

Kichwa or Quichua? Competing Alphabets, Political Histories, and Complicated Reading in Indigenous Languages

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Over the past century, missionary educators, nation-state and academic planners, and literacy development workers have used alphabets for political ends for traditionally marginalized languages, and Native peoples have contested such planning with other alphabet proposals. Yet literacy work now often overlooks that there are multiple alphabets circulated in reading materials for the same Indigenous language. This article shows how standardization, a process long favored by academics, has been a major source of disagreement. It combines historical analysis of the politics of alphabetic literacy in Latin America with ethnographic research on Kichwa (Ecuadorian Quechua) to demonstrate how contrastive alphabets affect current literacy efforts. Distinct but overlapping alphabets create difficulties for readers in Ecuador, and alphabet histories affect how people perceive and interact with schooling materials. Sometimes just the shape of a single letter invokes emotions. Orthographies are thus bound up in histories of language contact among colonial and marginalized languages, complicating educational research, planning, and assessment's efforts to make alphabetic literacy into a monolingual, neutral, or standardized process.

To understand a simple passage given the capacity of short-term memory, average students should read a minimum of 45–60 words per minute. Learning research and existing data suggest that this standard is possibly usable worldwide. (Education for All Fast Track Initiative Secretariat, World Bank, 2011)

My eyes feel lazy to look at this [text], sometimes because of the letter *k*. But if I see it written with the letter *c*, the same text, [it's like] there is a wider space, more rounded letters, prettier ones. (Pedro, Kichwa speaker and coordinator of Intercultural Bilingual Education, Ecuador, 2012)

The quotes above indicate distinct orientations to literacy events. In the first, a “standard” expectation for worldwide literacy can be generalized across

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vastly different populations, regardless of the participants' cultural backgrounds and multilingual abilities. In turn, institutions like the World Bank operationalize this standard to measure the successes of reading initiatives, label students "literate," and hold literacy programs accountable. Reading speed becomes, ostensibly, an apolitical indicator.

The second quote implies that alphabetic reading cannot be neutral or decontextualized, a point long emphasized by historians and anthropologists of education (e.g., Graff 1979; Street 1984). Made by a speaker of Kichwa about his language, the quote also serves as an entry point into an under-examined component of literacy initiatives in postcolonial contexts: there can be multiple alphabets in existence for the same language. Pedro and other Kichwa speakers regularly encounter reading materials inscribed with alphabets from different historical periods of language planning.¹ Such a fact further complicates efforts at decontextualizing literacy, as decisions must be made not just about a linguistic variety for reading and writing but also about which alphabet is used for educational materials. As Pedro lamented through describing the use of the letter *k* instead of *c* for the same sound, alphabets are consequential social artifacts that affect how individuals interact with written texts. His quote shows how alphabets have histories that affect reading in the present.

Kichwa, known outside of Ecuador as Quechua, is the most spoken Indigenous language in the Americas. Encyclopedias estimate that there are 1 million speakers of Kichwa in Ecuador and 8 million Quechua speakers in the Andean region of South America more generally (Haboud 2010). Kichwa thus provides a prominent example of how alphabets affect literacy planning in Indigenous languages. Like many minoritized languages, Kichwa has a relatively short history of standardized alphabetic writing. At present, there are multiple alphabets in circulation for Kichwa. Three of them, for example, come from the following events:

- Missionary linguists adopted much of the Spanish alphabet for writing in Kichwa during the latter half of the twentieth century:

◦ *a, b, c, ch, d, f, g, h, i, j, l, ll, m, n, ñ, p, q, r, s, t, u, y, z*

- Linguists and educational activists officialized an alphabet in the early 1980s, which used fewer letters:

◦ *a, c, ch, h, i, j, l, ll, m, n, ñ, p, q, r, s, sh, t, ts, u, y, z*

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¹ All names that appear in this article are pseudonyms.

- Kichwa-speaking officials of bilingual education created a unified alphabet in 1998 and revised it in 2004:

◦ *a, ch, i, h, **k**, l, ll, m, n, ñ, p, r, s, **sh**, t, **ts**, u, w, y*

Although at first glance these Roman alphabets appear similar, they alter how Kichwa speakers connect forms to sounds. Letters in bold do not occur across the three alphabets, and the last alphabet introduced the *k* that Pedro mentioned at the start of this article. From 1998 onward, even the official written name of the language changed from Quichua to Kichwa. Such changes have helped to systematize writing across Ecuador's intercultural bilingual school system and to valorize Kichwa as a language of schooling. But many speakers of the language also reject the changes, in part because the letters have altered reading events.

This article considers alphabets as prominent sites of contention across Latin America. Based on more than two years of ethnographic research with directors, linguists, teachers, parents, and students of intercultural bilingual education (hereafter referred to as EIB, the well-known abbreviation in Spanish for *educación intercultural bilingüe*), it asks: How and why are competing alphabets in Indigenous languages consequential? Through comparative historical analysis across Latin America and ethnographic research in Ecuador, this article seeks to move beyond viewing alphabetic literacy as decontextualizable and reading as simply connecting forms and sounds. Through ethnographic data analysis, this article shows how competing letters, and their social histories, complicate literacy planning. It foregrounds four alphabet-related conundrums of this process.

Literature

It is now clear that becoming "literate" entails facility with a multiplicity of varieties of language and modes of interaction that vary across contexts, including cultural differences.² Literacy is thus a social and ideological phenomenon produced through relationships of power (McCarty 2005; Gee 2014). Categorizing people through decontextualized generalizations has become tenuous, even though such logics continue, as the opening example from the World Bank (Abadzi 2011) shows.

Increasingly, scholars have emphasized the alphabetic part of alphabetic literacy. Psycholinguistic research has pointed to orthography as an underconsidered but integral part of reading, where emergent readers' decoding

² New London Group 1996; Hornberger 1997; Gundaker 1998; Collins and Blot 2003; Wagner 2008; and Vasudevan and Campano 2009.

involves connecting forms to sounds.³ Orthographies are writing systems that are developed for specific languages, such as English’s alphabet (Sebba 2007, 10). Psycholinguistic research on orthography and literacy depends upon the orthographic depth hypothesis, which holds that languages with “shallow” alphabets have a more precise match between letters and sounds (Pike 1938; Katz and Frost 1992). Often-cited languages include Spanish, Finnish, German, or Greek. On the contrary, orthographies that merge more phonemes with the same grapheme or have inconsistent spellings, such as in English, are often called “deep orthographies.” Psycholinguists have shown, largely in English in comparison to other languages, that reading tends to develop at a comparatively slower rate for readers in deep orthographies (Ellis et al. 2004; Georgiou et al. 2008; Florit and Cain 2011), but they conclude that most people can learn to read with any orthography. The Early Grade Reading Assessment (EGRA) also considers relationships between orthographies and sounds, holding that cross-linguistic “benchmarks” are inappropriate because they give readers in languages with shallow orthographies an “advantage” (EGRA Toolkit 2015, 22).

While theories of orthographic depth have been common to global literacy research and assessment, they have also guided modernist literacy planning in Latin America for decades as planners have created alphabets for largely oral Indigenous languages. Even though the effects of orthographies have been underexamined in language revitalization research (Grenoble and Whaley 2006, 137), global missionaries and literacy practitioners have spent decades debating and testing the effects of shallow or deep orthographies on reading. Their findings have been consistent with psycholinguistic research, holding that deep orthographies are less efficient for emergent reading practices. This article, on the contrary, shows how overlapping Roman alphabets have caused difficulties for even advanced readers.

One way that academic and practitioner work on alphabetic literacy may miss this importance is through foregrounding form-to-sound connections while ignoring other contextual factors that influence reading, such as the affective connections that readers like Pedro have with their languages. Linguistic anthropologists have increasingly shown that alphabets are not just important for form-to-sound connections but that they are also inseparable from social life more generally.⁴ Orthographies become political projects and, as such, have been operationalized in efforts to convert and “modernize” Native populations. Language planning for unified—or standardized—orthographies has invoked characterizations of scientific progress for Indigenous groups around theories of orthographic depth, which I examine in the

³ Holm and Dodd 1996; Verhoeven 2000; Aro 2004; Georgiou et al. 2008; Grainger 2008; Share 2008; and Caravolas et al. 2012.

⁴ Schieffelin and Doucet 1994; Jaffe 2000; French 2003; Suslak 2003; and Faudree 2015.

history section below. Orthographic planning must temper pushes for unified alphabets, or even phonetic alphabets, with practicalities that draw from the social experiences of readers (Hinton 2001) because alphabets are bound up in people's social experiences.

In the Americas, decontextualizing ideologies about literacy have ignored the consequences of postcolonial dimensions of social life. For traditionally marginalized peoples, centuries of settler colonialism, genocide, and erasure of cultural and linguistic emblems have created stigmas around alternative forms of knowledge and literacy (Lomawaima and McCarty 2002; Rappaport and Cummins 2011; Cortina and de la Garza 2015). Alphabetic reading events occur in this history. Educational research affirms the importance of examining localized inequality as consequential for identities in reading and writing projects (Wortham 2005; Bartlett 2009; Alim 2011), and emotions such as shame can be especially consequential (Bartlett 2007). When Native individuals are made to feel shame for speaking their languages (Skutnabb-Kangas 1988; King 2001; Meek 2010), planners must be sensitive to what alphabets "do" and what histories they invoke. Literacy workers should be especially careful with planning for and evaluating reading events of traditionally marginalized populations, and orthographies are bound up in connections between colonial and minoritized languages.

Perhaps no part of the world so clearly demonstrates this point as Latin America. I now turn to detailing the methods of this research and providing background information on Ecuador's EIB. Then I trace the origins of "scientific" standardized orthographies in Ecuador and their connections to paradoxical efforts at assimilation and political unity for Indigenous individuals in other parts of Central and South America. I end by examining how competing alphabet projects are consequential in EIB today, including creating difficulties for how advanced readers read. I argue for literacy planning within this sociopolitical history.

Method

This article draws from two years of ethnographic fieldwork in Ecuador from 2011 to 2013. It reports findings from a larger-scale project on the politics of Indigenous languages and EIB in Ecuador, where I considered what made possible the historical success of a national Indigenous school system. In preliminary research, I had been surprised by how certain forms of multilingualism were essential for the promotion of Indigenous languages by directors of the school system. I designed the study to consider how language revitalization draws from particular linguistic varieties of Kichwa, select Indigenous identities, and forms of linguistic recognition granted by the Ecuadorian nation-state. My project thus aimed to study language revitalization efforts across spaces of policy making and implementation, such as inter-

national endangered language conferences, national planning meetings, and daily events in schools and communities.

Over the 2 years, I divided research between three main field sites: the National Directorate for Intercultural Bilingual Education, where EIB is coordinated inside the Ministry of Education, and two EIB schools in Quito. Methodology included multisited participant observation, semi-structured interviews, life history interviews, document and curriculum analysis, and audio recording of events, such as meetings and classroom interactions. I collaborated with planners in educational offices, attended meetings with directors, and assisted teachers by helping students with their work in classrooms. At the same time, I often recorded dialogue in those events and carefully documented what was happening, and what I found most important, in my own notes.

As I conducted fieldwork, I reviewed and cataloged recurring themes in field notes. This iterative process was important not only for creating and maintaining a running list of questions to ask collaborators but also to modify the collection process to continuously address emerging ideas. As I analyzed data, I double-checked hypotheses through comparing results of contrastive methods (participant observation, interviews, and analyses of documents and curriculum) and through asking interlocutors about hypotheses in formulation. Although I focus on fewer than 10 Kichwa and Spanish bilingual interlocutors in the data sections below, their comments convey themes that emerged through systematic research with hundreds of people. All pertinent Kichwa and Spanish recordings were transcribed by individuals from the Andes and checked by me. I started the project conversant in Kichwa, especially through private classes, group classes, and living with a Kichwa-speaking family. Such knowledge was essential for understanding conversations and as proof of my commitment to Kichwa language revitalization in Ecuador.

Intercultural Bilingual Education in Ecuador

In a nation-state known around the world for the successes of Indigenous organizing, Kichwa individuals established a second national school system in 1988 that would run parallel to the principal school system. At the time I was conducting research, there were 2,792 EIB schools in Ecuador.⁵ The National Directorate's official policies hold that EIB schooling should occur in Spanish and in one of the nation-state's 14 Indigenous languages. The school system also promotes the importance of cultural values in the curriculum, including the histories, beliefs, and materials of Native groups. An autonomous school system, often the dream of marginalized peoples around the

⁵ From a 2013 Ministry of Education Excel spreadsheet.

world, became a reality in Ecuador. For the majority of schools across the EIB system in Ecuador, the Amerindian language of instruction is supposed to be Kichwa. Although Kichwa has been recognized as an “official language of intercultural relations” in Ecuador’s 2008 constitution, speakers are shifting to Spanish (Haboud and Toapanta 2014). Similar to other Amerindian languages in the Americas, centuries of colonial repression have left Kichwa highly stigmatized. Over recent decades, Kichwa has been one of the most prominent markers of alterity that many speakers attempt to mask.

The EIB school system has found it difficult to teach Indigenous languages in classrooms (King 2001; Martínez Novo 2009). As a traditionally marginalized language, parents of students have fought against schooling in the language that they speak at home. The EIB system has also lacked materials for teaching students who increasingly struggle to speak the language. Although bilingual in name, many EIB schools do not teach Kichwa, or they teach standardized varieties of Kichwa that differ from how Kichwa speakers communicate on a daily basis (King and Haboud 2007; Uzendoski 2008). Although teaching Kichwa and other Indigenous languages has been less successful, the EIB system has made great strides for the positive valorization of Indigenous languages and cultures, increased dialogue around cultural diversity, and extended recognition of linguistic and cultural rights for traditionally marginalized peoples (Haboud and Limerick 2016).

The “Science” of Orthography

In order to show how competing Kichwa alphabets have become consequential, this section examines alphabets as historical political projects. Orthographic planning in Ecuador borrowed from orthographies and ideologies about them elsewhere in Latin America over the past century. Discourses of decontextualized and “scientific” literacy efforts were key to orthographic efforts in Indigenous languages. This modernist past shapes current predicaments of Kichwa literacy.

1920s–1960s in Latin America

US missionary linguists of the Summer Institute for Linguistics (SIL) played prominent roles in literacy initiatives in the Americas from the 1920s onward. SIL is a “faith-based nonprofit” that now has 5,500 staff members working in the languages of 100 nation-states around the world.⁶ A major goal of the organization is to create educational materials and translations for less spoken languages. Their controversial efforts have shaped the orthographies of Amerindian languages in Latin America and elsewhere.

⁶ See <http://www-01.sil.org/sil/>.

Cameron Townsend, founder of the organization, arrived in Guatemala in 1919. He began to translate the Bible into the Mayan language Kaqchikel as he considered how to convert Mayan individuals to Christianity. In the process, Townsend created an alphabet that was “as close to that of Spanish as possible” for writing in Kaqchikel, attempting to bolster phonetic similarities between the two languages (Townsend 1961, 10, cited in French 2003, 485). This effort would form part of SIL’s early work to erase vast differences between Indigenous languages and Spanish, which they hoped would promote the sameness of Native individuals for their assimilation into a Christian nation-state of Spanish speakers (French 2003). Alphabetic literacy in Spanish was key to their “progress,” and the Guatemalan president endorsed these efforts (Errington 2008, 154).

As missionary linguists continued their work in Central America in the 1930s and 1940s, they changed from the Spanish alphabet to more “scientific” alphabets for writing in Indigenous languages. Previously, missionary linguists knew little about the languages they attempted to “reduce” to writing, but during this time, they increasingly studied formal linguistics in US universities. They began to examine Indigenous languages with standardized grammatical and phonological systems of inquiry instead of just writing Maya with the Spanish alphabet.⁷ Such work manifested a tension. On the one hand, it drew upon efforts in linguistics to create letters that corresponded with manners and places of the articulation of sound across all languages (French 2004), bolstering universal ways of describing a one-to-one match between letters and sounds. On the other hand, future SIL president Kenneth Pike, who had received a PhD in linguistics from Yale, professed that each language had a set of sounds that were made distinct by how speakers of languages understood them (Pike [1947] 1975, 208). Thus, universal articulatory formulas like the International Phonetic Alphabet had to be considered vis-à-vis how speakers perceived sounds of specific languages.

Standardized, systematic alphabets formed part of a widespread discourse about scientific literacy as a means to modernizing and assimilating Indigenous populations, most famously proclaimed at the First Interamerican Indigenist Congress in 1940 (Barros 1995, 28; De la Peña 2005). Although creating unified alphabets brought a systematic process to writing, graphemes inevitably merged sounds that Pike had previously recommended be written with distinct letters. Efforts for efficient planning often demonstrated this tension as planners opted for unified orthographies, including the letter *k*, over preexisting ways of writing sounds. SIL missionaries, UNESCO workers, national linguists, and state planners created such alphabets in national meetings in the 1940s in Central America and in Peru (Albó 1987; Hornberger 1993; Barros 1995). Planners sometimes even posited that such

⁷ See http://www-01.sil.org/WCT/wct_bio3.html.

orthographies were more evolutionarily advanced and would lead to cognitive benefits for Native populations (Fleming 2009; Sebba 2012). Affecting the future of Ecuadorian Kichwa in particular, the “Unified Writing System for Quechua and Aymara” was developed at Kenneth Pike’s meeting with Bible translators in 1944. It became Peru’s official alphabet for Quechua in 1946, with just a few changes (Albó 1987; Hornberger 1993). This alphabet was then approved internationally at the 1954 Third Interamerican Indigenist Conference in La Paz, Bolivia (Hornberger 1993, 239). The conference thus made official in the Andes the *k*, the letter that Pedro mentioned in the quoted passage at the beginning of this article, for writing in all varieties of Quechua.

The example shows the extent to which “scientific” ideologies about alphabets can change. For example, though SIL linguists had previously embraced the Spanish alphabet, they later considered it to be “inefficient” and “irrational” (Barros 1995, 282). Today, Spanish is considered to be a relatively “shallow” orthography. It also shows how such ideologies guided the adoption of standardized alphabets across different nation-states and languages. Planners tended to ignore Native individuals’ voices of protest (French 2004).

1970s–2000s in the Andes

Throughout Bolivia, Ecuador, and Peru in the 1970s and 1980s, nation-state planners and academics (more commonly known in Latin America as *Indigenistas*) promoted a pan-Andean writing system with “deep” form-to-sound connections. They posited that the “science” and “order” of unified alphabets would counter the stigma of illiteracy (Weber 2005). The project

1954 III Congress Alphabet				
p	t	ch	k	q
ph	th	chh	kh	qh
p'	t'	ch'	k'	q'
	s	sh	j	jj*
m	n	ñ		
	l	ll		
	r	rr		
i	e	a	o	u
	y		w	

FIG. 1.—Alphabet from 1954 Third Interamerican Indigenist Conference in La Paz, Bolivia, from Hornberger 1993, 241.

had also become a Quechua nationalist one, as their efforts envisioned a pan-Andean political nation of Quechua speakers. In other words, they hoped that a unified writing system would reflect and support a unified group.

Although such planners, including more prominent members of SIL, promoted modernist alphabets for Indigenous languages, other SIL missionaries living in Indigenous communities instead scrupulously matched Spanish letters and their corresponding phonemes to sounds in regional varieties of Quechua (Montaluisa 1980, 126; Albó 1987, 239). They saw that the new standardized alphabet was more difficult for Indigenous language readers. Missionaries thus simultaneously fragmented efforts at political unity (Albó 1987). In Ecuador specifically, schools run by SIL used Spanish letters as they treated Kichwa as a language of transition to Spanish. Although it was progressive to teach primary education at all in Indigenous languages in the Andes at the time (Larson and Davis 1981), Kichwa was to be eliminated from the curriculum by the third grade (Abram 1992, 63). In the meantime, local SIL members carried out widespread literacy campaigns in Kichwa with the Spanish alphabet.

In 1973, SIL worked with the Ministry of Education to organize the First Seminar on Bilingual Education at the Center of Investigation for Indigenous Education (CIEI), housed in the Pontifical Catholic University of Ecuador in Quito (Von Gleich 2006, 49). Academics and practitioners at CIEI began to write pedagogy for learning to read in Kichwa with the Pan-Andean alphabet for Quechua and Aymara that had been officialized at the Third Inter-american Indigenist Conference in 1954 (Montaluisa 1980, 126). The use of the letter *k* in Ecuador, then, was taken from regional efforts to write Quechua in unified ways, and those standardizing efforts borrowed from work in Central America. Based on this trajectory, planners at CIEI now hoped to use a standardized alphabet to make Kichwa an “international” language, drawing from prior-existing discourses about pan-Andean Kichwa-ness tied to letters.

As more Kichwa speakers became a part of planning in 1980s, they rejected officializing the Catholic University’s alphabet in a series of orthographic planning meetings. Beliefs about letters of those who spoke the language were at the heart of the rejection, linking the letters to English instead of Kichwa. “*K*, *y*, and *w* are gringo letters,” some Kichwa speakers noted, that “people use . . . to make us consume more whiskey and King tobacco” (Montaluisa 1980, 128). Indeed, linguists encountered a predicament as Kichwa speakers became a part of planning efforts. In creating unified alphabets for Indigenous languages, many Kichwa speakers had already learned how to read with Spanish graphemes. The letters were inseparable from social experiences and emotions. The first official alphabet for Kichwa had 21 graphemes and did not include the letter *k*: *a, c, ch, h, i, j, l, ll, m, n, ñ, p, q, r, s, sh, t, ts, u, y, z* (Chango 2007).

Although this alphabet was made official, various institutions and educators in Ecuador working on Indigenous education continued to use a range of other alphabets. In the 1990s, Kichwa-speaking planners of EIB led efforts to again create a unified orthography for Ecuador, inspired by the perceived “disorder” of alphabets for materials produced in Indigenous education and a renewed chance at pan-Andean nationalism (Chango 2007; Ministerio de Educación 2009). The Second Meeting for the Unification of the Kichwa Alphabet was held on July 21, 1998, and many Kichwa speakers were present, including members of Indigenous organizations, national directors of EIB, linguists, and representatives from schools (Quishpe 2013). Planners also reviewed proposals from teachers and students (Chango 2007, 4). This time, graphemes linked to standardized Quechua initiatives, such as *k*, prevailed. The new official alphabet included *a, ch, i, j, k, l, ll, m, n, ñ, p, r, s, sh, t, ts, u, w, y*. In 2004, directors of EIB made one more change and decided to use the grapheme *h* in place of *j* (Chango 2007).

The complex social history of Kichwa alphabets has brought challenges for present-day speakers as they read. The following quote cuts to the heart of these challenges. As Yolanda, a Kichwa speaker who worked in the National Directorate of EIB for years, told me on August 5, 2013, changes such as *k* offered a practical difficulty:⁸

[The latest alphabet] made me so sad because many words were lost that had existed. For example, the *k* united the *g*, the *c*, and the *q*. The three letters are fused. With those three letters, there were vocabulary differences that weren't related to allophones. They were different meanings. It's not the same to say *killa* and *jilla* because *killa* is “moon” and *jilla* is “laziness.” So when they were fused one says *killa*, *killa* [instead, for both words]. There's tremendous confusion if the author doesn't form well the context of the writing. In the moment when an alphabet is reduced in a language, it's not helping to strengthen the language. It's strengthening the elimination of a language.

One change was that voiced and unvoiced stops were condensed to single letters that formerly only represented the unvoiced version (Wroblewski 2012). In other words, use of “Spanish” letters like *b* and *d* was discontinued, with those sounds now merged into *p* and *t*, respectively. The letter *k* replaced multiple graphemes, including *c*, *g*, and *j*. Such unification does not mean that “shallow” alphabets are inherently better. Rather, the new alphabet had overlapping letters, but several of them were condensed and eliminated, changing parts of spellings. This change is one of several that systematically altered literacy events in Kichwa.

⁸ All quotes have been translated by the author from Spanish or Kichwa to English.

Findings: Consequences of New Alphabets

As the history of alphabet projects in Latin America has shown, alphabets in Indigenous languages have hardly been neutral or decontextualizable. Competing alphabets exist through political efforts at modernization, conversion, and resurgent nationalism. Ideologies, including “scientific” ones, have changed over time and with the project, creating practical difficulties. I now turn to consider how and why competing alphabets in Indigenous languages are currently consequential for bilingual individuals. I elaborate four alphabet conundrums facing those who plan for literacy events, showing how past alphabet projects continue to shape education.

Kichwa Alphabet Controversies Are Inextricable from Spanish

The above genealogy of alphabets showed how planning for Amerindian languages drew upon ideologies about literacy and alphabets in the colonial language Spanish. It is currently exceptionally difficult for adult Kichwa speakers to systematically differentiate Spanish letters from Kichwa letters. Although the newest unified Kichwa alphabet would seem to draw a nationalist line between languages, this difficulty is also compounded by the fact that, like most multilingual individuals, speakers frequently blend Kichwa with Spanish in daily talk. In addition to having grown up reading in Kichwa with Spanish letters, Kichwa-speaking EIB employees are highly bilingual. Daily work in offices and in schools occurs largely in Spanish.

The influence of Spanish was a central theme of a workshop on primary Kichwa education that I attended in 2013. Several members of the National Directorate of Intercultural Bilingual Education and about 30 Kichwa teachers attended. Participants had to elaborate teaching plans collectively in Kichwa. Writers would scribe words with particular letters only to be corrected by readers in the audience. Bivalent words, or words that are widely used across two languages, were common to this predicament, complicating efforts to bound alphabets. On day three of the workshop, for example, participants were confounded by the word *wamra* (“young person” or “boy”) in Kichwa, a word also used in Ecuadorian Spanish. Frequently written *guambra* or *huambra* in Spanish, the term could be written in Kichwa in the same way based on the older orthography. Or, based on newer orthographies, it could also be *wambra* or *wampra* in Kichwa. Writers and readers alike were unsure of how the word should be spelled, as well as which language they were invoking. Simón, a prominent linguist who was facilitating, attempted to explain.

It [the word] comes from *wan-ra*. That sound that comes after the *m* [is condensed in Unified Kichwa] so that the *r* is transformed [and added to] *p*. It seems that there is a *p* there. Even in Spanish they’ve put *huampra* with an *h*, as we would put [in Kichwa]. And other dictionaries seem to me to be with a *g* like that. (He writes *guambra* on the board.) Like that, that’s how it’s written in Spanish. And furthermore, [in Spanish sometimes] with *puente de wambra* [a widely known bridge in Southern Quito].

Simón, who was involved in the 1998 standardization meetings, showed how Kichwa sounds have been reduced in writing vis-à-vis similar form-to-sound matches in Spanish. He characterized a “deep” version of the word (*wanra*) as the underlying form, as opposed to variation in daily talk (*wambra*, *guambra*, *huampira*). He thus illustrated how psycholinguistic descriptions continue to affect unified orthographic planning in Kichwa. In the process, Simón noted contrastive spellings in Kichwa and in Spanish for the same word. Simón’s example shows the difficulty of spelling in Kichwa, especially when readers and writers are bilingual. In my research, even planners in the National Directorate of EIB struggled to consistently write the letters and would end up being corrected by others in the office. Employees of the National Directorate are, of course, smart, well-trained professionals with years of experience speaking and writing the language. The challenges for even Kichwa experts in untangling the old and new, the Kichwa and the Spanish, exist through the historical use of Spanish alphabets, current bilingualism, and the unification of graphemes for Indigenous languages in standardized alphabets.

Altering Letters Has Practical Effects on Literacy

New alphabets also transform reading events for even advanced readers. Because many Kichwa speakers have grown up with a different alphabet, systematic changes in letters can slow down reading for them. Merging multiple letters into a single one amplifies this difficulty. Such changes sometimes even prevent reading in Kichwa. On May 8, 2013, for example, I was with second-grade teacher Ruth in her classroom. As we were discussing why she disliked standardized Kichwa, she began to write the same expression in Kichwa (“unite yourselves as believers”) in two different ways.⁹ The first phrase is in what she called “old Kichwa,” using the missionaries’ Spanish alphabet. The second is written with the more recent Unified Kichwa alphabet:

Crijcunapura tandanacuichij¹⁰

Krikkunapura tantanakuychik

Her example demonstrates orthographic changes from the most recent alphabet, such as writing *c* and *j* with *k*. “I have old Kichwa books . . . written with the *d*, the *g*, the *q*,” Ruth said, demonstrating how she read in Kichwa as a young person in her community. Teachers and administrators of EIB have largely grown up reading in both Kichwa and Spanish with the Spanish al-

⁹ Parts of this data are also analyzed for a different argument in Hornberger and Limerick (forthcoming).

¹⁰ Ruth accidentally wrote a *k* into the first example, writing *tandanacuichik* instead of *tandanacuichij*. Her examples were otherwise perfect illustrations of the two alphabets. I changed the *k* to *j* above to avoid detracting from the main argument of the section, but the “mistake” is another example of the difficulties of separating the alphabets.

phabet. Ruth mentioned that she preferred how the phrase was written in the first example, and I asked her why. “Because like that I understand more quickly, with these letters *b*, *g*, and *c*,” she responded.

Ruth then began to read the same phrase written with the orthography of Unified Kichwa. “Tan-ta-na-kuy-chik,” she slowly read, syllable by syllable. She immediately offered the example of another teacher at the school who struggles with reading in standardized Kichwa. Pointing to the first example, she said, “when it’s like that, he understands quickly.” But the second phrase has a different result. “If I write it like that, he’s going to be like *krik-ku-na* [reading slowly, syllable by syllable], like those who are just recently learning to read. He’s going to be tongue-tied, stuttering.”

Systematic orthographic changes affect how people read. It is not surprising, then, that many employees of EIB prefer the old alphabet. The new letters slow down reading, causing preference for more familiar form-to-sound connections. Decades ago, the development of standardized letters in Indigenous languages was believed to make reading more “efficient” for acculturating Native individuals as quickly as possible. Today, standardized letters, some the same as those developed in Central America in the early twentieth century, complicate reading for those who read with other alphabets. Eager bilingual readers often prefer reading in Spanish to struggling with standardized letters in Kichwa.

Alphabets Are Linked to Emotions, Which Affect Literacy Events

Causing avid readers to read more slowly is no neutral process. Such changes can make even teachers feel like they cannot read. Slowing down reading connects readers to other literacy events, such as witnessing students who are, as Ruth mentioned, “just learning to read.” As Indigenous adults, the stigma of “illiteracy” can be especially palpable. Many teachers’ and planners’ parents cannot read and write alphabetically, and they have witnessed the exploitation of their parents through land titles and other state documents.

In the history of Indigenous language standardization, we saw how particular letters came to index emotions. Newer standardized letters invoke readers’ frustration based on more challenging reading. In the process, even single letters can become iconic of the consternation experienced in reading, in turn discouraging reading in Kichwa at all. I now turn to an interview with Pedro, who has coordinated EIB for more than 10 years in a regional directorate, to examine these points.

Pedro is a Kichwa speaker who has organized workshops for teacher training and attended workshops to translate laws into Kichwa. Pedro routinely expressed his frustration with the orthographic changes of standardized Kichwa. He can read with the unified letters, but he lamented the systematic changes to orthography, especially the merging of voiced and unvoiced stops

with a single grapheme *k*. Pedro specified such concerns in an interview with me on February 16, 2012, as we looked over a book written in standardized Kichwa:

Our fathers of the language have changed it with this letter *k*. Instead of *c* . . . here [*k*] appears, in this paragraph. It seems [like] 80, 70, 60 percent [of it is written] with this *k*. It's repeated many times, . . . and in the absence of *c* from *casa*, the letters seem very long, *carilargas* (serious, long-faced in annoyance) . . . Long, ugly they seem to me. . . . So in the first place, [seeing this text] makes me feel lazy about reading. . . . I would say that the aesthetic of this looks weird. My eyes feel lazy to look at this, sometimes because of the letter *k*. But if I see it written with the letter *c*, the same text, there is a wider space, more rounded letters, prettier ones. . . . So for example in the Kichwa Bible back in [the province of] Chimborazo, it is written like that with Spanish letters. The letter *k* doesn't show up, . . . like in old Kichwa. With this . . . it doesn't give me pleasure [to read in Kichwa].

Pedro describes previous experiences with the standardized Kichwa alphabet that make him dislike reading. He focused his frustration on letters as the most salient markers of Unified Kichwa. In turn, this connection contributed to his “eyes feel[ing] lazy to look at this.” The letters of the standardized Kichwa alphabet invoke prior experiences of frustration with reading. In the process, aesthetic differences become overwhelming signifiers of frustration. The letters, in particular the *k*, transform the text into something that is visually displeasing and long. There are a host of other alphabetic differences that Pedro chooses not to describe, focusing instead on the *k* as the primary emblem of texts produced with the alphabet. The letter and the frustration it invokes obscure the referential content or the meanings of the words on the page.

Pedro mentioned that he gets little “pleasure” from this difficulty. This is no small change. In that same interview, Pedro described his lifelong love for reading:

I was the first child in first grade to learn to read the book *Nacho* [in Spanish]. While my first-grade classmates only knew how to pronounce small words, I already knew how to read that text, the full story. When I was in eleventh grade, the community made me librarian, as there was a community library. Currently, I am addicted to reading. . . . Sometimes I say, [when] I finish reading a text, a brochure, “and now what will I read?” I am always imagining what to read.

But with orthographic changes, reading is challenging. Indeed, he went on to mention that he currently prefers to read in Spanish. Even advanced readers come to associate their frustration with the letters. They can be turned off from reading by seeing single letters that they associate with standardized Kichwa, and based on prior experiences with reading, emotions like frustration.

Planners Have Contrasting Opinions of the Unified Kichwa Alphabet, and Teachers Especially Dislike the “New” Letters

Some Kichwa planners and teachers view officialization as having solved orthographic problems, while other planners and teachers lament the recent changes. In a workshop with teachers, for example, a prominent Kichwa-speaking linguist said the following as he elaborated the main themes of primary education in Kichwa: “In Kichwa, we don’t have many problems with orthography” (August 15, 2011). An interview with one Kichwa-speaking planner from the National Directorate showed how he believes that written Kichwa is now easier for readers, even if conflict remains about the letters: “The problem of writing is no longer difficult now because the *w* and the *k* entered [into the alphabet]. But that’s also producing social conflict now because they say that [those letters] aren’t letters of our languages” (interview with author, October 17, 2011). And as the case of Yolanda showed above, other planners have different opinions.

Ongoing conversations with teachers would frequently come back to their distaste for standardized Kichwa through focusing on letters. Teacher Ruth emphasized this distaste on May 8, 2013: “I’m not in agreement with Unified [Kichwa]. . . . We use the *d*, but in Kichwa [now] it doesn’t exist.” In the history of decisions about alphabets, there continues to be much dissent, even though some Kichwa-speaking planners see unification as having reduced the number of alphabets in circulation.

Discussion and Conclusion

In contemporary Indigenous education, differences of opinion about alphabets are likely to remain front and center in language revitalization. As scholars have increasingly emphasized (Moore et al. 2010; Hornberger and McCarty 2012; Mortimer and Wortham 2015), trajectories of standardization shape planning for Indigenous languages across time and space. Alphabet histories, in particular, affect how people perceive and interact with schooling materials. Speakers have affective relationships with their language use, and sometimes emotions are invoked with just the shape of a single letter. Such relationships are important for reading. Literacy events depend not just on alphabets but also on sociohistorical relationships that affect how people perceive alphabets.

This conclusion has a number of implications for language planning and assessment. Minimally, evaluators should remember that languages have orthographies with contrastive form-to-sound relationships that affect reading events. EGRA does take this point into account, eschewing a global standardized measure for “reading speed” across all languages and orthographies (EGRA Toolkit 2015). However, EGRA and other evaluations should account for multilingual readers, as more people around the world are multilingual

than monolingual. Emergent and advanced readers may struggle with reading fluency and comprehension if the language of evaluation is not the participant's first language (Benson 2013; Walter 2013). Sometimes nation-states stipulate just a single language for literacy evaluation. Planners or educational development workers also collect data on literacy and reading speeds and do not specify in which language the exams are carried out (Benson 2013). Attention to first languages and orthographies is important, but it is also inadequate to ensure that readers are tested in their first language. In light of orthographic changes in Indigenous languages, some individuals read more easily in their second language. Individuals may be excellent readers in one language, or with a different orthography in the same language, while they may read more slowly in another language or with another orthography in the same language. With no further knowledge about the linguistic backgrounds of students, readers are planned for or assessed as if they simply read the language and orthography of planning or assessment.

Although psycholinguistic research has emphasized that alphabets are significant only for early reading stages, this article shows how alphabets are consequential for fluent readers. Overlapping, competing Roman orthographies can create bumps for reading. Competing alphabets in languages with shorter histories of standardization can lead to slowed reading in even an avid reader's first language, complicating efforts at writing textbooks and evaluating literacy. A generation of readers in Indigenous languages is now experiencing reading with distinct but overlapping Roman alphabets. This article shows some of the difficulties. Major orthographic changes need ongoing training and support for reading with different letters. Making letters more "efficient" may have just the opposite effect if orthographic differences are downplayed.

Furthermore, notions of orthographic depth or reading speed mute complicated ways in which orthographies are socially constituted and thus affect reading. Like examples of Indigenous literacies elsewhere (Hinton 2001; Seifart 2006), readers have rejected standardized Roman alphabets for Kichwa for social reasons. Language revitalization research has emphasized that merging disparate varieties of an Indigenous language with standardized alphabets can cause discontent for readers (Grenoble and Whaley 2006; Seifart 2006; Lüpke 2011). As I have shown, the rejection of standardized alphabets in Kichwa is also linked to the colonial language's alphabet and the aesthetic associations that people have with those letters. For Indigenous languages, there are various alphabets that already exist for readers, including those of colonial languages. No single orthographic system is best for all educational situations (see also Grenoble and Whaley 2006), including within a single nation-state. Considering which orthography individuals have grown up using, and whether letters come to invoke unpleasant emotions that affect reading events, should be integral to talks of language planning and evaluation.

Understanding histories of readers' language use would be an important addition to assessment tools, such as conducting a brief life history interview. For literacy planning, interviews could also help choose more appropriate orthographies for particular and smaller domains of readers. The necessity of increased dialogue with readers illustrates that, as the case of Kichwa has shown, Indigenous language planning is increasingly about bilingual individuals who also read in colonial languages. As colonial pasts continue to contribute to language shift, this point will only grow in importance regardless of geographic location, highlighting the diversity of ways in which Indigenous-language speakers read.

This study also shows the ongoing importance of including a diverse array of voices in major policy changes. Speakers of minoritized languages must be involved in policy decisions for those languages, and policy makers should include teachers in their decision making (Hornberger 1997; King 2001). However, solely including teachers and speakers of the language will also not suffice. As this article has shown, teachers were involved in creating the current alphabet used in the EIB system. And since the 1980s, Kichwa speakers have been at the forefront of elaborating and setting educational policy, perhaps more so in Ecuador than elsewhere because of a school system run by Indigenous individuals. It is important to bring in individuals from different types of jobs and roles—policy making, writing, teaching, reading—to language planning. Planning should also include individuals who have contrastive experiences with language standardization initiatives. Even with a wide array of representation, such domains of individuals can be dominated by the voices of those who support ideologies of linguistic unification (see other cases in Hornberger 1993; Jaffe 2000; Urla 2012). Proponents of differing orthographic initiatives are too often silenced or ignored in “expert” initiatives that are detached from readers' experiences.

References

- Abadzi, Helen. 2011. “Reading Fluency Measurements in EFA FTI Partner Countries: Outcomes and Improvement Prospects.” *GPE Working Paper Series on Learning, No. 1*. Washington, DC: Education for All Fast Track Initiative (EFA FTI) Secretariat, World Bank.
- Abram, Matthias. 1992. *El Proyecto EBI 1985–1990: Lengua, Cultura E Identidad*. Quito: Abya-Yala.
- Albó, Xavier. 1987. “Problemática Lingüística Y Metalingüística de Un Alfabeto Quechua: Una Reciente Experiencia Boliviana.” *Allipanchis* 29/30: 431–67.
- Alim, H. Samy. 2011. “Global Ill-Literacies Hip Hop Cultures, Youth Identities, and the Politics of Literacy.” *Review of Research in Education* 35 (1): 120–46.
- Aro, Mikko. 2004. *Learning to Read: The Effect of Orthography*. Jyväskylän yliopisto. <https://jyx.jyu.fi/dspace/handle/123456789/13355>.

- Barros, Maria Cândida. 1995. "The Missionary Presence in Literacy Campaigns in the Indigenous Languages of Latin America (1939–1952)." *International Journal of Educational Development* 15 (3): 277–87.
- Bartlett, Lesley. 2007. "Literacy, Speech, and Shame: The Cultural Politics of Literacy and Language in Brazil." *International Journal of Qualitative Studies in Education* 20 (5): 547–63.
- Bartlett, Lesley. 2009. *The Word and the World: The Cultural Politics of Literacy in Brazil*. New York: Hampton.
- Benson, Carol. 2013. "Towards Adopting a Multilingual Habitus in Educational Development." In *Language Issues in Comparative Education*, ed. Carol Benson and Kimmo Kosonen, 283–99. Boston: Sense Publishers.
- Caravolas, Markéta, Arne Lervåg, Petroula Mousikou, Corina Efrim, Miroslav Litavský, Eduardo Onochie-Quintanilla, Naymé Salas, et al. 2012. "Common Patterns of Prediction of Literacy Development in Different Alphabetic Orthographies." *Psychological Science* 23, no. 6 (2012): 678–86.
- Chango Juarez, Bernardo. 2007. "Algunos Fundamentos Sobre La Lengua Quichua En América." In *Shimiyukkamu Diccionario*, 7–12. Quito: Casa de la Cultura Ecuatoriana.
- Collins, James, and Richard Blot. 2003. *Literacy and Literacies: Texts, Power, and Identity*. 1st ed. Cambridge: Cambridge University Press.
- Cortina, Regina, and Katy De la Garza. 2015. *Educación, Pueblos Indígenas E Interculturalidad En América Latina*. Quito: Abya-Yala.
- Ellis, Nick C., Miwa Natsume, Katerina Stavropoulou, Lorenc Hoxhallari, Victor H. P. Van Daal, Nicoletta Polyzoe, Maria-Louisa Tsipa, and Michalis Petalas. 2004. "The Effects of Orthographic Depth on Learning to Read Alphabetic, Syllabic, and Logographic Scripts." *Reading Research Quarterly* 39 (4): 438–68.
- Errington, James Joseph. 2008. *Linguistics in a Colonial World: A Story of Language, Meaning, and Power*. Malden, MA: Oxford: Blackwell.
- Faudree, Paja. 2015. "Why X Doesn't Always Mark the Spot: Contested Authenticity in Mexican Indigenous Language Politics." *Semiotica* 203: 179–201.
- Fleming, Luke. 2009. "Indigenous Language Literacies of the Northwest Amazon." *Working Papers in Educational Linguistics* 24 (1): 35–39.
- Florit, Elena, and Kate Cain. 2011. "The Simple View of Reading: Is It Valid for Different Types of Alphabetic Orthographies?" *Educational Psychology Review* 23 (4): 553–76.
- French, Brigitte M. 2003. "The Politics of Mayan Linguistics in Guatemala: Native Speakers, Expert Analysts, and the Nation." *Pragmatics* 13 (4).
- French, Brigitte M. 2004. "The Politics and Semiotics of Sounds—Mayan Linguistics and Nation-Building in Guatemala." *Collegium Antropologicum* 28 (Supp. no. 1): 249–55.
- Gee, James Paul. 2014. *Literacy and Education*. Routledge.
- Georgiou, George K., Rauno Parrila, and Timothy C. Papadopoulos. 2008. "Predictors of Word Decoding and Reading Fluency across Languages Varying in Orthographic Consistency." *Journal of Educational Psychology* 100 (3): 566–80.
- Graff, Harvey. 1979. *The Literacy Myth: Literacy and Social Structure in the Nineteenth-Century City*. New York: Academic Press.
- Grainger, Jonathan. 2008. "Cracking the Orthographic Code: An Introduction." *Language and Cognitive Processes* 23 (1): 1–35.

- Grenoble, Lenore A., and Lindsay J. Whaley. 2006. *Saving Languages: An Introduction to Language Revitalization*. Cambridge: Cambridge University Press.
- Gundaker, Grey. 1998. *Signs of Diaspora/Diaspora of Signs: Literacies, Creolization, and Vernacular Practice in African America*. Oxford: Oxford University Press.
- Haboud, Marleen. 2010. "South America and the Andean Region." In *Atlas de Las Lenguas Del Mundo en Peligro*, ed. Christopher Moseley. Valencia: UNESCO.
- Haboud, Marleen, and Nicholas Limerick. 2016. "Language and Education in the Andes." In *Encyclopedia of Language and Education: Language Policy and Political Issues in Education*, ed. Teresa McCarty and Stephen May. New York: Routledge.
- Haboud, Marleen, and J. Toapanta. 2014. *Voces E Imágenes Lenguas Indígenas Del Ecuador*. Quito: PUCE.
- Hinton, Leanne. 2001. "New Writing Systems." In *The Green Book of Language Revitalization in Practice*, ed. Leanne Hinton and Ken Hale. Boston: Brill.
- Holm, Alison, and Barbara Dodd. 1996. "The Effect of First Written Language on the Acquisition of English Literacy." *Cognition* 59 (2): 119–47.
- Hornberger, Nancy H. 1993. "The First Workshop on Quechua and Aymara Writing." In *The Earliest Stage of Language Planning: "The First Congress" Phenomenon*, ed. Joshua A. Fishman. New York: Walter de Gruyter.
- Hornberger, Nancy H. 1997. *Indigenous Literacies in the Americas: Language Planning from the Bottom Up*. Berlin: Walter de Gruyter.
- Hornberger, Nancy, and Nicholas Limerick. Forthcoming. "Teachers, Textbooks, and Orthographic Choices in Quechua: Bilingual Intercultural Education in Peru and Ecuador." In *Indigenous Writing and Education*, ed. Kirk Sullivan and Coppele Cocq. Leiden: Brill.
- Hornberger, Nancy H., and Teresa L. McCarty. 2012. "Globalization from the Bottom Up: Indigenous Language Planning and Policy across Time, Space, and Place." *International Multilingual Research Journal* 6 (1): 1–7.
- Jaffe, Alexandra. 2000. "Introduction: Non-standard Orthography and Non-standard Speech." *Journal of Sociolinguistics* 4 (4): 497–513.
- Katz, Leonard, and Ram Frost. 1992. "Chapter 4, the Reading Process Is Different for Different Orthographies: The Orthographic Depth Hypothesis." In *Advances in Psychology* 94: 67–84.
- King, Kendall. 2001. *Language Revitalization Processes and Prospects*. Tonawanda, NY: Multilingual Matters.
- King, Kendall, and Marleen Haboud. 2007. "Language Planning and Policy in Ecuador." In *Language, Planning, and Policy in Latin America*, vol. 1, *Ecuador, Mexico, and Paraguay*, ed. Richard B. Bauldof Jr. and Robert B. Kaplan. Tonawanda, NY: Multilingual Matters.
- Larson, Mildred L., and Patricia M. Davis, eds. 1981. *Bilingual Education: An Experience in Peruvian Amazonia*. Washington, DC: Dallas: Summer Institute of Linguistics.
- Lomawaima, K. Tsianina, and Teresa L. McCarty. 2002. "When Tribal Sovereignty Challenges Democracy: American Indian Education and the Democratic Ideal." *American Educational Research Journal* 39 (2): 279–305.
- Lüpke, Friederike. 2011. "Orthographic Development." In *The Cambridge Handbook of Endangered Languages*, ed. Peter K. Austin and Julia Sallabank, 312–36. Cambridge: Cambridge University Press.

- Martínez Novo, Carmen. 2009. "Is the Cultural Project of the Indigenous Movement in Crisis? Some Ethnographic Remarks on the Ambiguities of Intercultural Bilingual Education in Ecuador." Presented at the 2009 Congress of the Latin American Studies Association, Rio de Janeiro, Brazil, November 14.
- McCarty, Teresa L., ed. 2005. *Language, Literacy, and Power in Schooling*. Mahwah, NJ: Routledge.
- Meek, Barbara A. 2010. *We Are Our Language: An Ethnography of Language Revitalization in a Northern Athabascan Community*. Tucson: University of Arizona Press.
- Ministerio de Educación. 2009. *Kichwa Yachakukkunapa Shimiyuk Kamu*. Quito: Ministerio de Educación.
- Montaluisa, Luis. 1980. "Historia de La Escritura Del Quichua." *Revista de La Universidad Católica* 28: 121–46.
- Moore, Robert E., Sari Pietikainen, and Jan Blommaert. 2010. "Counting the Losses: Numbers as the Language of Language Endangerment." *Sociolinguistic Studies* 4 (1): 1–26.
- Mortimer, Katherine S., and Stanton Wortham. 2015. "Analyzing Language Policy and Social Identification across Heterogeneous Scales." *Annual Review of Applied Linguistics* 35 (March): 160–72.
- New London Group. 1996. "A Pedagogy of Multiliteracies: Designing Social Futures." *Harvard Educational Review* 66 (1): 60–93.
- Peña, Guillermo de la. 2005. "Social and Cultural Policies toward Indigenous Peoples: Perspectives from Latin America." *Annual Review of Anthropology* 34 (1): 717–39.
- Pike, Kenneth L. 1938. "Practical Suggestions toward a Common Orthography for Indian Languages of Mexico for Education of the Natives within Their Own Tongues." *Investigaciones Lingüísticas* 2: 422–27.
- Pike, Kenneth L. (1947) 1975. *Phonemics: A Technique for Reducing Languages to Writing*. Ann Arbor: University of Michigan Press.
- Quishpe Lema, Cristobal. 2013. "Kichwa Shimita Yachakushunchik." *La Gaceta*, March 9. <http://www.lagaceta.com.ec/index.php/dominical/187-shayruco/11120-kichwa-shimita-yachakushunchik>.
- Rappaport, Joanne, and Tom Cummins. 2011. *Beyond the Lettered City: Indigenous Literacies in the Andes*. Durham, NC: Duke University Press.
- RTI International. 2015. *Early Grade Reading Assessment Toolkit*. Washington, DC: United States Agency for International Development.
- Schieffelin, Bambi B., and Rachele Charlier Doucet. 1994. "The 'Real' Haitian Creole: Ideology, Metalinguistics, and Orthographic Choice." *American Ethnologist* 21 (1): 176–200.
- Sebba, Mark. 2007. *Spelling and Society: The Culture and Politics of Orthography around the World*. Cambridge: Cambridge University Press.
- Sebba, Mark. 2012. "Orthography as Social Action: Scripts, Spelling, Identity, and Power." In *Orthography as Social Action: Scripts, Spelling, Identity and Power*, by Alexandra Jaffe, Jannis Androutsopoulos, Mark Sebba, and Sally Johnson. Berlin: Walter de Gruyter.
- Seifart, Frank. 2006. "Orthography Development." In *Essentials of Language Documentation*, ed. Jost Gippert, Nikolaus Himmelmann, and Ulrike Mosel. Berlin: Mouton De Gruyter.

- Share, David L. 2008. "On the Anglocentricities of Current Reading Research and Practice: The Perils of Overreliance on An 'Outlier' Orthography." *Psychological Bulletin* 134 (4): 584–615.
- Skutnabb-Kangas, Tove. 1988. *Minority Education: From Shame to Struggle*. Bristol: Multilingual Matters.
- Street, Brian V. 1984. *Literacy in Theory and Practice*. Cambridge: Cambridge University Press.
- Suslak, Daniel F. 2003. "The Story of Ö: Orthography and Cultural Politics in the Mixe Highland." *Pragmatics* 13 (4): 416.
- Townsend, Cameron. 1961. "Cakchiquel Grammar." In *Mayan Studies I*, ed. Elson Benjamin. Norman, OK: Summer Institute of Linguistics.
- Urla, Jacqueline. 2012. *Reclaiming Basque: Language, Nation, and Cultural Activism*. Reno: University of Nevada Press.
- Uzendoski, Michael. 2008. "La Textualidad Oral Napo Kichwa Y Las Paradojas de La Educación Bilingüe Intercultural." In *Repensando Las Identidades Y Políticas Indígenas En América Latina*. Quito: Abya-Yala.
- Vasudevan, Lalitha, and Gerald Campano. 2009. "The Social Production of Adolescent Risk and the Promise of Adolescent Literacies." *Review of Research in Education* 33 (1): 310–53.
- Verhoeven, Ludo. 2000. "Components in Early Second Language Reading and Spelling." *Scientific Studies of Reading* 4 (4): 313–30.
- Von Gleich, Uta. 2006. "La Lucha de Ideologías Lingüísticas En Sistemas Educativos." *Pueblos Indígenas Y Educación* 59: 39–64.
- Wagner, Daniel A. 2008. "Adult Literacy: Monitoring and Evaluation for Practice and Policy." *International Review of Education* 5–6 (54): 651–72.
- Walter, Stephen. 2013. "Exploring the Development of Reading in Multilingual Education Programs." In *Language Issues in Comparative Education*, ed. Carol Benson and Kimmo Kosonen, 265–81. Boston: Sense Publishers.
- Weber, David. 2005. *Writing Quechua*. Los Angeles: UCLA Latin American Center Publications.
- Wortham, Stanton. 2005. *Learning Identity: The Joint Emergence of Social Identification and Academic Learning*. New York: Cambridge University Press.
- Wroblewski, Michael. 2012. "Amazonian Kichwa Proper: Ethnolinguistic Domain in Pan-Indian Ecuador." *Journal of Linguistic Anthropology* 22 (1): 64–86.