

Visualizing Mapping as Pedagogy for Literacy Futures

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“**I** ABSOLUTELY WANTED TO FINISH READING that letter,” scribbled Nick, as he was reading a play that was assigned in his grade-12 literature classroom. Before him laid a map he drew to represent his reading experiences. When prompted to share further detail, Nick continued to highlight his insights as he linguistically, symbolically, and visually navigated his meaning-making processes: “I made links in my head between my perceptions and my judgments towards characters; I thought the two main characters meeting was the result of a symbolic quest—one that spoke about love and hate.”

In this article, we explore the pedagogical potential of mapping, such as how Nick’s map renders visible qualities of learning that are often left unseen, hidden, or left unexplored—feelings, thoughts, connections, memories, and experiences (Robinson & Petchenik, 1976). Rather than focusing on maps as representative end products, we emphasize the emergent qualities of the activity of mapping in learning. Through mapping, the dynamic ways in which individuals experience literacies—the ebbs and flows, rises, punctures, plateaus, disruptions, valleys of insights, connections—provide a rich and textured sense of how learners mobilize their meaning-making and sense-mattering.

With the pedagogical potential of mapping in mind, we present five empirical examples of student mapping from two cases of mapping pedagogy in literacy classrooms: three examples of body mapping from a Language Instruction for Newcomers to Canada program and two examples of mapping reading experiences in a high school classroom. Across these cases, we share examples of mapping activities that generated responses ranging from metaphorical to more literal renderings of learning as embodied experiences. We then chart the pedagogical dimensions of

these mapping activities using a 3D coordinate plane to illustrate the range of instructional approaches from tighter to looser instrumental structures.

Surveying the Landscape of Critical Mapping in Educational Research

Across time, mapping has taken a wide range of forms from navigational and topographical maps to thematic and figurative ones (Kitchin, Dodge, & Perkins, 2011). In recent years, place-based and identity-oriented educational studies have determined that map-making was a useful critical tool to disrupt socioculturally situated power dynamics (Gondwe & Longnecker, 2015; Morrison, Annamma, & Jackson, 2017; Parker, 2006). For instance, in a study on sociolinguistics and language learning by Dagenais, Moore, Sabatier, Lamarre, and Armand (2009), 5th-grade Canadian students used hand-drawn maps to develop awareness of language norms bound by territorial neighborhood tracings. Andrews and Smith (2011) similarly engaged youth in hand-drawn neighborhood maps as they participated in exploration of cosmopolitan practice with international peers. Spatial mapping in education has also taken a technical turn, with researchers and practitioners employing digital mapping technologies to layer felt life experience and memory across physical landscapes (Velez & Solorzano, 2017), conduct geohistorical and geopolitical analysis (Taylor, 2018), and create sociospatial arguments for policy change (Gubrium & Harper, 2013). Such critical mapping activities, Vaughan (2018) argues, engage a visual rhetoric that can situate urban phenomena, retrace histories, revert social justice imbalances, and chart spatial power dynamics in communities.

We suggest that this critical potential is not limited to mapping as spatializing activity focused on physical and social geography. Mapping can also be a creative and critical pursuit that charts experience and learning. It is this type of mapping—mapping experience and learning through thematic and figurative formats—that we are focused on in this article. Several forms of this type of mapping exist and have been taken up within critical and creative praxis. For instance, Annamma (2017) engages teacher educators in mapping the multiscalar inequities of their pedagogical journeys. Conceived as learning tools to heighten high school students' comprehension of texts, thinking maps are another example that help to graphically identify patterns of learning between such dynamic qualities as reflection, consistence, flexibility, development, and integration of ideas (Hyerle, Alper, & Curtis, 2004). In post-qualitative research, Ringrose and Coleman (2013) proposed a feminist Deleuzian mapping methodology to take the pulse of the relationships between adolescent girls' perceptions of gendered bodies, femininities, and masculinities—a dynamic, critical approach that elicited reconfigurations of sexualized bodies in the Western world. Like Ringrose and Coleman (2013), educators and researchers adopting rhizomatic methodologies have contextualized mapping as an agentic, critical, and flexible tool for inquiry. Mapping aimed at charting experience and learning can reveal and create relationships across complex sets of ideologies, discourses, feelings, aesthetic stances, and materialities.

Beyond Mapping Territories

As the philosopher Alfred Korzybski (1933) argued, “The map is not the territory” (p. 58). Following Korzybski, we argue that, rather than depicting reality, mapping offers an opportunity to territorialize emergent meaning-making processes (DeLanda, 2006; Deleuze & Guattari, 1987).

By territorialize, we mean that in the processes of mapping—as a metaphorical or literal depiction—the map-maker renders visible, discovers, and produces the evanescent, intertwined, mingling aspects of mind, body, and socio-material aspects of literacy engagements. Kamberelis (2004) explains that “a map produces an organization of reality rather than simply (re)presenting space” (p. 165). Thus, through thematic and figurative mapping activities focused on learning, map-makers’ active processes of coming to know are revealed as they reflect motives, reasons, and experiences. Corner (1999) offers a series of attributes to describe what happens when mapping is understood as a way of knowing: maps “dig, find, and expose...and they relate, connect, and structure” (p. 225). In other words, mapping lends the potential for a map-maker to territorialize or produce an organization of reality, visualized with markers for ideas, emotions, and experiences that otherwise remain undocumented, fleeting, or impalpable.

As a territorializing activity, mapping illuminates thinking and feeling in the moment. These mingling thoughts and feelings are in constant flux through and from multiple perspectives, connections, and epiphanies that are generated as the map is discovered. In doing this, mapping’s territorializing partners, *deterritorializing* and *reterritorializing* (DeLanda, 2006), support the map-maker in making and remaking connections. When confronted by the unfolding of the map-so-far, map-makers can make shifts and moves in their understanding and illustration of experience. These motions are influenced, but not determined, by the emergent territorializations process. Through these shifts and movements, learners reterritorialize their sense-making by expanding and repositioning boundaries and definitions. Therefore, one cannot pre-determine, set the terms for, or constrain the mapping activity because it follows the becomings (Deleuze & Guattari, 1987) of the relational states taking place as one draws. Mapping does not simply mirror reality; it repositions and reshapes the social worlds in which people live.

Theorizing through Mapping: Visualizing Two Cases of Mapping as Pedagogy

To explore the possibilities of mapping pedagogies, we revisited two classroom-based studies as cases for collective theorizing. In each case, literacy instructors employed thematic and figurative mapping activities to engage students in territorializing learning and experience. We drew on post-qualitative notions of “thinking with theory” to engage in processes of reinventing concepts (Jackson & Mazzei, 2012, 2017). Jackson and Mazzei (2017) describe thinking with theory as a new analytic to disrupt the concept of method as transferable in qualitative inquiry. Embracing conceptual instability over knowing, Jackson and Mazzei (2017) suggest a process of experimentation with ideas drawn from a wide range of sources (theory, feelings, data, reviewer feedback, past writing) approached with a flattened sensibility. St. Pierre, Jackson, and Mazzei (2016) outline this process as a series of actions in which we experiment with new knowledge and lace it against a dimension or plane of thought through “noticing” and “rethinking” what we know and how we come to know it, allowing “connectivities [to] emerge in between data and theory” (Jackson & Mazzei, 2012, p. 2).

Through rounds of collective dialogues (Kuby & Gutshall Rucker, 2016), we experimented with mapping theory as we situated and deconstructed concepts such as *mapping*, *intra-action*, *visualizing*, *agency*, and *territorialization*. Some of these concepts fell away, particularly as their conceptual potential was under-realized. We have come to dismantle our individual assumptions about what mapping was and what it did as a means to collectively formulate how mapping could be insightful as a pedagogical practice. This process permeated multiple modes of exchange across

several months including annotated texts, Zoom meetings, in-person discussions, text messages, chains of emails, manuscript drafts, doodles, and multiple walks.

We charted the cases' mapping activity across two continua representing the pedagogical (y-axis) and mapping (x-axis) dimensions we were theorizing (see Figure 1, below). As we mapped and experienced the territorializing↔deterritorializing↔reterritorializing process ourselves in attending to our cases, we realized that a third dimension—one that would visualize the dynamic territorialization process we saw in our cases and in our own processes—was needed. As a result, we theorize that mapping, as a pedagogical approach, can be viewed across these three dimensions: tight and loose pedagogies, literal and metaphorical mapping, and a dynamic third territorializing↔deterritorializing↔re-territorializing dimension that oscillates across, within, and beyond the other two dimensions. We articulate each of these dimensions below, and use the results of our mapping to illuminate five empirical examples from the two cases in our findings.

Dimensions of Mapping Pedagogy

Dimension 1: Tight↔Loose

As a first dimension of mapping as pedagogy, we draw a continuum on a y-axis to characterize pedagogy as working from a structured (tight) to open-ended (loose) range regarding assigned tasks, texts, modes, discourses, tools, and practices (Pahl & Rowsell, 2020). The instructional activities can take on more traditional approaches with teacher-led tasks. Within this context, the design, presentation, and substance instruction and responses may adopt a formulaic approach to developing and understanding student learning. Looser pedagogies occur in classrooms where the tasks allow for greater flexibility. In either setting, we argue from the following cases, students still engage in dynamic sense-making processes during mapping, and thus, the potential of territorializing↔deterritorializing↔reterritorializing can still be realized.

Dimension 2: Literal↔Metaphorical

Pedagogical mapping activities can also be seen to exist along a continuum of literal to metaphorical. We place this on an x-axis. In literal mapping, a map-maker attends more acutely to the empirical representation of experience in terms of dimension, shape, and scope. Although closer to what Deleuze and Guattari (1987) characterize as “tracing,” where the map-maker works to directly transfer the lived landscape onto the page, in literal mapping, a map-maker can (re)make their sense of their experiences and visualize their process. Examples of literal mapping include post-it charting to look at students' engagement (Lemieux, 2015; Maine, 2015) and concept mapping as a visual learning tool to organize and engage with readings (Hartsell, 2015).

At the other end of the continuum of the x-axis, metaphorical mapping embeds symbolic concepts into multimodal compositions. Metaphorical mapping prompts more explicit reterritorializing by signaling larger intersectional dimensions such as culture, religion, or social class. It is not that literal forms of mapping do not exert reterritorializing power, but they are more specific and tangible. A metaphorical map can give voice to the most often unheard, particularly in exploring how matters of health, gender-based violence, security, safe housing, and sexual violence can be expressed (Chege, Maina, Mitchell & Rothman, 2014; Ngidi & Moletsane, 2018).

To visualize these dimensions of mapping, we offer the coordinate plane in Figure 1. As a pedagogical heuristic, a teacher might design a learning activity at any point across this plane, and a learner might take up the prompt across each of these dimensions. In the cases that follow, we present empirical examples that illustrate this range.

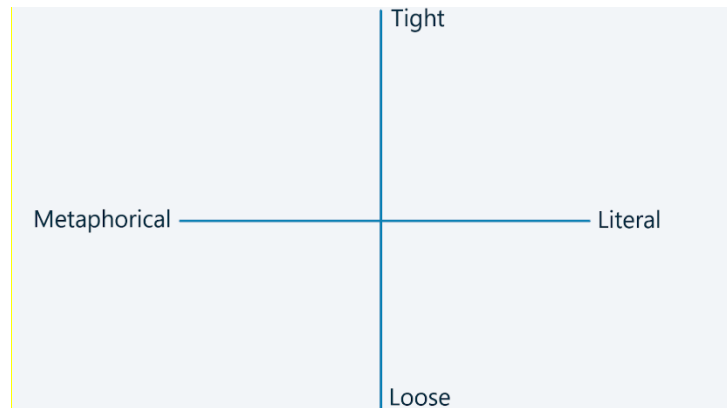


Figure 1. Coordinate plane illustrating pedagogical dimensions of mapping as pedagogy

Dimension 3: Territorializing↔Deterritorializing↔Reterritorializing

As we theorized this mapping heuristic, we recognized that conceiving these dimensions of mapping as existing on a 2D coordinate plane appeared to stabilize and flatten the dynamic, multi-sensorial experience of mapping. Learning and meaning-making are not static, binary, or unidimensional concepts. Mapping can simultaneously be literal and metaphorical, and the process can operate across the various dimensions. Just as experiences, practices, and perspectives of an event in any social space—including the classroom—can be layered, relational, and dynamic, so too are the processes for making sense of the event. For these reasons, it was important to plot a third dimension to illustrate the dynamism of mapping activity, one that signals the territorializing↔deterritorializing↔reterritorializing processes of mapping. Using metaphorical wavy lines to illustrate this dynamism across the z-axis, we intend to invoke the continual back and forth of mapping for each of the plotted empirical examples to come.

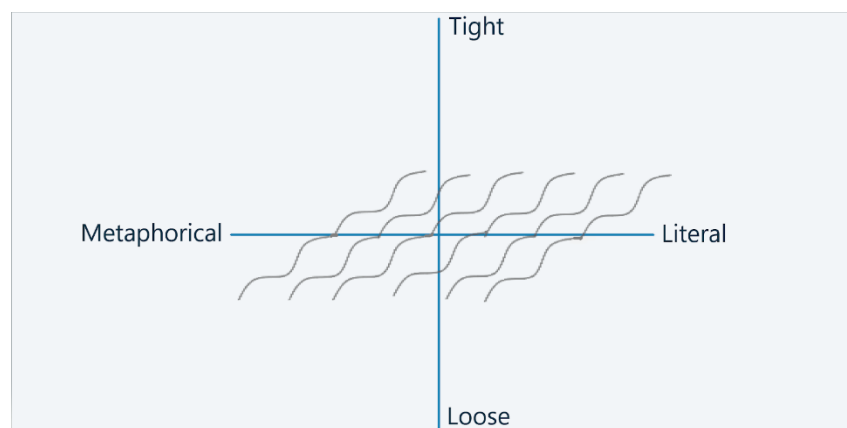


Figure 2. Coordinate plane with the dynamic third dimension territorializing↔deterritorializing↔reterritorializing

Two Cases of Mapping Pedagogy

When “thinking with theory,” as articulated by Jackson and Mazzei (2012), researchers are encouraged to intentionally draw from difference across data to challenge notions as they stabilize. Thus, to explore a wide range of mapping pedagogy, we revisited two cases of pedagogical mapping that, although linked as thematic and figurative types of mapping (Kitchin et al., 2011), present radically different uptakes of this type of mapping. The two cases also both employ literal and figurative interpretations of mapping with quite different populations. One population is adult language learners, and the other includes secondary school students. In these ways, the two cases provide different flows of meanings that rely in one case on learners’ experiences with resettlement, culture, and religion and in the other case with learners’ affectively-oriented responses to narrative reading. For educators and researchers, we bring these two cases together because they illustrate the range of ways thematic and figurative mapping of learning and experience can be taken up pedagogically.

Pedagogical Case One: Body Mapping with Adult Newcomers

As a part of a SSHRC-funded research study,¹ Jennifer Rowsell and Julianne Burgess worked with 20 language learners enrolled in a language program called Language Instruction for Newcomers to Canada (LINC). Funded by Citizenship and Immigration Canada, this ongoing initiative allows newcomers, permanent residents, and refugees aged 18 to 25 to take English classes for academic study in post-secondary settings (Burgess & Rowsell, 2020). Julianne is an ESOL teacher with 15 years’ experience who is interested in language learners’ transition to Canada. Julianne asked refugee research partners to draw body maps on 11” x 17” sheets of paper with colored pencils and markers, tracing their body outline and adding symbolic anatomy across their mapped elements. Body maps are drawings, paintings, or other artistic renditions of people’s bodies as reflections of internal worlds and lived experiences; they are a way of figuratively conveying one’s feelings of embodiment.

As students produced their body maps, they were encouraged to use color, symbols, and labels in their home languages. They were also asked questions to stimulate ideas for their artwork, including: What is your country of origin? How have you found and experienced the resettlement process? Draw a recent experience of home—it can be whatever comes to mind. Where is home—is it the place your parents come from, or where you grew up? Is it a location, a person, an artifact, a feeling you carry within yourself? In this instance, the body maps provided a “language” with which to deterritorialize and reterritorialize their thoughts, feelings, and lived experiences and, more importantly, to create their own narrative of transition. The activity moved beyond a simple tracing of a physical move to have them deeply reflect on the ways that their identities changed (if indeed they changed), which cast language, culture, memories, and so forth in a very different light. This is not to say that body maps served as therapy, rather that they were another vehicle for expression beyond their usual, more traditional, and at times instrumental instruction.

Pedagogical Case Two: Map-making with Adolescent Readers

Pursuing the idea that mapping renders ideas, emotions, and thoughts visible, Amélie Lemieux conducted an SSHRC-funded classroom-based study² where adolescents were asked to code and map their responses to literature. The larger study investigated 12th-grade students' literacy practices as they mapped their responses to a monomodal (print) and a multimodal (video) version of a text. Students enrolled in this class were part of different academic concentrations that ranged from physical education to advanced science. Their literature teacher was receptive to the project, and allowed Amélie to use map-making to teach about literature.

During the first phase of the larger study, students saw a visual presentation that illustrated a step-by-step process of making maps. These maps were participant-generated and recorded moment-by-moment reactions to texts in any mode or combination of modes. Map-making required readers to determine the level of intensity of each of their reactions to the reading (i.e., did a reaction correspond to an impactful moment or a barely noticeable moment?) and classify these moments into categories. To do so, Amélie provided students with a guide of reactions designed in the research methodology as a participative tool to help them code their responses. In this sense, the mapping activity was tightly designed to guide students in a particular way, but loose in the sense that they coded, selected, and invented categories that they felt best represented their responses. Prompted felt experiences included: perceptions, feelings, emotions, attitudes, tastes, explanations, judgments, reflections, and additional moments (the latter was an open-ended category that students could use to invent a category that was not on the list). Once students classified each of their reactions in the category that best described their response, they color-coded those categories. Finally, students drew their maps and made links between their reactions, justifying their meaning-making in an accompanying commentary. As part of this study, participants completed a pre-test highlighting reading preferences, a reading questionnaire that explored students' visual understanding of content (e.g., drawings of characters, scenes, book cover), two maps (one in response to a scene of the play *Incendies*, the other to its corresponding scene in an adapted film version of the play), two ekphrastic poems with accompanying commentary justifying their choices, and a post-test. As in the body mapping study, drawing maps went beyond simple tracing as it materialized designed patterns of visual representation in a process where responses merged into ideas, ideas into words, and words into categories, numbers, and expressions that territorialized the previously unthought and subsequently de- and re-territorialized perspectives.

Findings

Body Mapping: Situating Past, Present, and Future Literacies

In this section, we present three empirical examples of mapping that were part of a classroom-based study called *Mapping Home: Literacies of Resettlement* (part of the larger *Word in the World* research) and that sit on different quadrants within the coordinate plane. Within the reported research, body mapping is meant to elicit these map-makers' stories and uncover parts of their lives, inner thoughts, and memories as dynamic translations of felt experiences and meanings (Griffin, 2014). Participants considered notions of home and their lived experiences in new ways, using their intellects, cultures, languages and imaginations as key aspects of their identities. In this

process, body mapping allowed language learners to explore their subjectivities through the unfolding, enfolding, and becoming process: learners can see who they are, where they have come from, and where they are going.

Farah. “I love my life no matter where I live...but the journey has been hard,” Farah told us. Farah, a 22-year old woman, discussed with us how mapping helped articulate her experiences in resettling from Iraq to Canada. Farah was aware that her sudden and fraught move was not only physical, but also a marked shift in her identity. The first case study (Figure 3, below) presents a map by Farah, who was enthusiastic about sharing, through her map, some of her physical and emotional struggles with Crohn’s Disease.



Figure 3. Farah’s body map

Circulating within Figure 3 are ideas, languages, interpersonal connections, artifacts, and experiences that rekindle for Farah memories of her life back in Iraq. There are tensions that Farah felt in terms of gender and culture in her lived experiences as an Arabic woman. In class, during

the interview, and as seen in her body map, Farah voiced parts of her identity: “I am a strong woman who lives alone” in Canada. Farah moved to Canada for better healthcare services for the treatment of Crohn’s Disease because she had limited medical care in Mosul—hence, the image of her intestines and bleeding within her organs. Given her Crohn’s disease, Farah was selected by the United Nations High Commissioner for Refugees to come to Canada to receive urgent medical treatment, leaving her parents and brother behind. Farah’s design reflects her contested feelings about traditional, often gendered cultural and religious expectations, signifying her expressed desire for individualism and independence as a young unmarried Arabic woman. The arrow accompanies her body as a central figure shaping the terrain and landscape of her body map. Farah’s map shows great affection for her home in Iraq through her depiction of two friends back home with whom she connected on Facebook; representation of her strong allegiance to her first language Arabic; and aspects of her new life that she loves, such as living and thriving in her own apartment and having her own car in Canada.

Farah’s body map shows two faces: parts of her disease before she was able to receive adequate healthcare in Iraq and parts of her recovery after she sought healthcare in Canada. Through both the physical and conceptual map, there is a foregrounding and territorializing of: the disease in her intestines, a presence of her war-torn home with bombs falling on her neighborhood in Mosul, and tents under a hot sun in her refugee camp. In her written reflection, Farah wrote:

When I drew my body map I felt joy, because I like a lot of things in my life, happy and sad. There were a lot of ideas in my mind. I thought about my family; and now, I am happy: Farah is a strong woman. She lives alone and learns a lot of things in her new life here. I love my life no matter where I live.

Farah’s drawing of Arabic script echoes her close ties to Iraq, her culture, her mother tongue, which speaks to a process seeking to “visually reconstruct local memories” (Afonso, 2004, p. 87). Her visuals are not linear or hierarchical, but they circulate, flow, and move in unpredictable ways. As an example of a literal interpretation of mapping, the body maps contain layers of memories from the past, present, and future—blurring time in the process.

Applying our dimensions of the mapping pedagogy 3D coordinate plane to Farah’s body map, her visual rests within a quadrant on the bottom right corner because her drawing of her body is more of a literal depiction given these artifacts: her bleeding intestines; deceased soldiers with a helicopter circling over top; her two friends from Iraq; the Arabic script; her favorite dessert, Kupa; and her apartment and car in Hamilton, Ontario. It is also within the loose pedagogical parameters of the body map.

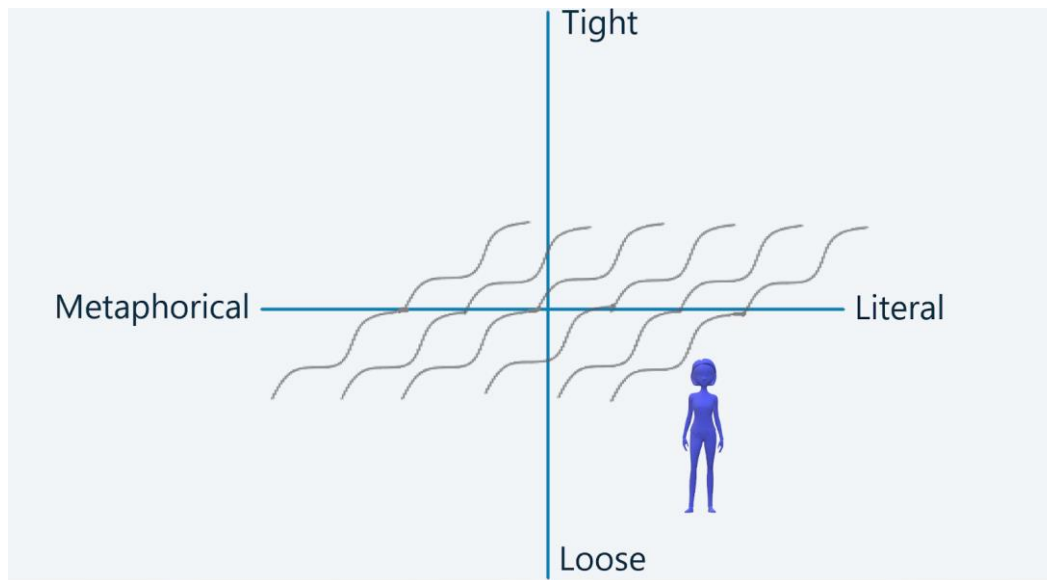


Figure 4. Farah’s map is located between the literal and loose dimensions of mapping

According to Farah, she arrived in Canada in very poor health, and with medical care, she grew stronger, and her views about Iraq shifted; those shifts materialized on her body map. Farah intricately depicted her Janus-faced feelings about Iraq, providing active forms of reterritorializing as she was working on her map and articulating her thoughts and emotions during conversations. Farah articulated how much she missed her parents, her home, her food, her friends, her language, but also talked about living in fear in Iraq due to ISIS. On a few occasions, Farah shared that her body map crystallized these conflicting emotions and allowed her to recognize changes that she has experienced with the passage of time. Given Farah’s clarity and literal depiction of her resettlement, we view her visual as a form of deterritorialization—of deconstructing her story in an explicit, highly materialized way.

Aadi. Aadi’s body map occupies a different quadrant of the mapping plane. By way of background, Aadi is a 24-year-old male from Nepal. His family is originally from Bhutan, but Aadi identifies as Nepali after living in a refugee camp in the eastern part of the country. He is married and is the father of a 2-year-old girl. As a result of a United Nations resettlement initiative, Aadi’s family is scattered across the United States, Norway, the Netherlands, and Canada. In a journal reflection on his body map, Aadi wrote: “When I drew this picture I forgot about Canada because my mind and body are in Nepal. In my heart are all my friends and our neighbors and cousins.” “*You mann to mero Nepali ho*” means “my heart belongs to Nepal.”



Figure 5. Aadi's body map

From what he expressed to us, in the forefront of Aadi's mind was designing a map that featured camaraderie, friendship, and community. A visual of linked figures holding hands in a circle appears on Aadi's t-shirt with him at the center. Aadi wears the Nepalese flag on his hat and is surrounded by visual anchors that embody his figured worlds (Holland, Lachicotte, Skinner, & Cain, 1998). Quiet and soft-spoken, he often got teary when he talked about Nepal, reminiscing about dwelling places or places where people congregate. On his map, there are people dancing and a building in the top right corner where he would have picnics with his family members and friends. There is his house in the top left corner, and he was popular amongst his friends for hosting impromptu parties. In his map, the circles imply family, connection, a sense of belonging. Aadi's design is more metaphorical than Farah's design because he uses scale, size, and height (e.g., the

large image of him at the center of the map); color (e.g., red signaling the Nepalese flag); and icons (e.g., notebook and pencil referring to the local public school as a hub for families). Although Aadi had a strong preference for more traditional, scripted, and tighter framing of language teaching, we witnessed a gradual shift in his interest in the body mapping activities. That is, as he produced his body map, he personalized the mapping process by focusing on music and relational aspects of his Nepalese life that he misses in Canada. As a result, Aadi sits in the top left quadrant of the dimensions of mapping figure as a learner who preferred tighter pedagogical framings, yet who gravitated to embodied activities like dancing and movement and had highly affective responses when discussing his connection to Nepal. Incorporating valued practices, preferred modalities, and a deep sense of community that he could not express in words or writing, there was a noticeable shift in his involvement and investment in the activities.

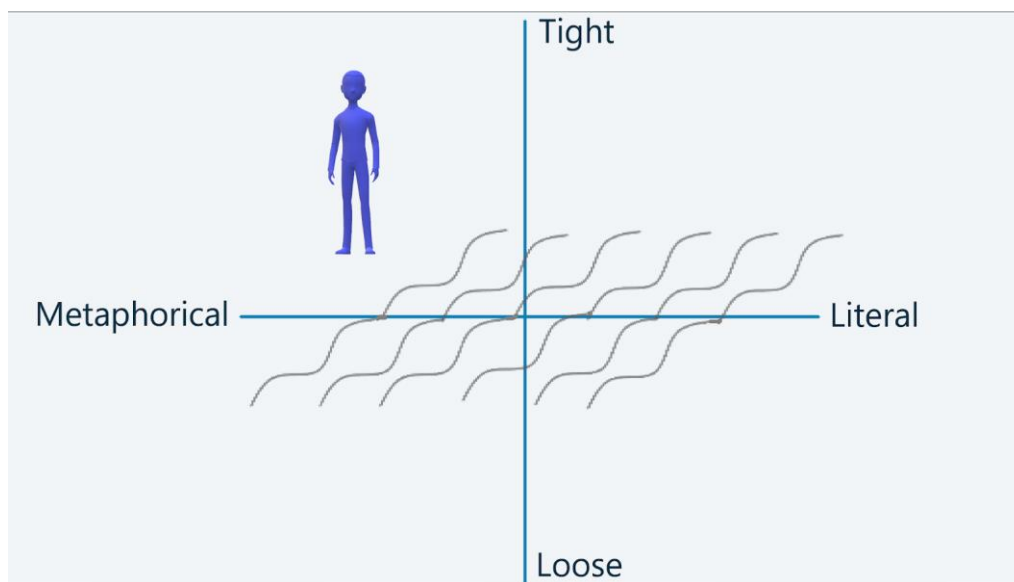


Figure 6. Aadi's map is located between the metaphorical and tight dimensions of mapping

Aadi's body map reveals efforts to territorialize by foregrounding favored parts of his culture, but his practices imply a deterritorializing or an isolation of discrete parts given prominence through size and color. Aadi's map is in the tighter section because he articulated at various points in the research a clear preference for more traditional language teaching involving rote memorization of words and writing expository essays. But, at the same time, Aadi also articulated how valuable it was to complete the body map and reflect on how much he misses his Nepalese communities of practice (Lave & Wenger, 1991). Although Aadi speaks through metaphors, within his map, there is deterritorializing with the minimal presence of symbols and metaphors and their isolation and recurrence.

Abdullah. The final case study traces the story of Abdullah, a 25-year-old university graduate from Yemen. With his mother, he fled to Canada after his activist father was forced into hiding. Abdullah had been dreaming of a life in Canada for a long time:

When I draw my body map, I made a mix about my future and my past, but I was trying to explain to everybody how I am. In the past I had friends, family, goals, and dreams. I attained my goal of finishing college, and I sat thinking how I can attain my dreams? My

dream was I wanted to go to another country...I was thinking about going to an Arabic country, because Canada is just a dream in my life. But I broke all the limits, and I insisted on going to Canada, and I attained my dream. Actually I take a long way, but I know I become happy when I reached Canada, because I wanted the make new friends, new home, and I will continue with my goals, but I will use my new language.



Figure 7. *Abdullah's body map*

Abdullah was considered the comedian in the class, often teasing his classmates, and he seldom became serious—unless he spoke of Yemen, his home country. As with the two aforementioned empirical examples, in Abdullah's body map, there are images of murders, killings, and strife outside of his home in Yemen. The Yemeni flag is on prominent display with a gradual trail—almost like footprints to Canada. Although the visual does not depict an expansive space, the map pictures three dimensions of space: 1) moving spaces; 2) shifting destinations from other Arab nations or Canada; and 3) movements to familiar spaces. In the map, there is a sense of a wide gap between Yemen and Canada and footprints between the two countries. While it is difficult to see in Figure 7, there are practices and discourses that inform Abdullah's sense of space, such as local sites or hubs, a cistern, and farmland. Abdullah's map is more complex to plot on the quadrant because there are literal elements and figurative elements. When we spoke with Abdullah about his map, he shared that, for him, true beauty is in the eyes, hence, the female with a niqab embedded within the map. This was an important moment during fieldwork because, through the mapping activity, Abdullah revealed parts of himself by describing and defending his conceptions

of beauty within our smaller group. After the conversation, he shared that he experienced trauma before leaving Yemen. In his map, the dead soldiers and the phrase “a den” located in a heart apparently depicted a hiding place near his home where Abdullah would go to hide from war and killing. The heart metaphorically mediates his feelings about the hiding spot, although he did not elaborate on this design feature. In fact, his rendering of and thinking through his map sit somewhere in the top middle of the axis (right between metaphorical and literal but closer to tighter).

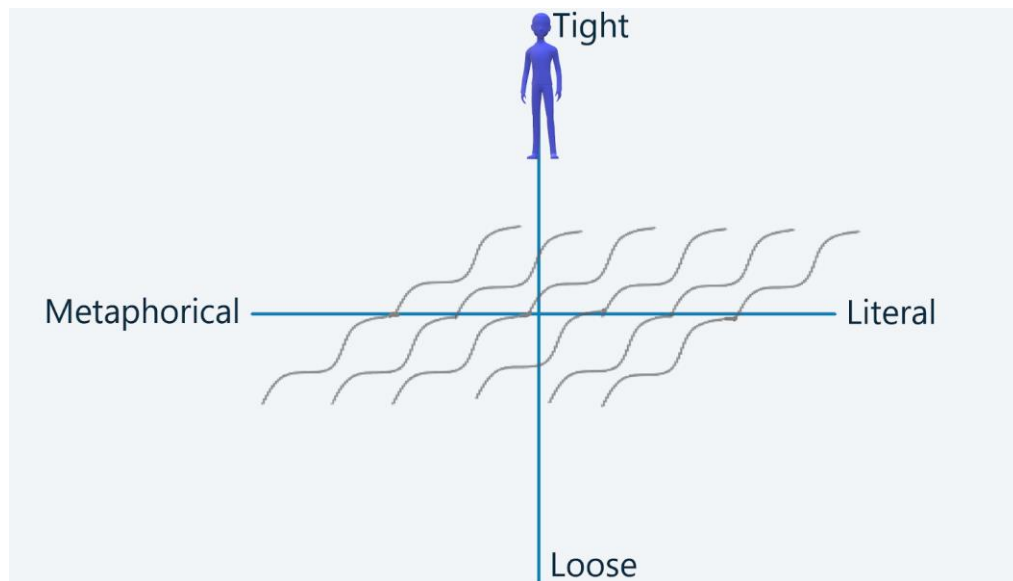


Figure 8. Abdullah’s map is situated between the metaphorical and literal dimensions

Abdullah’s map shows the processes of territorializing↔deterritorializing↔re-territorializing. He expressed changes that he had experienced during the unit and made manifest some of these changes in his body map, and it feels very much like a territorializing work-in-progress. Abdullah’s body map is neither entirely literal and deterritorialized in depicting his past life, nor is it entirely metaphorical and reterritorialized with new configurations and deconstructions of his past and future. Abdullah’s map is placed within the tighter quadrant because he said that he prefers more traditional language teaching methods that resemble teaching that he had back home, which privileged formal writing tasks. Yet, he became animated during moments of map-making that called into question his reticence.

Map-making: Mingling with Form and Experiences of Reading

We now direct our focus to mapping as a pedagogical activity situated on the tight and literal axes of the mapping dimensions, as illustrated through guided instruction (tight dimension) and diagram drawing (literal dimension). In our second case, students read a play, after which they listed their reactions to a particularly emotional and revealing scene in which a woman writes a letter to her son, disclosing that he is the prison guard who raped her while she was held captive after she murdered a politician in the Middle East. The collaborating teacher and Amélie chose this scene to generate ample opportunities for discussion in the classroom (Dutro, 2019).

As students mapped their thoughts—from moments of anticipation to reflection and comparison—they engaged in multiple instances of territorializing↔deterritorializing↔reterritorializing. For example, articulating expectations about the narrative, expressing admiration for a character’s actions, reflecting on the impact of form (e.g., stylistic devices) on affect (i.e., the overall sense and state of combined and mixed emotions, which at times cannot be named or identified), or expressing desires to complete the narrative (Lewkowich, 2016) are all processes that engaged students in territorializing↔deterritorializing↔reterritorializing. For the purposes of this article, we focus on the cases of two adolescents, Nick and Sara, by reporting on their mapped responses and considering how their meaning-making processes illustrate instances of deterritorialization↔reterritorialization.

Nick. In creating his map, Nick designed how he played, felt, thought, created, and experienced doubt and malaise, all the while establishing connections between his reading reactions. Nick’s understanding of the text was not constrained to the words on the page. Instead, his meaning-making was a complex process that merged the experiential, the material, the immaterial, the affective, and the cognitive. When charting his meaning-making, Nick engaged in coming to know parts of his reactive tendencies, a reterritorialization process acknowledging and documenting the intersecting paths, shifts, and transformations that characterize the ways of knowing in the literature classroom.

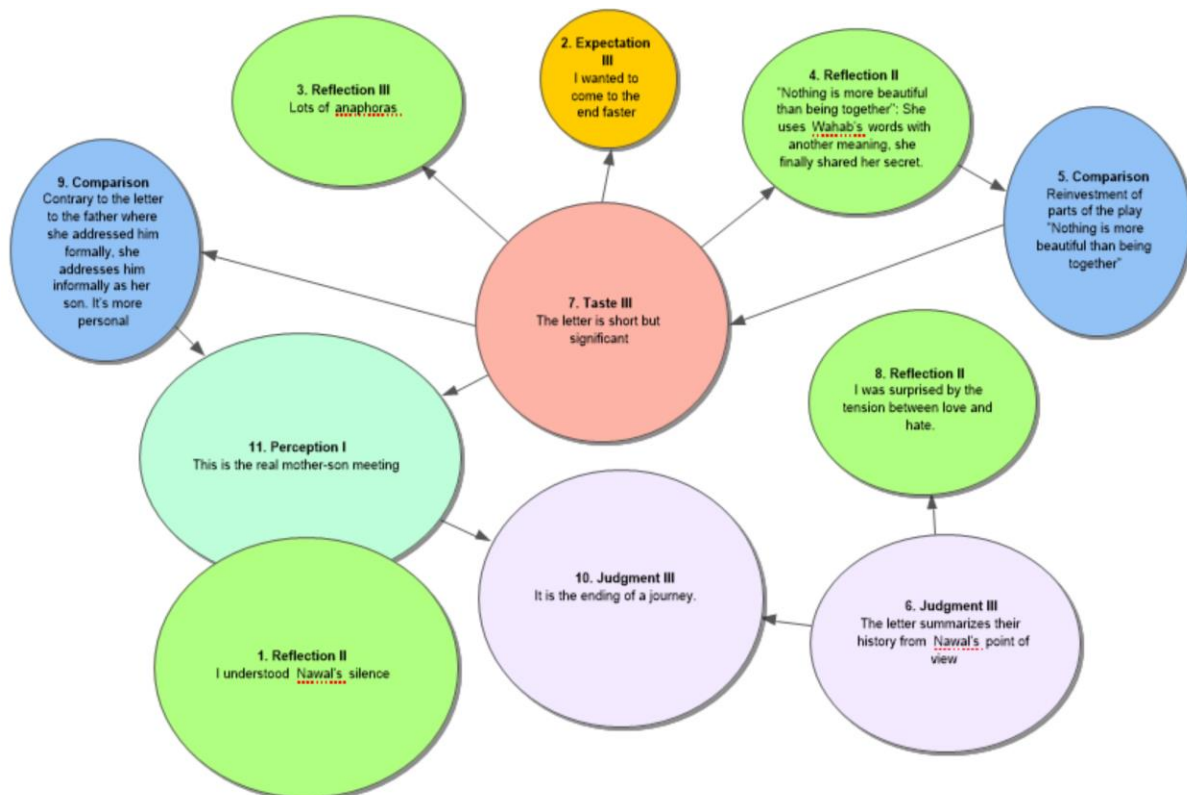


Figure 9. Nick’s map in response to *The Letter to the Son*

Nick’s map (Figure 9) and accompanying commentary were among the most detailed in this study. Nick’s experiences generated an ensemble of responses that spanned over seven categories and were drawn through eleven connected moments. His central reaction was an

observation of the text’s brevity and impact: “My map gravitates towards taste, in that the letter is short, but really significant in itself.” Nick’s commentary points to traces of aesthetic impact (an observation of the repercussions of the author’s style on the reader’s affective reception of the text), insofar as he noted the incidence of form on his meaning-making.

Nick’s second reaction echoes his enthusiasm in reading the text: “I absolutely wanted to finish reading that letter. I classified it in ‘Expectations’ because it is relative to time,” pointing to a haste to finish reading the narrative, wanting to know more about the outcome, sometimes channeled as what readers may desire in their drive to end a text (Lewkowich, 2016). In his 11th reaction, Nick referred to the scene as a real encounter between mother and son. This associative thinking implies, in part, a desire to complete the narrative and a will to find coherence in the story as a form of reterritorialization.

In his first reaction, Nick explained how one of the character’s silences created a lasting impact on him, as the scene triggered his empathy for the character. His statement refers to an empathetic stance and speaks to affective states while mapping his responses. His sixth response speaks to the understanding that the letter is written in the main character’s voice, which impacts the affective tone of the letter and how it is received. Nick’s eighth response depicted his surprise or malaise as a reader when he felt the tension between love and hate, pointing to potential malaise as a reading instance, having to come to terms with the seemingly conflicting emotions that surfaced as he read. Nick’s tenth response was placed under judgment, and he maintained that the letter represented the conclusion of a quest. In reterritorializing his responses, Nick added information on the narrative based on his desire to shape his vision of the text—the conclusion of a quest—building on his reading of the scene. Nick engaged in deterritorialization before he identified and categorized again and distanced himself from his reading—he engaged with his map again by reterritorializing the connections between his moment-by-moment responses. In Figure 10, Nick’s map is situated on the top right quadrant of our mapping chart between the tight and literal dimensions of the graph, pointing to how the mapping activity developed his engagement in a more guided and literal framework and with consideration for his de- and reterritorializations.

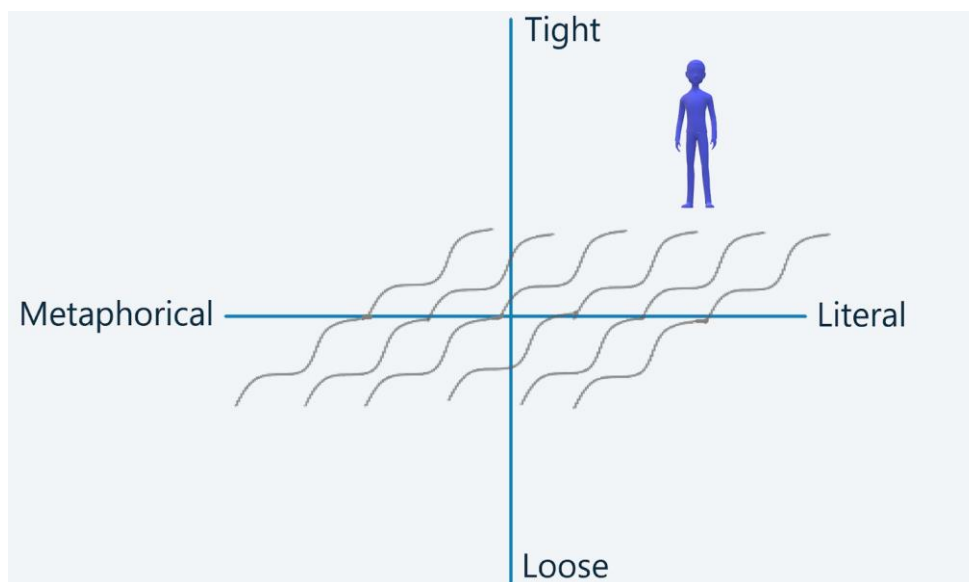


Figure 10. Nick’s map is situated between the literal and tight dimensions of mapping

Sara. In her notes, Sara described herself as someone who enjoyed fiction, tinkered with texts, and appreciated having alone time to read. She expressed that mapping shed light on thoughts and feelings that were not apparent otherwise and explained that she was not used to participating in such processes of reflection. She wrote,

Drawing this map allowed me to better reflect on my reading, because I was able to reflect on my emotions, which I am not normally inclined to do when I read.... I did not realize to what extent I could have so many mixed feelings when reacting to a scene.

Accounting for a range of emotions when reading, Wender (2017) argues, is key to connective learning and engagement. Sara's awareness of the range of her emotions speaks to how she deterritorialized previous reading experiences and reterritorialized them as new territories in her map.

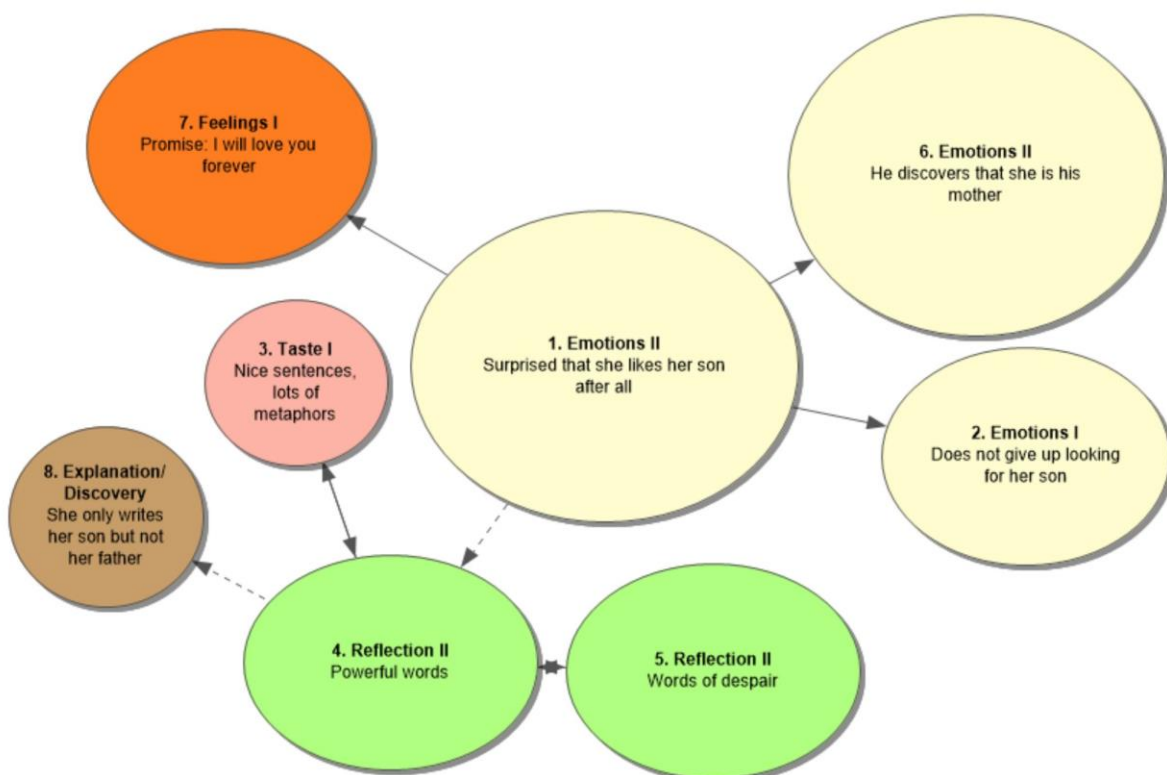


Figure 11. Sara's map in response to *The Letter to the Son*

Sara's first reaction was one of surprise—a clearly perceptible emotion:

The mother loves her son even after everything he did to her. It's the emotion that moved me the most. It was surprising to see that she had so much love for him despite his wrongdoing. So from there, I linked this reaction to all my other ones.

As Sara reflected on emotions that moved her as she was reading, her mapping exemplifies instances of territorializing affect through emotions that she linked to one another.

Sara linked her second reaction to her first (Emotions), emphasizing how the main character, Nawal, was determined to find her son as a sign of unconditional love. Sara linked the

emotion clusters to her seventh reaction, one she categorized in “Feelings”: “My seventh reaction points to the fact that she promised him she would find him.” Sara showed that mapping was an achronological and dynamic activity. Similar to Nick and other students from the larger study, relational understandings happened as students were drawing. As with any reterritorialization, the final setup could not be predicted.

Sara’s sixth reaction speaks to the scene’s paroxysm, i.e., the moment the son realized he assaulted his mother while he was a prison guard. “Then, there is the moment where the son realizes that the person he raped was his own mother. He must have felt extremely guilty to realize that given the love she had for him in writing the letter.” As with Nick, there is a sense of empathy that comes with Sara’s remark. This sense of empathy, or compassionate participation according to McGinley, Kamberelis, Welker, Kelly, and Swafford (2017), nurtures reading experiences in ways that complement them holistically. Form also has a role in these affective dimensions. Like Nick, Sara’s observation that the style influenced how she felt in that moment points to aesthetic impact: “All the reactions that are at the bottom refer to the structure and genre of the text. I feel like my fourth and fifth reactions (powerful words and words of despair) amplified all of my emotions.” The two-dimensional arrow drawn between stylistic and affective dimensions of her map reflects this affective dimension.

Reading experiences were catalyzed differently across participants through mapping. Despite points of conjunction, Nick and Sara experienced the focal scene differently: while Nick saw the letter as a meeting between mother and son, Sara saw it as a moment where “the mother distinguishes the son that she loves from the father that she hates.” These cartographies can serve as a starting point for discussion to pinpoint moments of affective engagement and situated reterritorialization of the narrative. Discussions could shed light on how individual readers received and experienced words and phrases differently. Conversations could speak to deterritorializing and reterritorializing affects, as Sara suggests, “The dashed lines represent reactions that are not directly linked to my main emotion; the link is still there but fleeting.” Making space for such conversations engage learners in considering how private affects can be made public through mapping. Sara wrote that producing her map allowed her to be aware of her feelings as part of the reading event: “The map activity allowed us to understand we could have many different emotions for the same scene. This activity also allowed us to sort of bring our emotions to light.” So in Sara’s case, there were assemblages between affective and more rational states that she charted, conveyed, and voiced through the drawn and spaces undrawn. Sara’s map is also situated in the tight-literal quadrant, in a mapping activity that deterritorializes and reterritorializes her thoughts, feelings, and dynamic utterances.

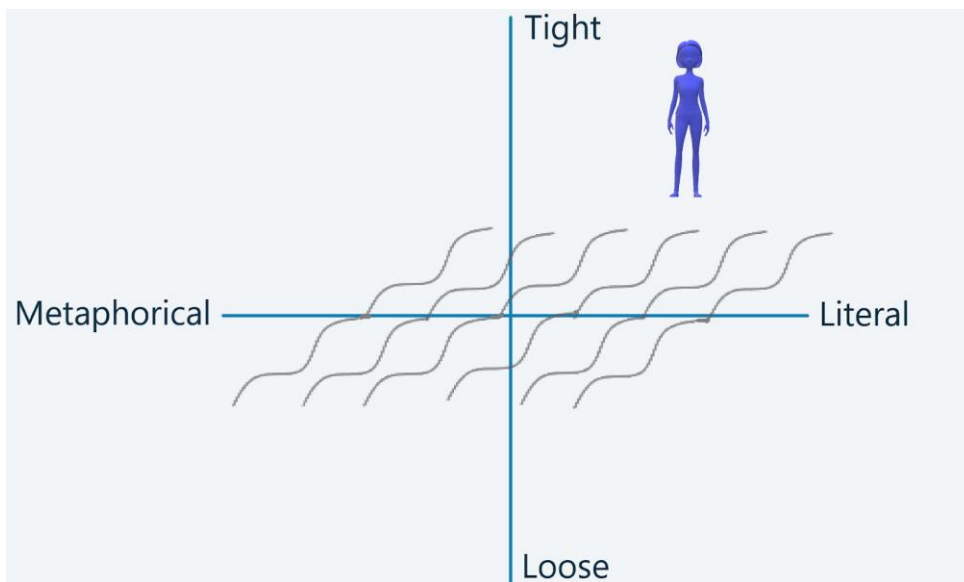


Figure 12. Sara's map is situated between the literal and tight dimensions of mapping

Students' maps provided examples where situated experiences were relational, open, and unpredictable, and these were rendered visible through progressively mapping thoughts, feelings, and reflections. Nick and Sara determined the relationships between reactions in a progressive manner, grouped, coded, and recoded their responses, and territorialized their maps that way. For example, Nick's map illustrates states of reflective unity, which developed progressively. These moments spanned across the impact of form on affect, making meaning across characters and scenes and affective states like malaise. Sara's map led to: 1) moments of affect with empathetic notes on the mother's will to find her son, and 2) the impact of form on affect, emphasizing relationships between words and metaphors.

While this mapping activity is tight (guided) and literal (categories), a closer look at the mapped responses reveals movements across the other quadrants. That is, a more structured approach to reading—when coupled with deterritorializations and reterritorializations—generated more open-ended thoughts that were looser and unguided. What is more, these shifting responses were generated and shaped by the relational and tension-filled terrains between form and affect.

Conclusion

Whether it is through the mapping of experience for Farah, Aadi, and Abdullah or the learning experiences of reading expressed by Nick and Sara, mapping invited these young people into deterritorializing↔territorializing↔reterritorializing their thoughts, ideas, feelings, and reflections. Pedagogically speaking, this exercise pushes for a call to consider mapping as a channel where students can (re)shape their conceptions of experience and learning. Mapping reveals the complex nature of learning by highlighting the interrelationships, synergistic connections, intersections, and dynamic interactions while making visible the tensions and meaningful tangents emerging out of existing territorializations.

The body mapping cases offered insights into the ways in which learners express themselves as language learners newly arrived in Canada. In creating their body maps, the meanings they associated with their drawings depicted both literal and socio-emotional shifts in

their physical movements. This territorializing process speaks to the ways that they illustrated, expressed, and talked about their experiences. We explained how maps account for learners' dynamic ways of mobilizing their literacies, thus, transcending representative end products.

Moving away from assessing objective “truths” from texts and moving towards addressing more affective and nonlinear ways of knowing, we suggest that mapping has the potential to discover connection and allow for the surfacing of feelings, thoughts, memories, and experiences often hidden in pedagogy. Mapping allows students, such as Farah, Aadi, Abdullah, Nick, and Sara, to embrace typologies of “being/knowing/doing” (Kuby & Rowsell, 2017, p. 1) in deterritorializing and reterritorializing paths of meaning-making.

We draw useful pedagogical and research conclusions from the coordinate plane framework we offer in this article. By providing an analytic rhizomatic tight-loose-literal-metaphorical axis framework to look at mapping literacy futures, the coordinate plane framework helped situate the ways in which rhizomatic and affective-laden analyses are helpful in understanding immigrant language learners' lives (Burgess & Rowsell, 2020; Waterhouse & Arnott, 2016) and how mapping provides sense-oriented insights into emotions, feelings, hesitations, imagination, reflections, discoveries, and so on—dimensions that otherwise remain fleeting and often unexplored (Lemieux, 2015, 2020; White & Lemieux, 2017). A coordinate plane framework may also incite map-makers—whether researchers or participants—to articulate the inchoate when prompted to do so, which in turn can illuminate pathways for meaning-making as part of literacy futures. Finally, situating maps within an analytic coordinate plane framework provides a process of determining where affective flows take place, within the map itself and outside of it, taking into consideration how matter comes to matter and what affective forces were mobilized in-the-moment and how they can be mobilized again through a dynamic relational framework.

Notes

1. The funded research study here is a smaller study within a Social Sciences and Humanities Research Council (SSHRC) Partnership Grant (grant number 895-2016-1008) entitled, *Word in the World*. Professor Gary Libben is the Principal Investigator and Jennifer Rowsell is a Collaborator.
2. This classroom-based research study is funded by a three-year Social Sciences and Humanities Research Council (SSHRC) Joseph-Armand Bombardier Canada Graduate Scholarship Grant (grant number 767-2014-1541) entitled, *Engaging Adolescents in Reading*, and led by Amélie Lemieux.

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