

Linguistic and cultural diversity in research and publishing

Prior to the 2016 CMESG/GCEDM meeting at Queen's University in Kingston a Pre-Conference session was organised to discuss the theme of *Challenges and opportunities related to linguistic and cultural diversity in research and publishing / Défis et opportunités de la diversité linguistique et culturelle dans la recherche et sa publication*. The following communications are based on, or somehow inspired by, the presentations of the four panelists: France Caron, Florence Glanfield, Jean-Francois Maheux, and Mamokgethi Phakeng. Further short communications on this topic are encouraged.

Challenges and opportunities for publishing in mathematics education: the personal viewpoint of a francophone researcher

FRANCE CARON

Pour un non-anglophone, tout projet de conférence ou de publication pose inmanquablement la question de la langue dans laquelle se fera cette communication. Comme le but de cet article est essentiellement de sensibiliser à « la réalité francophone » des chercheurs en didactique, j'ai cru plus utile de parler à ceux qui seraient étrangers à cette réalité, en optant donc pour l'anglais et en misant sur la compréhension de ceux qui liront ce préambule. Contrairement aux principes que j'énoncerai un peu plus loin, je me permettrai des insertions en français, notamment quand je me doterai de résolutions auxquelles pourront peut-être s'associer des collègues francophones. Le sujet de la langue et les différents lecteurs auxquels je m'adresse me paraissent autoriser ici pareille entorse.

Publishing and the goals of research

One can venture into research in mathematics education with one or two of these possible goals: contribute to the advancement of knowledge or help improve mathematics education. My personal goal has been to have some positive impact on the teaching of mathematics around me; this has led me to listen and contribute to the discussion on the evolution of the math curriculum, in Quebec and elsewhere, and enrich my own vision from such discussion.

With this goal, I have found limited value in empirical studies, as their results are so tightly linked to the current state of the teaching received by some students in a given area in a given period. They do not inform much if the reader does not have a deep understanding of the context in which they were obtained, including the underlying philosophy, culture and social aspects

of the educational system in which they were conducted. And they can hardly be generalised. In a way, this translates into endless opportunities for such research, as any change in time, location, context could justify another study, with roughly the same methodology and a potential for radically different results. That being said, some of those empirical research papers can serve as precious sources of inspiration for approaches for teaching and good learning tasks, with some unavoidable adaptation to the educational culture of the local scene.

The papers I find most useful in international journals are those that address the subtleties of a curricular reflection, or develop a delicate yet clear and robust framework to think about some profound ideas around the curriculum, the teaching or the learning of mathematics. I can take a lot from these papers, but I find it difficult to raise my English to the level I feel would be required to express adequately the thoughts I would like to add to the discussion. I did not feel such limitation back in my days in the telecom industry where I felt the technical papers I would write could be straight to the point and did not require such delicate use of words that a sensitive and complex field like mathematics education seems to warrant. In this latter domain, my publishing record in English thus has been limited to submitting short contributions to the proceedings of international conferences or chapters in a collective work, where I report on a small experiment and share some elements of the reflection that may have emerged from it. Paradoxically, I tend to write in English the sort of papers that I would not be too interested in reading. Overall, I feel that my relationship to international publishing in English has been mainly in one direction, as I mostly take it, but I give little back.

A greater part of my published work has been in French, on the local scene, in professional journals and magazines. I believe this is where I can reach teachers and students more directly with tasks, activities and their analysis, and have them participate in the discussions that I have had the privilege of having.

Differences between language and culture

One might think that I could be more active on the French research publishing scene with journals such as *Recherches en didactique des mathématiques* or *Annales de didactique et de sciences cognitives*. Yet, despite a common language, there are other cultural issues that make it more complex than it appears.

One of them lies in the differences in our respective curricula. Like most curricula in Canada, the one in Quebec has largely been influenced by the NCTM Principles and Standards for School Mathematics. This can sometimes be turned to our advantage, when, for examples, use of patterns in sequences for introduction to algebra, which is present in nearly all curricula across North America, may still be perceived as rather exotic in France and therefore generate there greater interest for a paper on the topic. But it can also create a backlash effect, when the "geometry" that we say we do in our schools has no longer anything to do with the geometry they do in theirs and to which they are very much attached. And rightly so, might I add.

A second cultural barrier is the perception of some protectionism with theoretical frameworks, whereby the use of a

concept or framework external to the French *didactique* in a paper destined for a French periodical or collective work, may raise questions about its necessity or relevance. This is often followed by suggestions for alternate constructs that would help maintain the coherence that the French community of researchers in mathematics education aims at establishing within the field. Although there may be a growing number of papers where connections have been made with external frameworks, especially on the topic of technology integration, new imports may still encounter initial resistance. In contrast, as Carolyn Kieran pointed out, “there is not a strong theoretical tradition in either Canada or the USA. Nor is there a unified school of thought in mathematics education research in these two countries” (2008, p. 81). As a result, despite similarities across the province school curricula, “the Canadian community of mathematics education researchers is basically quite eclectic with respect to theories and theorizing” (p. 81). Quebec is no exception to this reality. French *didactique* may serve more often there as paradigm of reference than elsewhere in Canada, but every researcher feels equally entitled to select among available frameworks those that he believes apply the most to his object of research, as well as design her own framework with the possibility of borrowing from other fields of research. Rather than looking for internal coherence of a strong unified system of theories, it seems to me that we are more driven by the perceived external coherence of a model to a local situation, even if such a fit cannot be generalised. This certainly comes with a greater sense of freedom and wider space for creativity, that I deeply appreciate; but it also may feel overwhelming when we fail to see the “larger story” that the different local stories might be telling and, consequently, their potential for being turned into knowledge that could be used in teacher education (Cooney, 1994) or curriculum design.

The world of French didactique

Despite (or because of) the constraints that come with its use, there are many elements of French *didactique* that I profoundly value. I feel that most French didacticiens keep a strong focus on the mathematical knowledge and they handle it with great care. They seem to share a relatively stable consensus (slowly evolving with technology) on what is the mathematics to be taught and why, and they generally see the process of its acquisition more liberating than oppressing. So they focus on how best to do it, with *Théorie des situations*, *ingénierie didactique* and its refined analysis *a priori*, the *Haute Couture* of learning task design. They may express their surprise when they discover that most people from other parts of the world who do research in mathematics education do it without ever using such theoretical tools. Karine Godot, a young French researcher, wrote after her first time at an international conference :

De façon générale, j’ai été surprise par le peu de place accordée aux mathématiques dans la plupart des exposés. Lorsqu’une situation d’enseignement ou un énoncé sont présentés, il n’y a pas d’analyse *a priori*, il est donc généralement difficile de juger vraiment la pertinence des situations présentées et leurs apports. [...] De façon générale, je suis contente d’avoir pu par-

ticiper à ce congrès. Il m’a permis de me rendre compte de la spécificité de la didactique française et de l’importance de *l’analyse a priori*. (2005, p. 15)

Georget (2006) attributed the relatively low penetration of French *didactique* that he perceived at the international level to the limited publishing in English of research done by French didacticiens:

J’ai constaté une nouvelle fois que les recherches françaises, notamment actuelles, sont assez méconnues et souvent simplement inconnues dans le contexte international. Au début, j’ai vécu ce phénomène comme assez frustrant voire déstabilisant quand il y a en plus la question de la « maîtrise » du *Basic Broken Simple English* ! J’ai un peu eu l’impression d’appartenir à « l’école française de didactique française des mathématiques françaises ». Finalement, la surprise passée, je me dis qu’il ne tient qu’à nous d’aller présenter nos recherches à l’extérieur et de publier en anglais, car personne n’a l’air de se presser pour nous en prier.

French didactique would indeed warrant greater visibility in international journals. But if it were only conveyed in simplified English (or Globish), much would be lost in the translation.

The role of language in developing knowledge

On the risk of adopting Globish as an acceptable way of communicating research, a French mathematician (Djament, 2013) wrote recently:

Quant à la substitution du globish au français, il faut en mesurer la gravité à l’aune des différentes contre-réformes qui déstabilisent depuis plusieurs années la recherche française [...]. Le diktat des critères bibliométriques, qui favorisent mécaniquement la généralisation du globish, la course au résultat, la concurrence exacerbée, dénaturent la recherche, activité collective dont les résultats ne peuvent se mesurer que sur le long terme et qui pâtit particulièrement de l’uniformisation. [...]

Même lorsque le « produit final » de la recherche peut s’exprimer sous la forme d’un code relativement standardisé, encore que ce ne soit pas forcément la façon la plus efficace et intelligible de le faire [...], les mécanismes intellectuels par lesquels on parvient à la découverte ne sont certainement pas, et il serait bien imprudent de s’imaginer qu’ils le sont, indépendants de notre langue maternelle.

It could be that it is not so much our mother tongue that so strongly shapes our ways of discovering and knowing, but rather our culture and education, which may come with that first language. In any case, no one can deny that we can articulate and develop ideas much better in a language that we master. With that language we also have access to a distinct subset of literature that can only contribute to our own advancement of knowledge, and eventually to that of a wider and more diverse community. So we must find ways to better connect our own ways of speaking and thinking with larger means of disseminating.

Hiring translators may be of little help if they do not mas-

ter the concepts of the field. Working with co-authors that have a greater mastery of the target language is another approach with greater benefit. The writing of CMESG working group reports has been for me a great way to go deeper with some of the reflection on mathematics education, through the co-authoring of texts where all authors can benefit iteratively from each other for accurately formulating ideas, and validating them at the same time. Yet I find that in such process, I often have sacrificed the French component of the text, so that there would be true teamwork and genuine conversation, and not just some splitting of the work into poorly connected chunks of a report. Unless you have time and energy left to play the role of the translator at the very end of the writing of the report, a role that can only be yours if you are, as it often happens, the only francophone in the team, the report runs the risk of having lost all of its French expression.

If it can be done without loss of cohesion, I welcome alternating languages within a more informal report or a live conference. However, I do not consider that it is an approach worth extending to articles in journals, even to those that could be open to the idea like FLM. It seems to me like a false good idea, as I feel that this oscillating mode in a given text may act as obstacle to the deepening of reflection.

Although I have been invited on a few occasions to do so, I have yet to write a first paper in FLM. One reason for my procrastination is the difficulty in deciding the language in which I would write it. If I write it in French, I fear that many FLM readers will simply skip it, and at the end, the readers I will reach are the ones I already reach with the papers I publish in French. If I write it in English, then I am condemned to using an approximate form for the ideas I want to convey, which would really be a shame in FLM, and I miss the opportunity of providing some visibility to French and some of its associated theoretical frameworks.

Mais maintenant, je crois de plus en plus qu'il est de notre responsabilité en tant que francophones de tirer parti de revues canadiennes comme *for the learning of mathematics* et *Canadian Journal of Science, Mathematics and Technology Education*, qui acceptent et encouragent (pour combien de temps encore?) la publication d'articles en français. Il nous faut oser y écrire des articles dans notre langue première, avec toutes les nuances dont nous sommes alors capables. Qui sait, si nous nous appliquons à lier nos cadres théoriques à d'autres cadres plus connus chez nos collègues anglophones, en montrant comment ces cadres peuvent se révéler connexes ou complémentaires, peut-être arriverons-nous à faire valoir l'intérêt de maîtriser une deuxième ou une troisième langue, avec ses écrits tant littéraires que scientifiques, les cadres théoriques et les façons de penser qui viennent avec.

Unavoidable forces in language development

Bakhtin speaks of centripetal and centrifugal forces to describe the dynamics at play in the use and evolution of a language (Bakhtin, 1981; Barwell, 2014). The centripetal force is centralizing, unifying, homogenizing; it imposes the norm and creates a hierarchy. By contrast, centrifugal forces push the language away from its centre, thereby favouring the emergence of dialects. A centrifugal force is thus decen-

tralisating, dispersing, going against the established norm. The question here is where does the center lie? In looking at the research publishing world as it is today, Geiger and Straesser (2015) chose to associate the centripetal forces with the academic drive to write in well-established research journals and therefore conform to the norm of a dominant language, English; the centrifugal forces were consequently associated with the need to address differences between people, the diversity often defined by geography, culture.

But what if we were to take another perspective, by looking at a given language in a country, with its associated culture and system of education? For that language, could it be that the academic world act as a centrifugal force, as it establishes different dialects to reflect the specificity of a field or even act as social markers? Would Globish be influencing some of these dialects? If that is the case, then one could wish for stronger centripetal forces so that the richness that comes from linguistic diversity is not lost in the process, and that the research done can return to the teachers.

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Reflections on the FLM pre-conference

OSNAT FELLUS, FLORENCE GLANFIELD

This is a reflective piece following the FLM Pre-Conference session that was set up a day before the 2016 CMESG / GCEDM annual conference in Kingston ON, Canada. The purpose of the session was to discuss the theme of *Challenges and opportunities related to linguistic and cultural diversity in research and publishing*. Florence was one of the panel members. Osnat was in the audience. Some very important issues were raised and discussed that day and we decided to continue the conversation in a dialogue form. Writing this piece in a dialogue form was intentional. Dia-

logue, we believe, is the touchstone—or at least an essential steppingstone—in the work of diversity in research and publishing. We also believe, that it is through sustained dialogue that we come to learn about each other, understand the other’s perspectives, languages, cultures, and experiences. In this dialogue, we converse about notions of connectivity, translation, and diversity that are pertinent to research and publishing.

Osnat: I must confess that I was very much looking forward to attending the FLM Pre-Conference session on *linguistic and cultural diversity in research and publishing*. To me, the speakers represented diverse backgrounds and I was very curious to learn about their respective insights on the topic.

I will not go into how I specifically perceived the diversified cultural and linguistic backgrounds of the panel members. Suffice it to say that, to me, *linguistic* and *cultural* diversity falls under a category I dub *amoeba words* because such words tend to mean and represent different things to different people, pretty much like an amoeba that continuously changes shape and direction. Let me explain. For some people, a working definition of diversity may include considerations of values, socio-cultural contexts, collective historical backgrounds, and institutional—or any other sort of—affiliation. For others, this definition may draw on more observable characteristics such as gender, race, and age. However we may perceive the concept of *diversity*, the more we think about it, the more we realize that there are deeper layers, additional dimensions, and not-previously-considered aspects that can be, and need to be, weighed in when we think of *diversity*.

So, to me, the real question is, what *diversified* aspects are we putting into the limelight every time we wish to build on cultural and linguistic diversity in research and publishing? You may think it’s fairly intuitive but in fact, it is not really. Obviously, we cannot operationally focus on all available aspects of diversity because although we may identify glimpses of diversified aspects in what people say or in what they do, or look like, many times, these diversified aspects are not readily observable nor are they easily detectable. Given the complexity of the nature of diversity and the need to address challenges generated from the ethical responsibility to ensure diverse representations in research and publication, I was looking forward to a most insightful discussion.

The panel started off with the different speakers introducing themselves.

Florence: I began in the following way, “I introduce myself as a member of the Métis Nation of Alberta. The Métis are recognized as one of the Indigenous peoples of Canada. As such I start by acknowledging that we are on the land of the Original peoples of this territory and, for that I acknowledge the ancestors that walked this land for centuries before we were gathered here together today. The ancestors have taken care of the land so that we can be here today. I also acknowledge my family and academic ancestors.

My family is from the Northeastern part of what we know today as Alberta—from the Fort Chipewyan and Fort McMurray areas. My family ancestors were the First peoples, the Scottish and French fur traders—and English. My academic ancestors are professors, Elders and Indigenous

knowledge keepers, graduate and undergraduate students. These family and academic ancestors have taken care of me and shaped who I am so that I may be here today.”

In my experience, Indigenous peoples will often greet one another with describing ‘where they are from’ and who their families are from that place. A person understanding this practice could ask an individual that they’ve met for the first time, ‘where are you from’ or ‘where are your people from?’ This question is not intended to be rude or ‘unwelcoming’ but it is intended to reach out and find the relationship(s) that exist(s) between yourself and the other. And, ‘where are you from’ is one beginning place. The response to the question will often include family names. For example, if I were asked that question, I would respond, “Northeastern Alberta, Fort Chipewyan, Fort McMurray areas. My family includes Wylie’s, Fraser’s, Mercredi’s, and Loutit’s.” The question and response are looking for the connections between peoples. And I’ve learned that this notion of the connections or relationships between peoples is a core belief in Indigenous communities. That is, we are all related, we are all connected and a part of the great circle of life.

In some traditions (or teachings), I’ve been taught around the medicine wheel, a representation of the great circle of life and living, there are four colours or races of people. These four colours, (black, red, white, and yellow) are in equal sectors and represent the four races, and the teachings suggest that the great circle of life can only exist with all four races in balance.

I was part of a panel discussion once and realized that the question ‘where are you from’ was seen as very rude by someone who was labeled a visible minority within the academy. In the context of the panel the visible minority label was given to individuals of Asian descent, African descent, and Indigenous descent. The individual expressed that the question was very rude because it made an assumption that the individual was not born in this place called Canada, but born in another country. But, in my experience, asking the question ‘where are you from’ was about finding the relationships with an individual, not about saying that the other does not belong or that the other does not belong in this territory.

So, working in multilingual and multi-cultural contexts within research and writing is about learning to find ways to build commonalities, connections, or relationships with one another and one way is through dialogue and listening with a good heart. Learning how to listen deeply and carefully so that the commonality can become visible. Learning to listen carefully involves learning to watch and learning to be present. Elders say that the creator gave human beings two ears, two eyes, and only one mouth. You need to learn to listen and watch, before you talk—and one should talk half as much as one listens and half as much as one watches. Put in another way, one should speak for 20% of the time, and listen and watch for 80% of the time when in dialogue and learning about the other. It is only through listening and watching that you begin to learn how there is commonality, connections, and relationships between and among human beings.

Osnat: Your reference to the fact that the people you have met have shaped who you are reminds me a line from Ulysses, a poem about a journey of discovery and growth

written as far back as the 19th century by Lord Alfred Tennyson. Tennyson's classic line reads, "I'm a part of all that I have met," which basically means we learn and develop by connecting to each other. This connectivity and relationship you are talking about actually shapes—and reshapes—who we are, how we see the world, our perceptions—and, our identity, which is another amoeba word!

I use these notions of connectivity and relationship when I think about the mechanism through which we can identify commonalities and establish relationships. And I think these notions are fitting the context of this session on challenges—and opportunities—related to diversity in research and publishing. The concept of the medicine wheel is useful here because it helps me visualize the equal sectors in any given context that strives for diversity. If we do not have a diversified representation of all people, we may not have a healthy system! The mechanism to achieve that is through identifying commonalities and establishing relationships.

Florence: So how, do you think, does one build or contribute to the creation—and ongoing operation—of a healthy system?

Osnat: While this question may be uniform across contexts, the answer is culturally designed and determined. In the indigenous community, the question: "Where are you from?" is perceived as a catalyst that brings people together by highlighting commonalities and establishing relationship between people of different groups. In non-indigenous discourse, this very question may evoke different reactions among individuals who are not familiar with the culture-specific meaning associated with this question. In fact, an answer to this question may be used—wittingly or unconsciously—as a proxy for who the speaker is, thus imposing a simplified, one-dimensional, flat, sometimes lopsided narrative onto a person's identity, which, in turn, shrivels diversity.

Florence: This may be so, however, indigenous practices of bringing people together—by putting forth and pushing forward the similarities and commonalities between people and then engaging in active listening and mindful observation—contribute to building bridges between people who come from different backgrounds. This mode of interaction through which people are brought together, listening with good hearts, sounds to me as a useful framework that thrives on diversity.

Osnat: If we follow indigenous practices of bringing people together, the question is, of course, *how* do we identify commonalities and make them visible so that they can be used as stepping-stones to fertile shores that allow for growth and development?

Florence: I wonder, how do *we* create systems where we can engage in dialogue that thrives on diversity?

Osnat: Well, I think the answer may lie within the notions of *cooperation and complexity*. In 2000, Robert Axelrod, a political scientist, and Michael D. Cohen, a social scientist, published their classic book *Harnessing complexity: Organizational implications of a scientific frontier*. In its 200-odd pages, you will find scores of evidence-based insights from a great variety of disciplines including biology and social science that illuminate the fascinating mechanism of cooperation. Among other notions, they discuss the idea of

interaction, which can provide an answer to how we identify commonalities between people. Axelrod and Cohen identify *proximity, activation, and space* as necessary—however, insufficient—conditions to explain how interaction between diverse entities works. These conditions reference, respectively, relational networks, which are contexts where relationships can be forged; temporal structures, which apply to time-related triggering events; and conceptual spaces, that refer to shared areas of interest. Using Axelrod and Cohen's conditions for interaction, I wonder what would be some studies that demonstrate how these conditions for interaction work. What are your thoughts about using these notions as mechanisms for connectivity and relationship?

Florence: Well, the ways in which I've interpreted teachings from Elders is that the mechanisms of connections and relationship are key to working in spaces that include linguistic and cultural diversity; and it is very much related to the notion of complexity. For individuals it is recognizing that the 'other' or 'others' are your relatives, that human beings are all related. Essentially, I interpret this to mean that the notions of connectivity and relatedness are crucial for the ontological stance of the individuals in relation to one another. If one believes in relationships and that all human beings are relatives, then they enter into spaces in ways that are generative. In Cree, there is a concept that describes collective processes. The word for the concept is *Wicihitowin*—helping each other to develop in shared responsibility and stewardship. I think that this idea is crucial in spaces with cultural and linguistic diversity—and this takes time.

Osnat: Wow! I think this concept gives us the moral aspect of cooperation. This concept actually highlights the fact that thinking about cooperation for the purpose of helping each other to develop in shared responsibility and stewardship is human-specific. This may explain why we do cooperate. *Wicihitowin* is crucial and it does take time to initiate connection, maintain interaction, and distill ideas that help humanity develop collectively. In the context of academic work, I think diversity in research and publishing can be achieved through *Wicihitowin*, but, I think this may be possible if Axelrod and Cohen's three conditions of *proximity, activation, and space* are in place. In fact, *Wicihitowin*, defined as a collective process where individuals help each other to develop in shared responsibility and stewardship, is epitomized in two publications that come to mind. There are, of course, many more scholarly works that may reflect the three conditions of interaction and, in turn, *Wicihitowin* but, I think these two are especially instructive. One paper was published in the *FLM*; the second in *Mind, Culture, and Activity*. Both put forth and push forward challenges and opportunities related to linguistic and cultural diversity in research and publishing. Both evolved through linguistic and cultural diversity. Both perceptively demonstrate how diversity in research and publishing is key to the advancement of research and knowledge.

Florence: What were the papers about?

Osnat: Let me be more specific. Vince Geiger from Australia and Rudolf Straesser from Germany recently authored the paper *The challenge of publication for English non-dominant-language authors in mathematics education*, which was published in *FLM* in November 2015. The paper

describes how Geiger and Straesser worked together through, to use your words, Florence, *collective processes by helping each other to develop in shared responsibility and stewardship*. In other words, they worked through *Wicihitowin*, as their writing demonstrates. They do not use the term, *Wicihitowin*, but the *shared responsibility and stewardship* is glaring at us straight from the pages. Geiger and Straesser draw on Barwell's 2014 work that empirically uses Bakhtin's notions of *centripetal* and *centrifugal* forces to explain the dynamics between speakers of different languages as they interact in specific contexts. But in order to understand under what conditions this work was made possible, I think we need to step back and look at what allowed for this to happen. Axelrod and Cohen's three conditions for interaction: *proximity*, *activation*, and *space* were in place to allow for *Wicihitowin*—to use your term, Florence. Geiger and Straesser had a “long history of cooperation” (p. 35), i.e., *proximity*; “Rudolf was invited to act as the respondent to a keynote address at a prestigious international English language mathematics education conference” (p. 38), i.e., *activation*; and they are both scholars in the field of mathematics education who decided to work together “to prepare an English language publication” (p. 38), i.e., *space*. Hence, three conditions for *Wicihitowin* to emerge.

Florence: At this point, I tend to agree to seeing Axelrod and Cohen's conditions of *proximity*, *activation*, and *space* as crucial to generating opportunities for interaction and I see how *Wicihitowin* can emerge, but what do you think might be some of the challenges and opportunities evoked in academic contexts that are specified by cultural and linguistic diversity?

Osnat: There seem to be quite a few. Let me first talk about the challenge of translation. To reiterate, we are talking about the conditions for interaction—read *proximity*, *activation*, and *space*—through which Geiger and Straesser were able to share responsibility and stewardship—read *Wicihitowin*—to develop their understanding (and ours!) of some of the challenges and opportunities related to linguistic and cultural diversity in research and publishing. Specifically, Geiger and Straesser used the terms *centripetal* and *centrifugal forces* to refer to the process of their collective work. But before I relate to some examples from their work, let me first talk about the challenge of translation. Reading their paper took me back to the days when I did my master's degree in translation and interpreting at Bar-Ilan University under the mentorship of my academic ancestor, the late Miriam Shlesinger. Miriam's teachings and guidance sharpened my understanding of translation-related challenges.

To begin with, etymologically speaking, the word *traduction*—translation, in English—means *betrayal*. In this context when translation is involved in the work of research and publishing, the concept *Wicihitowin* that you shared with us, Florence, acutely encompasses how this work should be done.

Florence: Can you elaborate some more on how this is so?

Osnat: I'll be happy to! One of the many challenges that emerge in translation is the challenge of voids, which basically means that there is no *one* word or expression that is a direct equivalent in the target language that covers the meanings embedded in the source language word. There are many types of voids that may cause serious problems if ignored. These

include lexical, grammatical, referential, conceptual, and cultural voids. By the way, it's important to note that they are not mutually exclusive nor are they collectively exhaustive.

An example of a cultural/lexical void can be the Hebrew concept *lefargen*, which is *one* word that embeds—simultaneously—a broad array of meanings to convey support, encouragement, and genuine happiness for the success of another person. There is no *one* word or expression in English that simultaneously conveys all of these meanings that *lefargen* embeds. And I suspect that the concept *Wicihitowin* also points at a void in the English language. In a new collection of previously published essays by the late philosopher Willard van Orman Quine, there is a whole chapter titled *Translation and Meaning* where Quine discusses the challenges of translation. To convey some of the challenges associated with translation, Quine wonders what the word *Gavagai* may mean to an alien linguist standing by a local who is pointing at a rabbit and saying *Gavagai*. In such a context, there are infinite meanings that can be attributed to *Gavagai*!

However words and expressions are translated from the source language to the target language, it is the responsibility of the individuals engaged in research and publishing in contexts of linguistic and cultural diversity to avoid situations where translations rendered “stand to each other in no plausible sort of equivalence however loose,” to quote Quine.

Florence: What might be other challenges associated with the work of translation in general and in academic contexts in particular?

Osnat: There are not only voids that should be responsibly treated. Geiger and Straesser identify other translation-related challenges that include the problem of faux amis, which essentially means that two expressions in the target and source language look and sound alike but in fact mean different things. The example Geiger and Straesser bring of the word *didactic* is fascinating as the word *didactic* casts its net of associated meanings to cover different semiotic areas in German and in English thus yielding different understandings of the word depending on the user's respective cultural and linguistic background. The authors also talk about register-associated challenges that is a fascinating field in its own right. A comprehensive treatment of the topic of registers in academia is provided in the work of the linguist Douglas Biber who has published extensively about the topic. I think his 2006 book titled *University language: A corpus-based study of spoken and written registers* is especially illuminating. But I won't go into it now.

Florence: So you talked about the challenges of translation and you tied it with the concept of *Wicihitowin*, which basically means that once scholars do get together if the conditions of *proximity*, *activation*, and *space*, are in place, they also work together to help each other to develop in shared responsibility and stewardship. There sure are opportunities that bud when these conditions simply—or not so simply, I should say—are in place.

Osnat: Absolutely! One seminal work that manifests such an opportunity is Michael Cole's paper titled *The perils of translation: A first step in reconsidering Vygotsky's theory of development in relation to formal education*. This work is a telling example of the opportunities occasioned by linguistic and cultural diversity in research and publishing. Cole recounts how as the work of Vygotsky and his disciples was

translated into English, he and others who came together—by *proximity, activation, and space*—to work on the transition of Vygotsky’s learning theory into the Western world have realized that the Russian word *obuchenie* means far more than the seemingly equivalent terms teaching and learning that are available in English. The fact that teaching and learning were chosen as the translation of *obuchenie*, says Cole, misses the rich, far more inclusive Russian meaning of *obuchenie*. In actual fact, *obuchenie* means so much more than the words teaching-learning that are pressed now in the Western mind as its equivalents. Through *Wicihitowin*—that is, the very work of Cole and many others who engage in the work of Vygotsky and his disciples—the West came to realize that *obuchenie* frames *teaching and learning* as a manifestation of multi-directional processes that *simultaneously* include mentorship, apprenticeship, guidance, and development. This meaning cannot be conveyed through using the single words teaching and learning separately or together. Clearly, this is an opportunity to better understand what teaching and learning can really be about.

That’s the beauty and the challenge of doing research in linguistically diverse contexts. In spite of these sometimes-unbridgeable problems, the contributions to knowledge are priceless. Just consider the contributions of the Russian scholar and his disciples to our understanding of what is involved in education, teaching, and learning. These would not have been possible had there not been the conditions of *proximity, activation, and space* in place, the shared responsibility and stewardships, and the efforts to bridge between linguistic and cultural differences through *Wicihitowin*.

Florence: As I read through your beautiful description of these two articles Osnat, I interpreted the efforts of the individuals, the shared responsibilities and stewardships of the individuals, as human beings who were living as relatives over time. These authors were living out *Wicihitowin*. Ay-Hay (Thank you).

Osnat: Thank you, Florence, for introducing *Wicihitowin*. It is an important concept in the work of scholars who come together through proximity, activation, and space in academic research. To reiterate your words, “this idea is crucial in spaces with cultural and linguistic diversity—and this takes time.” *Ay-Hay*, Florence.

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Visible and invisible diversity in academic publishing

MAMOKGETHI SETATI PHAKENG

What does it mean to ensure diversity in academic publishing? An academic journal is made up of a community (the publisher, editor(s); editorial board, reviewers and authors) that shares a similar ideology and will work hard to exclude those who do not believe what they believe. I thought much about this when I was invited to contribute to a pre-conference workshop on diversity in academic publishing.

Often when we talk about diversity there is a focus on race, gender, nationality and other kinds of visible diversity, when in fact diversity is much more than that. Diversity in academic publishing is about recognizing the various voices, identities and/or cultures that are usually silenced by a narrative of tolerance, which signifies keeping intact the hierarchies of what is considered hegemonic. In this reflection on my contribution to the pre-conference writing workshop I critique this focus. I argue that while a focus on visible diversity is important, it is limited at best and misleading at worst as it ignores the most important aspects of diversity, especially in academic publishing, which are invisible (*e.g.* ideology).

We have to understand that being a woman does not make anyone a feminist, because advocating for social, political, legal and economic rights for women as being equal to those of men is not a matter of gender, it’s a mental attitude. Similarly, being black skinned doesn’t make anyone black-conscious because to fight for the rights of black people is not a matter of race. Being visibly different therefore is no guarantee that one will bring ideas or ways of doing that are different from the mainstream and thus disrupt dominant voices. I recently met someone at a conference who physically looks like a black African but explicitly introduced himself as a black Swede. When I asked further he explained that while he is originally from Togo (in Africa), he does not identify with Africans on the continent and the people of Togo because his parents moved to Sweden when he was ten years old and he has not been back in Togo since then. So he feels Swedish, identifies with Sweden and finds it more comfortable to represent the interests of Sweden rather than those of black people on the African continent. So while this colleague may be invited to serve on an editorial board of an academic journal to ensure diversity, the possibility that he will disrupt the hegemony of the dominant culture is very slim. This of course does not mean that those who are not African, were not born in Africa and have not lived in Africa cannot be advocates of Africa. They can, but what makes one an advocate is not where they are born or their race but it is their ideological orientation. This is the reason why we need to look beyond visible diversity.

Scholarship is about destabilising comfort zones and dominant knowledge structures that exclude and prevent innovation, and so encouraging diversity in academic publishing means that we should welcome disruptions that push us to re-think or re-imagine who we are, what we do as a col-

lective and the implications that has for the future of our discipline and our world. While it is important to consider visible diversity, it is not sufficient to ensure heterogeneity in academic publishing. Focusing only on visible diversity can actually perpetuate homogeneity. To ensure real diversity in academic publishing we must go beyond the visible by considering diversity of ideology.

Another important point to consider is that while the dominant hegemony may construct and treat marginalized voices as homogenous, those who are in those communities are keenly aware of the differences between them. There is diversity among people who share the same race and so focusing only on visible diversity ignores this fact and treats silenced voices as a homogeneous group.

Many years ago my sister who is half blind worked as a social worker at an institute for the blind. Until then she had never been in a context where blind people are the majority and so she was not familiar with their discourses, politics and ideological differences. While the narrative outside the institute, a context dominated by sighted people, constructed blind people as disadvantaged and marginalized voices, within the institute the narrative was different. Blind people were the majority and so the debates were more about how each one of them became blind and thus who is more disadvantaged. There seemed to be a constant competition for visibility and acknowledgement between those who are born blind and the previously sighted ones irrespective of how they became blind. Being blind in and of itself is not seen as a disadvantage within the institute. Of course outside the institute blind people are seen as homogenous and so including one of them in a committee to ensure diversity is regarded as sufficient to ensure that the voice of differently abled people are included. However, within the institute they would have arguments about who is the most appropriate representative for blind people—in essence who can they trust to represent the marginalized voices of blind people. This is about ideology and not about blindness.

The problem with diversity is that sometimes it is done for compliance and that is when it focuses on tolerance and measured as a count or a fraction, which is demeaning. Success at ensuring diversity in academic publishing would be when we no longer ask if we are diverse enough because it has become the norm and thus not remarkable.

Défis and opportunities of la diversité (linguistic) in publication

JEAN-FRANCOIS MAHEUX

Prelude

La scène se passe alors que les conversants sont à deux extrémités de la planète: Montréal et Phnom Penh. In the background, we can hear conversations, but nothing is clear enough to be distinguished. Even figuring out the language of the background conversations is difficult. En fait, il s'agit d'un mélange de langue.

Ami: FLM is organising a pre-conference at the CMESG meeting and we'd like to invite you.

JF: Ah bon? Je ne sais pas encore ce que je vais faire en juin.

Ami: There will be a panel discussion where people will talk about their experiences as members of multilingual teams (or communities), in research. The idea is for the panelists to reflect on this and their interest in language, culture, diversity and so on, how it influenced them as researchers in terms of their goals or perspectives or method... in relation to doing research, and publishing.

JF: Wow, that covers a lot, but sounds pretty interesting. Est-ce que ça demande beaucoup de préparation, ou c'est plus pour réagir on the spot?

Ami: We want to leave it to the panelists to decide how they do it, but we'd rather have spontaneous discussions instead of standalone presentations.

JF: Super. Mettons 5-10 minutes par personne et puis on discute?

Ami: Yes! It's a bit adventurous!

JF: J'adore. Et vous avez un angle d'entrée pour orienter ça?

Ami: We sort of do. There was that paper by Geiger and Straesser (in a 2015 FLM issue) where they write about centripetal and centrifugal forces and language... Bakhtin you know... and how they affect teaching, researching, or publishing.

JF: Bakhtin! OK oui, je veux bien regarder mon travail de ce point de vue. Ça sera bilingue?

Ami: Oui... Maybe you could talk in French but have slides in English? Oh we have a title too: « Défis et opportunités associés à la diversité (linguistique) dans la publication ». In English that's: "Challenges and opportunities related to (linguistic) diversity in publishing". Can we count you in?

JF: Une présentation et une discussion bilingues pour aborder les questions de diversité linguistique, how could I say no to something like that!

Act(e) 1

Le décor est celui d'une petite salle de classe au fin fond d'un sous-sol d'université, une pièce anonyme. Il y a un grand tableau noir au fond avec des traces mal effacées (lâchées par le conférencier de la veille). A few tables and 5 chairs have been installed on the platform overlooking the classroom from about a foot. Mikhaïl Bakhtin quietly sits in the left corner of the room.

Scene 1

Ami: Do you think I should introduce you or something?

JF: Not really, but maybe just get us started. In what order do we go?

Ami: Hum.. I don't know

JF: I am going to have a powerpoint with a few things on it, so I'll set it up now. I know France has one too. I think she will speak in English this time and have her slides in French.

Florence: Oh..! This is such a good idea. I didn't even think about that!

Ami: Maybe then we should alternate? English and French?

JEAN-FRANCOIS
MAHEUX

Défis and opportunities
of la diversité (linguistic)
in publication

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I-we speak only one language
(idiom) and it's not mine-our

- Each one of us speak his/her way, colored by all the idioms we are exposed to
- Communicating in a "foreign language" goes the same way
 - It is not "my" language, and I speak/write/read it in "my" way
 - Trying to get "it" to say something, to talk with it...



Translating is impossible, one
can only re-write

- Descartes "J'écris en français" (vs Latin, as expected), wipe out in the Latin translation
- Because there is always an "I" behind an utterance (not only "facts", or a content)
- These re-writing are very creative process on can even play with
 - Nancy Huston



A language is always a mēlée
(scrum) of languages

- There is no pure or absolute language, no right way to speak or write
- It is because it can meddle with (se mêler) other idioms that a language exists as such
- Language is a house of *Being* (becoming) in which we dwell
- being in language is our manner of existence as the kind of animals that we are, if language disappear, we do too
- Its "essence" is friendship and hospitality



JF: Oui, anglais et bilingue. Alors j'irai en deuxième et France en quatrième. Florence, how about you go first?

Florence: Sure, I can do that!

Scène 2

Everybody has taken place in the room. Florence presents.

Acte 2

Scène 1

JF stands on the stage next to his computer. Au moment de commencer la diapo de départ (figure 1, en haut) semble tomber en pièce pour faire place à la seconde qui se meuble progressivement, puis cède à la troisième dans un fondu enchaîné.

JF: Hi! So I wanted to talk to you today about my own experience of linguistic diversity, and simply highlight four elements that are very present in my thinking when it comes to writing research. Key ideas that are directly related to how I work with linguistic diversity in research.

But before I start, I have to say... This is already so interesting because linguistic diversity is also, obviously, diversity in interpretation. Le thème pour cette table-ronde était très vaste, et je réalise que nous allons tous y répondre de manière très différente. Et pas dans le contenu seulement, mais dans le format aussi. So in contrast with Florence, I prepared something to talk for 5 to 10 minutes here... that's what I heard was expected!

Florence: Oh my! I didn't know that!

JF: But it's okay, I mean... we deal with that kind of things all the time. So... [to slide 1]. Surtout n'hésitez pas à réagir, ou si vous avez des questions, feel free to intervene.

Ami: OK.

FLM: I love it when we can do that!

JF: La première idée que je voudrais introduire, elle me vient de Derrida (1996), qui écrit « je ne parle qu'une langue, et ce n'est pas la mienne ». Il y a pour moi quelque chose de fondamental à réaliser dans le fait que l'on parle tous de manière unique, que la langue qu'on parle c'est ce qu'un regard « en arrière » nous permet de décrire (décrire ?) dans tout ce que nous avons dit jusqu'ici... y compris à travers le « languaging », le parlé, d'autrui.

Jeff: Incluant soi-même : Qui n'a jamais été surpris de se (re)lire, qui ne s'est jamais repris en disant « that's not what I wanted to say ! ».

JF: And its also true when we do math.

Jacques Derrida: [ouvrant brusquement une porte au fond de la salle] I am monolingual. My monolingualism dwells, and I call it my dwelling; it feels like one to me, and I remain in it and inhabit it. It inhabits me. C'est à la page 1! [il claque la porte en ressortant]

JF: La langue est aussi une interruption. When languaging emerges in our environment (e.g. as a baby), it is something that belongs to others, and that otherness forever remains. There is an unbreachable distance between the word, the experience, and the experience of the word. Oui ?

Lev Vygotsky: A word is also always for two : it is something we have in common even if it does not belong to any of us. We can only borrow words from others, or share words we make up.

Figure 1. The first four slides.

JF: Tout signe, tout symbole... toute trace est empruntée, prêtée, partagée au sens actif, verbal, si elle est pour jouer un rôle communicatif. C'est aussi vrai pour le langage mathématique, par exemple...

FLM: OK, but how do you connect this with les défis et opportunités de la diversité linguistique for mathematics education research?

JF: C'est que je pense à la question "dans quelle langue écrire", ou parler, au moment de partager la recherche. I know I will always be speaking or writing "my language", so for me it is a matter of seeing what words I want to borrow, or share, knowing that these words are not simply carriers, of or for my ideas. And that the best that can happen is if some of my languaging becomes part of some else's.

Jeff: D'autant plus que la parole et l'écriture sont d'abord et avant tout des *expériences linguistiques*.

The Math Guy: When I check a proof, when I solve a problem, I am engaged in some kind of activities. The problem or the proof can change, I am still proof-checking or problem-solving, is that it?

JF: Joyce...

FLM: Mais tu écris en français ou en anglais ?

JF: As you can see, I do both. That was my point with Joyce. J'ai parfois le désir de faire l'expérience de certaines idées en français, or I feel like experiencing them in English. Un peu comme on peut aborder une idée mathématique géométriquement, algébriquement, etc. La question de l'auditoire est parallèle : What words do I feel like sharing with those people ? Quand je sens que le français et l'anglais peuvent tous deux être entendus, se pose alors la question du partage. There is not fair way to share, in my opinion. Only unfair ways actually... [moving to slide 3]

Nancy Huston: Thank you for saying this. Et je voudrais ajouter : Je crois avoir un jour fait la réflexion que contrairement aux objets finis, au temps limité dont le partage épuise la substance, les idées se partagent à l'infini, même si chaque fois différentes dans leurs incarnations. I can share again, I can tell again such or such story. They are ways of experiencing, with different words, renewed for a renewed audience...

JF: Exactly! I didn't see you were here, but yes: that's the elephant in the room! Rien ne m'empêche d'écrire à nouveau... Après tout : je n'écrirais jamais la même chose ! Reprendre un texte et le « traduire » par exemple, c'est forcément écrire à nouveau, dire des choses nouvelles. Même si je cherche à me limiter dans l'écriture à rapporter, à faire un rapport de recherche.

The Math Guy: Like publishing "the same" proof twice by writing it differently... hum... would it be a different proof, or the same one?

Guy: [who is sitting next to him] But the question is: would this contribute anything? Est-ce qu'on ne devrait pas garder en tête qu'il y a des problèmes plus importants...

L'assistance commence à s'agiter un peu, on murmure. Some people begin to look uncomfortable, or upset. Others starts to whisper, chatter, chit-chat gossip with their neighbors : « I saw you did that a few time ! », « Not as much as him ! », « Si je me mettais à faire ça... », « Depends who you are writing for right ? », « J'ai même pas assez de temps pour écrire mes affaires UNE fois, alors deux... », « No no, this is unacceptable », « But that's the point », « Mais c'est

profondément choquant ce que tu dis là. Et les jeunes ? ».

Scène 2

As the scene unfolds, the noise in the room keeps rising. Certains ont des conversations enthousiastes, d'autres sont simplement outrés. Dans le brouhaha montant, on voit aussi quelques individus se désintéresser complètement de ce qui se passe dans la salle. One opens his laptop and writes emails, another pulls out of his bag some leftovers from the lunch and begins to eat.

FLM: Sorry to cut in again but I need to say this: we don't publish research reports, or proofs ! FLM est un journal orienté vers les idées, les réflexions, les conversations. And only original work ! Well... mostly.

JF: Comme c'est eux qui sponsorent l'événement je vais le laisser parler...

FLM: Vos résultats de recherche sont certainement intéressants, mais si vous écrivez pour nous, parlez plutôt de ce que ces résultats vous font voir, supposer, imaginer, regretter...

JF: Pour moi, ça touche à la question du « je » qui écrit. Il y a toujours des pertes et des gains dans la ré-écriture précisément parce que c'est un « je » qui écrit et que l'écriture est un faire, quelque chose que *je fais*. On peut choisir d'ignorer ce je, mais il me semble plus intéressant de chercher à en prendre avantage, et à jouer, comme le fait Nancy, sur ce qui naît de la possibilité de ré-écrire.

FLM: Mais c'est de l'auto-plagiat !

Nancy Huston: Oh trust me I've heard that one before... Stealing from yourself, seriously ?

Lev Vygotsky: Nous nous attribuons sans cesse les mots des autres ! Mais les mots sont en même temps uniques et universels à chacune de leur apparition, c'est aussi ce que disais Jacques il y a un moment.

JF: On pense à l'auteur, à l'auditoire, au texte... tout est sans cesse changeant si on veut bien le voir. Especially if I think that I am writing to change myself (e.g. I see writing as a research method, I see myself as a tool for research), or my reader... so much things we could say about this.

Lev Vygotsky: And such a political move ! You are all so infatuated with yourself. In my time and place, we did not care about who wrote what! We simply wanted to write, to work with ideas, and repeat them as many time as possible! Bakhtin worked like that too: our unity, our community... it is first of all this little group of people we work with, we write with, those we work for, those we write for.

JF: Diversity is a condition for/of language. Elle est au cœur de toute *utterance*. Où est Jacques ?

FLM: You like reading the same stuff twice ?!

The Math Guy: I can see the point of experiencing ideas in various ways... Je peux travailler avec la tangente géométriquement ou algébriquement, voire publier le même « fait » à son propos dans les deux langages and everybody is going to be happy with that. Est-ce une forme de diversité ?

Guy: You know he is talking about something else. Non-nétement reprendre « tel quel » ce qu'on a publié ailleurs ?

JF: There are those layers on internal diversity... Do we call Monet a cheat for painting the same freaking haystacks over and over again ? Or Mondrian with his *Compositions* ?

The Math Guy: Des variations dans une preuve, oui oui...

Guy: Mais à quoi bon ?!

Jeff: Are we going off topic here ?

JF: Oui et non. Repetition itself creates change, and diversity, change, and diversity.

The Math Guy: If you repeat something often enough, it becomes politics.

Guy: C'est à moi que tu parles ?

Guy and The Math Guy are now quite irritated by each other. Plus personne ne semble faire attention à ce qui se passe devant. Everybody is doing his/her own thing, except for the panelists who keep trying to follow la présentation.

Scene 3

As the audience is growingly indifferent to what happens in the front, the presentation looks like it is turning into a conversation. But it also becomes harder to follow as people keep on loudly carrying up their own talk. Parmi celles-ci, les échanges entre Guy et The Math Guy prennent de plus en plus de place, finissant par dominer as people stop talking to listen to them.

JF: On pourrait (on devrait ?) en parler plus longuement... mais je voudrais vraiment mentionner deux idées...

Ami: Shhhhh ! [the noise level in the room lowers a bit, but will soon start raising again]

JF: Merci [passe à la diapo 4]. So the next idea I find important in my own work, very strongly related to what I said so far, is that of seeing language as a mêlée (of lan-

guages). I am referring here to the work of Jean-Luc Nancy (who couldn't make it today) insisting on how there is no such things as a pure or absolute language, or a right way to speak or write.

FLM: Tu vas quand même réviser ton texte !

The Math Guy: At least pure math is still a thing !

Guy: No it is not ! Purity is a right wing bias.

Jeff: Well, j'ai bien lu quelques « constructivistes » pour qui there are no mathematical « errors » but only alternative understandings.

JF: ... or what we say about our data for example. I realize I am already talking about my next slide... [there is a lot of noise now, from people talking. He changes to slide 5 (Figure 2, top)]. Here I wanted to discuss how we are living in language. We are all languaging beings in this room...

The Math Guy: Les maths sont précisément un de ces rares espaces où on peut oublier la politique, one of those rare spaces where we can disagree in a civilized manner and eventually come to some agreement.

Guy: Only by dismissing all those who do not participate in your little elitists conversations! En recherche, pour les choses qui comptent vraiment, chaque mot est empreint de valeurs. Se dire a-politique est position politique autant que les autres. If you don't think about diversity and minorities in your work you simply participate in making it possible to ignore these issues.

The Math Guy: Avec plaisir !

JF: [nearly shouting] This idea is crucial in seeing how language is like a medium, a world in which we meet one another, so that we language...

Ami: Shhhhh !

Jeff: ...because we want and actually need to meet one another, amirite?

Guy: Selfish, irresponsible...

The Math Guy: Rather than being a pedantic moralist who thinks he can tell people what to do !

Ami: Excusez-moi, we are trying to hold a round-table here...

FLM: Je vais devoir demander à mon editorial board to stand on this.

Guy: You nogoodnik...

The Math Guy: You weaseler !

At this point Guy and The Math Guy are about to get physical and they will. Les deux individus se prennent par le col, une table est renversée.

Guy: What are you doing here anyways ? Venu pour te battre ?

The Math Guy: I am diversity. Proof: I am a mathematician, therefore I am a colanger !

JF: On peut évidemment vouloir « soigner sa langue » et juger ou être jugé à propos de la manière dont ce qu'on dit ou écrit correspond aux habitudes langagières d'un groupe à un moment donné, mais je vous rappelle [tapant du poing] que *ni* Molière *ni* Shakespeare ne répondaient au supposés critères linguistiques d'aujourd'hui.

Jeff: Les matheux d'avant ne répondaient pas non plus aux critères d'aujourd'hui...

JF: Of course even mathematics as a language has a similar history, and similar features. Il y aurait des avantages à une langue unique... all the work on formalism in mathematics ended up being really fruitful.

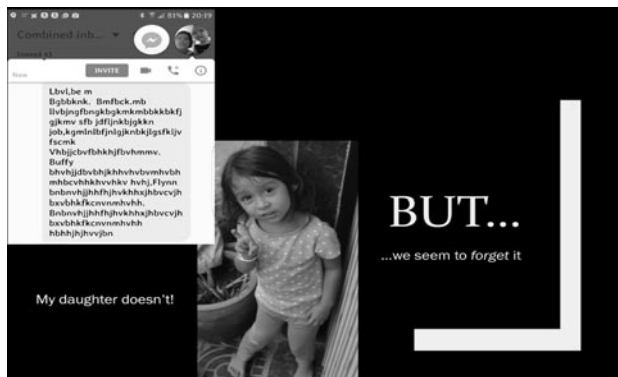


Figure 2. Les deux dernières diapos.

Jeff: but *also* miserably failed, I dare to say, at achieving its original purpose.

FLM: J'ai de la difficulté à suivre là... Why all this?

JF: OK, c'est un peu confus... peut-être juste... [switch to the last slide]

Jeff: I think the big idea is : we somehow know all that stuff already, all of us.

JF: But we forget it, on oublie tout ça même si on le vit tous les jours depuis l'enfance.

Jeff: And so we are asking questions about linguistic diversity as if linguistic unicity was an actual possibility!

JF: L'unicité linguistique est impossible, impensable, surtout si l'idée est de s'appuyer sur la langue, languaging, to build something

FLM: As in Publishing in order to create some sort of mathematics education construct ?

JF: Voilà ! C'est Babel !

People start forming a circle around the two individuals fighting. Les bagarreurs sont face à face en position de boxers. Someone rings a bell and the two start boxing. The audience has completely shifted its attention to them, and some people cheer loudly. JF moves off stage, closer to Jeff and FLM pour continuer la discussion sans avoir à crier.

Jeff: That's a strong position you are holding there... Plusieurs ne seront pas d'accord.

FLM: Maybe not building something, mais faire avancer?

JF: [talking at the same time] Oui, je sais, mais c'est sans importance; doesn't matter.

Jeff: Wittgenstein!

Au même moment, un des combattants décroche un uppercut de premier ordre à son opposant qui reste suspendu dans les air un moment, comme au cinéma.

JF: Bingo!

As JF pronounces his last syllable, the guy who got punched abruptly hits the floor.

KO.

Bakhtin quietly rises from his chair in the left corner of the room and leaves by the backdoor, like nothing happened. Comme si de rien n'était.

Acte 3

Nous sommes maintenant dans l'hémisphère Sud (36°52'S, 174°46'E) en plein hiver (mi-juillet). Il est 23h30 et l'auteur est installé chez lui, une veste et une couverture chaude jettées sur ses épaules. Il fait 9°C à l'extérieur and we can hear from the large windows le vent humide venu de la mer and the voices of Chinese students on their way to their rooms. On his desk, there is a number of printed documents with annotations ainsi que quelques livres. There is a bilingual version of Derrida's Le monolinguisme de l'autre, one or two books from Bakhtin and also Heidegger's Way to Language, Levinas' Totalité et Infini and Wittgenstein's Philosophical Investigations. Parmi les impressions, on distingue le texte de J.L. Nancy, Éloge de la mêlée, publié dans le premier numéro de Transeuropéennes, et le Biology of language de Maturana avec en entête l'adresse du site d'où il a été imprimé (<http://www.enolagaia.com/M78BoL.html>). We can also see different versions of this text, including the one you are reading now.

Scène 1

J: Quand j'adopte cette forme de communication, il est particulièrement difficile de choisir ce que j'explicite et les éléments que je rends présent dans la forme, mais laisse implicites au niveau du discours.

F: Yes, you could « explain everything », but not only would it take much more room than what you have, it would also « kill » some of the propositions in a way, right?

J: Oui. D'un côté—on me le fait remarquer à l'occasion—je me ferais « mieux comprendre » en évitant que la forme vienne distraire du fond. Mais il y a dans le déficit que pose la forme et les implicites quelque chose de puissant que je me donne toujours un peu pour mission de ramener à la surface.

F: As I see it, on the one hand you think that communication is not about « transmitting » ideas or information, the « tube » metaphor as Maturana or Varela put it. Writing or presenting and reading or listening is the active work of signifying, what people call sense-making. Leaving your audience with the impression that there is more to what you said than what you said is an invitation to go back and look for more.

J: Je dirais : à la fois dans le sens d'un acte de communication donné (par exemple ce texte, son propos), mais aussi de manière plus générale et plus profonde. Ce jeu est toujours présent, qu'on le veuille ou non. Je ne dis qu'une chose, et ce n'est jamais vraiment (que) ce que j'ai dit.

F: Mais la bagarre, what do you think people will think of that bar brawl thing?

J: That it's absurde. I mean it as a compliment. C'est important de parler de what did not happen.

F: Une possibilité du langage, un contenu sans contenant? Mais qui peut suggérer...

J: So again it's in part working (playing?) with/from the observation that symbiotic yet conflicting relationship between form and content, but there is more.

F: Yes, precisely: there is *more*.

J: And so it is a case of negating both the medium, the message and the relationship: "the not-medium is-not the not-message".

F: Isn't that why you start thinking in terms of "traces" instead?

J: To a certain extend. I like the idea of traces, of marks... a vague concept that easily evokes footsteps just as good as it resonates with writing, graphing, representations, symbolization...

F: Etymologically, there is also something that "pulls" in traces.

J: I also think of scars, how what we go through, what goes through us, leaves traces.

F: And mark has to do with "margins". So inclusion/exclusion?

J: Stigma.

F: Wait wait... are you... is this a comment about diversity and writing?

J: It certainly *can* be, but there is one very important idea missing in this text.

F: ...

J: Erasure.

Rideau