Coloniality and Cognitive Justice: Reinterpreting Formal Education for the Indigenous Peoples in Ecuador

Colonialidad y Justicia Cognitiva: Reinterpretando la Educación Formal para los Pueblos Indígenas del Ecuador

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This article examines intercultural bilingual education (IBE) as a reterritorialization of a globalized Western model of formal education into the Ecuadorian indigenous context. This reterritorialization is explored through an IBE teacher education institute. First, the article discusses the instructional practices that attempt to break with Western ways of thinking and understanding knowledge. Secondly, the article examines the "Monday morning assembly," a key event that exemplifies the negotiations between adopting and customizing Western ways in everyday practices. The study shows that the effects of coloniality remain strong despite the efforts towards social and cognitive justice. (This article is provided in English only.)

Este artículo examina la educación intercultural bilingüe como reterritorialización del modelo occidental globalizado para la educación formal dentro del contexto de las comunidades indígenas ecuatorianas. Esta reterritorialización se explora en el artículo a través del estudio de dos casos del Instituto Educativo de Maestros EIB. El primer caso discute el intento de romper con las formas de pensamiento y conocimiento en la instrucción de las ciencias occidentales. En el segundo caso, el análisis de una de las juntas del día lunes da una clara muestra sobre las negociaciones que se llevan a cabo para la adopción de las costumbres occidentales en la rutina diaria de la comunidad educativa. El estudio muestra cómo se mantienen los efectos de la colonización a pesar de los esfuerzos hechos para el logro de una justicia social y cognitiva. (Este artículo se ofrece solamente en inglés.)

> There is no global social justice without global cognitive justice. This
> means that the critical task ahead cannot be limited to generating
> alternatives. Indeed, it requires an alternative thinking of
> alternatives. A new post−abyssal thinking is thus
> called for. (Santos, 2007, p. 10)

Santos (2007) refers to the epistemic dominance of the West as "abyssal thinking," which he defines as a system of visible and invisible distinctions that divide social reality into two realms, to "this side of the line" and to the "other side of the line" (p. 1). In abyssal thinking everything that falls on the other side of the line is viewed as nonexistent, meaning that it does not exist "in any relevant or comprehensible way of being." To go beyond the abyssal thinking, Santos writes that one has to recognize the persistence of such thinking and break with modern Western ways of thinking as well as think from the perspective of the other side of the line. In this article I examine formal education for the indigenous peoples in Ecuador and abyssal thinking that privileges Western epistemology and, particularly, modern science. This abyssal thinking produces cognitive (or epistemic) injustice. Indigenous knowledge, which is on the other side of the line, is incomprehensible for Western ways of thinking and thus, by default, nonexistent to the West (Santos, 2007). Therefore, "alternative thinking of alternatives" is indeed required in formal education for the indigenous peoples.

To explore the complex role of globalization in this regard, I distinguish between different forms of globalization. Hall (1991) proposes that two forms of globalization are struggling together:

> [One form of globalization is] an older, corporate, enclosed, increasingly defensive one which has to go back to nationalism and national cultural identity in a highly defensive way, and to try to build barriers around it before it is eroded. And then this other form of the global post-modern which is trying to live with, and at the same moment, overcome, sublate, get hold of, and incorporate difference. (p. 33)

Along the same line, Falk (1999, 1991) introduced the analysis of "globalization from above" and "globalization from below." Globalization from above refers to an autocratic top-down process of imposition which is driven by powerful states, corporations, and international agencies (Brecher et al., 2000; Brysk, 2000). Because of the pre-existing asymmetric power relations between localities in the world, globalization is an uneven process. In that regard, Smith (1999) draws a parallel between globalization and European imperialism, whereas Mignolo (2000) speaks of globalization in terms of "global coloniality." Globalization from above is contested by globalization from below through transnational movements, coalitions, and people at the grassroots who interact and join forces to proclaim their views (Brecher et al., 2000; Brysk, 2000). Moreover, with the intensified global interconnectedness and flows of cultural influences, cultures become "dislocated" from a certain context. At the same time, the cultural influences are reinterpreted

and customized in other localities, and accordingly they become reterritorialized in new cultural settings (Inda & Rosaldo, 2002).

I start by discussing the role of coloniality (globalization from above) and transnational connections between indigenous movement and international organizations (globalization from below) in Ecuador. I consider intercultural bilingual education as a reterritorialization of a globalized Western model of formal education into the Ecuadorian indigenous context. I move on to a case study on an intercultural bilingual teacher education institute in the Ecuadorian Amazonia and examine this reterritorialization from two viewpoints. First, I discuss the instructional practices which exemplify the attempts to break with Western ways of thinking and understanding knowledge. Thereafter, I provide "Monday morning assembly" as a key event that exemplifies the negotiations between adopting and customizing Western ways in the everyday practices at this institute. Both of these viewpoints bring forward the co-existence of persistent coloniality and efforts towards social and cognitive justice.

Coloniality and Transnational Connections

Even though each Latin American state is unique, they share many features that derive from their common colonial history. Latin American states have typically had strong state-centered policies, but weak nation-state sovereignty ever since their formation. Furthermore the Latin-American states can be characterized by their peripheral position in the global economy, and by their political and economic dependence on Europe and the United States (Arnove, Franz, Mollis, & Torres, 2003; Freeland, 1996; Popkewitz, 2000; Valtonen, 2001). Moreover, the Latin American states have experienced pressure from within due to their social and ethnic fragmentation. The early 19th century, when the Latin American states became independent, meant the end of the colonial period, but not the end of coloniality. The colonial structures of power remained, and the indigenous population continued to be marginalized. The local elites were mainly comprised of the mestizo (mixed European and indigenous) population that largely adopted Eurocentric views and power structures. The Latin American political economy has typically favored the maintenance of a hierarchical distribution of power, with the exclusion of the subordinate groups (Arnove & al., 2003; Freeland, 1996; Mignolo, 2000; Quijano, 2000).

The global coloniality is reflected in the global influences of neoliberalism in national policies as well as in values and principles of education (Mignolo, 2003). With regard to educational policies in Latin America, the quality of education, especially higher education, was emphasized in the 1950s, but the mainstream discourses were not interested in the equality of educational opportunities (Arnove et al., 2003). Furthermore, higher education was based on the traditions of European universities and European knowledge, whereas Latin American indigenous peoples' knowledge was ignored and marginalized (Mignolo, 2003). Concerns related to the inequality of educational opportunities and outcomes have

been brought forward in social movements, such as "educación popular" (popular education) (Morrow & Torres, 2003). The social, cultural, and educational concerns of the indigenous people, in particular, have been addressed by indigenous organizations which started to form in Latin America in the 1970s. Starting in the 1980s, identity politics, the attempts to recover indigenous peoples' dignity, brought the celebration of cultural difference, ethnic identity, and ethnic pride into a central position in many indigenous organizations (Langer, 2003).

During recent decades, increasing global interconnectedness through telecommunications, regular contacts with foreign citizens, and the ease of travelling have enabled indigenous organizations to establish contacts with national and international nongovernmental organizations. Such transnational connections produce "globalization from below." The Latin American states have not necessarily responded to the concerns of their indigenous populations, such as addressing the question of the Amazonian indigenous peoples' land rights and the multinational oil companies appropriating and polluting the lands. Meanwhile a growing number of international NGOs have become interested in indigenous issues, human rights, and environmental questions and have given their support to indigenous organizations (Brysk, 2000; Mato, 2000; Langer, 2003). The International Labour Organization (ILO) was a path breaker in 1957, when it adopted the Indigenous and Tribal Populations Convention, the first international convention that addressed the social problems and the rights of the indigenous and tribal people. The ILO Convention has been followed by other international declarations and working groups related to indigenous issues, such as the UN Working Group on Indigenous Populations (1982), the UN Permanent Forum for Indigenous Issues (2000), UNESCO's Universal Declaration on Cultural Diversity (2001), and the UN Declaration on the Rights of Indigenous Peoples (2007). Furthermore, the World Declaration on Education for All (1990) addressed indigenous peoples along with other vulnerable groups. Apart from putting pressure on governments, the international allies provide indispensable financial support to indigenous causes (Brysk, 2000).

The Ecuadorian Indigenous movement is considered to be one of the strongest in Latin America, and its strength is at least partly related to the collaboration between the different groups at the local, regional, national, and transnational levels (Brysk, 2000; Langer, 2003). The indigenous movement has strongly promoted indigenous identities, worldviews, and knowledge and demanded culturally responsive education to eliminate the assimilating effects of colonial schooling (Aikman, 1996; Brysk, 2000; Laurie et al., 2005). The indigenous movement in Ecuador has pursued a model of intercultural bilingual education (IBE) that stresses both maintaining the uniqueness of the indigenous people and the importance of their relations with the dominant society (Useche, 2003). The Ecuadorian indigenous nations federation, CONAIE (Confederación De Las Nacionalidades Indigenas Del Ecuador), declares that one of the main objectives of the organization is the struggle for IBE as the model for indigenous people's "proper education" (CONAIE, 2007).

IBE achieved formal status as the Ecuadorian national educational system for the indigenous population in 1988. Currently, the country has over 2000 IBE elementary schools and five teacher education institutes. The IBE curriculum documents reflect the quintessential striving toward social justice and greater educational equity. The intercultural bilingual teacher education curriculum (DINEIB 2005), for example, emphasizes the importance of confirming indigenous knowledge, cultural practices, languages, and identities in order to produce intercultural bilingual elementary school teachers "with competence to improve the socio-cultural, linguistic and economic situation of the indigenous peoples and nationalities" (p. 3).

Case Study: Intercultural Bilingual Teacher Education in the Ecuadorian Amazonia

In this section I will discuss reterritorialization of the globalized model of education through the case of intercultural bilingual teacher education (IBTE) in Ecuador, focusing on one IBTE institute situated in the Amazonia region. First, I present the study methods and participants. Then, I discuss the IBTE instructional practices that exemplify the attempts to break with the Western ways of thinking and understanding knowledge. Lastly, I provide "Monday morning assembly" as an example of negotiation between adopting and customizing the Western ways in the everyday practices at this institute.

Methodology

I conducted ethnographic fieldwork in one Ecuadorian IBTE institute during the years 2006, 2007 and 2009. This institute, with its affiliated elementary school, is situated in the Amazonia region, in a community where the majority of the residents are Kichwas. Among the teacher education students, Kichwas are a minority: most of the students are Shuar and Achuar. All these students are indigenous to the Amazonia. In the elementary school affiliated with the institute, nearly all the teachers are Kichwas, but mestizos are the majority among the teacher educators at the IBTE institute.

The fieldwork involved diverse research methods, such as observation, photography, and interviews with students, teacher educators, and elementary school teachers. I lived with a local family in the community and conducted participant observations in and outside school every day for the time periods spent in the community (a total of 8 weeks). I interviewed altogether 22 teacher education students (10 Shuar, 7 Achuar, and 5 Kichwa), 16 teacher educators (3 Kichwa, 3 Shuar, and 10 non-indigenous) and 4 elementary school teachers (all Kichwa). To protect the confidentiality of the participants, their names are replaced with pseudonyms. The interviews were centered on the interviewees' understandings of knowledge in general and indigenous knowledge in particular,

teaching and learning in indigenous communities and in the IBTE program, relationships between educator and student, and evaluation of and prospects for the IBE. I observed 11 of the interviewed teacher educators in the classroom during six weeks. In addition, 11 of the interviewed students took photographs to portray their views on knowledge.

Triangulation between different types of data and different sources of information is central in the ethnographic analysis (Fetterman, 2010). In this study the data drawn from observation provide detailed descriptions of classroom situations, other everyday practices and "key events" (Fetterman, 2010, p. 99) such as the "Monday morning assembly", whereas the interview data and the photographic data describe the participants' thinking in verbal and visual ways (Veintie & Holm, 2010). Together this methodological triangulation between observation, interviewing, and photography provides a "thick description" (Geertz 1973) of the everyday incidents and participants' views.

Instructional Practices

According to the core documents that introduce the intercultural bilingual education model, MOSEIB (Modelo del sistema de educación intercultural bilingüe) (MEC, 1993; DINEIB, 2010) teacher education should be based on the MOSEIB and the current IBTE curriculum. Furthermore, the former Amazonian regional administrative unit for IBE (DIREIB-A) produced documents such as "Innovations of education" and IE (Innovaciones educativas) (DIREIB-A, 2006) to emphasize and clarify or to modify and further develop the ideas presented in the MOSEIB. All these documents bring out the aim of providing instruction that incorporates indigenous knowledge and is based on an indigenous worldview.

Generally, indigenous ways of viewing the world tend to be holistic, and knowledge is seen as something that cannot be fragmented into different categories or separated from the people or the environment (Battiste & Henderson, 2000; McGregor, 2004; Reascos, 2009). The Amazonian indigenous epistemology is described, above all, as holistic and relational based on the interrelatedness of all the physical and spiritual elements of the universe (Chacón, Yanez, & Larriva, 2010; Reascos, 2009). Reascos (2009) explains the relational character of indigenous knowledge by arguing that the premise of Amazonian indigenous epistemology is that nothing in the universe is meaningful on its own, but everything has value in relation to the totality. Furthermore, the relational worldview is reflected in the conception of time. Like other indigenous peoples, the Ecuadorian Kichwa and Shuar people also tend to conceptualize time as a circle or spiral of receding and approaching in time and space (Chacón, 2012; Cornejo, 1993; Pari, 2009; Yañez, 2009). Salgado (2011) argues that for the Amazonian Kichwas, time is part of the "spiral of life" and is understood as "a living thing just like the spaces, animals, invisible beings, the ancestral medicine and the man and the woman" (p. 63).

In the MOSEIB as well as the IE, this holistic and relational way of viewing the world and understanding knowledge is addressed particularly through the idea of integrated science. According to the IE, integrated science means that instruction should present subjects and phenomena that appear in the world as interrelated, as a totality, instead of presenting them as fragmented, classified, or individual occurrences. Moreover, instruction should follow the indigenous cyclical instead of Western linear orientation with regard to understanding the relation between the present, past, and future times (DIREIB-A, 2006).

Two Kichwa elementary school teachers, Juan and Rosa, highlighted the difference in understanding integrated science in IBE and in the mainstream schooling system. They claimed that in the mainstream schools integrated science merely meant integrating various subject areas as separate sections in one textbook, whereas in IBE the idea is not to separate the subject areas at all. According to Juan and Rosa, the IBE integrated approach to science instruction was, in principle, applied in the IBE elementary schools. They, however, claimed that the IBTE program did not support student teachers in the application of the IBE integrated science, because science instruction in the IBTE institute was divided into different subjects instead of a more interdisciplinary thematic approach. Juan and Rosa, both graduates from this same IBTE institute, argued that after having studied separate subjects in teacher education, it was difficult for the prospective teachers to change their mode of thinking and to start applying the IBE integrated approach in their instruction at an elementary school. In this instance, educational practices at the IBTE institute dismissed the indigenous holistic and relational epistemology and directed students towards "this side of the line," the Western epistemology which works on the assumption that knowledge is separated into different subjects and disciplines and branches of science. Such an approach alienated students from the indigenous worldviews instead of helping them to develop their thinking on "both sides of the line" and cross the borders between the Western and indigenous epistemologies.

As an example of the indigenous holistic and relational way of thinking, we can listen to Fernando, a Shuar teacher educator, who claims that agriculture is not just about technology, such as computers and machinery. He argues that indigenous understanding of the earth as a mother who has her fertile and non-fertile periods, is necessary for a good profit in the agricultural production. In the IBTE program, however, technical aspects of agricultural production were studied in the classes of a subject titled "production technology," whereas indigenous knowledge on the fertility of the earth and the proper times to plant and reap the harvest were discussed in a specific subject related to worldviews and mythology. In other words, the technical and spiritual aspects of agriculture were discussed at different times, in different subjects, instead of dealing with them simultaneously, as a totality.

Indigenous knowledge and worldviews were most clearly incorporated into the instruction in the IBTE program through the above-mentioned subject related to worldviews and mythology, which provided a particular space for discussing indigenous knowledge. Otherwise, the modifications to the traditional Western

model of schooling were highly dependent on individual teacher educators' background and enthusiasm. Maria, a Spanish-speaking teacher educator, argued that the teacher educators "have stagnant minds. We are still in the Hispano system where we were educated. It is difficult for us to change." In other words, Maria thought that the teacher educators generally adhered to Western ways of thinking and could not change the educational practices they had learned in the mainstream education system that they themselves had attended. The classroom observations, however, indicated that some of the teacher educators strove for a change in their instruction in various subjects with a view to revitalize indigenous knowledge and make the instruction more culturally responsive. The Spanish-speaking educators whom I observed in class sought indigenous knowledge mostly from the students and the indigenous community. Maria, for example, helped the students to connect with the indigenous community and to learn from the community, whereas Lorenzo encouraged the students to work in groups to study the cultural knowledge of their respective ethnic groups. The indigenous teacher educators made use of their own life experience and knowledgeability about indigenous knowledge and ways of knowing. Fernando, a Shuar teacher educator, for example, used metaphors and different kinds of narratives, such as traditional Shuar stories, anecdotes, or personal stories for many purposes in class. On occasion his stories served to incorporate indigenous knowledge into instruction and to demonstrate the relevance or usefulness of indigenous knowledge. Sometimes he used narratives to give general guidance or advice, for example on moral questions. Fernando's instructional practices reflect the principles that he defended in the interviews: incorporation of indigenous and non-indigenous knowledge into instruction simultaneously, and recognition of values and the affective along with the cognitive dimensions of education.

With their attempts to incorporate indigenous knowledge into the instruction, Maria, Lorenzo, and Fernando among other indigenous and non-indigenous teacher educators contributed to the reterritorialization of the global Western model of schooling into the indigenous context. In the next section I move on to another aspect of reterritorialization by discussing the morning assembly that initiated the week at the IBTE institute.

Monday Morning Assembly

Monday morning at the IBTE institute in the Ecuadorian Amazon: First thing in the morning everybody gathers at the tin-roofed sports ground in the back of the schoolyard. Both the elementary education students and teacher education students are wearing blue uniforms. One of the teachers, also in a fairly similar uniform, tells the students to form in lines according to their grade. Teacher gives directions: "attention," "at ease." There are a few speeches, and then a small game is played standing in lines, greeting each other or clapping hands on command. Then the national flag of Ecuador is brought to the front. The national anthem is sung in Kichwa, and after that

two students salute the flag. Also some prayers are recited in unison with students crossing themselves (Field notes, 2007).

The morning assembly initiated the school week every Monday. It was striking to see all the students in their school uniforms standing in direct lines and moving simultaneously to stand at attention and at ease on teachers' command. Such exercise of discipline over the body seemed more pertinent for military service than for an IBTE institute. As a general impression, this morning assembly seems to resonate with coloniality. In the context of education for the indigenous populations, educational institutions have been places for exercising discipline over the indigenous people in order to colonize and modernize or civilize them (Radcliffe & Westwood, 1996; Rival, 1996; Smith, 1999).

Similar morning assemblies can be seen in school yards in many parts of the world, exemplifying the fact that the everyday practices of traditional Western schooling have expanded all over the world as part of the globalization process. In Ecuador such morning assembly is also known as the "civic moment." It is celebrated in schools all over the country, and the national flag and national anthem are irremovable parts of the assembly (Radcliffe & Westwood, 1996). In the morning assembly described above, however, the national anthem was sung in an indigenous language. Choosing Kichwa instead of Spanish is a significant modification to this ceremony if we remember the long history of subordination of indigenous languages. In the colonial era the Spanish language and Spanish ways were imposed on the indigenous people in the name of the empire. When the independence from Spain initiated the process of nation-building, the concept of nationhood and national identity included an aspiration towards an ideal of Spanish as the unifying language (Freeland, 1996; Langer, 2003). Currently, however, Spanish is no longer the only option; national belonging can be expressed also in indigenous languages. Indigenous peoples are included in the idea of the Ecuadorian nation at least through their language. On the other hand, it is interesting that the national identity is performed in such a salient way, whereas the indigenous identities are not celebrated correspondingly in the Monday morning assembly. This is surprising since the IBTE curriculum aims at confirming the indigenous identities. Furthermore, anthems, flags and other symbols that represent indigenous peoples do exist. Ecuadorian nationality, however, is a common denominator for the multi-ethnic group of students and teachers, and the morning assembly confirms the "imagined community" (Anderson, 2006), the story of a unified nation, instead of confirming the indigenous identities.

In addition to celebrating the national belonging, the morning assembly involved practice of Roman Catholic religion. Ecuadorian population in general is predominantly Roman Catholic, and also the indigenous peoples have to a large extent converted to Catholicism. The connection between schooling and Christian evangelization of the indigenous population has a long tradition in Latin America. The first wide-ranging education program of the indigenous population in the region was initiated by the Summer Institute of Linguistics (SIL), a North American Christian organization that functioned in several Latin American countries starting in the 1940s and 1950s. The SIL combined missionary work with linguistic

research and promoted the substitution of the "unhealthy" aspects of the indigenous cultures with Christian values (Freeland, 1996). Moreover, the impact of the Roman Catholic Society of the Salesians, in particular, has been substantial in the Ecuadorian Amazonia. The Salesians founded hospitals and schools in addition to the missionary stations. They aimed at converting the indigenous population to Catholicism and extirpating some indigenous cultural practices, such as polygamy and shamanism. Nevertheless, many indigenous people did not abandon such cultural practices or their indigenous spiritualities even though they agreed to be baptized (Rubenstein, 2005).

Religious syncretism was typical also among the indigenous teachers and students at the IBTE institute. Many of them went to Mass on Sundays and said the prayers in the morning assembly at the institute while simultaneously practicing their indigenous spiritualities on other occasions. Some of the Shuar and Achuar students, for example, were active participants in the Mass and in the activities of the Catholic mission, but they also told that they practiced the indigenous tradition of going to the waterfall to receive power and knowledge from Arutam, the spirits. Even though Kichwa, Shuar, and Achuar people have their respective spiritualities, the morning assembly keeps to the Christian tradition, which appears as a common denominator that unifies all these indigenous groups together with the mestizos.

According to Sabina, a Kichwa teacher educator, this kind of a morning assembly initiated every working day at the institute during the previous headmaster. Sabina, together with some of the other indigenous teachers, promoted modifications to the traditional practices and had urged that the assembly only take place only once a week. Furthermore, on other Monday mornings later on the shape of the formation was different, and the students were directed to form a semi-circle facing each other. Gathering to a morning assembly in a semi-circle was one of the modifications specifically suggested by the DIREIB-A in the "Innovations of Education" (IE) document. The IE outlines that one of the objectives of IBE is to give up formalities at school. Accordingly, students should not be standing in rows in the morning formation nor seated in rows in the classroom, but in a circle or semi-circle where they face each other. Furthermore, the IE suggests that in the classroom, the teacher should not have a separate desk in front of the students, but be seated among the students. These modifications in the spatial organization relate to the attempt to shift from a teacher-centered model of schooling practices towards a more egalitarian approach that better conforms to the indigenous views. According to the IE, also formalities such as ringing the bell to signal the time to start and end the classes and using school uniforms should be given up. Elimination of the bell-ringing was part of a general effort to modify the temporal organization of the school from the mainstream linear time of calendars and clock-time towards indigenous circular conception of time which involves interrelated cycles of time, space, nature, and human life (e.g., Chacón, 2012; Pari, 2009; Salgado, 2011). As for abandoning the school uniforms, the objective was to encourage using the kinds of clothes and adornment that are specific to the students' ethnic groups and reflect their respective identities.

Thus, the IE makes concrete suggestions for customizing the traditional Western schooling practices to better meet the needs and aims of the IBE, and to conform to the indigenous worldviews and confirm the Amazonian indigenous identities. Some of the teacher educators at the institute were in favor of the innovations suggested in the IE. Sabina, for example, was a steadfast advocate of the innovations and their application in elementary schools and at the IBTE institute. At the same time, some other teacher educators thought of these modifications as pointless or even harmful. Amelia, a Spanish-speaking teacher educator, for example, thought that it was a mistake to change the formalities. In her opinion ringing the school bell and standing in lines in the morning assembly were important educational issues that teach punctuality and social skills, such as queuing, necessary for town-life. On another occasion Amelia also claimed that such modifications were not radical enough to produce real change to the mainstream education model. Amelia did not have a profound understanding of the indigenous thinking behind the suggested modifications. In other words, coloniality may be driven by unawareness or denial of the "other side."

Conclusion

Santos (2007) claims that abyssal thinking continues to reproduce itself, unless it is actively resisted. The resistance against the global coloniality and against the cognitive injustice of abyssal thinking rises from the initiatives and movements that constitute the counter-hegemonic globalization, or "globalization from below." Santos (2007) proclaims that indigenous people were the "paradigmatic inhabitants of the other side of the line," and that the indigenous movements are "those whose conceptions and practices represent the most convincing emergence of post−abyssal thinking" (p. 10). In Ecuador, one of the main concerns and major achievements of the indigenous movement has been the reformation of formal education for the indigenous peoples, in particular, IBE (Brysk, 2000; Freeland, 1996). The IBE policy has attempted to reterritorialize the traditional Western model of schooling into the indigenous context through reinterpretations and modifications.

The idea of integrated science is an excellent example of the IBE efforts to reinterpret the globalized model of schooling and fracture the Western thinking. However, in the IBTE program the integrated science approach was not applied, since instruction was compartmentalized into subjects. This choice exemplifies the coloniality and persistence of Western epistemology as the principal mindset. By following the traditional Western model, students were alienated from the indigenous worldview and epistemology and directed to think according to "this side of the line" (see Santos, 2007). Therefore, after graduation the prospective teachers were confronted with a difficult task of finding their way to apply the IBE integrated approach to science instruction in the elementary schools and, this way, reflect the indigenous holistic and relational way of viewing the world and understanding knowledge. Indigenous worldviews and knowledge were, however,

brought forward in the IBTE program through a specific subject related to worldviews and mythology. Furthermore, fractures to the epistemic dominance of the West were produced in other subjects by teachers who aimed at culturally responsive instruction and revitalization of indigenous knowledge. These teacher educators' actions were steps towards cognitive justice. Global cognitive justice involves the requirement to disentangle from the modern Western ways of viewing the world and thinking and understanding knowledge, and to start thinking from another perspective, from another epistemology (Mignolo, 2000; Santos, 2007; Walsh, 2012). To further cognitive justice, it is important that teachers are knowledgeable of the ways of thinking on "this side of the line" as well as on the "other side of the line." Such teachers are needed as mediators or brokers between cultures in the IBE elementary schools, let alone teacher education institutes. In other words, teachers should be able to help the students cross the cultural borders between (Western) school knowledge and indigenous knowledge (See Aikenhead, 2001; Cajete, 2008).

The Monday morning assembly brings us to the identity politics, which is central to the indigenous movement and connected to the politics of knowledge. Moreover, recognition of indigenous identities and the diversity of these identities may contribute to the recognition of the diversity of knowledge and ways of knowing. In other words, cognitive justice may also benefit from the recognition and confirmation of indigenous identities (Sefa Dei, 2010). The indigenous leaders in Ecuador are not fully united with regard to their approach to indigenous identities. The CONAIE slogan "unity in diversity" highlights the collective indigenous identity and the togetherness of the diverse Ecuadorian indigenous population. Performing the collective identity of indigenous peoples gives strength to the indigenous movement and helps to voice the demands related to common concerns, such as land rights. However, Ecuadorian indigenous leader Nina Pacari, for example, has been concerned about the homogenizing effect related to the celebration of the unity of the indigenous peoples. She fears that diversity is lost in the unity if "indigenous people" as an all embracing epithet replaces other more subtle identifications, such as ethnic Shuar or Kichwa identities (Langer & Muñoz, 2003). The Monday morning assembly at the IBTE institute and elementary school did not reflect either of the views. Singing the national anthem in an indigenous language has a strong symbolic meaning, but otherwise the morning assembly was neither customized to particularly celebrate Kichwa, Shuar, or Achuar identities and spiritualities, nor to confirm a collective indigenous or Amazonian indigenous identity. By celebrating the national identity and Catholic devotion instead, the morning assembly followed the mainstream education model and confirmed the colonial idea of unity among the imagined community of Ecuadorian nation instead of bringing forward its diversity. However, changing the position from standing in direct rows to standing in a semi-circle was a local reinterpretation that represented the idea of equality across the boundaries of ethnicity and age. This modification exemplifies the more general aim in IBE to abandon formalities that stem from the mainstream schooling and do not conform to the indigenous identities and ways of viewing the world. The importance, and the difficulty, of changing such instilled everyday practices was reflected in the

views of those teacher educators who opposed these modifications. Eventually, the application of modifications into practices is dependent on teacher educators and elementary school teachers, and their preparedness and willingness to break with the coloniality and strive for alternative thinking and cognitive justice.

In recent years, the political development in Ecuador has shown signs of opening up toward the "other side." Through the Kichwa concept of *Sumak Kawsay* (living well), indigenous ways of thinking and viewing the world have been incorporated in the latest constitution of the country since 2008. However, the persistence of colonial structures and canonical epistemologies complicates the process of decolonization, slows down the implementation of changes, and sustains cognitive injustice (see Radcliffe, 2012). Indigenous teachers, leaders, and intellectuals continuously develop their thinking of alternatives in education. With regard to modifications to educational policies, whether small or large scale, these are constantly negotiated in the everyday practices of the educational institutions.

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