VOICING CURRICULUM: EXPLORING EMBODIED ENTANGLEMENTS OF ARTS-BASED INQUIRY AND REFRAIN

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ABSTRACT

In this article, we share our understanding of a "more than" (Ulmer 2017, 10) critical curriculum inquiry and how this type of inquiry can help us collapse the subject-object binary by attentively responding to embodied experiences in curriculum studies. Our focus is specifically on the affective dimension of curriculum inquiry as we work with what St. Pierre (2018, 604) refers to as the "history of the present". We use education memory to tap into the nuanced intra-actions between post-humanism, curriculum studies and how these are extended into the post-schooling context. We understand education memory as the sensory, affective and embodied experiences of education that emerge as we pause in awareness of our present moment of becoming. We draw on Pinar's *currere* as folding memory into the present to continuously give voice to multidimensional layers of imagined futures. We draw on the concept of refrain (Deleuze and Guattari 1988, 300), which we understand as complex lived experiences informative in our becoming as educators. In using arts-based methods such as poetry, object inquiry, drawing and drumming, we explore lived experiences to tangibly integrate memory and imagination on pedagogical refrains that shape our becoming. Arts-based methods and materials afford tactile

engagement with materiality and attentive responsiveness. Thus, we ask: How might the concept of refrain, as manifest in an arts-based research approach, allow us to give voice to curriculum entanglements as a *"more-than-critical"* curriculum? Through this question, we pay attention to relational occurrences as refrains, for memory and improvisation becoming integrated to inform curriculum entanglements between humans and the more-than-human.

Key words: arts-based inquiry, curriculum inquiry, pedagogical refrain, post qualitative inquiry, science education

INTRODUCTION

In this article, we (Zettie, Marguerite and Frans) explore the radical and rapid shift that posthumanism makes possible in curriculum inquiry as affirmative, interconnected and material (Ulmer 2017). The aim of our exploration is to experiment with the use of a post qualitative¹ inquiry in curriculum studies. We understand post qualitative inquiry as refusing "*representationalist logic* that relies on a two-world ontology, which assumes there is the real out there and then a representation of the real in a different ontological order" (St. Pierre 2021, 6). Therefore, in doing post qualitative inquiry, we are not trying to represent experience or memory, but instead we are experimenting with the "creation of the new, which is very difficult" (St. Pierre 2021, 6). Given its critique of representational logic, post qualitative research might find resonances with the emerging field of non-representational research. For Ingold (2015, 98), "the sun can only shine in a world with eyes capable of so responding." Thus, eyes and sun show *correspondence*. We can find *correspondence* by doing non-representational work in responding to or asking questions about things and happenings around us. Paradoxically, however, communication of non-representational work (re)presents the work.

In this regard, Zettie, in her doctoral study, worked with Marguerite as supervisor and Frans as critical friend to experiment with the materiality of art to express material correspondence on indeterminacy (Bozalek 2022) of refrain (Deleuze and Guattari 1988, 310). In her work, Zettie understands refrain as a simultaneous working of territorialization, deterritorialization and reterritorialization (Deleuze and Guattari 1988), and a consistent returning along passages for functionality to be expressed in complexity (Gray van Heerden 2017). In other words, Zettie hoped that to experiment with the materiality of art could open possibility for singular expression (Olivier 2013) corresponding to the indeterminacy (Bozalek 2022) of refrain and that plural response would be enacted (Olivier 2013). Zettie's interest in post qualitative inquiry stems from her struggle to communicate her complex lived experiences informative to her becoming as a science educator. In her study, Zettie shares her becoming as a science educator by integrating experiences with the lived and written curricula, as she shows what an affirmative *more-than-critical* curriculum study might look like. In *thinking with*

(Ulmer 2017) refrain, we explore how creative experiments involving memory and imagination about curricula became entangled in a materiality of arts-based responses of what can be perceived as a more-than-representational expression of experiences with/in education.

This collaboration started when we were all working at the University of the Free State and were part of the Critical Inquiry for Social and Eco-Justice Education (CISEJE) special interest research group. As PhD student in the group, Zettie imagined a possibility of a science education where functionality of what a pedagogical life might do (Wallin 2010) can be explored untimely (Pinar 1975; Kruger 2020) and diffractively (Bozalek and Zembylas 2017), and along the lines of multisensory experience and memory (Müller and Kruger 2022). In this article, we draw on Zettie's PhD work and pay attention to how complex lived experiences that refrain holds can afford material expression (Gray van Heerden 2017) should conditions present to tangibly integrate memory and imagination. In its materiality, arts-based work creates *correspondence* to an affective functionality and a possibility to integrate memory and imagination informing complex lived experiences entangled with curriculum as well as other continuous entanglements between humans and the more-than-human.

EDUCATION MEMORY AND CURRICULUM INQUIRY

- Frans: "Zettie, you have been a science educator for many years. Tell me about yourself and why are you interested to become a member of CISEJE?"
- Zettie: "Frans, as a mentor teacher and senior science educator in the Free State province in South Africa, I mentored many young colleagues who qualified as educators from different HEIs (higher education institutions) in the country and noticed a tension, similar to my own, between following the written curriculum and creating a lived curriculum. This tension is a struggle to communicate experiences of entanglements between humans and more-than-humans within curriculum. I am interested to explore how we might affirm and communicate interactions between a lived and written curriculum as human and more-than-human entanglements."
- Frans: "Hmmmm Interactions seems valuable to you. I suggest you speak to Marguerite. It seems as if you struggle to communicate something without shape which is ever expanding."

As we draw on correspondence to create a *more-than-critical* curriculum inquiry, we understand curriculum as a lived experience (Wallin 2010, 64). The lived experience of education resides in the multiple layers of past, present and future. Pinar's *currere* (1975) can be understood as an active layering of past experiences onto the present to continuously give voice to multidimensional layered understandings of possible imagined futures. By using artsbased inquiry to voice these multidimensional layered understandings of imagined futures, attention is drawn to the history of the here and now (education memory) and to how current

responses may shape imagined futures in and through education.

Marguerite: "Zettie, perhaps you can think of artmaking as a way to communicate affective experiences between humans and more-than-humans as you think of your memories and experiences as a science educator."

For Ulmer (2017, 841), *thinking with* (Jackson and Mazzei 2013) becomes *more-than-critical* and more-than-representational in creative experimentation. In this article, we voice a plural response by *thinking with* refrain in creative experimentation. In Zettie's study, she folds education memory and imagination in arts-based form to express complex lived experiences as affective entanglements amongst humans and more-than-humans. For Zettie, actual and virtual experiences (Deleuze 1988) co-existed in processes of artmaking and education memory as she expressed pedagogical refrains as complex relations that inform her becoming as a science educator. In this co-existence of the actual and virtual, she uncovered "a history of the present" (St. Pierre 2018, 604) through arts-based expressions.

Zettie's educational journey began during the 1970s in South Africa and continued as she studied sciences during the 1980s and 1990s. She continued to teach sciences and completed a post-graduate qualification in science education as well as a master's in science education in 2019. Enculturated into a positivist paradigm of science-based research (SBR), Zettie perceived that truth could objectively be observed and measured, justified and represented through qualitative or quantitative data. However, over the years, she started to experience tension within SBR and her critical perspective culminated in resistance against measurement and representation. In her PhD work, she purposefully attended to pedagogical occurrences and correspondingly engaged with arts-based material in "the labour of refrain" (Deleuze and Guattari 1988, 302). In her study, Zettie noticed a simultaneous working of territorialization, deterritorialization and reterritorialization as well as a consistent returning along passages for a functionality to be expressed from complexity (Gray van Heerden 2017).

Marguerite: "Zettie, what do you mean with, 'simultaneous working of territorialization and deterritorialization experienced a co-existence of actual and virtual experiences (Deleuze 1988)'?"

Zettie: "This is difficult for me to explain."

Frans: "My suggestion is to not get tied down by the DeleuzoGuattarian philosophy, but take what you can use and move on"

Within the materiality of arts-based work as actual experiences, educational memories co-existed as virtual potentialities and changed Zettie's perception to allow for noticing a

pedagogical refrain. In her work, she explores complex and intangible affective experiences informing her becoming as a science educator and educational researcher by integrating memory and imagination into arts-based expressions. Refrain, for Zettie, was put to work in changing her perception on knowledge and what counts as knowledge (St. Pierre 2013; Denzin 2019). Thus, in a singular expression and the re-telling of Zettie's educational story from a non-normative perspective, we *think with* (Ulmer 2017; Jackson and Mazzei 2013) refrain in a creative experiment and we paradoxically hope for plural response (Olivier 2013) to the affective dimensions of a *more-than-critical* science curriculum.

Zettie: "Have you ever experienced moments in teaching when it felt like the boundaries of your body, the learners or students, the learning and teaching material, the building and everything surrounding it disappeared? As if that moment has been present and will continue being present? Those are the moments in teaching that I treasure. The moments when it felt as if everyone participated, attended and found some kind of value."

Education memories inform our conceptualisation of the history of the present. Importantly, we take up memory not as signifying merely a recollection of past events but as a creative rupture (Müller and Kruger 2022). This is the case given the relational and creative interplay of the past stretching into the present (and future) and the present reaching out towards the past (Bergson 1929, 194) and the ways in which both continuously are re-invented as a consequence. This stretching and reaching of the "trajectories of the past-into-present [and present-into-past] ... are always in place through the various interconnecting ecological, corporeal, material, cultural, economic and memorial flows" (Jones 2011, 876). It follows that the relationship of the past and present, and how these manifest in memories and embodied experience, is always already affective. As such, we understand a *more-than-critical* curriculum inquiry as a *correspondence* with the past, present and future that allows for affective and embodied responses mediated through the material dimensions of arts-based inquiry.

EMBODIED EXPERIENCES

In attending to education memory as a crucial part of the *more-than-critical* curriculum inquiry, we pay attention to the affective and embodied dimensions of curriculum studies. Plural response can be enabled from singular expression in artwork (Olivier 2013), and our experience in this imaginative experiment was for materiality of art (Müller 2020) in *correspondence* with the indeterminacy (Bozalek 2022) of refrain, for a tangible integration of memory and imagination about complex lived experiences informative to becoming of a science educator.

We found *correspondence* by folding arts-based experiences and "dig where I stand" (Finnegan 2018, 5) into education memories as co-existing actual and virtual experiences (Deleuze 1988). One such experience for Zettie was a participatory session on embodied knowledge on 25 May 2022, at the 8th International Symposium on Poetic Inquiry in Cape Town (ISPI) (8th International Symposium on Poetic Inquiry 2022), where imaginative interactions amongst humans were demonstrated when the facilitator responded to the curiosity of the group by asking: What is it that your body knows? The facilitator expected the group to express response in the form of art as well as some free writing. Zettie's arts-based response was to create a drawing (see Figure 1) and later, from some freewriting during that session, a poem.



Responding to imagical play during the Abr + a session

Attending to knowing ... sensing knowing, knowing knowingness. Can this knowing be me? Sensing Knowing ... Without empathy and binding affect the knowledge-centre remains empty. Can this knowing be me? In silence deprived of empathy and binding affect the knowledge-centre remains empty ... knowingness embrace silence attends ...

Zt 25/05/22 29/09/22

Figure 1: Participating in imagical play during ISPI (8th International Symposium on Poetic Inquiry 2022)

For Zettie, the poem made it possible to ask whether embodied knowledge, as a different and non-normative kind of knowing, opened possibility for her to re-tell her educational story by tangibly integrating memory and imagination to express experiences informative to her becoming as a science educator. She considered a possibility, on the outside of language and normative symbolic order (Manning 2016, Gray van Heerden 2017), that her experiences informing her own becoming as a science educator involved empathy and relation to others and that she valued relations in all forms (humans and more-than-humans). This embodied experience, encountered in correspondence with a materiality of art, collapsed theory into practice in Zettie's work. As a science educator to whom deconstruction comes naturally, she interrogated the value of embodied responses in *thinking with* refrain as interactions with

memory and experience in science education.

- Zettie: "If data is dead (St. Pierre 2013; Denzin 2019), can I use art to tangibly express integration of memory and imagination about my experiences of becoming a science educator?"
- Marguerite: "I suppose that through artmaking, we can express response on experience tangibly and perceive differently"

ON REFRAIN

Working on what surround us, for Deleuze and Guattari, becomes the refrain, "... a prism, a crystal of space–time. It acts upon that which surrounds it ..." (1988, 348). The refrain can likewise be understood as simultaneous working of territorialization, deterritorialization and reterritorialization, returning along passages whilst affording material expression and taking on functionality from complexity (Gray van Heerden 2017).

Through arts-based inquiry, we show how affective and embodied responses are useful to think with education memory in a more-than-critical curriculum inquiry. Furthermore, we draw on the concept of refrain (Deleuze and Guattari 1988, 310), which we understand as an expression of memory and imagination to afford engagement with embodied responses. We further use the metaphor of soil to explain how we understand refrain. Refrain, as complex lived experiences informative to becoming of science educators, can metaphorically be understood as fertile soil sustaining all life. As part of what scientists understand to be lithosphere (National Geographic 2022), interactions with soil can be plural. Rocks and minerals from lithosphere can weather and erode by wind (atmosphere) and water (hydrosphere). Interaction with plant and animal material (biosphere) can create fertile soil. More interactions amongst lithosphere, atmosphere and hydrosphere can influence climate and temperature, which in turn may affect plant and animal life. Natural fertile soil forms throughout millennia, in geological time. However, homogeneous (capitalist) human activity, whether agricultural or industrial, caused/causes depletion and erosion of natural fertile soil resources. By being aware of the detrimental homogeneous practices and beginning to enact some heterogeneous practices, it can be possible to restore eroded soil, find ways to use uncharted/barren soil and take care of fertile soil resources. As such, we recognise pedagogical refrain as that which emerges when educators attend and work all "soil" (in this case a metaphor for curriculum) in their environment, ensuring conservation of soil to sustain (educational) life. For conservation of soil, fertile as well as uncharted, barren/eroded and/or overcultivated soil in an environment needs attention. As metaphor for science educators' pedagogical refrain, a working of only fertile soil can imply a choice to territorialization and being stuck in memory to create habitual

response only. A working of eroded, barren/uncharted soil can imply a choice to deterritorialization and a focus on the imaginative and to create only improvisation as response. In attending to all soil and metaphorically working to conserve all soil can, in terms of refrain, imply an integration of memory and imagination to express complex lived experiences informative to the becoming of science educators. For Zettie, artmaking created conditions to tangibly integrate memory (habit) and imagination (improvisation). Thus, this inquiry as a creative experimentation helped her to affirm complexities that have no shape and are ever-expanding as pedagogical refrains in a *more-than-critical* curriculum inquiry into science education.

ARTS-BASED PLACE-MATTER-ENTANGLEMENTS OF REFRAIN

In this article, we show how a post qualitative and arts-based more-than-critical curriculum inquiry might work, what it might do and what it makes possible. *Thinking with* refrain gives us the theoretical toolbox to imaginatively think through educational experiences and education memory as a pedagogical life holding complex lived experiences informative to the becoming of science educators. Post qualitative inquiry helps us to trouble the idea that, "[t]he researcher exists ahead of, in advance of the world (subject/object), outside it, and so can objectify and know it, can 'collect data' from it" (St. Pierre 2023). We accept that our inquiry does not "stop" the world as something to be understood or viewed; it merely brings us into correspondence with that which is in constant movement and flux. As such, we draw on the materiality of artsbased inquiry, not as a method of data generation, but as a material correspondence between what we feel, know, remember and wish to express as educators and researchers. Arts-based inquiry makes it possible for us to conflate the subject and object of the research into a tactile and affective event that shapes us as much as we shape it. For this reason, we believe that the materiality of arts-based inquiry can help us think about post-humanism as the erasure of the separation between subject and object and the decentring and dethroning of the human subject. This understanding resonates with Manning's (2016) proposition of artfulness in which dwelling in the process of inquiry becomes foregrounded. This foregrounding allows for being attentive to our becoming in-the-world and in-time with others, human and more-than-human (Kruger 2021).

As Zettie engaged with materiality of arts-based inquiry and responded to education memory, inquiring into her experiences journeying through science education, we were interested to know how post qualitative inquiry could take us to the borders of what we think of as observable and describable reality and experience. In other words, how post qualitative inquiry helped us move beyond the borders of what we had been trained and taught to see in curriculum inquiry, and to view and conceptualise it anew. In what follows, we explain how Zettie used arts-based methods such as poetry, object inquiry, drawing and drumming to engage with embodied responses and explore education memories. We then extend this into a discussion on how this work could help educators shape their becoming in the post-schooling context. We argue that post qualitative arts-based inquiry provides tactile engagement with materiality and affords attentive responsiveness.

In *thinking with* (Ulmer 2017) refrain, Zettie used personal and collaborative arts-based work (Müller 2019; 2020; Müller and Kruger 2022) as material expression of untimely and fluid memories of her experiences in science education. She placed collaborative and personal arts-based work in correspondence (Bozalek 2022) to refrain by layering it fourfold as: *Territorializing*; *Deterritorializing*; Continuously *returning to* deterritorializing; and Opening *possibility for reterritorializing* and creating something new.

Marguerite: "Zettie, can you explain, again, how you understand refrain?"

Frans: "How do you use refrain in your work, Zettie?"

Zettie: "This is difficult for me Over the past three decades of teaching sciences postapartheid in South Africa since 1994, I responded to the expectations from the Department of Basic Education (DBE) to implement various planned curricula (Gumede and Biyase 2016) with a national aim of transforming education in our country. This happened in parallel to continuous national concerns specifically about physical sciences as critical subject (South Africa. DBE 2023) and sciences and science education that can be linked to Sustainable Developmental Goals (SDGs) of the United Nations (UN) other than the 4th SDG only (United Nations 2023). As a science educator in South Africa, I assessed Physics Paper I (South Africa. DBE 2011) on provincial level and in a senior position from 2009 to 2019. This meant that I had to work closely with a group of four to six colleagues, from other schools in the province, to interpret the written curriculum about specific topics in each paper. I served on the executive committee of the Free State Science Society from 2015 to 2021 and correspondingly during that time I acted as examiner and moderator of a Grade 11 and Grade 12 provincial Physical Science Olympiad for this society. Given these experiences, I have extensive knowledge about the written curriculum (syllabus) of South African high school physical science. Yet, engaging with these experiences through my doctoral study, I chose to work outside of dominant paradigms in science education on developing a non-normative perspective on my educational journey to find ways to communicate my understanding about affects amongst humans as well as more-than-humans shaping my educational journey."

In territorializing, metaphorically working fertile soil within representational logic, Zettie related past educational experiences to the present along the regressive part of Pinar's *currere* (1975). In relating past to present, she used arts-based work created during a workshop that Marguerite invited her to during June 2021 in response to the question Marguerite posed to the

group: Use the available material and respond on your educator identity. Who are you as an educator? Zettie remembers that thoughts running through her mind were: *This is impossible. I am not an artist. How can I paint or draw. Who* am I *as an educator*? She remembers that she was overwhelmed by the expectation, but it was as if her one hand reached out to paper and pencil, which she was familiar with. Zettie also remembers that in responding, her other hand reached for crayons, later clay ... and she made the drawing in Figure 2.

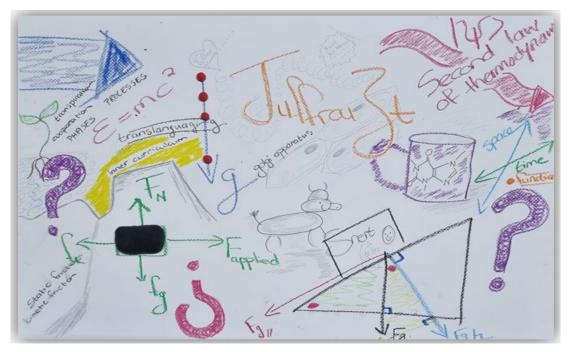


Figure 2: Response to research question on educator identity (Zettie Venter, 19 June 2021)

Arts-based work as co-existing virtual and actual experiences (Deleuze 1988) can enable a shift in perspective and Zettie feels that working in arts-based ways enabled her to integrate memory and improvisation and in a tangible way to express experiences that were informative to her becoming as a science educator. For Zettie, this shift in perspective took place when she decided to use Pinar's *currere* (1975) and perceive her educational journey in a holistic way. Metaphorically, then, along phases of *currere*, Zettie could recognise her drawing (Figure 2) as using arts-based material in a habitual way, as if a science educator drawing on a board. This can be perceived as territorialization and metaphorically only a working of fertile soil. Moving along phases of *currere* made possible a working of uncharted, barren and/or overcultivated soil and a taking up of non-representational logic for her on the outside of dominant paradigms in science education. During her PhD study, Zettie invited some peers and mentors in science education to an arts-based workshop during September 2021, where collaborators used arts-based material and explored their educational journeys. Collaborators in science education experienced some challenges working in an arts-based space, as Zettie did upon her initial engagement with arts-based material during inquiry at the workshop that Marguerite invited her to. One peer mentioned that Zettie's prompts to present their educational lives as rivers by making use of the arts-based material available "were very vague"; however, all who collaborated on the day agreed that the experience was meaningful and that collaborating released feelings of discomfort and fear. Whilst drumming, drawing and painting (Figure 3), they shared stories about experiences that informed their becoming as collaborators on the day and reminded themselves that "sometimes we are not OK and that is OK". Likewise, collaborators reminded themselves about finding value in experiencing fun and healing.



Figure 3: September 2021 workshop and community drumming with Bevil

Figure 3 illustrates creations from the September 2021 workshop. From Zettie's experiences at the two workshops, she mentioned that she continued to improvise in trying to find expression on experiences informative to her own becoming and collaborated on community drumming with Bevil (Spence 2022), a seasoned drumming facilitator. Zettie reached out to Bevil after the September workshop, since she remembered a collaborator mentioning experiencing intense emotions whilst drawing and painting and for the drumming activities on the day relieving some of the tension. Likewise, it came to mind for Zettie reading about African drumming contributing to psychophysical wellness (Nzewi and Nzewi 2007) and she was curious to learn more, thinking that drumming as a tangible activity could create conditions to integrate memory and imagination.

During March 2022, she attended a short course on facilitating community drum circles presented by Bevil. Since then, Zettie and Bevil have been working together on forming a deepened understanding on the possibility of developing Bevil's drum360° pedagogy (Spence 2022) into a collaborative arts-based practice to tangibly integrate memory and imagination to express experiences in education and educational research. Zettie asked Bevil to facilitate

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drumming circles in correspondence to the drum(s) and drummers sitting in a circle, 360°, experiencing creation of sound as bodily movements of humans in correspondence with other human bodies as well as more-than-human drums. This community drumming experience, in correspondence to place, allows for thinking about place as emergent, agentic and relational (Kruger 2020), and thus to think about relational entanglements between place and materiality. For Zembylas (2017), relational entanglements between place and materiality can be understood as affect, whilst Kruger (2020) also acknowledges correspondence of place and affect. Zettie asked the question: What is it that place-matter-entanglements do? And for Zettie, continuous experiences of place-matter-entanglements amongst humans and the more-thanhuman in community drum circles catalysed an embodied understanding of how affective entanglements amongst place and materiality could be expressed in arts-based form as memory and imagination entangled to lived educational experiences informative to educators' becoming. Affective entanglements imagined untimely amongst place and materiality and integrated on education memory along an (Zettie's) educational journey along the phases of Pinar's currere (1975) shaped Zettie's study. She expressed these untimely integrated memories in arts-based form and acknowledged experiences informative to her becoming as a science educator by using diffraction as tool in sensemaking.

By consistently and continuously improvising and collaborating with different people and affording herself opportunity to experiences that were unfamiliar and new to her, metaphorically affording uncharted, barren/overcultivated soil a possibility to conservation, Zettie shaped an analytical layer in Pinar's currere (1975) and used community drumming as with materiality, complementary to indeterminate tactile engagement refrains. Correspondingly, for Deleuze and Guattari (1988), sound can be perceived as a most powerful expressive response to bring affect into play: "sound invades us, impels us, drags us, transpierces us" (Deleuze and Guattari 1988, 348). As such, Zettie chose to introduce community drumming (Nkosi 2021; Spence 2022) as collaborative arts-based method and practical musical experience inclusive and accessible to all. In her PhD study, Zettie also used drumming as tool, whilst diffractively layering (Bozalek and Zembylas 2017) arts-based work onto writing poetry. She found that playing in community drum circles whilst layering actual arts-based experiences onto educational memory culminated onto writing poetry as a powerful way to integrate her imagination and memory to express experiences informative to her own becoming as a science educator.

Deleuze and Guattari (1988, 348) perceive the refrain as a "crystal of space–time"; refrain, for Zettie, became untimely place–matter-entanglements and a powerful way to use Pinar's *currere* (1975) and holistically craft a diffractive and layered interpretation on complex lived

educational experiences as embodied pedagogical refrains corresponding to arts-based work. At the same time, this adventure of creative experimentation with Marguerite and Frans and a *thinking with* (Jackson and Mazzei 2013; Ulmer 2017) refrain afforded Zettie a possibility to tangibly integrate memory and imagination to express response on educational experiences informative to her becoming as a science educator. Also, for her, artmaking made knowable how she wants to continue living her life as an educator; and, from a non-representational perspective on learning science, she continued and wrote a poem (see Figure 4).

Studying in silence, looking up: people are not supposed to do that singing, dancing, laughing – having fun Pamparapadapam. Pamparapadapam. Prrrrrrrrr! Whaaaaaaaa! people are not supposed to do that one should learn in silence Pamparapadapam. Pamparapadapam. Prrrrrrrr! Whaaaaaaaa! Imagine ... I was taught to learn in silence singing, dancing, laughing – having fun What if ... Studying in silence. Look up!

Figure 4: Pantoum poem on a learning of science (Zettie Venter, 3 June 2022)

ARTS-BASED WORK AS CREATIVE EXPERIMENTATION INFORMING CURRICULUM

In this article, we explored how a post qualitative arts-based inquiry makes it possible to engage with an affirmative, *more-than-critical* curriculum as imaginative and interconnected to lived experiences of educators and in a post-schooling context. We asked how might the concept of refrain, as manifest in an arts-based research approach, allow us to give voice to curriculum entanglements as a *more-than-critical* curriculum. Pinar's *currere* was used to understand the folding of memory into the present and continuously voice multidimensional layers of possible imagined futures. At the same time, in using materiality of arts-based expressions, *corresponding* to the indeterminacy of the concept refrain (Deleuze and Guattari 1988, 300), it became possible for us to voice a role played by complex lived experiences of educators, experienced in embodied ways and entangled to their becoming. In other words, the materiality of arts-based inquiry made it possible for us to perceive affective, tactile and embodied responses to education memory, and arts-based experiences created correspondence with

refrain, enabling us expression on embodied responses.

In addition, the use of post qualitative inquiry helped us link this material correspondence with post-humanist research, where the subject-object binary is collapsed within curriculum studies. In a *more-than-critical* creative experiment through Zettie's PhD work, we show how place-matter-entanglements in arts-based work, such as poetry, object inquiry, drawing and drumming, can imaginatively create embodied responses to explore how education memories on complex affective experience may shape our becoming in the post-schooling context. Should we, as educators and educational researchers, metaphorically focus on the working of fertile soil only, fertile soil can become overcultivated and uncharted soil may erode. Caught up in a reactive mode of representational logic (Wallin 2010) and focussing on habitual response as the known and familiar, a territory becomes stratified and lifeless (Deleuze and Guattari 1988). Should we imaginatively dare to work all soil around us, fertile soil as well as barren and uncharted, conservation and cultivation of all soil become possible. Arts-based work makes it possible to break free from a reactive mode of thinking and to take up non-representational logic actively and imaginatively (Wallin 2010). From a non-representational logic in arts-based work, it becomes possible to integrate memory and imagination and express experiences informative to our becoming as educators. This, we argue, allows for giving expression to curriculum-as-lived (see Aoki 2005a) as material-affective encounters with a multiplicity of human and more-than-human others, where these encounters unfold through improvisation and complex experiences that are never quite the same (see Aoki 2005b). We believe that the post qualitative and arts-based inquiry used in this article could be productive in preparing educators for affirmative more-than-critical curriculum engagement. Furthermore, post qualitative and arts-based curriculum inquiry allow us an attentiveness to relational occurrences as refrains, where memory and imagination fold into deep awareness of our complex lived experience that informs human and more-than-human curricular entanglements.

NOTE

1. Elizabeth St. Pierre specifically uses "post qualitative inquiry" (St. Pierre 2023, 24) as a phrase spelled differently from other concepts containing the prefix post-; this, since during her doctoral studies, she found postmodernism and poststructuralism to be incommensurable and initiated a doing of post qualitative inquiry where each inquiry becomes different and subjective without pre-existing social science research methodology.

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