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ABSTRACT

Global Reporting Initiative (GRI) guidelines have become the most relevant institution in sustainability reporting standards, highly adopted by organizations worldwide. However, much criticism has been raised about these standards' ability to further sustainable development within organizations and render their sustainability performance more accountable and transparent. Using a case study of Hydro-Québec, an important hydro-electricity provider in Quebec, Canada, and its relationship with the Cree, an Indigenous community, the purpose of this study is to provide theoretical and empirical insights on the subject by showing how GRI guidelines, legitimized and reinforced through their institutionalization, tend to create a limited scope and an incomplete picture of the organization's sustainability performance reporting. More specifically, this paper highlights two main problems arising from the use of these standards. First, drawing on the ideology of numbers of Chelli and Gendron (2013), this paper examines how GRI technocratic guidelines frame the sustainability reporting discourse, thereby contributing to leaving aspects of organizational sustainability performance in the shadows. Second, drawing on the ontological typology of Descola (2013), this study examines how these guidelines are ontologically driven by a Western view of nature. This contributes to silencing alternative ontologies in organizational sustainability performance reporting.

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1. Introduction

Sustainability performance reporting has become a common practice in major organizations, and over 93 percent of Fortune Global 250 companies now publish sustainability reports (KPMG, 2017). Following this trend, a significant amount of literature has been devoted to examining sustainability reporting practices (e.g., Hahn & Kühnen, 2013; Owen, 2008; Parker, 2005; Unerman, Bebbington, & O'Dwyer, 2007). The research has, in particular, investigated the internal and external drivers that led to the adoption of sustainability performance reporting (e.g., Adams, 2002; Bebbington,

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Higgins, & Frame, 2009; Cormier & Gordon, 2001; Cormier & Magnan, 2003; Deegan & Blomquist, 2006; Ernstberger & Grüning, 2013; Reid & Toffel, 2009), the relationship between sustainability reporting and organizational performance (e.g., Al-Tuwaijri, Christensen, & Hughes, 2004; Cho, Guidry, Hageman, & Patten, 2012; Clarkson, Li, Richardson, & Vasvari, 2008; Lackmann, Ernstberger, & Stich, 2012; Walker & Wan, 2012), and the quality of sustainability reporting (e.g., Adams, 2004; Deegan & Rankin, 1996).

Despite this extensive body of literature, how to make corporations more accountable and transparent in sustainability performance remains an important question in the academic field (e.g., Roberts, 2009; Gray, 2010; Bebbington, Unerman, & O'Dwyer, 2014). One of the difficulties identified by academics in reporting sustainability performance resides in the vagueness of this concept (e.g., Bebbington, 2001; Moneva, Archel, & Correa, 2006). Sustainability performance is a complex concept, ambiguous in definition, and with no consensus to date (de Colle, Henriques, & Sarasvathy, 2014; Moneva et al., 2006). As emphasized by Bebbington (2001, p. 129), “sustainability means different things to different people in different contexts”. In fact, sustainability can be made to mean what one would like it to mean (Moneva et al., 2006).

In an attempt to clarify the concept of sustainability and guide organizations in their reporting of sustainability performance, several standards have been proposed. Among them, the Global Reporting Initiative (GRI) has become the most relevant institution in sustainability reporting standards (Brown, de Jong, & Lessidrenska, 2009; Etzion & Ferraro, 2010). However, the literature on sustainability reporting is critical of GRI guidelines and questions their ability to further sustainable development within organizations and help organizations become more accountable and transparent in their sustainability performance (e.g., Boiral, 2013; Dingwerth & Eichinger, 2010; Joseph, 2012; Milne & Gray, 2013; Moneva et al., 2006). Although this literature has provided many relevant insights, only a few studies, which we cite in the next section, have sought to explain why GRI guidelines failed to fulfill their claims of increasing transparency and instilling deep values of sustainability.

The purpose of this paper is to examine theoretically and empirically the ideology and ontology underpinning GRI guidelines, thereby developing a deeper understanding of the manner in which these guidelines affect organizational sustainability performance reporting, particularly as related to sustainability impacts affecting Indigenous communities. The chosen context is particularly interesting as struggles experienced by Indigenous communities are a growing concern in Canada and worldwide (Anaya, 2015; Neuman, 2016). For organizations having close relationships with Indigenous communities, it could be expected that these stakeholders will be at the forefront of organizational preoccupations and sustainability reporting. This context allows us to analyze the extent to which sustainability reporting contributes or fails to help organizations be more accountable and transparent regarding their impact on Indigenous communities. Also, Indigenous communities have a relationship with nature distinct from that of Western societies, where dualism between humans and nature dominates (Gallhofer, 2018). This context makes it possible to highlight an alternative conceptualization of the relationship between humans and nature and, thus, to present insights and criticisms of sustainability reporting that go beyond the Western¹ view.

1.1. The GRI guidelines and its critics

The GRI is used worldwide, with more than 6000 organizations from over 90 countries publishing a sustainability report based on them in 2018.² One of the main goals of the GRI is to strengthen the rigor and transparency of sustainability reporting for stakeholders (GRI, 2018). Indeed, the GRI includes detailed sustainability principles and guidelines that provide guidance to organizations on how and what to report regarding their environmental, social, and economic performance while increasing their accountability (GRI, 2018). Adopting a multi-stakeholder approach, the GRI relies on experts from different sectoral activities and represents different stakeholders when developing sustainability performance indicators (Boiral, 2013). These experts exercise authority through their knowledge of the development of a sustainability performance definition. By proposing numerous performance indicators covering the three dimensions of sustainability performance, the structure of GRI guidelines provides a sense of the concept of sustainability development (Boiral, 2010). This important contribution from experts led to the construction of a technocratic instrument, i.e., a system where sustainability performance is legitimized “through the rationalization of [expert] competence, know-how and experience” (Chelli & Gendron, 2013, p. 195). In addition, over the past decade, application of GRI standards by organizations is increasingly verified through a process of external assurance (KPMG, 2013), reinforcing the institutionalization of the GRI as a technocratic instrument.

Although the GRI has been established as the international reference in corporate sustainability performance reporting (KPMG, 2017), much criticism has been raised about these technocratic standards. The first criticism is that, despite its rhetoric, these guidelines fail to increase comparability (e.g., Boiral, 2010; Hedberg & von Malmberg, 2003) and transparency of sustainability reports (Dingwerth & Eichinger, 2010; Sethi, Rovenpor, & Demir, 2017). For instance, Boiral

¹ In this paper, we use the term “Western” to refer to societies having social norms, ethical values, beliefs, and political systems that originated in or are associated with Europe. Attributes defining Western societies notably include the existence of political pluralism and laicism. Although the West as a geographical area is not clearly defined, the term “Western” generally applies, beyond Europe, to countries in the Americas and Australasia, where language, culture, and demographic ethnic majorities are of European descent (Huntington, 1996).

² The list of reporting organizations is available on www.globalreporting.org (as of November 22, 2018).

(2013) analysis of GRI reports in the energy and mining sector revealed that a large majority failed in presenting significant negative events. Similarly, Isaksson and Steimle (2009) examinations of five reports in the cement industry showed GRI guidelines were not sufficient to ensure clear disclosures about the capacity of organizations to be sustainable. Another oft-cited criticism concerns the incapacity of GRI guidelines to instill within organizations deep values and practices of sustainability development (e.g., Buhr, Gray, & Milne, 2014; Dumay, Guthrie, & Farneti, 2010; Joseph, 2012; Milne & Gray, 2013; Moneva et al., 2006). According to these conceptual critics, using GRI guidelines that promote a business-case approach “may reinforce business-as-usual and greater level of *un*-sustainability” (Milne & Gray, 2013, p. 13). Empirical analyses also revealed that GRI reports largely privilege a narrow and instrumental approach detrimental to sustainability development (e.g., Brown, de Jong, & Lessidrenska, 2009; Brown, de Jong, & Levy, 2009). For instance, Brown, de Jong, and Lessidrenska (2009) argued these guidelines incite managers to focus on technical aspects, avoiding discussions on core sustainability aspects and limiting organization learning towards sustainability.

While criticisms accumulate, why the GRI fails to capture and further sustainable development remains understudied. However, some research has looked at sustainability reporting more broadly and highlighted lines of inquiry. Notably, de Colle et al. (2014) and Chelli and Gendron (2013) argued that sustainability standards encourage the construction of morally discriminating boundaries framing sustainability reporting discourse. These authors stressed that, by formulating and codifying sustainability performance, organizations tend to respond “blindly” to these standards, to the detriment of a more outwardly directed attention toward the specific needs of and impacts on external stakeholders. As emphasized by de Colle et al. (2014, p. 185),

[...] the more the organizational decision-making tends to focus on complying with predetermined logical schemas and rules, the more the decision makers will tend to pay attention to manuals and procedures concerning the right way of making the decision, possibly losing sight of the importance of ‘making’ the right decision.

By promoting a certain understanding of sustainability using a coherent set of quantified measures and boundaries for corporate sustainability performance, sustainability standards may provide an incomplete portrait of the ways in which organizations fulfill their social and environmental responsibilities, or fail to do so.

Other researchers pointed out that the definition of sustainability performance provided in the guidelines is too constrained (Gallhofer, 2018; Hines, 1988; Laine, 2010; Phillips & Hardy, 2002), affecting how organizations and societies perceive sustainability. According to some, the guidelines indicators also constrain the sustainability definition adopted by organizations (Russell & Thomson, 2009) and contribute to the construction of organizational identity and representation toward sustainability (Tregidga, Milne, & Kearins, 2014). By doing so, it is argued that these corporate sustainability indicators could calculatively capture sustainable development and suppress forms of knowledge associated with this complex concept (Russell & Thomson, 2009). Many scholars argued that the dominance of sustainability standards discourse may be detrimental to other interpretations of sustainability performance that may exist (Byrch, Kearins, Milne, & Morgan, 2007; Laine, 2010; Milne, Tregidga, & Walton, 2009). Gallhofer (2018) recently extends this line of argument, maintaining that the notion of sustainability reporting reflects Western thinking about nature and narrows the potential of this construct.

Overall, despite substantial development and improvement of reporting practices in the field, a number of accounting studies questioned the capacity of GRI guidelines to strengthen sustainability development. This may be due to the setting of discriminating boundaries and the constrained definition of sustainability provided therein. In response to these criticisms, some authors have proposed going beyond GRI by adopting alternative reporting methods such as shadow and counter reports (e.g., Dey, 2007; Dey, Russell, & Thomson, 2011; Gallhofer, Haslam, Monk, & Roberts, 2006; Gray, 1997). However, due to the increasing use of GRI within organizations, we believe it is relevant to question these failings in order to review its mode of operation towards increasing transparency and sustainability values. This paper aims to provide theoretical and empirical insights regarding GRI limitations.

1.2. Research objectives and contributions

Using a case study of Hydro-Québec, an important hydro-electricity provider in Quebec, Canada, and its relationship with the Cree, an Indigenous community, our objective is twofold. First, drawing on the ideology of numbers, we empirically examine how GRI technocratic guidelines frame sustainability reporting discourse and contribute to leaving certain aspects of organizational sustainability performance in the shadows. The analysis of Hydro-Québec’s sustainability performance reporting related to Indigenous communities between 2009 and 2013 illustrates how GRI standards constrained the construct of sustainability performance. Our in-depth examination in light of the ideology of numbers brings to the fore the discriminating boundaries created by sustainability standards through use of standardized and comparable measures.

Second, drawing on Descola’s ontologies, we examine how these guidelines evoke a naturalist (or Western) ontological stance. This contributes to silencing alternative ontologies in organizational sustainability performance reporting. The analysis of documents on the Cree community highlights alternative conceptualizations of sustainability often ignored in the Western sustainability performance discourse. Descola’s ontological typology allows us to develop a deeper understanding of the ontology underpinning sustainability standards and provides

evidence of the Western driven nature of sustainability standards. In doing so, our paper provides “a better and more detailed understanding of the human-nature interrelationship in cultures other than the Western and an exploration of how these human-nature interrelationships can inform the design and production of [corporate nature responsibility] reports” (Gallhofer, 2018, p. 2126). Incidentally, the chosen context extends literature on accounting and Indigenous peoples (e.g., Annisette & Neu, 2004; Buhr, 2011; Gallhofer & Chew, 2000; Gallhofer, Gibson, Haslam, McNicholas, & Takiari, 2000; Neu & Graham, 2004, 2006; Neu & Heincke, 2004; Preston, 2006; Preston & Oakes, 2001) by showing how sustainability reporting guidelines may contribute to the Western domination of sustainability accounting.

More generally, our paper responds to a recent call to broaden the range of theoretical approaches in order to understand sustainability reporting practices adopted by organizations (e.g., Adams & Larrinaga-Gonzalez, 2007; Bebbington, Larrinaga, & Moneva, 2008; Lodhia & Jacobs, 2013) by drawing on conceptual frameworks rarely used in accounting and sustainability studies, the ideology of numbers and Descola’s theoretical concepts. These two theoretical approaches help us better understand the discriminating frontiers and boundary effects implicit in the sustainability performance indicators proposed by the reporting standards. They also emphasize the need to consider multiple conceptions of sustainability in order to increase accountability and transparency.

The remainder of this paper is organized as follows. First, we introduce the ideology of numbers and Descola’s ontologies, the theoretical background for our paper. Next, we present the method used to carry out our investigation, and our case study. Regarding the latter, we provide empirical evidence for how international guidelines, through the ideology of numbers, frame Hydro-Québec’s discourse surrounding sustainability performance. We pursue our analysis by examining how the organization’s standards based sustainability reporting evokes a naturalist ontological view. Our findings point to the shadowing of certain impacts of Hydro-Québec’s activities on the Cree community, and the silencing of the Cree conceptualization of sustainability. Finally, we conclude and discuss the main implications of our study.

2. Theoretical framework

Our study builds on two complementary theoretical approaches. First, we rely on the ideology of numbers to better understand how international guidelines frame sustainability discourse and define the boundaries of what counts in sustainability performance. Second, we draw on Descola’s theoretical concepts to better understand the ontological stance underlying sustainability performance within these boundaries.

2.1. Ideology of numbers

An ideology may be defined as a set of beliefs or ideas that influence a person or a group’s behavior. In the context of this study, we are interested in ideas that influence sustainability performance. According to Chelli and Gendron (2013), sustainability rating agencies promote what they call an ideology of numbers through a legitimization, concealment, unification, fragmentation, and reification discourse that ultimately “aims to establish a regime of normalization governing socio-environmental performance” (Chelli & Gendron, 2013, p. 200). Following these authors, we argue that GRI guidelines and, consequently, organizational sustainability performance reporting, are increasingly influenced by the ideology of numbers.

The ideology of numbers may be defined as “a coherent set of ideas and practices that promotes the understanding of reality through the use of quantified measurements, making visible certain aspects (or at least some representational aspects) of reality while leaving others in the shadows” (Chelli & Gendron, 2013, p. 188). In this ideology, codification and quantification attempt to explain reality in a standardized, comparable basis, leading to a reductive conception of sustainability (Porter, 1995; Thompson, 1990). As Chelli and Gendron argue (2013, p. 197), the “ideology of numbers promotes a relatively narrow vision of corporate social and environmental responsibility [...] leaving in shadow certain aspects of the ways in which companies fulfill, or fail to meet, their social and environmental responsibilities”. This shadowing is due to the fact that codification and quantification through numbers illuminate aspects of reality, which in turn casts shade and obscurity on other portions of that reality (Bebbington & Larrinaga, 2014; Espeland & Stevens, 2008). By separating what specific criteria and norms are considered through this process of shadowing, the ideology of numbers “alter[s] the conceptions, attitudes, and behaviors of organizations in terms of sustainable development” (Chelli & Gendron, 2013, p. 200). This construction of discriminating boundaries surrounding sustainability is justified and legitimized, in subtle ways, by a claim of expertise from those who produce the codes and norms.

In this paper, we rely on the ideology of numbers to examine how GRI technocratic guidelines frame sustainability reporting discourse. We argue that the ideology of numbers defines the boundaries within which sustainability can unfold by illuminating and circumscribing a portion of sustainability performance through comparable measures and numbers, letting other aspects remain in the shadows. Descola’s ontological typology, presented next, will help us understand how sustainability is conceived of within these boundaries.

2.2. Descola's ontological typology

An ontology³ may be defined as a theory about the “kinds of beings the world is made of and how they relate to each other” (Descola, 2014a, p. 273). In this study, we are interested in the ontologies underlying sustainability performance to better understand how the relationship between humans and nature is conceptualized. To do so, we rely on the ontological typology developed by Philippe Descola (2013) in *Beyond Nature and Culture*. In his book, Descola (2013) draws on multiple sources from the anthropological literature and his own fieldwork to argue that the nature/culture dualism, a theoretical foundation of anthropology from the 19th century, is not shared by all societies; in fact, it constitutes an obstacle to the understanding of non-Western societies (Lerosier, 2017). He therefore proposes a new analytical field that highlights different ontologies defining the relations between nature and society. His work resonates with the contemporary debates in sustainability. Rather than resorting to conceptions of sustainability performance that only make sense within the Western ontological system, Descola (2013) suggests that the modalities of sustainability should be examined in light of the ontologies of the societies concerned (Lerosier, 2017). He thus intends to make people realize that “the modern West's way of representing nature is by no means widely shared” (Descola, 2013, p. 30).

Descola (2013) identifies four possible types of ontology to account for the different ways in which humans organize their relationship with the world: naturalism, totemism, animism, and analogism. This fourfold typology of ontologies is generated by the distinction between the interiority and physicality of humans and elements of nature (e.g., plants and animals). The term “interiority” refers to the range of properties ordinarily associated with the mind, the soul or consciousness (e.g., feelings, intentionality, reflexivity, ability to communicate). In contrast, the term “physicality” concerns external forms, substance, the physiological, perceptive and sensorimotor processes; in other words, the visible and tangible aspects peculiar to a particular entity (Descola, 2013). Table 1 summarizes the four ontologies developed by Descola.

Totemism postulates that groups of humans and non-humans are affiliated around a “totem”, and therefore share sets of physical and moral attributes. Animism conceives humans and non-humans as having the same type of interiorities, or a continuity of souls, but as lodging in different types of bodies, thus creating a discontinuity of physicalities. Analogism is predicated on the idea that all beings (human or non-human) are singularities fragmented in an infinite set of forms and essences, and are therefore characterized by a general discontinuity of both interiority and physicality. Naturalism distinguishes humans from non-humans not from the types of bodies, but from the mind, the soul, language, etc. Thus, naturalism is characterized by the view that humans and non-humans share similar physicalities, but have dissimilar interiorities.

In this paper, we will focus on what Descola (2013, p. 201) contends to be a crucial ontological distinction, i.e., the distinction between naturalism, which corresponds to the Western view, and animism, the ontology advocated by Indigenous communities in South and North America, including the Cree.

2.2.1. Naturalism

Naturalism, Descola argues, corresponds to the ontology of all Western societies. Descola (2008) also contends that this ontology dominates the discourse in sustainability. Naturalism is defined as a conception of the world in which humans have a distinctive interiority (i.e., consciousness and subjectivity) that separates them from non-humans (i.e., plants and animals). However, humans and non-humans are perceived as having similar physical characteristics. As Descola (2013, p. 173) explains:

For us [Western societies], what differentiates humans from nonhumans is a reflective consciousness, subjectivity, an ability to signify, and mastery over symbols and the language by means of which we express those faculties, and furthermore the fact that human groups are reputed to distinguish themselves from one another by the particular manner in which they make use of those aptitudes by virtue of a kind of internal disposition that used to be called “the spirit of a people” but that we now prefer to call “culture.”

In naturalism, nature is what does not belong to culture (Descola, 2013). The naturalism of our Western societies therefore creates a boundary between humans (who have a culture) and nature (i.e., animals and plants that do not share a culture). In this conception of the world, nature must be protected for its usefulness to humans. In other words, in naturalism, humans have a utilitarian relationship with animals and plants as the latter lack subjectivity and consciousness. Thus, humans are the master of nature. However, this Western distinction between humans and non-humans, or nature and culture, is nonexistent in other societies. It is therefore interesting to examine alternative ontologies of the relationship between humans and non-humans, such as animism.

³ According to Descola (2014a), an ontology is not a worldview. The word “ontology” refers to a more elementary analytical level which allows a better understanding of what the world contains and how the elements of the world are connected. Descola (2014a) refutes the idea of multiple worldviews. From his standpoint, there are different ways in which humans inhabit the world and relate to nature which result not in a worldview, but “one version among others of the same transcendental reality” (Descola, 2014a, p. 277).

Table 1
Descola's four ontologies.

| | Similar interiorities | Dissimilar interiorities |
|--------------------------|---|---|
| Similar physicalities | <i>Totemism</i> E.g.: Indigenous in Australia | <i>Naturalism</i> E.g.: Western societies |
| Dissimilar physicalities | <i>Animism</i> E.g.: Indigenous in South and North America | <i>Analogism</i> E.g.: Ancient China, Aztecs, Incas, native communities of the Andes |

2.2.2. Animism

Animism presents a natural order where humans, and animals and plants are not differentiated. As mentioned above, this ontology postulates that all beings (i.e., humans, animals, and plants) possess subjectivity, consciousness and intentionality, but are distinguished by different physical characteristics (i.e., appearance, body shape, behaviors). Animal species are likened to people, to “humans in disguise” (Descola, 2013, p. 129), possessing their own language and characteristics.

Indigenous communities in South and North America, such as the Cree, adopt this ontology. Indeed, according to Descola (2013, p. 139):

[Amerindians] say that nonhumans are persons endowed with a soul [...], conferring upon them a position as enunciators that defines them as subjects: ‘Whatever possesses a soul is a subject, and whatever has a soul is capable of having a point of view.’

It may seem atypical from a Western point of view to grant a soul and subjectivity to non-humans or, in other words, to give a culture to nature. However, to counter these criticisms, Descola (2013, p. 132) argues the following:

For many years, such claims were regarded as evidence of thinking that was averse to logic and incapable of distinguishing reality from dreams and myths [...]. Amerindian peoples who make such claims are no more short-sighted or credulous than we are. They are well aware that a jaguar devours its prey raw and that a peccary does not cultivate maize plantations but lays them waste. It is the jaguar and the peccary themselves, they say, who see themselves as performing the very same gestures as humans [...]. In short, in their myths and in their daily lives as well, Amerindians do not regard what we call culture as the prerogative solely of humans [...].

In sum, whereas naturalism confers solely on humans the capacity of reasoning and free will, thus introducing a hierarchy between humans and non-humans, “animism extends to a general multitude of existing beings the position of a moral and epistemic subject” (Descola, 2013, p. 289).

This paper uses these two ontologies, “all-inclusive hierarchical schemas that are the polar opposites of each other” (Descola, 2013, p. 201), to examine how sustainability reporting standards promote a “naturalist view” of sustainability performance that ultimately influences organizational reporting and silences the “animist” conceptualization of sustainability performance. That being said, there is no doubt in our minds that the boundaries of the different ontological perspectives are not that clear-cut. As Descola (2014a, p. 277) contends:

Actual ontologies can be very close to the model [...] but perhaps the most common situation is one of hybridity, where one mode of identification will slightly dominate over another one, resulting in a variety of complex combinations. This fourfold typology should thus be taken as a heuristic device rather than as a method for classifying societies; a useful device, however, as it brings to light the reasons for some of the structural regularities observable in the ways the phenomenological world is instituted and for the compatibilities and incompatibilities between such regularities—two basic anthropological tasks that have been too quickly discarded and thus left open to crude naturalistic approaches (Descola, 2014a, p. 277).

Our analytic endeavor is therefore comparative and relative, not absolute. Nonetheless, we believe our typological endeavor deepens understanding of the ontological perspective underpinning sustainability guidelines and those being silenced.

3. Research method

We explore sustainability performance reporting through a specific case study involving a major hydroelectric development by Hydro-Québec (hereafter HQ) – i.e., the James Bay Hydroelectric Development, located in northern Quebec – which has significant impacts on the Cree and their territory. Our research design involves a collection of qualitative data in order to gain deep insights into this hydroelectric development and its impacts. We deemed the use of qualitative procedures appropriate given the complex dynamics involved between HQ and the Cree in this hydroelectric development (Patton, 2015).

3.1. Data collection

Our data sources include a collection of private and publicly available documents. To examine the context surrounding the James Bay Hydroelectric Development, more than 50 different documents and reports were used. We had access to

archival documents, not publicly available, provided to us by an important stakeholder involved in the development of hydroelectricity projects on the James Bay territory. These documents allowed us to contextualize the different hydroelectric projects in James Bay and their environmental impact. We also obtained private documents from the Cree community that allowed us to better understand its reality and ontology. In addition to these documents, we reviewed 58 newspaper articles published between 2005 and 2013 to assess the actual environmental and social conditions of Quebec's Indigenous communities, including the Cree community, and the impacts of HQ's activities.

In order to assess the organization's sustainability performance reporting and the influence of international standards, we examined HQ's sustainability performance reporting from 2009 to 2013 (five years). This period was chosen to provide a more complete picture of the organization's sustainability performance reporting. Indeed, at the time of the data collection, HQ's latest sustainable development action plan covered this five-year period. Furthermore, the construction of the last hydroelectric station on the James Bay territory occurred in 2013. During the 2009–2010 period, HQ used the G3 guidelines (level B) from GRI to report its sustainability performance, and the updated G3.1 for the 2011–2013 period. These five sustainability reports received an independent assurance statement from certification bodies (Intertek in 2009, Ernst & Young in 2010 and 2011, and the *Bureau de normalisation du Québec* in 2012 and 2013). HQ also received a Corporate Register Reporting Award in 2013,⁴ one of the most prestigious prizes in the field, provided by an independent organization in recognition of the world's best sustainability reports. The five sustainability reports provide a comprehensive review of the sustainability actions and impacts of HQ. Table 2 summarizes HQ's sustainability reporting between 2009 and 2013.

3.2. Data analysis

The data were analyzed as follows. First, we read the documents and reports explaining the context surrounding HQ's hydroelectric development on the James Bay territory, arranging the data into a condensed, chronological account. We then arranged those data around each of the primary actors (HQ and the Cree). From this reading, complemented by the analysis of the 58 articles regarding the actual environmental and social conditions of Quebec's Indigenous communities, including the Cree, we were able to develop in-depth understanding of our case study, notably the difficulties involved for each group of actors and the sustainability impacts of the hydroelectric development. We then carried out a detailed analysis of the documents provided by the Cree community in light of the animist ontology to further understand their relationship to nature.

Second, we conducted an interpretive textual analysis (e.g., Laine, 2005; Makala & Näsi, 2010; Tregidga & Milne, 2006) of HQ's sustainability performance reports from 2009 to 2013. To do so, we used a grid including different themes covering the three pillars of sustainability performance. These themes were developed after combining the GRI framework and the "materiality matrix"⁵ produced by HQ to identify the information reported.⁶ This method helped us identify and classify the different sustainability performance information disclosed by HQ. This analysis was conducted twice, by a research assistant and the first author, independently. The data were then compared and discussed to reach consensus. As our analysis focused on HQ's impacts on the Cree community and its territory, we conducted a second-level analysis to identify the various subjects related to Indigenous communities disclosed within HQ reports between 2009 and 2013. Finally, we conducted a third-level analysis using the ideology of numbers and naturalist ontology to identify how HQ's sustainability performance reporting on its economic, environmental, and social impacts on the Cree reflects both this ideology and ontology.

3.3. Trustworthiness

As settler scholars, we recognize the importance of ensuring the trustworthiness (Lincoln & Guba, 1985) of our interpretation of the Cree culture. This is why we deployed considerable effort to make sure that the reality and the ontology of the Cree are properly interpreted and depicted in the paper.

To do so, we first compared our interpretations with other sources of evidence discussing the Cree culture and ontology. Our primary source of information is several private documents (e.g., books, pamphlets, and videos) obtained from the Cree community depicting their way of life and beliefs. At the beginning of this project, the first author had the opportunity to discuss informally with a Cree community member their beliefs and way of life.⁷ This conversation essentially corroborated the ontology of the Cree presented in the various documents obtained from the community. We also build on Descola who, as an anthropologist, depicts within his book *Beyond Nature and Culture* (2013) the different ontologies shared by Indigenous peoples around the world. Descola explicitly refers to the Cree community in Canada when depicting the animist ontology, confirming our analysis of the Cree documents. Finally, the animist ontology of the Cree is corroborated in

⁴ See www.corporateregister.com.

⁵ See <http://www.hydroquebec.com/sustainable-development/our-approach/materiality-analysis.html>.

⁶ In each of its reports, HQ presents a table showing the performance indicators of the GRI guidelines covered within its reports and the page(s) where the information is disclosed. However, our analysis was conducted independently.

⁷ This conversation has not been quoted in the paper since it was not an official research interview and we did not receive authorization to use this information in our paper.

Table 2

HQ sustainability reporting between 2009 and 2013.

| | 2009 | 2010 | 2011 | 2012 | 2013 |
|---------------------|----------|---------------|---------------|---|---|
| No. of pages | 44 | 50 | 50 | 48 | 72 |
| Guidelines | G3-B | G3-B | G3-B | G3.1 | G3.1 |
| External audit firm | Intertek | Ernst & Young | Ernst & Young | Bureau de Normalisation du Québec (BNQ) | Bureau de Normalisation du Québec (BNQ) |

other sources, some included in our paper, notably [Chaplier \(2015\)](#). This author provides a detailed description of the animist ontology of the Cree through an ethnography that she produced in the community between 2005 and 2013.

We also consulted two scholars who have done research using anthropological approaches with the Cree community for many years to ensure our interpretations of Cree ontology adequately represent their reality. We sent the portion of our paper concerning Cree ontology to these scholars to check the viability of our interpretations. They provided some minor suggestions – which we incorporated into the paper to strengthen our analysis – and affirmed that our interpretations properly reflect their understanding of the Cree reality, culture, and experiences.

In sum, considering the number of different sources consulted for the paper as well as the input of knowledgeable scholars, we are confident in the interpretation we present of the ontological view of the Cree community. That being said, it is important to note that it is not our intention to speak for the Cree. We use the relationship of HQ and the Cree as a context to make us, Westerners, aware that other ways of conceiving nature and its relationship to humanity exist, and that these alternative conceptions should be considered in sustainability standards.

4. Case study

4.1. Actors

4.1.1. Hydro-Québec (HQ)⁸

Founded in 1944, HQ seeks to develop and promote Quebec's hydroelectric resources. Its head office is located in Montreal and its sole shareholder is the Quebec Government. Nationalized in 1963, the company has since established a monopoly in Quebec's electricity production, transportation, and distribution. HQ had more than 20,000 employees in 2014 and recorded sales of CAD \$13.6 billion, while paying out substantial dividends to the Government of Quebec. Although HQ generates energy from different sources, such as wind power and biomass, 99 percent of its electricity is generated from water, with a total installed capacity of 36,643 MW in 2014. HQ's hydroelectric facilities include 62 generating stations and 27 large reservoirs. It is a world leader in hydroelectricity and the largest hydroelectricity producer in the world. A portion of its electricity production is exported to the United States and other Canadian provinces. As an important Western organization, the culture of HQ is dominated by the naturalist ontology prevailing in Western societies as our analysis will show.

4.1.2. The Cree

The Cree is one of the largest Indigenous community in Canada, with people who have lived on the James Bay territory for millennia ([Feit, 2004](#)). This Indigenous community has an animist ontological view of nature that results from their everyday hunting practices on the land and a deep knowledge of their environment ([Ly, 2010](#)). For the Cree, nature and society are one, having the belief that “the animals that they hunt live in social groups similar to [them]” ([Descola, 2013, p. 137](#)) and have “attributes in every way identical to those of humans, such as reflexive consciousness, intentionality, an affective life, and respect for ethical principles” ([Descola, 2013, p. 14](#)). Therefore, within this tradition, their territory is above all populated by humans, but also by non-humans also possessing souls and intentions ([Heit, 2000](#)). This passage of a private document obtained from the Cree community and written by The Grand Council of Cree describes this ontological perspective ([2002, p. 11–12](#)):

Life is tied and connected to the land. Everything has a spirit. Eeyouch (Cree) and all the peoples of the world are connected to the spirit of the land. [...] All animals and plants, all natural forces are personalized in the Cree mind and spoken of in the Cree language in the personal form. These natural forces make decisions, just as people do.

Also, the Cree do not conceive of their quality of life in the same manner as Western technocrats ([Findlay & Wuttunee, 2007](#)). For example, the expression “myupimaatisium” not only refers to health, but a physical well-being in harmony with one's community and environment ([Adelson, 2000](#)). This animist ontology stems from the cumulative experience and direct contact between Crees and the environment over long periods of time ([Roué & Douglas, 2002](#)). It involves the relationship between living beings (including humans) and their environment within non-industrial and less technologically advanced societies ([Berkes, 1993, p. 3](#)).

⁸ See <http://www.hydroquebec.com>.

Until the end of the 19th century, the Cree and non-Indigenous lived in harmony, but significant changes took place with a series of uncompromising federal assimilation and paternalistic policies (Lemieux, 2007). These once nomadic Indigenous people were forced to become sedentary and adopt the way of life of Western societies (Lepage, 2002; Scott & Morrison, 2004; Scott, 1998). The effect of this changing environment on the Cree is well depicted in another private document obtain from this community (Cree Nations of Eeyou Istchee, 2011, p. 16): “For thousands of years, our identity was shaped by our relationship to the land, the animals and one another. The challenge facing us today is how to be Cree in this rapidly changing world.”

4.2. James Bay hydroelectric development

4.2.1. Background and description

During the 60s and 70s, HQ initiated significant hydroelectric dam projects in an effort to respond to Quebec's growing energy needs. Among the company's many hydroelectric initiatives, the James Bay Hydroelectric Development drew the most attention due to the size and scope of the disruptions involved. Known as “the project of the century”, James Bay became the largest hydroelectric complex in the world. Through the James Bay Development Corporation (SDBJ), the intention of Quebec Government was to develop a vast and practically undeveloped portion of the territory made up of some 350,000 km² located in James Bay between the 49th and 55th parallels in northern Quebec. The territory was home to fewer than 31,000 inhabitants, including some 16,000 Cree⁹ who traditionally lived as nomadic hunters-gatherers-fishermen divided into nine communities, both inland and along the James Bay coast. This study only considers the relationship between HQ and the Cree, as it represents the most contentious relationship surrounding the James Bay Hydroelectric Development.

In 1971, the Cree learned from the newspapers that their territory would be subject to large-scale hydroelectric development, all without warning or any environmental impact assessment (Desbiens, 2004; Niezen, 2016). According to the media, the development would flood a significant portion of their hunting grounds and threatened to significantly alter their way of life, especially for those living in villages downstream from the hydroelectric installations. The Cree sought in vain to be informed and consulted during the development (Niezen, 2016). At the time, no one expected any opposition to form (not the managers of the SDBJ or Hydro-Québec, nor their lawyers), but opposition nonetheless came from the Cree and certain nature conservation groups. A protracted legal battle ensued between the Cree and HQ that essentially held irreconcilable views. The Cree believed that their territory would be flooded, that the fauna would disappear and that their culture would be threatened. HQ believed that their hydroelectric requirements took precedence, that no ecological catastrophe would occur and that the Cree had already adapted to their presence. The establishment had difficulty accepting the clear ecological and environmental evidence. Various experts were enlisted: engineers, biologists, anthropological ecologists, hydrometeorology and hydrodynamics specialists, as well as caribou experts, trappers and Crees. It became a battle of experts. Among other requirements, the Cree had to provide historical proof of their occupation of the vast territory for the past hundreds of years. After a series of legal twists and turns, often unfavorable to the Cree, political logic prevailed and the James Bay and Northern Quebec Agreement (JBNQA) was signed in 1975. With this agreement, the Government of Quebec obtained the right to develop the hydroelectric, mineral, and forest resources of Northern Quebec. In return, the Cree were granted exclusive rights over territories covering 5544 km². This agreement led to the construction of the first hydroelectric station, the Robert Bourassa Dam commissioned in 1979, followed by the construction of seven other stations, the latest brought into service in 1996 (Hydro-Québec, 2018).

In the early '80s, the conflict reignited with the announcement of additional hydroelectric development in the region. After almost two decades of battles between the Cree and the government, a new agreement was signed in 2002, the “Peace of the Braves” (Oblin, 2007), allowing the Cree to consolidate their territorial claims while HQ received the authorization to pursue the development of the hydroelectric potential of the James Bay territory. This pact notably led to the Eastmain/Sarcelle/Rupert hydroelectric project (hereafter, Eastmain-Sarcelle-Rupert), which started at the end of the first decade of the 2000s. This project involved the partial diversion of the Rupert River flow (71 percent), one of the most important rivers on Quebec territory, and the construction and commissioning of the Eastmain-1/Eastmain-1-A (completed in 2012) and Sarcelle (completed in 2013) hydroelectric stations on the James Bay territory. It also included the construction of two power lines and the relocation of three 735-kV transmission line sections. The Eastmain-Sarcelle-Rupert project required an investment of CAD \$5 billion and the employment of 5500 workers. Once completed, this project allowed HQ to add 1398 MW to its annual output (Hydro-Québec, 2018). This second phase of the James Bay territory development put the important issues related to the hydroelectric projects in the region, especially its impact on the Cree community, back into the spotlight.

4.2.2. Environmental and social impacts

Numerous studies, focusing on environmental and social impacts, showed the effects of the different James Bay hydroelectric projects on the Cree (e.g., Blaser, de Costa, McGregor, & Coleman, 2010; Chaplier, 2015; Hornig, 1999; Niezen, 2016; Papillon & Sénéchal, 2011).

⁹ Other habitants of the James Bay territory includes non-Indigenous people and the Inuit, another Indigenous community.

Although the greenhouse gas emissions of hydroelectric energy are marginal relative to those of thermal stations operating with coal and natural gas, the environmental impact of the hydroelectric infrastructure construction on the James Bay territory remains important. These impacts mainly involved the disruption of flora and fauna due to the construction of dams that divert the flow of rivers and flood the surrounding lands (Niezen, 2016; Peloquin & Berkes, 2010; Royer & Herrmann, 2013). Overall, three major rivers, including the Rupert, have been diverted, and the flow of half a dozen rivers was substantially affected (CRRNTBJ, 2010). It was known that priming the James Bay hydroelectric works along significant portions of the territory would severely damage the flow of the rivers, their banks, biodiversity, and ecosystems due to the altering of the hydrological, thermal, and sediment regimes (Koutouki, 2010). It was also known that the projects would result in greenhouse gas emissions from reservoirs and the bioaccumulation of methyl mercury in the food chain (Koutouki, 2010). The flooding of vast territories was substantial, with more than 10,000 km² of the boreal forest flooded as a result (Hydro-Québec, 2018). This led to the release of carbon dioxide and methane (greenhouse gases) caused by the decomposition of organic materials. The biggest impact came from the production of mercury and other toxic elements (Schetagne, Therrien, & Lalumière, 2013). Intense bacterial activity due to the presence of submerged vegetation inside the new reservoirs transforms elemental mercury into toxic methyl mercury, which accumulates in the flesh of edible and piscivorous fish, along with the humans and animals that eat them. In boreal regions, this process normally lasts 20–30 years. Effects of the James Bay territory hydroelectric development on the fauna were also substantial. While some species, like the caribou, have been relatively unaffected by this development, others, such as Canada geese, were more significantly harmed (Peloquin & Berkes, 2010; Royer & Herrmann, 2013). A report on public consultations held following the completion of Eastmain-Sarcelle-Rupert project mentioned the possible disappearance of sturgeon in certain areas, changes in the migration patterns of geese, a marked decrease or even the disappearance of waterfowl in some sectors, and a major decrease in the presence of beavers (COMEX, 2013).

Although this hydroelectric development had negative environmental effects, the greatest impact involved the consequences on Cree land use and territorial organization. An entire way of life that had subsisted for thousands of years was destroyed, and few of them received the “civilized” benefits promised by HQ (Perreault, 2011). For example, the James Bay Hydroelectric Development constructed 2000 km of roads, six airports and seven villages (Hydro-Québec, 2018). This infrastructure was considered by some isolated Cree communities in James Bay as a means to increase access to hunting grounds and encourage commercial and social exchanges with cities in the south. However, it instead contributed to dismantling the Cree’s way of life and destroying the traditional organization of villages, including the hunting, fishing, and trapping lifestyle in which families co-operate with one another and live in close relationship with the natural environment (Casu, 2018; Mulrennan, Mark, & Scott, 2012; Peloquin & Berkes, 2010). The document on public consultations held following completion of the Eastmain-Sarcelle-Rupert project reports the major impact of this hydroelectric project on the way of life of the Cree community: trappers were no longer able to ensure all families had food throughout the year (COMEX, 2013). There was also a substantial reduction in social cohesion in and between communities affected by the drop in activities such as fishing and hunting, which were intended to bring people together (COMEX, 2013). The hydroelectric development on the James Bay territory affected the Cree traditional way of life to a magnitude “they had never anticipated [...]. The isolation that the Cree once lived in, as well as living off the land, brought them a sense of pride and community independence. They are now confronted with the realization that it will no longer be possible to go back” (COMEX, 2013; p. 22).

These transformations created social instability and social problems began to develop. Alcohol and drug abuse, family violence, and poor nutrition were now part of “their world” (Niezen, 2016; Papillon & Sénéchal, 2011). Perreault (2011) reports that, today, Indigenous peoples in Canada, including the Cree, are three times more likely than non-Indigenous to be victims of some form of violence. Also, Indigenous males in Canada are seven times more likely than non-Indigenous males to be homicide victims (Statistics Canada, 2018). As for other Indigenous communities, Cree quality of life remains well below that of the non-Indigenous population (Papillon & Sénéchal, 2011). A report of the Cree Board of Health and Social Services of James Bay (CBHSSJB) (2015a) showed that although the life expectancy of the Cree increased during recent decades, it remains below the Canadian average. The Cree rate of hospitalization is higher than for non-Indigenous for almost all health conditions, the prevalence of diabetes is of particular concern at more than three times higher than for non-Indigenous Quebec. This report also showed that Cree suicide attempts and ideation are ten times that found for non-Indigenous people. Moreover, only 6 percent of Indigenous Canadians obtain university diplomas, compared to 28 percent for non-Indigenous (Statistics Canada, 2017). More than half the Cree population aged 15 years and older has not completed secondary school (Board, 2018). A 2013 survey of Cree students attending high schools shows that smoking, alcohol and drug consumption, and gambling are well above the rate of other high school students in Canada (CBHSSJB, 2015b). Furthermore, the Cree unemployment rate is about twice the Canadian average (Statistics Canada, 2017). While agreements have been signed with HQ in an effort to promote Cree employment and business opportunities, the Cree remain largely dependent on governmental transfers through various forms of income support and public service employment (Papillon & Sénéchal, 2011).

In sum, the James Bay Hydroelectric Development has had long-lasting impact on the Cree and their environment. The most recent Eastmain-Sarcelle-Rupert project, including the diversion of the Rupert River flow and the construction of two major hydroelectric stations, means these issues are still important and ongoing for Cree community. Also, the growing awareness of these impacts on Indigenous communities that have emerged from part of the population at the same time as the development of this project, as reported by numerous articles published in newspapers during that

period, means that this is still significant for the wider society. This hydroelectric development is therefore an interesting case study to examine organizational transparency in sustainability performance reporting as it offers deep insights into sustainability challenges and implications. How does HQ report the environmental and social impacts of its activities on the Cree community? What ontology prevails in the organization's sustainability performance reporting? What are the consequences of such reporting practices? This is what we will now examine.

5. HQ's sustainability reporting

5.1. Framing sustainability performance discourse

In light of our case study, we now examine how GRI guidelines frame HQ's discourse surrounding sustainability performance. More specifically, drawing on the ideology of numbers, we examine how the disclosures of economic, environmental and social impacts of the James Bay Hydroelectric Development on the Cree leaves certain aspects of sustainability in the shadows.

5.1.1. HQ's sustainability performance reporting for the Cree

The G3 and G3.1 guidelines used by HQ to disclose its sustainability performance include several indicators that may help the organization capture and measure its impacts on Cree community. Specific information is reported in the various sections of the reports which usually begin with a global presentation of the organization and its governance. This section includes a materiality analysis presenting the various issues for HQ of which Indigenous communities, including the Cree, have been presented as one of the most important. It also includes the 2009–2013 sustainable development action plan which, surprisingly, does not include any objective regarding Indigenous communities despite their importance for HQ.¹⁰ Other sections include the energy portfolio of the organization, environmental protection, social commitment, relations with stakeholders, customer service, and human resources development. Information on the Cree is also included within a specific section of the sustainability reports presenting the development and evolution of the project being implemented during this period on the James Bay territory, namely the Eastmain-Sarcelle-Rupert project. However, the quantity of information reported by HQ in line with Eastmain-Sarcelle-Rupert is very limited, starting from about a half a page in 2009 up to two pages at the end of the project in 2013. The different GRI economic, environmental, and social performance indicators related directly or indirectly to the Indigenous communities, including the Cree, and the reporting of these indicators in their sustainability reports between 2009 and 2013 are summarized in Table 3. We will now consider them.¹¹ Although only a few excerpts from HQ's reports are presented, it is important to note that these excerpts adequately reflect the content of these reports with respect to the Cree community. What is disclosed in the reports is no more elaborate than what we present in our results.

Economic performance. The G3 and G3.1 guidelines include three specific economic indicators that may be related to the Cree (directly or indirectly):

- EC1 – Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments;
- EC6 – Policy, practices, and promotion of spending on locally-based suppliers at significant locations of operation;
- EC7 – Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.

These indicators unsurprisingly incite organizations to provide quantified measurements of their economic performance, such as revenues, costs, earnings, and spending. HQ discloses these economic indicators quite extensively within its sustainability reports. Regarding the economic value generated by HQ for the community (EC1), the organization discloses the different taxes (capital, public, municipal, school, etc.) and royalties paid to the various levels of government, and the annual expenditure in the James Bay region. For instance, HQ presents its expenditure to construct facilities and infrastructure for the local communities, including the Cree:

27 km of access roads, 37 km of ATV trails and 22 km of snowmobile trails were developed. (HQ, sustainability Report 2012, p. 23).

¹⁰ This sustainable development action plan includes ten actions: (i) build hydropower projects and contribute to the development of wind power, (ii) increase the capacity of existing hydroelectric generating stations, (iii) step up energy initiatives, (iv) continue helping low-income customers, (v) reduce transport-related GHG emissions, (vi) promote reduction at the source, reuse and recycling, (vii) establish specifications for sustainable procurement, (viii) inform and educate employees regarding sustainability and the company's approach, (ix) improve vegetation control methods on the distribution system to better protect biodiversity and (x) organize sustainable events and promote responsible management of events sponsored by Hydro-Québec.

¹¹ HQ is involved with many different Indigenous communities, and report essentially the information related to these communities in an aggregate manner, except for some information reported for a specific community. When reported, the information specifically related to the Cree is presented. Otherwise, the information presented relates to the Indigenous communities as a whole, including the Cree.

Table 3Sustainability performance reporting related to Indigenous communities between 2009 and 2013.¹⁶

| GRI performance indicators | Examples of information reported | | | | |
|---|--|--|---|---|--|
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| <i>Economic</i> | | | | | |
| EC1 – Direct economic value generated and distributed | Capital, public, municipal, school, and other taxes, water-power royalties ¹⁷ Annual expenditure in the Estmain-Sarcelle-Rupert region | Capital, public, municipal, school, and other taxes, water-power royalties ¹⁶ | Capital, public, municipal, school, and other taxes, water-power royalties ¹⁶ | Capital, public, municipal, school, and other taxes, water-power royalties Number of meetings of the economic spinoffs committee which includes Indigenous members | Capital, public, municipal, school, and other taxes, water-power royalties ¹⁶ Construction of Cree hunting and fishing camps |
| EC6 – Procurement on locally-based suppliers | Amount paid out to independent Indigenous companies or workers for goods or services | Amount paid out to independent Indigenous companies or workers for goods or services Percentage of wind power purchase from Indigenous population / total purchase | Amount paid out to independent Indigenous companies or workers for goods or services | | Awarding of contracts to Indigenous companies |
| EC7 – Local hiring | Number and/or percentage of Indigenous employees | Number and/or percentage of Indigenous employees Number of Indigenous who took part in information and employment training workshops Presentation of future perspectives on employment in Indigenous schools affected by the HQ projects | Number and/or percentage of Indigenous employees Number of Indigenous students registered in a college-level natural environment program designed by the <i>Cégep de Saint-Félicien</i> and supported by HQ in Chibougamau | Number and/or percentage of Indigenous employees Survey on the integration of Indigenous employees at the construction site | Number and/or percentage of Indigenous employees Level of appreciation of Indigenous employees of their workplace |
| <i>Environmental</i> | | | | | |
| EN12 – Impacts on biodiversity | Number of acres of land cleared due to the realization of the Eastmain /Sarcelle/ Rupert project Follow-up on fish mercury levels | Monitoring of the presence and distribution of the anadromous lake cisco | Inventory of the Breeding pairs of raptors to describe their use of the diversion bays and the reduced-flow section during nesting | Analysis of the effect of the winter instream flow regime on whitefish egg incubation | Monitoring of changes in breeding populations for special-status or special-interest bird species |
| EN13 – Habitats protected or restored | Development of spawning grounds and wetlands | Creation of spawning grounds and fish restocking Seeding the sensitive portion of the exposed banks of the Rupert with herbaceous plants to encourage plant regeneration | Restoration of land affected by the Eastmain /Sarcelle/ Rupert project | Follow-up of spawning grounds and fish restocking Restoration of land affected by the Eastmain /Sarcelle/ Rupert project | Development of spawning grounds |

Table 3 (continued)

| GRI performance indicators | Examples of information reported | | | | |
|---|--|---|---|--|--|
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| EN14 – EN26 – Management of impacts on biodiversity | Environmental inventory projects carried out in concert with Indigenous communities | Indigenous peoples' advisory committees organized to conduct environmental studies | Indigenous participation in environmental monitoring programs | | Indigenous participation in environmental monitoring programs |
| <i>Social</i> HR9 – Respect of indigenous peoples' rights | Number of agreements signed with Indigenous communities for various HQ projects | | Number of agreements signed with Indigenous communities for HQ projects various | | Number of agreements signed with Indigenous communities for various HQ projects |
| S01 – S09 – S10 – Management and mitigation of operation impacts on communities | Water supply project follow-ups for the Eastmain Cree community Funds to help promote the Indigenous way of life Contributions to socioeconomic development of Indigenous communities Use of newsletter and radio broadcast to inform Cree community about project progress | Implementation of mitigation measures for the safety and well-being of communities regarding HQ projects Consultation with the Indigenous population through surveys regarding their preoccupations/satisfaction with hydroelectric projects Meeting with Indigenous committees to provide follow-up on conditions and measures to reduce environmental impacts | Beaver trapping in collaboration with Indigenous trappers and the redistribution of game within Indigenous communities Creation of a joint committee to monitor traditional fishing conditions Survey of Indigenous workers to determine the socioeconomic impacts of their participation on construction sites Creation of a journal to inform Indigenous committee of construction site activities | Indigenous consultations to establish a future snowmobile path Harvesting of medicinal plants in future reservoirs Consultation with the Indigenous population through surveys regarding their preoccupations/satisfaction with hydroelectric projects Presentation and discussion of environmental impact projects with Indigenous communities | Beaver trapping in collaboration with the Indigenous trappers and the redistribution of game within Indigenous communities Identifying Indigenous family problems caused by workers in remote locations Presentation and discussion of environmental impact projects with Indigenous communities |

¹⁶ In this table, the term Cree is used when HQ presents in its sustainability reports specific information related to Cree people. Otherwise, the term Indigenous is used when HQ presents aggregated information related to the different Indigenous communities with which the organization is involved, including Cree.

¹⁷ Includes but is not limited to Indigenous communities.

By presenting this information, HQ complies with GRI guidelines that encourage disclosing community investments. In doing so, much importance is given to numerical data, such as kilometers of roads and trails developed, i.e., data that are standardized and comparable. However, although this measurement of local investment in infrastructure informs us of HQ initiatives to mitigate the impact of their projects on communities (or HQ outputs), it does not help us understand the outcomes of these initiatives on the community's well-being. Are these roads and trails useful for the Cree? Do they help Cree community maintain or enhance their quality of life? Such questions remain unanswered.

This focus on output measurement is also visible in HQ's disclosures on procurement from locally based suppliers (EC6). Indeed, as suggested by GRI performance indicators, emphasis is put on the amount spent on local purchasing and, more specifically, on Indigenous companies and workers for goods and services. HQ notably discloses initiatives undertaken to support local purchasing:

An agreement to maximize the regional economic spinoffs of the Eastmain-1-A/Sarcelle/Rupert project was signed with ComaxNord.¹² To date, over \$188 million has been disbursed to contractors and workers in the Nord-du-Québec region, including \$40 million in 2009. (HQ, Sustainability Report 2009, p. 35).

We issued a call for the purchase of two 250-MW blocks of Quebec-generated wind power, one reserved for Aboriginal¹³ projects [. . .]. (HQ, Sustainability Report 2009, p. 13).

Hydro-Québec purchased \$83 millions in goods and services from Aboriginal companies, organizations and independent workers. Work for Société d'énergie de la Baie James was valued at \$186 million. (HQ, Sustainability Report 2010, p. 30).

Again, the organization presents its initiatives on a standardized and comparable basis, relying on millions of dollars or the number of megawatts purchased to make its contribution visible to local communities. And, once more, HQ highlights its outputs, more specifically quantified local purchasing, leaving the outcomes that this purchasing had on Indigenous companies, including Cree companies, and the community's well-being unexplored.

Following GRI economic indicators, HQ also systematically disclosed information on local hiring (EC7), including the percentage of Indigenous employees (from 0.8 percent in 2009 to 1.0 percent in 2013) and the number of Cree employed in James Bay (from 41 in 2009 to 59 in 2013) in every one of its sustainability reports. Moreover, different initiatives to support the training of future workers, including Crees, are disclosed, as well as information related to Cree worker satisfaction and health and safety:

In Chibougamau, Hydro-Québec supported a new college program on natural environment technology. The program was designed by the Cégep de Saint-Félicien and nine students, mostly Crees, were registered in it last fall (HQ, Sustainability Report 2011, p. 29).

Cree workers appreciated the measures taken to facilitate their contact with their families. Some of these measures were: gathering places, the opportunity to eat traditional foods, family visits and Cree radio broadcasts at the workcamps (HQ, Sustainability Report 2013, p. 32).

One could argue that, in these disclosures, HQ goes beyond GRI expectations, expanding information regarding procedures on local hiring. However, the information provided is still limited and focused on measurements. Indeed, emphasis is put on the number of students registered in a training program or on measures to satisfy Cree workers. Nothing is mentioned regarding program dropouts, potential jobs after completing the program or how the measures taken to facilitate Cree workers' contact with their families actually increased their quality of life. In other words, HQ's economic disclosures, which follow GRI guidelines, focus on the measurement of the organizational outputs rather than on the potential outcomes for the Cree.

Environmental performance. Given the importance of the fauna and flora for Cree community, four different environmental performance indicators of the G3 and G3.1 guidelines may be more directly related to them¹⁴:

EN12 – Significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected area;

EN13 – Habitats protected and restored;

EN14 – Strategies, current actions and future plans for managing impacts on biodiversity;

EN26 – Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation.

HQ discloses extended information about the impact of the Eastmain-Sarcelle-Rupert project on biodiversity (EN12), including the clearing of the vegetation made before the impoundment of the reservoirs, the level of the in-stream flow and the presence of wood debris in the rivers affected by the dams, and the impact on the population of certain fauna and flora species:

Monitoring of anadromous lake cisco to verify its presence upstream of the Smokey Hill rapids and its spatial distribution in spawning grounds downstream of the rapids (in the fall), as well as larvae abundance during downstream migration (spring) (HQ, Sustainability Report 2010, p. 18).

Breeding pairs of raptors were inventoried to describe their use of the diversion bays and the reduced-flow section during nesting. Result: osprey, bald eagles, red-tailed hawks and northern harriers were more abundant than in 2002 (HQ, Sustainability Report 2011, p. 25)

Two years of follow-up have shown that the winter instream flow regime did not have any effect on whitefish egg incubation. (HQ, Sustainability Report 2012, p. 23).

A follow-up program for special-status or special-interest bird species was established to track changes in breeding populations. An inventory was conducted in 2012, the first year of environmental follow-up on the short-eared owl, great grey owl and Bonaparte's gull that still frequent this area. (HQ, Sustainability Report 2013, p. 38).

¹² ComaxNord is a committee with a mission to develop strategies to maximize economic benefits for businesses and workers of Northern Quebec.

¹³ Although the term *Indigenous* is used in this paper, we conserved the term *Aboriginals* to respect the terminology used by HQ in its sustainability reports.

¹⁴ The G3 and G3.1 guidelines cover other aspects of environmental impact, including energy and water consumption, air emissions, waste, and effluents. However, these performance indicators have indirect and very little impact on Cree community given the nature of the project undertaken by HQ in the James Bay region.

HQ still puts much emphasis on measurement in its approach to biodiversity impact disclosures. For instance, the organization refers to an “inventory” of species or “result” of its measures such as “more abundant” or “any effect”. However, the organization provides limited information on the impacts beyond the number of species. For instance, the fact that “osprey, bald eagles, red-tailed hawks and northern harriers were more abundant than in 2002” or that “the winter instream flow regime did not have any effect on whitefish egg incubation” does not mean that HQ activities had no consequences on the species and their natural habitats. Their use of GRI performance indicators leave such consequences in the shadows.

Similarly, HQ presents different initiatives undertaken to protect and rehabilitate habitats and sites during and after the completion of the Eastmain-Sarcelle-Rupert project (EN13), focusing on measurement. For instance, in its 2012 sustainability report, HQ resorts to different kinds of figures to explain its tree planting and spawning grounds initiatives:

More than 241 ha of land affected by the project was restored: 1,080,000 green alder, jack pine and poplar seedlings were planted over 185 ha, and hydroseeding and machine seeding were done over some 56 ha. (HQ, Sustainability Report 2012, p. 23).

New spawning grounds (200 m²) for brook trout were developed to make up for the ones lost in 2010. (HQ, Sustainability Report 2012, p. 32).

The organization makes use of quantified and comparable measures, such as the number of trees planted, the number of hectares of land or square meters of ground seeded, to promote its environmental performance. However, in doing so, the organization fails to disclose the consequences of its activities on biodiversity. Creating new spawning grounds or planting new trees may not rehabilitate biodiversity and may have important effects on natural faunal habitats.

HQ also presents some initiatives taken to manage its impacts on biodiversity for the Cree (EN14–EN26). For instance, in its 2009, 2011, and 2013 reports, the organization discloses the creation of various committees ensuring a liaison with Cree communities and collaboration on sustainability issues:

Participation in the Eastmain-1-A/Sarcelle/Rupert environmental follow-up program is coordinated by the Monitoring Committee, which is a joint forum that promotes Cree participation in program design and execution (HQ, Sustainability Report 2013, p. 42).

As required by GRI indicators, HQ here explains how the organization tries to manage and mitigate the impacts of its operation on the Cree. Nevertheless, and once again, this disclosure provides limited information on the actual impacts on biodiversity for the Cree. In sum, by presenting these environmental initiatives and measures, HQ respects the codification of the GRI framework providing no more or less information than recommended in this framework, potentially glossing over significant outcomes of its activities.

Social performance. Four different G3 and G3.1 social performance indicators may be specifically related to Cree community:

HR9 – Total number of incidents of violations involving the rights of Indigenous people and actions taken;

S01 – Percentage of operations with implemented local community engagement, impact assessments, and development programs;

S09 – Percentage of operations with significant potential local community engagement, impact assessment, and development programs;

S10 – Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.

Interestingly, although related to social performance, these GRI indicators emphasize measurement, probably to facilitate comparison. HQ provides some information on the social impacts of its activities. However, the organization seems to deviate slightly from GRI guidelines when it comes to measuring incidents of violations involving the rights of Indigenous people (HR9). Indeed, the number of these incidents is not explicitly disclosed. This could be because the organization did not experience such violations or because this information is included in the amount of non-compliances reported by HQ. However, no specific information on the nature of such non-compliances and the manner in which they were corrected was provided. For example, in its 2011 report (p. 25), HQ only mentions that: “Six legal non-compliance notices were received and corrective measures have been implemented.” Another explanation for the absence of disclosure on this indicator may reside in the numerous agreements signed between HQ and the Indigenous communities that may potentially regulate the actions of HQ and the expectations of Indigenous communities, reducing the risk of violations involving the rights of Indigenous people. HQ refers to these agreements in three of its reports, notably in the 2013 report:

Since 1975, Hydro-Québec has signed some 30 agreements with Aboriginal nations and communities regarding development projects. These agreements enable them to participate in project construction and the environmental follow-up programs and to benefit from the economic spinoffs (HQ, Sustainability Report 2013, p. 41).

Aside from this one, HQ complies with all other GRI social performance indicators, reporting how the organization manages and mitigates the impacts of its activities on communities. More specifically, HQ sustainability reports explain the initiatives undertaken to provide information on the negative environmental impacts of the Eastmain-Sarcelle-Rupert project to the Cree and to consult them in order to mitigate these impacts (S01 – S09 – S10):

Six Cree communities were visited for meetings with the tallymen and land users directly affected by the project to inform them about the follow-up on commitments and the work carried out in their area. The Crees are consulted at every stage of development of the follow-up measures and participate in implementing many of them (HQ, Sustainability Report 2010, p. 21).

HQ also discloses different actions implemented to prevent and mitigate these negative impacts on Cree community and contribute to maintaining their traditional activities:

A joint committee was created to oversee measures to maintain traditional dip-net fishing conditions for anadromous lake cisco (HQ, Sustainability Report 2011, p. 24).

Hydro-Québec rehabilitated sites, enhanced the area affected by the project, preserved fishing activities and improved access to the area. The company also seeded 300 hectares to support goose hunting, and built two pools and boardwalks at Smokey Hill Rapids for traditional Cree cisco fishing (HQ, Sustainability Report 2013, p. 32).

Finally, HQ reports information about the Cree perception and satisfaction of the Eastmain-Sarcelle-Rupert project:

According to a survey conducted among the nine Cree communities, six of which are affected by the project, 21% of respondents stated the project had a negative impact on their lives, mainly due to changes in the land, while 18% said it had had a positive impact, mainly due to job creation (HQ, Sustainability Report 2010, p. 10).

These social performance disclosures show that limited information is provided to understand the impacts of HQ activities on Cree community. As for the economic and environmental performance indicators discussed above, and as encouraged by GRI guidelines, the focus is on organizational measures (or outputs) rather than on actual outcomes for the communities. For instance, mentioning the creation of “a joint committee” to maintain traditional activities or that “21% of respondents stated that the project had had a negative impact on their lives, mainly due to changes in the land” does not say much about Cree recriminations or what has been done to overcome them and increase community well-being.

Globally, one could argue that HQ has fully disclosed its sustainability performance related to the Cree between 2009 and 2013, providing information on all the different GRI performance indicators related to the Indigenous community discussed above, with the exception of HR9 – total number of violation incidents involving the rights of Indigenous people and actions taken. That said, if we can conclude that HQ’s sustainability reporting related to the Cree for the period is in (almost) full compliance with GRI guidelines, we can also wonder what is left in the shadows in following these technocratic guidelines.

5.1.2. Shadowing negative sustainability impacts on the Cree

Even though HQ respects GRI guidelines and reports lots of information on its sustainability performance, little of the information disclosed is related to the impacts of HQ’s activities on Cree well-being and quality of life. Several initiatives and practices measured by the performance indicators reported by HQ may contribute indirectly to community well-being, such as the consultation of Indigenous communities, purchasing from local suppliers, and Cree employment. Other reported information may, to a certain extent, contribute indirectly to Cree quality and way of life, such as the mitigation measures to reduce the environmental impacts of HQ’s operations and restoration of some natural habitats to support traditional fishing and hunting activities. However, the standardized performance indicators neither illuminate nor measure the Cree’ quality of life and well-being despite the notable impacts of HQ’s hydroelectric development on the Cree way of life. As discussed previously, the James Bay Hydroelectric Development destroyed the traditional organization of these communities and increased the level of unemployment, criminality, alcohol and drug abuse, family violence, suicide, and school dropout rates (Niezen, 2016; Papillon & Sénéchal, 2011). We believe that HQ should have, at minimum, addressed these aspects, which remain mostly absent in its 2009–2013 sustainability reports.

Building on the ideology of numbers proposed by Chelli and Gendron (2013), we argue that GRI standards and the institutional forces surrounding the use of this technocratic reporting framework contribute to leaving these social impacts in the shadows. Indeed, GRI guidelines seem to contribute to restricting the notion of sustainability performance by separating what HQ considers sustainability performance from what it does not (Contrafatto & Burns, 2013; Milne & Gray, 2013). This restriction is attributable both to the content and substance of the GRI. First, when we analyze the content of the GRI and, more specifically, sustainability performance related to local communities, none allow the capture and measurement of community well-being and quality of life directly. As previously noted, the economic and environmental performance indicators proposed by GRI guidelines provide only an indirect measure of the impact of the organization on local communities. Even the social performance indicators proposed by GRI guidelines fail to measure the well-being and quality of life of local communities.

Therefore, we argue that the performance indicators related to local communities are organization-centered (in contrast with community-centered), since the emphasis is put on the initiatives, actions, and operations completed by organizations and their potential impacts on local communities. In other words, the focus is on the measurement of the potential organizational outputs (prevention and mitigation of the impact of organizational operations on communities) in

detriment to reporting on the outcomes (community well-being and quality of life). Actually, for organizations following the GRI, it seems to be beyond their scope to measure and report community well-being and quality of life. Indeed, the GRI contributes to capturing the discourse of sustainability performance by separating what should be considered (organizational output) and what should not (outcome) and contributes to shape organizational behavior (Chelli & Gendron, 2013). Through codifications and numbers (a set of predetermined sustainability performance indicators), GRI guidelines create boundaries and frontiers. These limit the extent to which broader sustainability concerns are considered by the organizations, leading them to shadow part of the organization's sustainability performance, in our case, the well-being and quality of life of Cree community.

The content of the GRI may not only restrict the sustainability performance reported, but also its substance. The objective of the GRI is to guide organizations to report sustainability performance by following the performance indicators identified. While GRI performance indicators may contribute to increasing comparability, they may also contribute to limiting the "mindset" of organizations by getting them to think in terms of performance indicators, as seems to be the case for HQ. By presenting sustainability performance in terms of performance indicators, organizations may tend to provide quantitative measures, which seem more natural and easier to perform. Following Chelli and Gendron (2013), by promoting quantification and numbers, GRI guidelines contribute to making certain aspects of reality (easier to quantify) visible, while leaving others (more difficult to quantify) in the shadows. In other words, HQ's use of GRI guidelines may have contributed to restricting the scope of sustainability performance reporting to more easily quantified actions, initiatives, and impacts (e.g., number of roads and trails developed, number of trees planted, number of hectares of land seeded, number of agreements signed, etc.), leading the organization to shadow the part of its sustainability performance harder to quantify, in this case, the well-being and quality of life of Cree community (e.g., to what extent and how these roads and trails, trees, seeds, agreements are useful for Crees and contribute to maintaining, enhancing, or decreasing their quality of life).

In sum, this case study highlights how the GRI, a technocratic framework developed by experts and institutionally legitimized and reinforced, contribute to framing the scope of HQ sustainability performance through the ideology of numbers, defining the boundaries within which sustainability can unfold and restricting what can be said regarding impacts on the Cree community. Ultimately, this framework contributes to leaving part of the reality of sustainability related to the Cree community in the shadows.

5.2. Evoking the sustainability view

Drawing on Descola's ontologies, we now examine how HQ's sustainability reporting, based on GRI guidelines, evokes a naturalist ontology, contributing to silencing the Cree's animist ontology. If the ideology of numbers that permeates GRI guidelines frames what can be said about HQ sustainability performance, we argue that the naturalist ontology evoked in these guidelines shapes how HQ talks about sustainability.

5.2.1. The ontological view of HQ sustainability reporting

Our analysis of HQ sustainability reporting (and the underlying GRI guidelines) found their reports are predicated on a naturalist ontology that creates a boundary between humans and nature (non-humans). This distinction is made visible in the way HQ talks about its economic, environmental, and social performance. Here are three examples of HQ's naturalist view for each dimension of sustainability.

Economic performance. When discussing economic indicators in its reports, HQ puts much emphasis on the economic value generated by using natural resources distributed to the community on the Cree territory. For instance, in three of its reports (2009, 2010 and 2011), the organization discloses financial compensation paid to Indigenous communities, including the Cree:

To compensate for the residual impacts of its new transmission projects, particularly those related to landscape, Hydro-Québec pays 1% of the initial authorized value of the planned facilities to the affected communities under its Integrated Enhancement Program (IEP) (HQ, Sustainability Report 2010, p. 30).

By giving an economic value to natural resources – as suggested by GRI guidelines –, HQ highlights its utilitarian relationship with nature, perceiving landscape as an economic tool to enrich humans. In doing so, the organization fails to present the consequences of its activities on the Cree way of life.

Environmental performance. This desire to dominate nature is also evident in the way HQ discusses the actions taken to manage its impact on animal habitats. Indeed, as shown in the following excerpt, the discourse held by HQ seems to advocate that it is possible to replace animals' natural habitats by human-constructed habitats without generating too many negative consequences:

We finished the construction of 12,219 m² of spawning grounds: 8533 m² of multispecies grounds, 2060 m² for sturgeon, and 1626 m² for brook trout and lake trout. (HQ, Sustainability Report 2010, p. 18).

The discourse held by HQ seems to clearly distinguish humans from non-humans, with humans presented as "masters" of nature, able to recreate natural animal habitats. However, from an animist perspective, we could argue that even thousands

of square meters of engineered spawning grounds would not replace a natural habitat and would have important consequences on the animals' way of life.

Social performance. The naturalist ontology of HQ is also present in its social performance evaluation where the organization discloses different actions implemented to maintain Cree traditional activities. Again, the focus is on the utility of fauna for human purposes:

An inventory was made of 189 beaver colonies. Trapping in 113 of these colonies allowed Cree tallymen to benefit from significant economic spinoffs (HQ, Sustainability Report 2009, p. 23).

Six hunting and fishing camps were built for the Crees, along with two roads totaling 1.5 km and two ATV trails. Seven approach corridors were cleared close to goose hunting areas and navigation corridors were optimized (HQ, Sustainability Report 2013, p. 32).

Hunting and trapping are depicted here as simple economic activities that allow humans to profit from nature. However, for the Cree, hunting and trapping is not only done for economic purposes. It is a way of life. By presenting numbers of colonies, camps, corridors, and roads, HQ fails to present what is most important for the Cree in these traditional activities and their relationship to the land. Here is depicted a human desire to dominate nature, a distinction between humans and non-humans. Once more, HQ seems to fail to present its sustainability performance in light of alternative ontologies. In the next section, we discuss what HQ sustainability reporting could have resembled if the Cree's ontology had been considered.

5.2.2. Silencing the Cree's ontology

HQ hydroelectric development, which may seem to have limited impacts from a naturalist's point of view, had significant consequences for the Cree. These impacts are not discussed in the organization's sustainability reporting. Indeed, analyzing HQ activities from the Cree's perspective enables us to see that most consequences on the Cree community are silenced in HQ's sustainability reporting.

An important impact that is silenced in HQ reports is the consequences for the Cree of receiving financial compensation for the use of natural resources on their territory. The Cree animist ontology does not conceive quality of life and relationship to nature in economic terms. Here members of the Cree community explained, in newspapers, the problems linked to this compensation. These problems are not disclosed in sustainability reporting:

The river is forever changed, while compensation will end one day. In addition, it [the compensation] keeps people in a state of dependency. . . It's a lot of money. It fills our needs. Before, we had to fill our needs ourselves. . . Now there is no reason to learn. (Roger Orr, a member of the Cree community, in [Teisceira-Lessard, 2018](#))¹⁵

The financial compensation received from HQ changed the Cree way of life, notably by leaving the Crees with no reason to learn which, according to Mr. Orr, explains the extremely high dropout rate among the community ([Teisceira-Lessard, 2018](#)). Also, even though the financial compensation allowed the community to build sports complexes and arenas, diabetes has continued to rise among the Cree, as they could no longer exercise their traditional activities ([Montpetit, 2011](#)). The Cree's close relationship with nature has been disrupted by HQ's hydroelectric development and money is not adequate compensation. As another member of the community maintains:

For us, the Cree identity is deeply rooted in the territory. Once you have sold your territory, you have nothing left. And all the financial compensation in the world will not change anything. (Matthew A. Iserhoff, member of the Cree community, in [Montpetit, 2011](#))

From the Cree animist perspective, HQ activities had significant social impacts, such as the loss of traditions which resulted in high dropout rate and diabetes. These impacts are excluded from the organization's sustainability reports. If one can argue that HQ and the Government of Quebec did, in some sense, buy social order in compensating the Cree for the use of their natural resources and, in doing so, absolved themselves of all social problems, one can also argue that there are two perspectives regarding the Cree's quality of life. The naturalist and animist perspectives show us that the social consequences of HQ's hydroelectric development stem from the variety of ontological concepts surrounding sustainability performance. HQ failed to connect "social pathology" with large-scale development.

Another consequence of HQ's hydroelectric development unmentioned in sustainability reports is the impact of environmental disruption on nature, animals, and the Cree's way of life. For example, during the public hearings on the Eastmain-Sarcelle-Rupert project, members of the Cree community testified to the distress experienced by the elements of nature through this project as this excerpt illustrates: "The river is so sad since the dam has been built" ([COMEX, 2013, p. 22](#)). Others expressed empathy for animals that suffered from the project including habitat destruction or death ([COMEX, 2013](#)). Similarly, [Roué and Nakashima \(2002\)](#) stated a few years earlier that, according to the Crees they interviewed, the James Bay Hydroelectric Development has impacted creatures that live in the water, whether or not we can see them. The Cree place a high priority on the places where these creatures live and are worried about what will happen when they disappear. According to Davey Bobbish, leader of a Cree community, the loss of eelgrass due to the

¹⁵ Excerpts presented in this section were originally in French and were translated by the authors.

diversion of rivers has significant impacts on animals' natural habitats and on the relationship the Cree have with nature: "The way our kids are taught how to behave in the bay, even the names of the islands, the Cree terminology... that's what we're losing" (in [Weber, 2018](#)). In the same vein, during public hearings on the Eastmain-Sarcelle-Rupert project, a member of the Cree community explained how the diversion of rivers has important effects on the Cree way of life:

Eventually, we will lose all our rivers. Think of people. Is this the kind of heritage we want to leave to our children and grandchildren, no more rivers? What will they do? They will have nothing left; we will not leave them anything. What will we leave them apart from the diversion of all our rivers? What will remain for our people, our children, their grandchildren, and great-grandchildren? What will they do for hunting, for fishing? What will they do to pursue our way of living, the Cree way of life, if we lose all our rivers? If so, how would they survive? Will they live the way of life of the white man? (William Wapachee, former tallyman, in [Chaplier, 2015, p. 329](#))

Again, the impact of HQ activities on nature and, consequently, on Cree traditional activities are ignored in sustainability reports following GRI guidelines. While measurements proposed by these guidelines may help capture sustainability performance and facilitate comparative stakeholder analyses, the gain in comparability is made at the expense of removing the individual objects from their particular contexts ([Latour, 1999](#)). Institutionalization of the guidelines' dominant discourse arguably makes it difficult to consider other conceptualizations of sustainability performance. This seems to lead HQ to silencing the Cree's animist ontology by adopting the naturalist sustainability discourse promoted by GRI performance indicators, preventing any reconsideration of these ideas and perpetuating the status quo ([Laine, 2010; O'Dwyer, 2003](#)).

In sum, the naturalist ontology imposed by technocratic frameworks, such as GRI guidelines, shapes how organizations discuss sustainability. In following these frameworks, organizations fail to address important social aspects, such as community well-being, and fail to consider other ontological concepts of sustainability performance, such as the one embraced by the Cree community. As [Descola \(2008\)](#) argues, sustainability and biodiversity can only occur if they take into account the plurality of ontological perspectives.

6. Conclusion

The current study provides an inquiry into the impacts of GRI technocratic guidelines on organizational sustainability performance reporting. Using a case study of HQ and its relationship with the Cree, this study has addressed two concurrent objectives concerning: (i) an inquiry into how GRI guidelines frame sustainability reporting discourse; and (ii) an investigation of ontologies evoked and silenced in sustainability reporting following GRI standards. The existing literature criticized the ability of these standards to further sustainable development within organizations and help them become more accountable and transparent in their sustainability performance (e.g., [Boiral, 2013; Dingwerth & Eichinger, 2010; Joseph, 2012; Milne & Gray, 2013; Moneva et al., 2006](#)). This study furthers the debate by providing theoretical and empirical explanations regarding two main problems ensuing from the use of GRI standards: the shadowing of negative aspects and the silencing of alternative ontologies in the organizational sustainability performance reporting.

This study offers theoretical, empirical, and practical contributions to the literature. Our conceptual contribution to the debate develops deeper understanding of the ideology and ontology underpinning sustainability standards and highlights conceptualizations of sustainability silenced by these standards. Descola's ontological typology helped us to explain that the Western conceptualization of sustainability depicted in standards and HQ reports is not widely shared by other communities, such as the Cree. This theoretical framework therefore contributes to thinking on the modalities of sustainability to alleviate the silencing of alternative conceptualizations of sustainability. Sustainability performance should be examined not only in light of the Western ontological system, but also of the ontologies of those societies concerned. As well, the ideology of numbers allowed us to show the boundaries created by sustainability standards, which framed and limited what HQ could say regarding its impacts on the Cree community. Through usage of standardized and comparable measures, HQ reports left major social impacts of its hydroelectric development on the Cree in the shadows. Overall, our study provides a different theoretical explanation of organizational sustainability reporting practices, illustrating that the limited scope and incomplete picture of sustainability performance reported by organizations may be due to the use of reporting standards.

Our empirical contribution to the growing body of literature criticizing sustainability reporting standards provides a specific example of how these guidelines may contribute to the shadowing and silencing of certain aspects of reality. The case study of HQ and its relationship with the Cree was helpful in clearly illustrating how GRI standards constrained sustainability to mostly measured and economic aspects, ignoring the social impacts of HQ's hydroelectric development on the way of life and well-being of local communities. Our case study also highlights how HQ's attitudes toward sustainability performance were shaped by GRI guidelines in trying to follow all the rules and norms proposed in these standards. In so doing, our paper participates in the important debate on the relevance and effectiveness of sustainability reporting standards, demonstrating that GRI standards may fail to adequately support the sustainable development of organizations. It thus provides empirical support to the conclusion of [de Colle et al. \(2014\)](#) that sustainability reporting standards may represent an obstacle toward corporate sustainability development "if they are developed and implemented uncritically and with an excessive emphasis on compliance" (p. 190).

Moreover, our paper empirically extends literature on the interrelation of Indigenous peoples in the development of sustainability accounting practices by showing that ignoring the voice of Indigenous peoples may contribute to the Western domination of sustainability accounting. Our chosen context shows that this domination restricts the scope of sustainability performance reporting regarding Indigenous communities. Therefore, our paper highlights the importance of including different ontological conceptions of sustainability, notably one shared by Indigenous peoples, to better integrate the understanding of the human-nature interrelationship in cultures other than the Western ones and how these interrelationships can inform sustainability reports (Gallhofer, 2018).

Our practical contribution has significant implications for organizations, demonstrating the importance of ensuring that managers understand the discriminating frontiers and boundary effects surrounding use of sustainability performance indicators proposed by the reporting standards. Indeed, managers should be aware that ideology and different ontological conceptions about sustainability may influence the orientations and limits of the sustainability performance reported by an organization. Our paper suggests managers must develop a critical approach to the use of sustainability performance indicators in order to overcome these major drawbacks. Blindly following technocratic frameworks, such as GRI guidelines, can lead organizations, perhaps unintentionally, to limit the sustainability information disclosed. Such guidelines tend to confine organizations to “preformatted” ways of conceiving sustainability that may create a loss of transparency and critical reflexivity regarding the impacts of their activities. Adopting a more critical approach may help managers be more conscious of the limits of sustainability reporting standards and provide more complete and transparent corporate sustainability performance reporting. This could help avoid significant negative consequences to corporate image and reputation if organization sustainability reporting is perceived to shadow part of the reality and silence the voices of stakeholders. Our paper also raises practical questions for sustainability standard setters who should rethink their normalization process to provide a broader perspective on sustainability, which should include ontologies of various communities.

Future research on sustainability performance reporting could further investigate the institutional forces that drive sustainability standards such as the GRI. Future research could also examine how Indigenous values and culture may be integrated within the Western view to better transform accounting practices and our comprehension of sustainability performance. If, in normal circumstances, Indigenous and Westerners live in worlds predicated on different ontological premises, it does not mean, according to Descola (2014b), that a Westerner, taking the time to understand Indigenous ontology, would not be able to integrate some ontological aspects of their worlds. As Descola (2014b, p. 434) argues, ontologies can change or hybridize, as they are “not [a] self-contained glass jar into which peoples are locked up.” Besides, most Cree today are familiar with the Western ontological approach to reality and how at times it contrasts with their own values, attitudes, and assumptions. With the need to deal with outsiders who treat nature and the environment as objective things, they have to transform or hybridize their ontological assumptions into forms that remain both true to their ontological principles, while allowing them to communicate with and be understood by Westerners. However, if Cree ontology is being forced to change, the Western view remained mostly static. It is therefore our hope with this paper to encourage Westerners to open up to alternate ways of conceiving nature and its interrelationship with humanity in our conceptualization of sustainability.

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