

## **Crafting a new materialist care story: Using wet wool felting to explore mattering and caring in early childhood settings**

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### **Abstract**

This article presents a methodological account of a postqualitative approach to research investigating entanglements among crafting experiences of wet wool felting and a story of caring in an early childhood education and care (ECEC) setting. The concept of care is understood as central to relationships in ECEC settings. Multiple theorisations shape contours of a conceptual landscape of care. Caring relationships may be envisaged as close, dyadic bonds of nurturing, or as networks of reciprocal relationships among humans, or entangled relations where care happens among humans, non-humans, and materials. From a posthumanist perspective, care stories in early childhood teaching and learning involve much more than human individuals. Early childhood practitioners, children in early childhood settings, their families, teacher educators, and policymakers can benefit from understanding how multiple, diverse components of early childhood settings continually produce care and caring relationships. New materialist theories reconceptualise care where humans, other-than-humans and materialities are constantly produced in intra-actions as temporary outcomes of entangled relations. Bringing materials into view as producing and being produced alongside humans raises possibilities for considering how care matters and how matter cares in early childhood education environments. Playfully, with curiosity, I engage with wet wool felting physically, intellectually, and emotionally. Entangled in crafting processes, I am produced as researcher, as carer and cared-for with materials. Concepts of caring and felting are multifaceted, providing rich contours of meaning. I am enmeshed in sensual experiences of thinking-making-doing, alongside some text from a research study into emotions in early childhood teaching in Aotearoa New Zealand. Contours of concepts of caring and felting are explored through crafting

experiences interwoven with writing about care and caring relationships in ECEC settings.

## Keywords

Felting; Care; Early childhood; Posthumanist; New materialism; Postqualitative.

## Introduction

Early childhood practitioners, children in early childhood settings, their families, teacher educators, and policymakers can benefit from understanding how multiple, diverse components of early childhood settings continually produce care and caring relationships. In this methodological account of researching using posthumanist and new materialist theories, thinking-making-doing (Springgay, 2019) of crafting with wet wool felting is entangled with thinking-feeling-writing about care and caring relationships in early childhood education environments. Contours of concepts of caring and felting are explored through crafting experiences interwoven with writing about care and caring relationships in ECEC settings.

A postqualitative methodological approach entails openness to multiple opportunities to think and do research differently, to loosen some constraints of traditional qualitative methods that limit how data is understood and how data is accessed and analysed (St. Pierre, 2019). A postqualitative researcher responds within the research situation with methodological strategies, thinking and doing with theory (Jackson & Mazzei, 2012) with creativity and experimentation. Postqualitative research approaches are unpacked in more depth in the methodology section of this article. In this research, I use a concept-as-method strategy, playing with contours of concepts (Mazzei, 2017) of caring and felting, curious about what thinking-making-doing-feeling-writing could do. For Deleuze and Guattari (1991/1994), concepts are acts of thought that do rather than neat categorisations of meaning. I take a postqualitative approach to weave threads of writing about care in early childhood education, research processes, textual data, and crafting experiences, layered with and through posthumanist and new materialist theories and concepts.

Caring and felting are both concepts that are understood in many ways, as conceptual landscapes shaped by multiple contours. In ECEC settings, caring may be dyadic relationships between caregiver and cared-for; networks of bonds of reciprocal obligation among humans and non-humans; interactions governed by ethics, within power relations where some are privileged and others are marginalised; concerned with physical and emotional wellbeing; or concerned about accountabilities for social, emotional, and intellectual education. Contours of the concept of felting are intriguing and generative for explorations of care using new materialist theories. Felting may be the process of entangling wool fibres using a needle or agitating wool fibres with soap and warm water; felt can be understood as feeling, as textural experience, or as physical or emotional closeness. In this thinking-making-doing-feeling-writing about caring in ECEC settings, working with materials through felting while thinking about contours of caring brings materialities of caring relationships into awareness alongside human dimensions.

This article presents a new materialist story of care entangled in relationships among humans, other-than-humans, and materials in an ECEC setting. A vignette was developed from multiple data sources that tells a story of a situation in an ECEC setting where caring and not-caring produced feelings of unease. As researcher, I experimented with wet wool felting to make some fabrics and then cut and stitched to experiment with what next and what else could be produced. I used the concepts of caring and felting with a postqualitative concept-as-method approach, bringing multiple contours of these concepts into encounter with the vignette and the felted creation. A new materialist story of care was produced as a videoclip incorporating images and spoken and written words (<https://youtu.be/SeJ6fWN0yj4>). This story is seen not as an endpoint but an opening up to further thinking about how care matters and matter cares in ECEC settings.

## Context and theoretical underpinnings

I am continuously becoming as a researcher, teacher educator, and crafter in Aotearoa New Zealand. I work with early childhood student teachers and within networks of early childhood settings and practitioners. Aotearoa New Zealand has an early childhood curriculum *Te Whāriki* (Ministry of Education, 2017) that is grounded in

sociocultural and Indigenous Maōri theories that value reciprocity and relationalities. The methodology reported in this article is underpinned by two related but separate theoretical frameworks: posthumanist and new materialist theories. From a posthumanist perspective, dynamic, complex, and messy care came into view as a central aspect of what happens in an ECEC setting. New materialist theories were helpful in bringing attention to materialities of care. As an embodied researcher, I experienced being embedded in human and material relations (Braidotti, 2019) in an early childhood setting. I watched and listened to what was happening, recorded observations, and talked with teacher participants (Warren, 2019a).

According to Rosi Braidotti (2013), posthumanism has two aspects: an anti-humanist aspect challenging humanist views that position normative versions of White Man as central, while 'othering' humans who deviate from the norm; and a challenge to anthropocentrism which positions the human species as central and 'others' non-human species and materials. A posthumanist perspective moves the focus away from human individuals as sole components of caring relationships in early childhood settings, and critiques hierarchies of caring in society and ECEC and how those who care and those who are cared-for are positioned. Teachers, children, and their families can be understood as posthumanist subjectivities that are continually negotiated in webs of connections, "embedded, embodied and yet flowing in a web of relations with human and non-human others" (Braidotti, 2019, p. 47). Much qualitative research is underpinned by humanist perspectives with methods that focus on investigating experiences, language, thoughts, and actions that are understood to be produced by human individuals. However, posthumanist theories recognise that other-than-human "forms/things/objects/beings/phenomena" (Ulmer, 2017, p. 834) also produce knowledge.

New materialist theories reconceptualise existence as constantly produced in intra-actions (Barad, 2007) as temporary outcomes of entangled relations, where relations are ontologically prior to what is produced. Karen Barad situates her thinking within agential realism, expanding a view of agency beyond human individuals exerting their will, to encompass entangled agencies that produce "possibilities for worldly re-configurings" (Barad, in Dolphijn & Van Der Tuin, 2012, p.55). Bringing materials into view as producing and being produced alongside humans raises possibilities for

considering how care matters and how matter cares in early childhood education environments. However, everyday humanist thinking and language tend to reinforce perceptions of care as human experience, shaped in early childhood teaching by pervasive values and beliefs about gender and maternalism. For humans, care is experienced and expressed in language, physically in bodies, and through emotions (bodily and through language). As researcher into care in ECEC, I could sense how other-than-human and material components contribute to care, but human players stayed in the centre of my awareness. The research reported here was an attempt to shift my awareness towards other-than-human and material components of care relationships in ECEC through engagement with crafting materials and processes.

I started to think about and experiment with the craft of wet wool felting as a means to bring my bodymind's attention to matter and to think about aspects of care that are not expressed in language. In previous research into emotions in early childhood teaching in Aotearoa New Zealand, I have written and thought about care relationships by analysing textual data (Warren, 2019a, 2019b). I have articulated understandings through language and described entanglements of humans with other-than-humans and matter in care relationships. In this article, I explore embodied experiences and expressions of care through work with craft materials. My physical experiences of felting processes provided bodily knowledge through sensual awareness of texture, temperature, colours, sounds, and smells. Braidotti (2013) suggests that thinking as a posthuman subject involves affecting and being affected in modes of relations among humans, other-than-humans, and materials. This requires a qualitative shift in how thinking and sensing are understood as entwined, and it is this sort of thinking that this research enables.

As I knew very little about felting, I explored YouTube videos and craft shop shelves, watching, thinking, feeling, and imagining. I spent a wonderful morning being taught how to wet felt, being nurtured and guided by a caring tutor. I remember following instructions with careful unhurried concentration, the pleasure of sitting outside in the sun with coffee, watching the tui (birds) ducking and diving through the harakeke (flax plants), and the satisfaction of holding my first felted creation in my hands. I spent several quiet sunny weekend days in my kitchen with felting materials on the bench, following YouTube video instructions. My mind worked with my body, working out

what to do, how long, and how much while my muscles warmed and ached. Once I learned some rules of felting, I experimented and explored what next and what else. I started to think about how felting experiences and products could encounter textual data and bodily memories from my research, to bring material aspects to my bodymind. In this article, I express these entangled bodymind experiences in writing, as theories, materials, humans, physical memories, thoughts, and emotions jumble and weave together.

The context of the research is an early childhood centre in provincial Aotearoa New Zealand where children from infants to school age attend. A feature of the centre is its large grassed outdoor play area, with trees, sandpit, and other play equipment. The children have space and time to learn and play at their own pace, supported by thoughtful and responsive teachers. The teachers have pride in a centre culture of respect. I visited the centre several times over six months, observing teachers and children, recording anecdotal observations and videorecordings, and engaging in research conversations with four teacher participants. Participating teachers and families who agreed their children could be observed gave informed consent. Children were provided with consent forms to indicate whether they agreed to be observed, and children could withdraw their consent at any time verbally or non-verbally. This article uses a vignette from this research that draws on multiple data sources. These sources include a narrative recounted by participant Mila (pseudonym) and discussed with me in research conversations, as well as recollections of physical encounters, language, and gestures when Mila and I revisited the setting to talk through and re-enact what happened.

In the next sections, contours of care in ECEC and contours of felting are mapped, setting the scene for description of a postqualitative methodological approach to encounters between textual data and felting experiences. Networks of interconnections among human, other-than-human, and material components of caring relationships in early childhood environments are explored. Early childhood practitioners, children in ECEC, their families, teacher educators, and policymakers can benefit from understanding how multiple, diverse components of early childhood settings continually produce care and caring relationships. Material components must

be in view when considering the many ways in which care matters and matter cares in early childhood education environments.

### **Care in early childhood settings: Contours of a concept**

The concept of care in early childhood settings is complex with shifting contours (Ailwood, 2017), and this thinking/making/doing exploration of care through feeling engages with experiences within networks of care where humans, other-than-humans and materials produce and are produced together. Care is widely agreed among practitioners and scholars to be central to early childhood human experiences and wellbeing (for example, Noddings, 2003; Page, 2018). However, care is described as “a very slippery word” (Ailwood, 2020, p. 340), “a tinkering, a constant shuffle and dance” (p. 344). Contours of the concept of care in early childhood settings shape a complex landscape encompassing caring that attends to children’s physical, social, and emotional well-being in responsive and sensitive ways, as well as caring about and providing for environments, resources, and experiences that enhance children’s learning. In Westernised societies, traditional maternalist perceptions of dyadic caring relationships that reflect the mother-child pairing persist, positioning early childhood practitioners as caregivers to children who receive care. Beyond the view of care as dyadic, care can be conceptualised as dialogic, reciprocal, networked, and extending beyond human relationships (Ailwood, 2017; Aslanian, 2017; Tronto, 2010). Such a view is expressed by the description of care as a “species activity that includes everything we do to maintain, continue and repair our ‘world’ so that we can live in it as well as possible” (Tronto, 1993, as cited in Tronto, 2010, p. 160).

Feminist ethics of care approaches bring the political nature of reciprocal networks of care within power relationships to attention. Critique of how those who provide care and those who receive care in ECEC are positioned combines with advocacy for capacities of care as enrichment and repair (Barnes, 2019). Early childhood practitioners are devalued as professionals when their skills in emotional, caring, and nurturing relationships are positioned as instinctive, feminine, and natural attributes that are separate from and lesser than professionalism (Ailwood, 2007; Osgood, 2012). Thoughts, language, and actions of caring practitioners are shaped within powerful expectations. Power circulating in early childhood settings can be mapped,

to advocate for and articulate the place of care as central to teaching and learning (Ailwood, 2020). Feminist care ethics can be used to address micropolitics of everyday concerns and macropolitics of policymaking (Barnes, 2019). Advocating for care entails practitioners taking responsibility for care interactions as ethical concerns, respecting children's needs which encompass "interrelated social, intellectual, emotional, aesthetic, physical, and spiritual domains" (Langford & White, 2019, p. 65).

Care can be mapped as a cartography of power and politics (Ailwood, 2020) to explore how present perceptions of care in early childhood have come to be and some possible ways that care might become in the future. Threads of care can sustain and nourish or oppress and deprive. Ailwood (2020) maps three threads: care as power, care as commodity, and care as judgement. She suggests that privilege is associated with power that determines who receives care and who is expected to provide it. Care, together with those who care and those who are cared-for, can become commodified and regarded as a resource. Within the thread of care as judgement, dominant discourses of 'good care' may be used to benefit some and harm others.

Posthumanist perspectives on care expand understandings of care among networks of humans in early childhood education to entangled relations among humans, and things and beings that are other-than-human. This article explores such expanded, uncertain, and complex understandings of care and caring, including how not-caring might play a part. For Maria Puig de la Bellacasa (2017), care is an interest of humans but not a human-only concern. Neither does matter take a passive role while humans are active in caring relationships. Rather, care is networked and "distributed across a multiplicity of agencies and materials and supports our worlds as a thick mesh of relational obligation" (p. 20). In te ao Māori, the worldview of Indigenous Māori people of Aotearoa New Zealand, such entanglements are assumed as "necessarily mutually constituting relationship[s] between all things, including human beings" (Jones & Hoskins, 2016, p. 80). An ethics of care framed by a posthumanist view on caring relationships in ECEC brings attention to interdependencies not only "between and among humans, but also with and between the materialities and forces" (Arndt & Tesar, 2019). Investigating these interdependencies is a practical project, as this



article will demonstrate through thinking-making-doing-feeling-writing encounters between a vignette of care in ECEC and experiences of wet wool felting.

Within a new materialist perspective, Sonja Arndt (2020) expands understandings of care in early childhood settings to encompass humans and other-than-humans in complex relations, an approach that is taken in this article. She takes a starting point of understanding care in terms of everything we do to maintain, continue, and repair *our* world, and interrogates what *we* and *our* can mean in new materialist terms. She draws on Karen Barad's (2007) agential realist concept of intra-action that proposes that material and social bodies, whether human or other-than-human, are continually produced in relations in-between. New materialist theories and concepts open up spaces to wonder who and what intra-acts in relations of caring, and how concepts such as attentiveness, responsiveness, and responsibility might be enacted.

This mapping of some contours on the conceptual landscape of caring indicates some complexities of this everyday term. The next section explores some contours of the concept of felting.

### **Felt and felting: Contours of a concept**

The concept of felting is an "act of thought" (Deleuze & Guattari, 1991/1994, p. 21) that is activated in this postqualitative inquiry into caring in ECEC in Aotearoa New Zealand. Like care, felting is a relational, affective concept with shifting contours (Mazzei, 2017): "a process and a material of chaotic inventiveness" (Springgay, 2019, p. 61). Felt is a fabric produced by entangled materialities of wool, water, and soap agitated with human bodyminds. Perceptions of colours and patterns, sensations of warmth and wet, smells, and textures emerge from thinking-making-doing processes. Samira Jamouchi (2020) takes a performative approach to felting and writing experiences as she explores intra-actions among humans, space, time, and materials that produce "concepts as philosophical doorways and reminiscences as my poetical reverberations, students' reflective notes, material-discursive reflections of felting phenomena, and spaces in-between those lines" (p. 53). I explore concepts of felting and caring as being produced among intra-acting bodily and mindful experiences of felting and thinking with data about caring.

Deleuze and Guattari (1980/1987) use descriptions of felt and woven fabrics to compare smooth space where affect flows unimpeded through assemblages with striated space where myriad forces constrain and enable flows of affect. Innovation and experimentation may happen in smooth space, and striated space may be institutionalised and criss-crossed with rules and expectations (Springgay, 2019). Deleuze and Guattari (1980/1987) describe felt as an 'anti-fabric', characterised by entangled fibres that do not follow regular patterns. Felt is not homogenous or smooth in the sense of being featureless, but "it is in principle infinite, open and unlimited in every direction" (p. 525).

Touching and being touched, feeling and being felt, moving and being moved are contours of the concept of felting that invoke meshing and mingling intimacies across human and other-than human bodies with indistinct boundaries (Springgay, 2019, 2021). Multiple aspects of the concept of felt are used by Stephanie Springgay (2019) to think-make-do writing practices, including felt as force and movement, felt as affect, and felt's engagement with touching. Although she does not call researchers to practice felting, Springgay's theorising is entangled with her bodily/mindful engagement with wool, soap, water, and stones, "*moving my fingers and thumb in rapid spirals along the surface of the rock, kneading and pressing*" (p. 57, emphasis in original). Springgay (2021) links felt with postqualitative research through 'feltness', a practice of intimacy that incorporates "reciprocity, relationality, stewardship, and an ethics of care" (p. 212). The bodily affective experience of touch when felting invokes an intimacy of entangling with difference that cannot always be articulated in language, and which is partially expressed through the new materialist story of care shared in this article.

For me as researcher/crafter/writer, intimate touching bodymind encounters of felting with textual data intra-acted with theorising of care in early childhood education and with writing a new materialist story and this article by "writing-with felt ... an engagement with textile processes, where woolly fibres seep, cut and fold into academic writing" (Springgay, 2019, p. 60). Describing how this work of research is understood and enacted is the work of the next section of this article.

## Methodology

Multifaceted concepts of care and felt provide the foundations for this methodological account of postqualitative research using a concept-as-method approach to investigate entanglements among crafting experiences of wet wool felting and a story of caring in an ECEC setting. This section will outline some understandings of postqualitative research and explain the concept-as-method approach taken with reference to research strategies that engage with art and craft experiences.

Postqualitative methodologies respond to posthumanist theories with interest in what is coming into being, in creation and experimentation (St. Pierre, 2019). They require openness to doing, thinking, and becoming differently, engagement with diverse bodies of knowledge, and courage to embark on research strategies tentatively and adventurously. As a process methodology, postqualitative research can be understood as improvisational practice of thinking with theory, noticing what happens when data and concepts encounter each other (Mazzei, 2021). Linnea Bodén and Karin Gunnarsson (2021) provide postqualitative researchers with hopeful encouragement that while methods are not prescribed, versatile and contingent tools are available for researchers to navigate, “creating an imaginative and fluid practice” (p. 194). Pauliina Rautio (2021) suggests that postqualitative researchers build on existing understandings of systematic and planned research, rather than discarding these. Postqualitative strategies that are responsive to the situation may be similar to familiar qualitative research methods. Rautio stresses that postqualitative research needs to articulate a generative and relevant argument while making room for “the not-yet-known, the emerging, the wild, the uncategorisable” (p. 229).

Each postqualitative inquiry is different and not replicable, responding to its own unique events without/outside the ‘proceduralism’ (Springgay & Truman, 2018) of prescribed methods or models. Researchers are entangled in uncomfortable and uncertain experiences of “thinking-making-doing” within research events (Springgay & Truman, 2018, p. 206). Stephanie Springgay and Sarah Truman describe a ‘speculative middle’ of research characterised by agitations and affective forces, “concerns and gnawings” (p. 207). They highlight (in)tensions as necessary aspects of postqualitative research where researchers attend to “the immersion, tension, friction,

anxiety, strain, and quivering unease” (p. 204) of encountering problems from within and generating new thinking.

Such (in)tensions are present in this research study, as I embark on a crafting exercise of felting guided by a hunch or intuition (or hope) that this will become relevant to the data I have about caring in ECEC. These (in)tensions persist as I continue to tentatively engage in the research process, painfully aware of my lack of familiarity and skill with art and crafts. Springgay (2021) emphasises that transdisciplinary work is difficult, and “requires an ethical commitment and accountability to many different disciplines, practices, and ways of being in the world” (p. 212). I hope that by making my lack of experience clear, as well as my respect for the skills and knowledge of artists and craftspeople, I can tentatively engage with postqualitative research that involves crafting.

Previous sections of this article have outlined the key concepts of care and felt that shape the concept-as-method approach of this research study. A concept-as-method approach to postqualitative inquiry is based in Deleuze and Guattari’s (1991/1994) ‘concept of the concept’. Rather than providing a means to categorise according to characteristics, concepts respond to particular situations: “new concepts must relate to our problems, to our history, and above all, to our becomings” (Deleuze & Guattari, 1991/1994, p. 27). Concepts of care and felt provide conditions for designing contingent research strategies such as wool felting and composing a videoclip of a new materialist story of care comprising images and words, both written and spoken.

Arts-based research literature provides a useful starting point to think about what felt-making processes can produce in relation with networks of materialities, concepts, theories, texts, and humans. Interconnections are often highlighted, whether between components of assemblages or between aspects of practice or roles of practitioners. Cartographic approaches to arts-based inquiries might map complex interconnections among intensities of bodies, materials, texts, and memories of “textures and vibrancies, evocative glowings of encounters and events” (Flint, 2018, p. 17). Relations and encounters in artful doing are not between autonomous artist bodies and passive materials but more about leaking, merging, pulsing vitalities: “To consider the bodies of self, milieu, others as entwined and always already dancing together” (Guyotte, 2017, p. 58).

Roles or practices are linked through arts-based research in the concept of a/r/tography, “an interwoven “living practice of art making, researching, and teaching” (Springgay et al., 2005, p. 902). The slashes in a/r/tography suggest active, reverberating relationships among the roles of artist, researcher, and teacher. The concept of research-creation works the hyphen between research and creation as an ecology of practices of thinking and making (Manning, 2016). Research-creation was devised as a category for research funding in Canada, and has been developed by postqualitative researchers despite its original neoliberal framing (Springgay, 2021). Both research and creation are understood in ways that encompass many ways that ‘thinking’ and ‘making’ can become, with “the active hyphen that brings making to thinking and thinking to making” (p. 13).

In literature about research-creation inquiries, writing intra-acts with a wide range of artmaking processes, including visual arts (Flint, 2018; Guyotte, 2017), dance (Manning, 2016), a workshop where participants intra-acted with bags (Taylor et al., 2019), and walking and thinking with landscapes (Springgay & Truman, 2019). In this article, the hyphen in research-creation activates thinking-making-doing among materials and processes of felting and an excerpt of textual data, producing knowledge that is incompletely articulated in processes of new materialist storying.

This section has outlined the methodology as postqualitative, responding to a particular research situation with strategies that are contingent and relevant. A concept-as-method approach based on multifaceted concepts of care and felt is described as engaging with crafting processes of felting in encounter with textual data about caring in ECEC. The methodology is influenced by theories of arts-based research that propose mapping interconnections among components of research situations and activating interconnections among practices and roles such as art or craft practitioner, researcher, and teacher. The next section will bring together the aspects discussed so far to give an account of the research process and how a new materialist story of care was produced.

## Felting Care: A new materialist story

There is never a starting point of any account of how and why something happens, like this exploration of care in ECEC through a new materialist care story. There was a data excerpt from a doctoral research study that kept returning to my attention, asking for more thought, demanding exploration of potentialities. I was concerned about a disconnect in my work between drawing on theories that prioritised processes and relationalities among humans and other-than-human, and production of writing and thinking that focused on language expressed by humans about human experiences. I have always enjoyed crafting without having any particular expertise, and this sort of tentative, touching manipulation of materials seemed to offer my bodymind opportunities to bring matter into my perceptions of care in ECEC. I experimented with felting, trying needle felting but finding the needle unfriendly. I moved to the warm slipperiness of wet wool felting and enjoyed the sensual experience. The entangling of fibres and colours, the feeling of warmth and softness, and the pliability and openendedness of working with felt appealed to me, relating in a bodily way to warmth, nurturing, and undemanding acceptance of care experiences. The concepts of care and felt encompass contours of affecting and being affected, touching and being touched, moving and being moved, and feeling and being felt.

Care, as I earlier outlined, is a big, complex, many-contoured concept. I chose to frame care in ECEC within understandings of meshing, twisting, dynamic networks, “thick mesh[es] of relational obligation” (Puig de la Bellacasa, 2017, p. 20). Care is interwoven through the early childhood curriculum of Aotearoa New Zealand *Te Whāriki* (Ministry of Education, 2017), most obviously in the strands of learning concerning wellbeing and belonging, but also clearly present in the other strands of contribution, communication, and exploration. Teachers’ caring roles are described in terms of attentiveness, responsiveness, and responsibility (Arndt, 2020).

A new materialist story of care in ECEC was built through images, words, and memories, to tell a story of how care matters and matter cares. A vignette was composed from textual data from a research study into posthumanist perspectives on emotions in early childhood teaching (Warren, 2019a). A cartographic account follows the encounter of this vignette with crafting processes of felting and the

production of a new materialist story of care, with attention to theory-praxis that communicates about care in ECEC using posthumanist and new materialist theories.

### Caring and not-caring: Vignette

The vignette is set in the large playground of an early childhood centre in provincial Aotearoa New Zealand. Humans (teachers and children) and other-than-human playground materials (including play equipment and materials, trees, grass, and concrete) continually become in dynamic intra-actions. Material and discursive entanglements produce relations of caring and not-caring:

Trees, sandpit, play equipment, children and teachers are scattered around the large grassy playground. Wood bark cushions the ground as a soft fall surface and provides material for creating mixtures at the nearby water trough, where rice has been added to the cold water. A large wooden box has two sides with small holes and two sides with larger openings. The box hides two children inside watching people pass by, and also hides bowls containing bark pieces mixed with water and rice from the water trough. A whisper reaches Mila, "She is coming, let's get her, let's get her in the eyes!" A bowlful of bark, rice, and water flies through the air, splatting on a child's passing body, on her skin, on her face and in her mouth. Emotions of shock and distress reverberate among the children and Mila. Concerned for the upset, crying child, Mila asks the children in the box, "Hey, what are you doing? What is happening?" The children blame each other, saying, "It was her, it was her". Mila speaks sternly to the children: "I don't care, but it was either one of you. That is not a behaviour I like, and I do not want to see it again. Can you tip that water out and take that container back to the trough?" The remaining bowls of bark, rice, and water are returned to the trough and the children follow Mila inside to help care for the hurt and upset child: "Come and make sure your friend is ok".

And ... in the quiet of early evening after a busy working day, Mila and I sit at a table with my iPod recording our conversation. Our roles of participant and researcher are entangled with roles as student teacher and teacher educator at other times and places, and within discourses of professionalism. For Mila, early childhood teachers saying, 'I don't care' to children is not professional: "I don't feel like I should have said

that, and I don't feel like I should have expressed it like that". But she feels conflicted: "I think that's the exact response that those girls needed at that time to show that I wasn't messing around, and I didn't think it was semi-okay. I thought it was absolutely not okay and I didn't really care who it was, whose idea it was because [they] both did it". I seek to reassure Mila: "But you meant you don't, it doesn't matter which one it was. It's not that you don't care". Mila concludes: "There are some things, you know, that you feel like you should ... feel but not ... express". Relations of caring and not-caring here are materially and discursively entangled and this article seeks to explore what else new materialist theories can do through a postqualitative concept-as-method methodology.

#### Felting a story: Responsive and contingent strategies

Considering research encounters with materialities through craft processes of wet wool felting led me to investigate writing new materialist stories: stories of affecting and being affected, of touching and being touched, of moving and being moved, of feeling and being felt, of felting and being felted. New materialist stories are produced within networks of relations among humans and other-than-humans, and so they are stories communicated by means that go beyond language. My efforts to compose a new materialist story of caring in ECEC in Aotearoa New Zealand are produced in intra-actions with readings of literature. I read stories of responding in the moment of hearing of a death (Flint, 2018); videorecordings of artmaking using "coloured pencils, watercolour pencils, matte medium, oil pastels, ink pens, eraser, drawing pencils, scissors, brushes" (Guyotte, 2017, pp. 59-60) accompanied by text; stories of encounters among children and the liveliness of a creek (Somerville, 2016); and stories of what is produced when bags, bodies, and environments encounter each other (Taylor et al., 2019). New materialist stories attend to assembled relations, the expressivity of matter, and ways of communicating beyond language. Affectively moved by these stories, I responded through thinking-making-doing with felting, textual data, and writing. I sought to attend to "the unfolding forces, ebbs, and flows between humans, nonhumans and more-than-humans" (Lemieux, 2021, p. 494).

Mila's story had affected me, and kept on returning, seeking my attention. I imagined the children's anticipation of hiding, the large wooden box enclosing, the bark



cushioning the ground, bark activating as a play material, bark, rice, and cold water flying and splatting on skin. I felt Mila's shock, a child's distress, and children's dismay at crossing a boundary of expectations. I wondered about what caring and not-caring do. Who and what cares *here* in networks of 'relational obligation'? What parts do the trees, the box, the bark, and the water play in the caring that happens here? I have previously written about relationalities and affective flows of this vignette (Warren, 2019b), but I wanted to work with materials in a bodily way and communicate matter's involvement in this story of caring and not-caring. Serenella Iovino (2015) proposes that matter has narrative agency as 'storied matter'. For Iovino, matter can be understood as expressive, with "an eloquent and signifying agency" (p. 72) that is articulated in how it changes in relations with other bodies and environments. Although it may be difficult for humans to 'read' the stories matter tells, we can grapple with understanding that the stories 'we' tell are produced through intra-actions that include narrative agencies of matter. Caring and not-caring, in this vignette told by humans, are shaped and formed by entangled agencies, including agencies of materials. Writing new materialist stories offers opportunities to cultivate an openness to matter's expressions as "an ongoing performance of the world" (Somerville, 2016, p. 1166) or "choreographies of mattering" (Taylor et al., 2019, p. 18). The sensual experience of working with the feltmaking process, and the texture, patterns, and colours of the resulting creation leaves space for an awareness that felt and felting, as well as the materials present in the vignette, have narrative agency in combination with the 'reader' who encounters the new materialist story.

In composing this new materialist story, I made two pieces of felt fabric. One was made in two layers that enclosed several handfuls of bark and rice splattered onto the wool early in the process. The second piece was larger, with the wool spread unevenly, producing a thin fabric with holes. The piece enclosing the bark and rice was sewn on top of a piece cut out of the other fabric. Phrases from the vignette were written onto ribbon and sewn on to the fabric. Some strips of felt from the second fabric were entangled and embellished with embroidery thread. The resulting creation is sturdy enough to pick up and handle, pull and squeeze, to experience weight, textures, and colours, and the ribbons can be read at any pace in any order. New materialist stories flow through entangled artmaking and writing that "narrativises snippets of the creation process and theorises the *doing*" (Guyotte, 2017, p. 55). The researcher needs

to explore ways to not *be the storyteller*, but to somehow allow space for other means of expression to emerge. Rather than analysing, interpreting, and explaining, researchers writing new materialist stories are “attending-awakening-dancing” (Guyotte, 2017, p. 58). Through felting, writing on ribbon, and stitching processes, words, materials, physical, emotional, and intellectual experiences have been brought together in an entangled and open-ended way.

The words in this new materialist story of care include the phrases on the ribbon from the vignette, a selection of words associated with care and with some ideas and theories discussed in this article. In the wellbeing strand of the early childhood curriculum, *Te Whāriki* (Ministry of Education, 2017) states that “safe, stable, and responsive environments support the development of self-worth, identity, confidence and enjoyment, together with emotional regulation and self-control” (p. 26). This statement can be understood in posthumanist terms as the ways that materials are involved with care but does not encompass the reciprocity of caring and being cared-for. However, a ‘thick mesh of relational obligation’ in an early childhood setting incorporates trees, grass, play materials including boxes to hide in, and bark that cushions falls, is mixed with rice and water, and is thrown at a child’s body.

The next step in composing this new materialist story of care in ECEC was to produce a slide show of images with written and spoken words (<https://youtu.be/SeJ6fWN0yj4>). I would not claim that this is the final iteration of the story as it seems to keep on evolving. It should not be surprising that the materials seem to have narrative agency in combination with the writing and images. Writing new materialist stories involves decentring humans and becoming open to other expressions and articulations. Ulmer (2018) recommends a creative, playful approach to postqualitative writing practice, with an openness to uncertainty and surprises. Practices that involve not-writing, such as choreographies and cartographies, keeps knowledge production in motion and off well-worn tracks. There seems to be so much potential for new ways of thinking-making-doing-feeling-writing for researchers working this way

In this research-creation experience, intra-actions produce felt fabric embellished with ribbons with text and embroidery, and a slide show telling a new materialist story of care in ECEC. I am continually becoming as crafter/researcher/writer through

immersion in these unpredictable and uncertain processes. The work is slow, faltering, and difficult. Slowing down and working with bodymind engagements brings sensations of intra-action, of becoming different materially, physically, intellectually, and emotionally. Memories of pulling, layering, rubbing, rolling, and squeezing wool, memories of Mila telling her story and of us re-enacting it, writing text on ribbons, working with felted fabrics, ribbons, and embroidery thread were eventually and tentatively composed into images and words of a new materialist story of care. Many 'what next and what else' choices were made. Much of what was experienced is beyond easy articulation. Reverberations will come from memories and imaginings of each reader as they intra-act with the story. The story still feels unfinished.

## Conclusion

This postqualitative new materialist story of care in ECEC opens up spaces for innovative thought, words, and actions in early childhood environments that complexify care beyond involvements of just human individuals. By seeking to attend-awaken-dance (Guyotte, 2017) with these multiplicities rather than describe-explain-interpret, a playful open-ended story of images and words allows space for the reader to entangle the story with their own insights, memories, and imaginings. Teachers, parents, scholars, and policymakers can benefit from considering all the human, other-than-human, and material components of care relationships in ECEC settings. Children are no doubt already aware of these material agencies and how they continually become with them in meshes of reciprocal caring. New materialist thinking can enhance the stories we tell about care and encourage us to sustain caring networks as by attending to and curating the materials present. It makes a difference to the caring that happens in the centre in this research that the playground is spacious, grassed, shaded by trees, and provided with a variety of resources for open-ended play.

This new materialist story opens opportunities to go beyond narrow conceptions of care as a human-only concern, as simply warm, kind, and positive. An invitation is present to explore expanded views of power relations and consider what happens when not-caring and indifference are viewed as integral parts of stories of caring in ECEC. I have intense interest in what these entangled caring/not-caring agencies do

and produce in particular localised enactments of care in ECEC. Stories that go beyond language depart from humanist understandings of stories and storytelling, a challenging move in light of the dominance of writing and talking to communicate among humans. Artmaking is one means of “providing a different language to both communicate with and connect to the world” (Guyotte, 2017, p. 58). This new materialist story of care offers opportunities to sit with complexities and think about what might become. Now that I have experienced thinking-making-doing with the concept of felt, a humanist view of care has been defamiliarised. Contours of concepts of felting and caring have been entwined to attend to how they shape relationships of affecting and being affected, of touching and being touched, of moving and being moved, of feeling and being felt, of felting and being felted.

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