Rethinking causality through children’s literacies

by Jacqueline Barreiro, Simon Fraser University


In this chapter, I share a literacy-related story from a rural school in the Ecuadorian Andes. The story takes place in Highland School\(^1\), in a first-grade classroom where six-year-old Mauricito has a singular encounter with the letter ‘s’. This is a story that, in its writing, entangles theory and memory. In the story, I bring together the concepts of affect and intra-action to trouble traditional conceptions of causality in literacy research and pedagogy that takes causality to be the relationship between distinct sequential events (Barad, 2007) that are constructed as causes and effects. Educators and researchers have long searched for the causes of children’s and adults’ struggles with literacy. Often this work relies on a linear view of cause-effect that leads to literacy ‘remedies’ or preventions (Heath, 2010), which do not always result in expected improvements (e.g., Neuman, 2017). For example, a causal understanding of the relationship between low socio-economic status (SES) and academic achievement (Berkowitz, Moore, Astor, & Benbenishty, 2017) has led some educators and schools to pressure, and, sometimes, to also assign responsibility of blame to families from low SES backgrounds for not adequately preparing or supporting their children through schooling (Heath, 2010).

However, the particular literacy experiences of children from low SES backgrounds in Highland School that are at the heart of this story, lead me to wonder how a different understanding of causality might disrupt narratives of lack, deficit and underperformance expectations.
Drawing upon Barad (2007), I propose causal relationality as a more complex but productive mode of thinking and doing literacy. Barad rethinks causality, not as a chain of events between distinct elements where one is taken to “be the cause of the effect left on the other” (Barad, 2007, p. 175), but rather as the intimate or intra-active continuous (re)configuring of the world. Central to Barad’s causal relationality is ‘intra-action’ which “signifies the mutual constitution of entangled agencies” (Barad, 2007, p. 33) (italics in original). This is distinct from interaction, which assumes distinct, a priori boundaries and properties between agencies (Barad, 2007). In intra-action, subjects and objects, such as literacy, texts, bodies, and time are not separate ontological units acting one upon the other, as in a linear understanding of cause-effect relations, but rather, these agencies are entangled and emerge together to produce events.

Another concept grounded in a relational causal structure is that of affect. Following Spinoza, Deleuze (1988) describes affect as the capacities of bodies to affect and be affected, and also as the passage of affect from one body to another. This understanding of affect also becomes vital in reconfiguring causality. Affect refers to those intensities and forces that bodies undergo as they encounter each other, and also to the passage or flow of those forces (Seigworth and Gregg, 2010). These forces, running through bodies, have their own rhythms; they can be forceful, gentle, subtle, mostly imperceptible. According to Spinoza’s (1949) concepts of affect that I draw upon in this chapter, affect is pre-conscious. They happen. The capacity of bodies of all sorts (Deleuze, 1988) to affect and be affected is vital to a theory of posthumanism, becoming and change. Bodies are in continuous connection as capacities to affect and be affected, and, in so doing, take
up or lay down rhythms (Deleuze, 1988). This also means that bodies are never a finished
affair but are always in the process of becoming in affective flows.

Understanding affect as the capacity of bodies to affect and be affected helps us to
rethink causality “in terms of intra-activity” (Barad, 2007, p. 393), because for bodies to
exchange affect, they have to connect. In this sense, in Barad’s relational causality, cause
and effect emerge simultaneously in the intimate affective relationality of intra-activity.
In other words, due to the intra-active work of affect, it is not possible to affect a body
without simultaneously being affected by that body, and so on with all other bodies ad
infinitum (Spinoza, 1949). If we think of pencils for example, we know that the
phenomena child-pencil is not the same as the phenomena child-iPad. Different children
and different iPads, pencils, emerge from each event, perhaps slowly and imperceptibly,
but changing nevertheless. The pencil affects the child differently than does the iPad,
because the histories and relations of the pencil and the iPad are different. They are
enrolled in different assemblages. This can be understood as “the mutual constitution of
entangled agencies” (Barad, 2007, p. 33) (italics in original), namely, intra-action. It is in
this way that the world or worldings emerge, including those of literacy practices.

In this chapter, I interweave the concepts of affect, intra-action, and causality through
storytelling with theory. Storytelling with theory is the name I chose for an inquiry
approach that emerged when writing stories of my educational practice as teacher and
principal and my readings of posthumanist theory engaged with one another through
embodied memory (Barad, 2007). Embodied memory does not faithfully represent the
past in the present, but allows the continuous “openness of the narrative to future retellings” (Barad, as interviewed in Juelskjær & Schwennesen, 2012, p. 11).

Remembering, for Braidotti (2013) is a creative reworking of both imagination and chronologically previous experiences. In accounting for the affective impact of remembering, the focus of loyalty, according to Braidotti (2013), shifts from replication to what a text can do, has done, and how it has had impacts on one and others through the affective forces it engages. In this sense, memory is a relational event that enfolds the past, present, and future. Thus, a story is not simply the retelling of a past event, but also an opening to the future. The story I tell in this chapter resonated with me and called out to me (MacLure, 2013) in a way that led me to think literacy differently through theory.

In order to sharpen the focus of this literacy event, recounted below though the lens of storytelling with theory, it is important to situate the literacy practices of the families living in rural areas in the high Andes of Ecuador and the public schooling available to their children. Although there is access to education in this community, it might be making very little difference in the lives of these children. We must thus ask what counts as education, and what it means to participate in education. Below I describe the Highland community in terms of its literacy rhythms and causal relations.

**Literacy rhythms in children’s families**

The children who attended Highland School come from families identifying themselves as mestizos², whose main language of communication is Spanish, although it is a
variation of Spanish with Quichua³ influences. In most households, a grandparent still
speaks this Indigenous language, and while some of the children understand some
Quichua or know a few words, they have been made to feel ashamed to use it. This
speaks to the ongoing work of colonialism that is part of the assemblages of these
children’s and their parents’ daily lives from which they emerge as outsiders, and thus are
“seen to fall short of the standards of the dominant group” (de Finney, Dean, Loiselle, &
Saraceno, 2011, p. 362). The variety of Spanish these children speak, their Quichua-
derived last names, and their shared physical traits, all place them in a colonial category
of Mestizo. Although this group does not constitute a numerical minority in Ecuador,
Mestizos have been “minoritized” (de Finney, MacKenzie, Loiselle, & Saraceno, 2011)
and commonly regarded as less intelligent and less capable than the mainstream
population. Localized in a lower socioeconomical class (McLaren, 2009), Mestizo
communities have been consistently abused and oppressed by landowners and others who
hold more powerful positions on the racial-social scale. Historically, the type and quality
of education available to children in Mestizo communities has ensured that social
inequities are perpetuated (OECD, 2018; Torrecilla & Carrasco, 2011).

Families sent their children to Highland School because they understand the value of a
formal education, and parents have typically suffered from a lack of educational
resources and experiences in their own lives. Although Ecuador has made steady
increases in its funding and investment in education, for example, by building 65 modern
Unidades Educativas del Milenio (Millennial elementary and secondary schools) between
2009 and 2017 (Redaccion Plan V, 2017)⁴, Ecuador’s public education system, especially
in rural lands, remains dramatically underfunded since its inception. The uninviting tin roof, cement floor, and dirt patio are, sadly, still the norm for many elementary school designs in rural communities. Besides the inadequate infrastructure, rural schools also lack learning materials, Internet access and, more significantly, books.

Access to secondary school in Ecuador is still only available in larger urban centers; consequently, most parents in rural, Mestizo communities have not completed high school. This means children have had few models of extended engagement with complex texts and opportunities for practice that are associated with fluent school literacy skills (Ewing, 2018; Kalman & Street, 2013). Maintaining and enhancing their literacy skills was hard work for the Highland school community and others like it. It is a 2.5 kilometres walk from the Pan-American Highway, and another thirty-minute bus ride to town, in order to get to a library with limited and dated resources. Few print texts make their way into homes. In a similar socioeconomic context, Kalman’s (2004) study on the access to written culture in a group of women from the Mixquic, a rural and agriculture-based community in Mexico, identified that, among the print materials available in the 49 households involved in his study, the most common reading material in 98% of homes were saint cards. Kalman (2004) also found that 77% of families kept and consulted the free elementary school textbooks provided by the government. These findings are very similar among rural agriculture-based communities in Latin America (Kalman & Street, 2013), and resonate with the practices of the Highland School community where the story of this chapter takes place. Thus, families have little opportunity to engage with reading and writing activities (understood in the traditional definition of foundational and discrete
sets of literacy skills), flowing from a racialized class system that has diminished access to the “social conditions necessary for literacy learning” (Kalman & Street, 2013, p. 7), including to the materialities of literacy such as print texts, libraries, post offices, newsstands, the Internet, and digital devices.

Although there are many other forms of learning underway in the community, engagement with print texts is not typically part of family life, which in turn influences the way children are prepared for and supported through schooling (Heath, 1982; Prendergast & MacPhee, 2018), as well as how these children are positioned as ‘less than’ in mainstream schooling practices. The children, like Mauricito, who is described later on in this chapter, came from families subscribing to the philosophy captured in the well-known Spanish saying “la letra con sangre entra” (a verbatim translation: ‘the letter enters with blood’). Thus, many children came to school with ideas of how difficult it is to read and write, and how hard it is to learn. There are colonial overtones that come with this belief, especially when we remember the first encounter around 1532 between the Inca and the written word, a bible. History tells us that a priest presents the Inca Atahualpa, the Emperor, with a bible, which he refuses to accept and finally throws to the ground, providing the justification for his capture, and later, his death. Although there are differences in the ways this story is narrated, historians usually stress that this defiant act was used to justify the Spaniards’ violent massacre of the Incas. For about three centuries thereafter, literacy instruction was provided to the Indigenous population by Catholic priests as charity, rather than as a right to education, and, as such, it became closely attached to Catholic faith. In this way, literacy education is equated with control and
discipline, with the force of Western colonialism, and with violence. Children coming to school carry the weight of this history of literacy education, unconsciously or not. This makes it all the more difficult for them and their families to take learning risks as they become readers and writers.

The educational inequalities experienced by the children and families in Highland School are becoming more entrenched. This is part of a global trend. On average, across OECD countries in the 21st Century, schooling is not contributing to social mobility as it did in the second half of the 20th century (OECD, 2018). Nevertheless, it is worth noting that inequality is not only rooted in education processes, but that it is also driven by class, race and political aspects, where capitalist and neoliberal policies play major roles (Alvaredo, Chancel, Piketty, Saez, & Zucman, 2018). According to OECD’s (2018) report on social mobility, “[i]n an ‘average OECD country’ it would take around four to five generations for children from the bottom earnings decile to attain the level of mean earnings” (p. 14). And this kind of mobility would take even longer for countries with developing economies.

Returning to my inquiry into causal relationality at Highland School, I now build upon emerging research that proposes thinking literacies beyond engagement with text and human agencies; the “unbounded ways of doing literacy,” such as those presented by Kuby and Gutshall Rucker (2016, p. xxi). With these authors, I want to imagine what literacies education could look like if relational causality were accounted for in pedagogy and educational research in the constitution of literacy events. My hope is that doing so
would release a force to disrupt centuries-old narratives of educational detachment, lack, and underperformance of certain marginalized and rural populations. It would also open worlds of possibilities for students in these communities, by exploring strengths, developing potentialities, and even reaching dreams.

As we read the next story through a lens of relational causality, I would like to invite readers to be open to the indeterminate: literacies beyond literacy, interventions beyond intervening.

**Stories with theory: Affect, intra-action, and relational causality in literacy pedagogies**

Some afternoons, when the sun shines softly, my wife Valentina and I like to stroll around the neighborhood. We usually walk the few steps down from the entrance gate of the building where we live to the sidewalk and interlace our arms side by side, and after a few awkward strides, we soon fall into a rhythmic and synchronic pace.

During several of these walks, we recall and (re)construct many of the stories of the ten years we spent teaching in Highland School, a rural school in the high Andes of Ecuador; Valentina as an elementary school teacher, and I as a high school teacher and principal. The rhythm of our walking permeates our bodies and our thoughts, and our memories interlace as we weave together snippets of life at school. Deleuze (1988) reminds us that it is through these rhythms of “speed and slowness that one slips in among things, that one connects with something else” (p. 123).
‘S’ is for sssss…not ‘c’ or Mauricito’s story

One evening, at dinner, Valentina told me that in the morning, during class, Mauricito, one of our young students, had been writing about a story he had just heard from a classmate during the ‘diario compartido’ [the shared diary]. This is an activity in which one student shares a personal experience with the group; the others ask clarifying questions to help shape the narrative; and then the students write their story. Mauricito had abruptly stopped writing, got up from his chair, and asked Valentina for his folder containing his work. Every so often, Valentina would take out the students’ folders and review students’ work with them, discussing their writing and choosing with them what to put into their portfolios. But, she said, this was not one of those times. Mauricito’s story was not finished, and the six-year-old boy looked a bit anxious. He moved the weight of his body from one foot to the other and rubbed his hands. She wondered what was going on, so she asked him, “What do you need your folder for?” “I need to correct my name,” he said.

Valentina sensed that something was affecting Mauricito. Maybe it was something in the sharing of the story? They walked together to the cupboard, and Valentina handed him the folder, which he took and rushed back to his table, flipping through the pages while murmuring something to himself. Since the students were used to reviewing their work routinely with the teacher to discuss progress, Mauricito was familiar with his own work. So, what was troubling him so much? Valentina wondered. She walked quietly towards him, not wanting to disturb him, and heard him say: “I knew it, I knew it, I knew it.”
Then he got up and walked directly towards the shelf where writing supplies laid until becoming entangled in a literacy event. Mauricito’s hand picked up a pencil and an eraser, and he hurried back to the table. One by one, he took each of his papers from the folder and patiently erased the letter ‘c’ in his name and replace it with an ‘s’.

Customarily, the name Mauricio and its diminutive Mauricito is spelled with ‘c’, not ‘s’. So, changing c for s, to Valentina, seemed rather odd since he had been writing his name “correctly” since he was five years old.

After the erasing event was over, Mauricito, the table, and the floor around them were covered in eraser dust and chippings, his papers were all wrinkled, but he had a big smile on his face and the look of satisfaction of a job well done. He patiently put the papers back in the folder and returned it to Valentina, who saw this as the opportunity to ask him what had happened. “You see,” he said, “When I say my name: Maurissssito, I hear sssss and not the /k/ /k/ /k/ of the letter ‘c’, so I knew I have been writing my name wrong.” “I just had to correct it,” he explained. And then, with solemnity, he declared, “It’s important, it’s my name.”

In Latin American Spanish, the letter c has an /s/ sound when followed by the vowels e or i, but a /k/ sound when followed by the vowels a, o, or u. When Mauricito first “learned” to write his name, he could do it by heart, but the relation between symbol and sound that characterizes standard written Spanish had not been part of his literacy becomings.
Kuby and Gutshall Rucker (2016) use the idea of literacy desirings to express the “intra-actions, movements, and surprises that students and materials produce while creating rather than their end products” (p. 5) (italics in original). For them, literacy desiring, as a construct of adjective and gerund, allows them to express the active and process-oriented aspect of a literacy event. The intra-action of the erasing and rewriting event in the story where Mauricito becomes Maurisito (with an ‘s’) makes his literacy desirings more visible, entangled, affective. The written language is materialized and a source of pride for him, not merely a representation of his accomplishment, but a new becoming-with-literacy. Although Maurisito moves from a conventional spelling to an unconventional spelling of his name, which Ferreiro (1991) would refer to as “the logic of the error” or an overgeneralization of a spelling rule, in this entanglement of affective intensities among child-eraser-pencil-sound of letter ‘s’, Maurisito emerges anew as his literacy becoming now involves taking learning risks, and, at the same time, does not imply any ‘bleeding’. Important to note as well, is the understanding of children’s literacy becominges Valentina demonstrates, as she does not interfere with Maurisito’s efforts but supports and respects his literacy desirings. Of course, in time, he became aware that the letter ‘c’ also has a soft sound which accounts for the /s/ sound in his name.

In this story, when we account for the relational causality of the phenomenon, we find an array of components (intra-acting forces) that produce new affects and that disrupt the rhythms that sediment low expectations for children as literacy learners. All these pedagogical components combined in a surprising way so that it is no longer possible to identify one without simultaneously bringing others to the fore. In Highland School, love,
care, generative pedagogies including place- and project-based learning (Smith & Sobel, 2010), high expectations, emphasis on communication and listening, balanced nutrition, educationally designed buildings and spaces, direct contact with the natural environment, inclusivity, diversity, mutual respect as a guiding principle, educational materials, reading and writing resources, preventive healthcare, community outreach, histories, caring teachers, and students, and so many other components intra-actively reconfigure, in their iterative performance, the real and the possible (Barad, 2007, p. 393) for these children. Nonetheless, let me clarify a point here. While our interventions as educators matter, and all the components mentioned above matter, in literacy becomings, relational causality is not about adding more causes to an effect. The affective flows of the unexpected and difference produced in the intra-actions of pedagogical components modify, transform, and interrupt rhythms among/of bodies in schools. Affective flows are about being open to the newness and the indeterminacy of learning events in the entanglement of these pedagogical intra-actions and not about guiding students through “rationally designed change” (Leander & Boldt, 2012, p. 32).

Maurisito’s story is not unique but rather one of many in Highland School. It became clear to Valentina and to me that a positive school climate can mitigate the impact of a lower SES background (Berkowitz et al., 2017). In Highland School, we were determined to interrupt rhythms of deficiency and lack. We were also aware that, in order to make a difference, we needed to provide, create, and nurture a whole range of experiences, practices, events, and encounters that went beyond good literacy and numeracy teaching.
Thus, for us, the question was not what happens in literacy assemblages, but how they happen.

Nothing is ever just literacy

As Manning says in an interview with Bruner and Massumi (Massumi, 2015), understanding that the human is only one part of the ecology of the event, helps us relocate the human as a becoming through encounters in events, or as we have discussed above, as effects and causes in affective intra-active phenomena. Many of the components that partake in this process of becoming might be over-coded, determined/ing (e.g., socio-economic class, parents’ educational experiences with literacy, inadequate nutritional practices, etc.). But the potential that is latent in affective flows, ‘the mutual constitution of entangled agencies’ (Barad, 2007, p. 33) opens to a different ethics and politics of education assemblages. In this case, this possibility lies in our response-ability (Haraway, 2016) as educators in how we understand and intervene through affect in pedagogical change. Affect works at the level of the pre-individual, and it also works at the level of the pre-experience. Attending to causal relationality in an event brings forward a focus on the potential of the emergent event before it becomes an experience. It means accounting for the causes and not just for the effects (Deleuze, 1988, pp. 19-20).

Therefore, going back to Maurisito’s story, the observable part of the event is his desire to change the writing of his name. If we do not account for the affects created in the school by the material-discursive intra-actions (the relational causality) which he was a part of and that position him in a place where he can carry out the action, we would
understand this effect as only a personal, cognitive achievement. However, accounting for the relational causality of his literacy becomings means that we consider the way different bodies intra-act with one another as they affect and are affected by each other. Maurisito’s literacy becomings cannot be separated from the well-balanced nutrition he received at school, just as they cannot be detached from the wooden blocks that stimulated his imagination and desires, or the books and fellow students that engaged him with their stories, nor from the gentle but consequential interventions of his teacher, Valentina, listening, noticing, asking, following along. Thus, Maurisito’s literacy becomings are not just in encounters with text, pencil, and paper, or to the occasional time spent at the computer in school, but to a much broader range of affective intra-actions his body and other bodies engaged in at school, undergoing intensities and flows of affective forces that shape, reshape, and change the rhythm of a body slipping into literacy practices.

Storytelling with theories of literacy, affect, and intra-action, brings to the fore the need to rework the traditional understanding of causality. There are differences that matter in literacy assemblages when causality is theorized as a linear view of cause-effect, or when it is theorized as a relational phenomenon. How we theorize causality changes the assemblage, and thus, what is produced. It matters for us as educators, it matters for our students, and it matters for our understanding of literacies. Causal relationality draws our attention to a “whole array of very complex material practices” (Barad, in Dolphijn & Van der Tuin, 2012, p. 56) that contributes to any literacy event but are not accounted for in a linear understanding of causality where we might then be pulled to look for single
sources upon which to project blame or solutions. When material practices are left out of our accounts of literacy events, the entangled agency of humans and materiality tends to be overlooked, which makes it very hard to understand how literacy and learning happens.

For Manning, the real political question of the possibility of change is how an experience comes into formation because the process of formation, before it is formed as an experience, is really where “the force of the potential for change occurs” (Massumi, 2015, p. 150). Thus, a relational causal account of affective pedagogies of change unsettles discourses of language and literacy as linear processes that require certain prerequisites such as early exposure to rich written-language contexts. This also disrupts narratives of educational development that are desiring a different, more ready, more savvy, more resourced child than the child who arrives at school, and the well-worn education practices of ‘not-enough’ that produce the status quo of rural, racialized, minoritized children.

And here is where Massumi’s (2015) understanding of affect as “the margin of manoeuvrability” (p. 3) is useful for thinking about relational causality in literacies. As educators, the point of thinking with affect in relational causal fields in schools is that it pushes us to think about our engagement and implication in those relations. It also means being open to the pedagogical changes they could unfold. In re-membering and writing Highland School, here in Canada, so far from the Ecuadorian Andes, theory and memory entangle once more and Maurisssssito rushes in, the feel and sound and touch and
resonance of his name-pencil-voice unfolding a different literacy or maybe not a literacy at all.
References


---

1 The real name of the school has been changed to preserve its anonymity. This school is no longer.

2 The term *mestizo* is a complex and contested term used by most Ecuadorians to define themselves. At one level, it represents the European-Spanish and Indigenous mixed heritage of Ecuadorians. From this perspective, some describe certain groups as ‘white-mestizos’ (see, for example, Muñoz, 2014). Others understand mestizos as non-Indigenous peoples (see, for example, Roitman, 2008). Conversely, Indigenous peoples who have adopted Hispanic customs may identify as mestizos, and not as a member of an Indigenous group. Although Indigenous cultural practices and identities are complex and diverse, in this sense, the term *mestizaje* is commonly understood to refer to the acculturation of Indigenous peoples (Roitman, 2008). The families and children depicted in this chapter would be considered mestizos in the latter understanding.

3 Quichua or Kichwa is the Ecuadorian variety of Quechua, an Indigenous language spoken in several South American Andean countries. You can find more information about this variety in *Languages of the World – Quichua* at: http://www.peoplesoftheworld.org/text?people=Quichua

4 Millennial schools boast modern educational infrastructures that accommodate from 570 to 1140 students.

5 While I have mentioned several educational issues that shape literacy experiences for people in the area, these do not form an exhaustive list. For example, I have not discussed teacher training, retention, pay, or other curricular policies, as these would require a nuanced exploration, which is out of the scope of this chapter.

6 Saint cards are Catholic religious cards with the picture of a Saint and a short message.