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10 Knowledge plurality for greater university-community permeability

Experiences in art and design from fieldwork*

Caoimhe Isha Beaulé, Élisabeth Kaine, Étienne Levac, Anne Marchand and Jean-François Vachon

Abstract: By relating the authors' experiences in the field with institutions and within indigenous communities, this chapter argues that knowledge plurality is required for greater university-community permeability, reciprocity and transformation, and that design can be a space to do so. When addressing the research obstacles, the authors are trying to highlight how collaboration can be a relationship with different levels and how addressing those obstacles within the university only makes the process of community empowerment easier.

Keywords: Collaborative research, fieldwork, university-community permeability, multiplicity, ways of knowing

Introduction

When addressing the pluriversal proposal of rejecting the modern and Western epistemology domination on the *world* (Escobar, 2018; Blaser, 2013; Stengers, 2007), settler scholars often fail to truly consider the knowledge systems of Indigenous peoples (Todd, 2016), hence undermining a true collaboration research process. Even so, the pluriversal proposal is far from a goal in our sense; it offers new perspectives for design practices. On this matter, Escobar is eloquent in stating, 'Transitions studies considers design as an innovative critical praxis, a particular form of knowledgepractice that is in the spirit of transitions and the pluriverse' (2018, p. 172). In this chapter, the authors propose a reflection on university-community relationships and reciprocity from the perspectives of knowledge plurality, particularly in the field of design. This idea is addressed by presenting the authors' voices and experiences as non-Indigenous and Indigenous people. We, the authors, believe that as the first step to truly engage in a university-community collaboration-based approach, we must try to engage in a reflexive work in looking at our own experiences and thoughts reflexes.

The first section opens the discussion on how we are witnessing important changes in the academic world regarding what we term the 'university-community permeability'. The second part of the chapter deepens the idea that moving away from the dictates of a 'unified science' philosophy towards one that values pluriversal ways of producing knowledge and judging its validity (Weiler, 2011) opens spaces for imagining more mutually enriching university-community exchanges. In the third part, based on extensive fieldwork experience in art and design with Indigenous communities, the authors discuss the obstacles and possible incentives related to the integration of these 'other ways' of knowing in academic research. Anecdotes in both parts of the chapter are used to illustrate shared ideas. This material is then discussed through the lens of different levels of collaboration with the communities in a project. Finally, as an opening, the conclusion suggests that design—as a relatively young discipline or meta-discipline—may be well positioned to flourish by being especially permeable to a multiplicity of ways of knowing.

Towards greater 'university—community permeability'

Over the past few decades, we have seen historical and well-defined boundaries between research institutions and non-academic communities being challenged. For example, knowledge mobilisation-where research outputs benefit knowledge users outside academia—has significantly gained attention (Smith, 2012). In general, the diverse forms of knowledge held by community experts and community researchers are making their way into universities, contributing to this permeability and, ultimately, to power negotiation in more diverse directions. This example shows the contrast with the dominant ways of knowing established in academia by including experiential knowledge (Baillergeau & Duyvendak, 2016), local knowledge (Valkonen & Valkonen, 2018), Indigenous knowledge and procedural knowledge or 'knowing-how', as defined by Ryle (1949). For instance, in health sciences, rather than being an object of research, patients are considered partners, where their experiential knowledge is acknowledged as valid research input. In the processes of decolonisation, universities are invited to critically examine the hierarchy of knowledge and recognise Indigenous knowledge systems that have been developed over generations and that are grounded on individual and collectively learned experiences (Nicholas, 2018), mostly on and with the land. Regarding procedural knowledge in design research, discussions about design epistemologies support the legitimisations of 'knowing-how' or 'knowing though making' (Mäkelä, 2007).

Further recognition and legitimisation of such various forms of knowing and knowledge are necessary for creating positive impacts within and outside academia. However, by recognising the pluriversal proposal of different and 'other' ways of enacting our modern world (Blaser, 2013)—and so as to be aware of the thought mechanisms resulting in our constant perpetuation of the same onto-epistemology hierarchy we criticise—we must have the consciousness that we are also this 'otherness'. From a critical standpoint and regarding Indigenous critical scholarship in particular, while academia tends to include theories that are trying to recognise this 'other', we are still failing to create the conditions for 'intellectual presence as Indigenous peoples within its very own bricks-and-mortar institutions' (Todd, 2016, p. 10). According to Todd, who offers a critical and different ontological perspective on the notion of the pluriverse and the trend of ontological turn in a broader sense, such an encounter requires negotiations between worlds and realities that must go both ways and beyond a simple reference to Indigenous theories to achieve people's full participation and account for their knowledge systems.

In collaborative research, creating the optimal conditions for the encounters of different ways of knowing involves recognising these different forms of knowledges in their own terms, which include those that exist outside the walls of university institutions. That being said, as a way to introduce the next section, where the authors share anecdotes from fieldwork to illustrate and nurture reflections on



Figure 10.1 Okacic (walleye) fillet. Credit: Étienne Levac.

the obstacles and limits of knowledge systems, it seems pertinent to start by sharing a small example. In our sense, it highlights interesting elements as part of this reflection on the hierarchies of knowledge systems: those of context, utility and standpoint. During a research project taking place in the community¹ and on the traditional territory of the Atikamekw Nehirowisiw Nation (one of the ten First Nations of Québec), one of the authors of this chapter, Étienne, who is not Indigenous, follows an Atikamekw collaborator on their fishing activity. He attempts to help by preparing the fish they caught (Figure 10.1); however, although he tries his best, he makes many mistakes. His collaborator tells him with humour, 'For a researcher, you don't know that much!' Etienne adds, 'In that moment, I truly had a glimpse of the value of different forms of knowledge and that there, I was essentially a child; in a constant learning process'. This small interaction between Étienne and a member of the community can seem commonplace, but it holds an important aspect of the pluriversal that impose the Western epistemological framework as a knowledge benchmark for the rest of the world. As Stenger states, 'Slowing down reasoning creates the occasion for a small new sensibility regarding the problems and situations that mobilize ourselves' (2007, p. 45). In this sense, the considerations in Étienne's anecdote interact with questions such as the following: How can we engage in truly collaborative community-based research when we are not able to do a simple task in the daily life of the community with whom we work? How can we engage with a different onto-epistemical² than ours without devaluating their importance along the process of collaboration?

Anecdotes from the fieldwork: caught between the tree and the bark

As mentioned earlier, this section highlights the obstacles and possible incentives related to the integration of these 'other ways' of knowing in academic research. Its content draws on the experiences of the authors through their participation in various art and design activities, including those of the La Boîte Rouge VIF (BRV), an Indigenous nonprofit organisation (NPO) that was cofounded in 1999 by Élisabeth Kaine (author), which aims to preserve, transmit and value both Indigenous and non-Indigenous community cultural heritage through a consensus-building and cocreation approach. As an NPO, BRV was created as the more 'operational' branch of the design and material culture research group, an initiative led by Elisabeth as a professor and researcher at the University du Québec à Chicoutimi. The content of the discussion in this chapter also stems from reflections that emerged from the UNESCO Chair in Transmission of First Peoples' Culture to Foster Well-Being and Empowerment, which was established in 2018. This chair's mission is to promote an integrated system of research, training, knowledge transfer and documentation in the areas of education, well-being and culture with First Nations and Inuit people. It facilitates collaborations between cultural experts, Indigenous knowledge holders, university researchers and higher education establishments of Canada, the Americas and the world. This action research structure was also founded by Elisabeth, member of the Huron-Wendat First Nation.

Unlearning as the first step: knowledge considered an alternative for one is *the* way of knowing for another

During an activity organised as by the UNESCO chair in which the BRV is highly involved, M. Lucien St-Onge, Innu and a member of the Elders and Knowledge Keepers Committee of the chair, addresses the university researchers involved as part of a collective reflection around Indigenous research: 'To get there, you must first unlearn what you know. At the moment, it is not you who is listening to me, but all the conditioning you have received' (Kaine & Lavoie, forthcoming).

These words from M. St-Onge invite university researchers to unlearn to learn from each other, to access one another's knowledge and to obtain greater equality between knowledge systems and university and community researchers. This requires us to change our ways of doing and perceive our roles as university researchers as facilitators that set a context and the conditions that allow for the emergence of a diversity of knowledge during the entire process. It seemed relevant for the authors to mention that the concept of unlearning in the context of knowledge production, as pointed out by M. St-Onge, is actually the object of a significant body of academic publications on the notion of discomfort and the process of unlearning (Boudreau Morris, 2017; Le Gallo & Millette, 2019).

Nonetheless, the conditioning to which M. St-Onge is referring is profoundly routinised and institutionalised in our ways of learning and understanding. Elisabeth, who has been involved for more than 30 years in various exhibition design projects as an Indigenous commissioner, project director or been responsible for collaborations with First Nations and Inuit, states that both museums and research institutions do not escape this reality. Among the projects she has been involved in, as an invited researcher for a significant national museum in Canada, she led an extensive



Figure 10.2 Creative workshop—thematic modelling, strategies and museographic means at the Matakan Camp in Manawan, 2011. Credit: La Boîte Rouge VIF.

concertation with the 11 Indigenous Nations of Québec as part of a new permanent and reference exhibition on the First Peoples of Québec (Figure 10.2). This process, financed by the Social Sciences and Humanities Research Council of Canada, was intended as exemplary in terms of its collaboration; however, as we will discuss, this exemplarity was not reflected as much as it should have been in the exhibition. The concertation process allowed encounters with over 700 people and collaboration with about 60 artists and cultural experts from various Indigenous Peoples (Kaine, Kurtness et al., 2016). More than 2,000 pages of verbatim, 250 hours of video material and more than 10,000 photos were collected. Based on oral tradition, the content conveyed what the Nations had to say about their own histories and, most importantly, their contemporary reality. For an institution that relied primarily on academic 'written' knowledge to give credibility to its exhibitions, this approach turned out to be highly destabilising. From Elisabeth's perspective, this might have occurred because of the museum's personnel going back to their old ways of acting once she let her guard down.

At the end of the extensive concertation and creation process that started in 2010 and that lasted over three years, very few recommendations from the makers were followed by the institution. Few of the objects selected during the concertation were included as part of the exhibition, and it did not reflect what the individuals had imagined over the years.

If, at the beginning, I thought the intent of working in a collective dynamic of action with all the First Peoples seemed real, it was crumbling during the whole process. Finally, an amount of decisions are taken internally; the institution fell into it's the compliance with its old reflexes on the first occasion: the centralisation of decisions, the 'let's do everything in the place of.

[...]

I was literally obsessed to find answers, reasons for this failure, which I wanted to be a concertation process that was completely exemplary. I would have wanted to identify a single and fundamental cause—the one that would explain it all. But it was rather a combination of small factors that created failure, and I found that almost harder to accept, as they were, in general, easy to resolve: the personality of some, a lack of sensitivity regarding the Indigenous cause or wrongdoings of colonialism for others, the unawareness of Indigenous cultures, the lack of knowledge regarding consultation approaches, but also, and most importantly, perhaps a lack of humility to stay behind the ones we are supporting for them to represent themselves.

(Kaine, 2021)

The humility, which is discussed here as the capacity to stay behind (Kaine et al., 2017), which was necessary to the legitimisation of different ways of knowing and encountering this knowledge, is clearly expressed through the shared vision of the Indigenous stakeholders of the UNESCO chair. During a long trip, canoeists can alternate the one steering the boat according to the conditions in the field. Following this image, leadership is shared based on the context and complementarity of expertise. Nonetheless, the main challenge remains not to fall back into old reflexes. As powerfully illustrated by Mme Evelyne St-Onge, M. Jacques Kurtness and M. Lucien St-Onge, members of the Elders and Knowledge Keepers Committee of the chair, the metaphor of the cowalker—especially the one of the canoeists—helps define a relationship based on alternatively sharing the leadership between the university and the community researchers (Kaine & Lavoie, forthcoming).

The answer is in the following action: circularity versus linearity

Nowadays, universities and funding agencies require the generation of knowledge and activities that have a strong societal impact. Research impact is often expressed through the idea of knowledge transfer, which can be criticised for being essentially unidirectional. Rioux et al. (2006) propose moving from 'knowledge transfer' to 'knowledge interfacing and sharing' and the 'coproduction' of knowledge through collaborative learning. According to them, this implies '[...] a shift from a view of knowledge as a 'thing' that can be transferred to viewing knowledge as a 'process of relating' that involves negotiation of meaning among partners'.

In a similar perspective, Anderson and McLachlan (2015) point out that 'mainstream knowledge production and communication in the academy generally reflect the tenets of positivist research and predominantly embody hierarchical processes of knowledge transfer' (p. 295). In contrast, according to Anderson and McLachlan (2015):

A transformative research paradigm, which create social change, is rooted in knowledge mobilization processes involving close collaboration between researchers and community actors as co-enquirers as a part of a broader agenda for progressive social change. They also involve communication strategies that mobilize knowledge beyond those directly involved in the research process.

(p. 295)

The authors describe three key and nonlinear knowledge mobilisation strategies for high impact research methods, communication and outcomes: *transmedia* to exchange knowledge across a wide range of communication media, formats and platforms to engage wider audiences; *bridges* to invite communication among diverse knowledge communities by inviting, for example, people with different politics, sensibilities and interests; and *layering* to communicate knowledge at varying levels of detail.

Why not undertake a collaborative approach from the start, where, step by step, the project is completed together? If community members are stakeholders from the start and contribute to the emergence of knowledge and solutions, there is no need for 'transfer' at the end of the research because they are actors in the research. For this to work, there cannot be a hierarchy of knowledge and epistemologies. Collaborative and cooperative approaches are key to successful knowledge mobilisation strategies. A model developed by members of the design and material culture team, where eight levels of project collaboration applying to non-Indigenous and Indigenous milieus are identified, is reported here (Kaine, Bellemare et al., 2016). This scale allows us to reflect on how the appropriation of a project and transfer of knowledge can be done in a unidirectional manner at the very end of a project; alternatively, it can be a part of the project's conceptualisation, in which knowledge mobilisation is an integral part (Table 10.1). When located in the higher levels of collaboration, the odds are higher of project appropriation and knowledge mobilisation. In this model, collective action—a project approach where the answer is in the following action and where transformation occurs though reflective action—is the goal of a true collaboration process. Ultimately, this approach would allow us to move from a scale of collaboration to one of decolonisation. These tools have been developed from the perspective that too often projects are coming to a community in response to a problem. Solutions are designed and carried out by experts coming from outside, and at the most, people are informed of it. It is a visual tool where actors of the project can agree upon or evaluate the level of collaboration desired in different phases of the project. Further, in section 4, this table will support the synthesis and further reflections on knowledge sharing in relation to the degree of collaboration in a project.

Rhythm and formats or the shock of the worlds

When the level of collaboration in a project is high and properly achieved, there is a shock of 'worlds'. However, if conversation and adaptation are constant and the appropriate amount of time is taken, this creates conditions for the real participation of all the actors in the project. Conversing must take time, and one should not expect

Level	Description of the project proponent's relationship with the community	Types of collaboration	Dynamic of collaborative work	Resulting power for the population/community
7	The project proponent entirely hands over decision- making and action- taking to the community, which therefore becomes the project proponent.	Collective action	Decisions and actions are entirely taken by the community.	<i>Real power</i> —the community is in a position of authority, and holds all of the decision- making and action-taking powers, becoming perfectly self-reliant.
6	The project proponent oils the wheels of dialogue and teams up with the community as equals to make decisions and draw up an action plan.	Consensus building	The project proponent and the community are experiencing a real encounter. The project proponent makes decisions <i>with</i> the community.	<i>Real power</i> —the community is as powerful as the proponent. The relationship is a partnership.
5	The project proponent always seeks to dialogue and argue with the community in order to make decisions and take actions that are based on consensus and that aim for compromise.	Negotiation	The project proponent enters into dialogue with the community, and takes part in making decisions and taking actions.	<i>Relative power</i> —the community gains some power but isn't in a position of equality with the project proponent. So there is a 'give and take' of power relationships.
4	The project proponent wishes to consult the community and is committed to hearing the opinions that it expresses in order to influence decision making and action plans.	Cooperation	The project proponent goes to the community and aims to represent it (ideas, concerns, aspirations) in the decisions it will make.	<i>Relative power</i> —dialogue is established, the community begins to have some power of influence and persuasion, but with no real influence over decisions.

Table 10.1 Levels of desired collaboration in a cultural development project.

(Continued)

Table 10.1 (Continued)

Level	Description of the project proponent's relationship with the community	Types of collaboration	<i>Dynamic</i> of collaborative work	Resulting power for the population/community
3	The project proponent wishes to consult the community about decisions and actions he/she has to make or take, while making no commitment to take this feedback into account. If the project proponent makes no such commitment, the strategy is 'co-opting'—appeasing the community by raising hopes of involvement, which in fact is illusory. Long-term co-opting may make the community lose confidence that it can really influence its own development. The resulting disillusionment may lead to a reflex of passivity among citizens.	Consultation/ Co-opting	The project proponent goes to the community, considers its viewpoint, and decides instead of the community.	<i>Illusion of power</i> —the community has a power of expression, but this expression, has no real impact and is ultimately <i>manipulated</i> .
2	The project proponent makes an effort to inform the community about his/ her decisions and actions, wants to ensure that the community fully understands them, but does not ask for its opinion or acquiescence. The information provided is nonetheless more objective than at the 'communication level; the community can thus form its own opinion and eventually respond and seek dialogue with the project proponent.	Information	The project proponent goes to the community, gives it a message, and hopes it will be fully understood. He/ she decides instead of the community.	Absence of power—project proponent's goal is to 'put forward.' Thus, no real dialogue takes place with the community.
1	The project proponent makes an effort to communicate his/her decisions and actions to the community, while not ensuring that the community has understood this message. He/she shows a desire for contact with the community, but isn't open to any feedback from the community. There may also be manipulation of the facts presented in order to convince people. He/she retains the power to decide and act.	Communication	The project proponent goes to the community and gives it a message. He/she decides instead of the community.	Absence of power—the community is subjected to decisions and actions that are imposed on it-the community is merely succinctly informed.
0	The project proponent wishes to keep his/her power and remain faithful to his/her work habits (vertical dynamic). He/she acts alone, without communicating with the community concerned by the project.	No agreement from the community or trust in the project proponent	The project proponent decides and acts instead community.	Absence of power—the community is subjected to deci-tead of the sions and actions that are imposed on it—guardian/ward relationship.

quick answers. Jean-François Vachon (author), scientific director of the BRV, recalls the following:

A crew was literally thrown out of a community because their framework was too rigid. It was catastrophic. They wanted answers from the elders that would fit within the two-minute clips they had predetermined; that they answer the questions in two or three sentences, then they would cut them off. This highly disturbed the elders, as they could not answer in their own 'format' in their own ways.

Again, regarding the format, similar to what Nishnaabeg academic Leane betasamosake Simpson has previously mentioned (Simpson, 2017), Étienne observes that when he asked a question to the elders of the Atikamekw Nation, with whom he collaborates, they often respond with a story. They take a different path to answer the question: their own path. In their universe, the elders responding directly, answering with oral tradition that works through narrative; in their system, they answer perfectly. Elisabeth recalls that for the treatment of the 2,000 pages of verbatim mentioned previously, it was necessary to avoid summarising the contents of the interviews, the length of which was determined by how much time the interlocutors desired to give to their answers; these interviews lasted between two and eight hours. A method inspired by phenomenological reduction (Husserl, 1980) was developed with the main objective of concentrating on meaning rather than a summary tainted by the editor. The aim is not to condense or summarise, but rather to extract its essence and meaning.

The question of formatting the research products presents a challenge. For instance, when we start from a complete experience and process it in a linear way—a linear narrative—we reduce and destroy something that is alive. The product can be suitable for certain standards, but it does not correspond to decolonising approaches, and in a wider sense, it undermines the multiple ways of apprehending the world. Ultimately, the format of the research outcomes should be thought out with and by the people during the fieldwork. Our deliverables as researchers are highly framed by the norms and conventions that dominate the funding organisations. 'We are caught between the tree and the bark' says Elisabeth when speaking about the pressures that are brought by the reporting process and its formats, before saying with a laugh:

When we worked with members of a Guarani community in Brazil, we learned afterwards that in their language, they named us 'those who run with papers in their hands'. We had about 10 weeks to wrap up everything, produce the contents and deliverables and meet our commitments with the funding organisations. We were trying to fit into a conception of time that was not the same as that of the Guaranis.

Discussion: collaboration and trust as grounds for knowledge interpenetration

Based on Table 10.1, it could be useful to think about a scale of knowledge sharing or interpenetration anchored in the concept of collaboration between the stakeholders of a project according to the different steps that constitute it. Such a tool could allow all the stakeholders to together situate their potential contribution—or their projected position in the canoe—for each step of the project, all while supporting trust-building. These intersubjective interactions, including knowledge sharing and constant dialogue, are at the core of the trust-building processes needed for successful collective action; these are also conducive to navigating multiple knowledge systems and expertise interacting within the same project (Beaulé & Viinikainen, 2022).

In terms of knowledge interaction, in the seventh level, it is the community that holds the intellectual leadership and project products, with their formats being determined by them during the whole process. To ultimately reach the seventh level of collaboration, it may mean that you work in the coconstruction of transformative knowledge and solutions at level 6 but within the perspective of level 7. This notably resonates with the idea of cultivating humility while occupying the support posture mentioned earlier. In levels 6 and 7, knowledge is considered a 'process of relating', not as a 'thing'. On the sixth level, where there is shared intellectual leadership, there is the recognition that the knowledge considered as 'alternative' for one is the way of knowing for the other. Knowledge mobilisation is an integral part of the project's conceptualisation. The format of the research outcomes is thought out with and by the people during the fieldwork. Levels 4 and 5 are mostly about knowledge interfacing and sharing. There is an account of pluriversal knowledge systems, but old and familiar ways of doing are difficult to undo. It is important to remain vigilant to avoid the dominant ways of knowing taking over again. In level 4, the community is especially likely to carry the burden of translating their world into the prevailing meaning systems to be considered. Finally, if the project occurs in the community, the third level is certainly the most critical and dangerous one because the community's knowledge is profited from and approaches that are defined from the outside are used. Indeed, the risk of instrumentalising and appropriating knowledge from the community seems particularly high because of an illusion of power and the possible establishment of trustful relationships.

Conclusion

To conclude, we are now expected to produce academic knowledge that has impacts on society or on transformative knowledge, but it is less clear how institutions are being transformed by 'knowing otherwise'. This chapter has stressed that recognising and celebrating knowledge plurality is necessary for greater university—community permeability, reciprocity and transformation and that design may be especially wellpositioned to do so. The chapter has underlined that know-how or practice knowledge and experiential knowledge, being essentially tacit, are often seen as incompatible with or even less valid than the traditional understanding of research (Niedderer & Reilly, 2010), which contributes to exclusion and domination (Kamarck Minnich, 2005). From a broader view, the discussion in this chapter opens a reflection on the asymmetry of relationships that are inadvertently perpetuated by the nature of the research funding ecosystem in terms of leadership, retribution, output and liability. It suggests the production of a model and tool that could facilitate an open dialogue about knowledge leadership and interaction during the different phases of a collaborative project.

Finally, because designers are increasingly involved in projects that are anchored within a community, design practice and research in such contexts seem to call for new forms of competences and approaches that favour local actors to take charge. This may

call, for example, for the integration of new contents in the curriculum of design training, including the approaches and postures that have been presented in this chapter. Many of the ways of knowing discussed are not part of traditional documentation practices or of knowledge mobilisation in the academic world. Collaborative approaches that rely on creation and creativity to 'envision something that is not yet un existence' (Niedderer & Reilly, 2010, p. 2) may represent an avenue supporting its access and celebration, while enhancing research practice in creative disciplines and their epistemological foundations. One can consider that design can no longer draw on the model of applied sciences, where practical knowledge is seen as the mere application of scientific knowledge (Bousbaci, 2020) to circumscribe design epistemologies and postures as a scientific discipline. As opposed to disciplines with long-established traditions, design, a relatively young discipline or meta-discipline—which is notably seeing its epistemology defined by established traditions and disciplines—may be well-positioned to flourish by being especially permeable to a multiplicity of ways of knowing.

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Notes

- * The authors of this text wished to emphasise the common authorship of this work and, therefore, deliberately used the alphabetical order system.
- 1 The use of the term 'community' here is referring to the geographical location of Manawan and people with whom Étienne has been collaborating.
- 2 This term is used to reflect how ways of knowing and our ways of enacting the world are mutually re-enforcing themselves at the expense of other onto-epistemologies (Blaser, 2013).

References

- Anderson, C. R., & McLachlan, S. M. (2015). Transformative research as knowledge mobilization: Transmedia, bridges and layers. Action Research, 14(3), 295–317. http://doi. org/10.1177/1476750315616684
- Baillergeau, E., & Duyvendak, J. W. (2016). Experiential knowledge as a resource for coping with uncertainty: Evidence and examples from the Netherlands. *Health, Risk and Society*, 18(7–8), 407–426. http://doi.org/10.1080/13698575.2016.1269878
- Beaulé, C. I., & Viinikainen, M. (2022). Building trust with storytelling: Dialogues and encounters in the Arctic. In M. Sarantou & S. Miettinen (Eds.), *Empathy and business transformation* (1st Ed., pp.104–118). Routledge. https://doi.org/10.4324/9781003227557
- Blaser, M. (2013). Ontological conflicts and the stories of peoples in spite of Europe: Toward a conversation on political ontology. *Current Anthropology*, 54(5), 547–568. http://doi. org/10.1086/672270
- Boudreau Morris, K. (2017). Decolonizing solidarity: Cultivating relationships of discomfort. *Settler Colonial Studies*, 7(4), 456–473. https://doi.org/10.1080/2201473X.2016.1241210
- Bousbaci, R. (2020). L'Homme Comme un Etre d'Habitude. Essai d'Anthropologie et d'Epistémologie pour les Sciences du Design [Man as a creature of habit. Anthropological and epistemological essay for the sciences of design]. Presses de l'Université Laval.
- Escobar, A. (2018). Sentir-penser avec la terre: une écologie au-delà de l'Occident. Anthropocène.

- Husserl, E. (1980). Ideas pertaining to a pure phenomenology and to a phenomenological philosophy, third book. Phenomenology and the foundation of the sciences (T. Klein & W. Pohl, Trans.). Dordrecht.
- Kaine, E. (2021). Récit d'une Incursion Autochtone en Territoire Muséal [Story of an Indigenous incursion into Museum Territory]. Conference proceedings. Décoloniser la muséologie: Musées, métissages et mythes d'origine. 44e symposium annuel de l'ICOFOM — 15 au 18 mars 2021.
- Kaine, E., Bellemare, D., Bergeron-Martel, O., & De Coninck, P. (Eds.). (2016). *The little guidebook on the extensive consultation: Cultural creation and transmission by and with communities.* Presses de l'Université Laval.
- Kaine, E., Bergeron-Martel, O., & Morasse, C. (2017). L'artiste-médiateur. Un Transmetteur de l'Expérience de L'autre [The mediator-artist. A transmitter of the other's experience]. In N. Casemajor, M. Dubé, J. M. Lafortune, & E. Lamoureux (Eds.), *Expériences Critiques de la Médiation Culturelle* (pp. 321–342). Presses de l'Université Laval.
- Kaine, E., Kurtness, J., & Tanguay, J. (Eds.). (2016). Voix, Visages, Paysages: Les Premiers Peuples et le XXIe siècle [Voices, faces, landscapes: First peoples and the XXI century]. La Boîte Rouge VIF and Presses de l'Université Laval.
- Kaine, E., & Lavoie, D. (forthcoming). La Gouvernance en Recherche Autochtone: Pour y Arriver, Tu Dois D'abord Désapprendre Ce Que Tu Sais et Ensuite M'écouter [Governance in indigenous research: To get there, you must first unlearn what you know and then listen to me]. *Revue d'études autochtones*, Special Issue *Mémoire et Territoire*. C. Desbiens & J. Gagnon (co-dir).
- Kamarck Minnich, E. (2005). Transforming knowledge (2nd ed.). Temple University Press.
- Le Gallo, S., & Millette, M. (2019). Se positionner comme chercheuses au prismes des luttes intersectionnelles: décentrer la notion d'allié.e pour prendre en compte les personnes concernées. *Genre, sexualité et société*, 22, 1–18.
- Mäkelä, M. (2007). Knowing through making: The role of the artefact in practice-led research. *Knowledge, Technology and Policy*, 20, 157–163.
- Nicholas, G. (2018, February 15). It's taken thousands of years, but Western science is finally catching up to traditional knowledge. https://theconversation.com/its-taken-thousands-of-years-but-western-science-is-finally-catching-up-to-traditional-knowledge-90291
- Niedderer, K., & Reilly, L. (2010). Research practice in art and design: Experiential knowledge and organised enquiry. *Journal of Research Practice*, 6(2), Article E2. http://jrp.icaap.org/index.php/jrp/article/view/247
- Rioux, D. J., Rogers, K. H., Biggs, H. C., Ashton, P. J., & Sergeant, A. (2006). Bridging the science—management divide: Moving from unidirectional knowledge transfer to knowledge interface and sharing. *Ecology and Society*, 11(1), 4. www.ecologyandsociety.org/vol11/iss1/ art4/
- Ryle, G. (1949). The concept of mind. University of Chicago Press.
- Simpson, L. B. (2017). As we have always done. University of Minnesota Press.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and Indigenous peoples* (2nd ed.). Zed Books.
- Stengers, I. (2007). La proposition cosmopolitique. In J. Lolive & O. Soubeyran (Eds.), L'émergence des cosmopolitiques (pp. 45-68). La Découverte.
- Todd, Z. (2016). An indigenous feminist's take on the ontological turn: "Ontology" is just another word for colonialism. *Journal of Historical Sociology*, 29(1), 4–22. http://doi. org/10.1111/johs.12124
- Valkonen, S., & Valkonen, J. (2018). On local knowledge. In T. Hylland Eriksen, S. Valkonen, & J. Valkonen (Eds.), *Knowing from the Indigenous north: Sámi approaches to history, politics and belonging* (pp. 12–26). Routledge.
- Weiler, H. N. (2011). Knowledge and power: The new politics of higher education. *Journal of Educational Planning and Administration*, 25(3), 205–221.