al 2022; Salter et al 2016; Sormani et al 2020).

- politics and aesthetics
- knowledge objects as creative things as well as texts
- training of students
- hybrid methods

III. Short case study of RC “in the making” : An example from practice

Haptic Fields (2014-2017)

- FRQSC funded project exploring how touch can be both felt at a distance and shared among a group of people physically distributed in a space.
- Collaboration with anthropologist David Howes (CU) and music technologist Marcelo Wanderley (McGill).
- Utilize cultural, historical and anthropological theories of touch to inform artistic and technological development and practice in the burgeoning research area of haptics.
- Continued development of ethnographic methods from sensory anthropology expand the range of standard engineering, Human Computer Interaction (HCI) and “human factors” approaches for measuring user experience.

Outcomes

- Major installation (*Haptic Field*) premiered in Shanghai, China in July 2016.
- European Tour of HF in 2017 to Wienerfestwochen and the Berliner Festspiele) as well as Munich and Bandung, Indonesia 2018
- Development of new technology ("Vibropixels") with McGill. Technology successfully commercialized and developed by Montreal-based VR-games start up.
- Conference/Artist Presentations in Weimar, Shanghai, Tokyo, Kyoto, Linz, Aalborg, Sao Paolo, Irvine, Vienna, Paris, Krakow, Ann Arbor, Beijing.
- 7 peer reviewed book chapters (anthropology, performance studies, sensory studies) and 2 catalogue essays plus contribution to new MIT Press book (*Sensing Machines*, Salter 2022) - this constitutes academic evaluation.
- HQP training (1 BA, 2 MA, 3 PhDs - 1 dissertation).



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<CAC>
RESEARCH

JNBY

 McGill

Journal of Interpersonal Violence

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XMODAI

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Haptic Field: Wiener Festwochen, Vienna, 2017



Haptic Field: Berliner Festspiele, Berlin, 2017



Haptic Field: Vibropixel Technology



Haptic Field: Vibropixel Technology

Method: sensory ethnography / “participant sensation”

Concentration specifically on documenting the techniques of perception, or ways of sensing, that audiences use to cope with, enjoy or enhance the experience. These techniques complete the stimuli generated by the technology. In this sense, thresholds of perception can vary widely.

How: Collective group interviews (semi structured) and conversation with the public in the wild.

Collected data (interviews) in Shanghai, Berlin and Bandung.

4. Questions for students (and advisors)

What is it?

What does it do?

Where does it come from?

Who did something similar before and
where is the gap?

How do you do it?

Does it work?

Why does it work?

Does it matter to someone besides you?

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