

## Diffraction early childhood teachers' culture stories: Reimagining methodologies

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### Abstract

Teachers' cultures impact on their orientations to diversity and pedagogical practices. However, limited attention is given to early childhood teachers' cultures in research and practice. Informed by Barad's notions of diffraction and intra-action, we reimagine research methodologies as critical in shaping research on what culture does or how it works for teachers and their culture stories. Turning and re-turning to diffractively engage with teachers' culture stories in an exploratory Australian project, this paper pushes the boundaries of conceptualisations of research. It elevates the ways in which research methodologies, like culture, are always re-iterative, contingent and responsive to their relational context.

**Keywords:** Teachers' cultures; culture stories; early childhood education; diffraction; methodologies

### Introduction – Why this paper?

This paper is a commitment to the reimagination of research methodologies within the field of teachers' identity formation and critical cultural studies in education. It argues that such a reimagination is fundamental to (re)engaging the promise of philosophical foundations for social

and more-than-social justice and equity, specifically in early childhood (EC) studies in the 21st century (Arndt & Tesar, 2016). A necessary foundation for this thinking is developed by focusing on philosophical ideas as methods as a way to engage with moral, ethical and political discourses (Tesar, 2021). This paper draws on both discourses and affects that emerge through teachers' culture stories, to rethink possibilities for methodologies in and beyond qualitative research using philosophy as method. Rather than outlining in a linear fashion the methodological steps that we followed in a small exploratory project, the intention in this paper is to engage with its methodological underpinnings as an ideas paper. The philosophical methodologies it engages with are presented as always emergent and in construction, and as always responding to the contingent situations within which they arise. As Biesta (2012) brings to our attention, drawing on the earlier work of Dewey, the aim is to move from philosophy as related to "the problems of philosophers" to "a method, cultivated by philosophers, for dealing with the problems of men [sic]" (Dewey quoted in Biesta, 2012, p. 581). In our work here, the "problem" is that of the under-researched area of teachers' cultures, and their recognition within their early childhood teaching teams.

While there might be a craving in society for a set of methodological techniques and strategies arising from a particular philosophical orientation to help teachers to "deal" with the othernesses<sup>1</sup> in their teaching teams, we are increasingly drawn to ways that philosophically engaging with the problem might unsettle dominant norms to provoke reconceptualisations and fresh openings. In this paper we engage with how research can open up moral, ethical and political discourses by engaging in what culture does or how it works for teachers in EC settings. In this vein, we are also interested in what (culture) stories do or how they act in the ongoing construction of identities and intercultural relationships of teachers and their cultural wellbeing in their teaching teams.

The need for this research is described elsewhere. We have previously highlighted how early childhood teachers'<sup>2</sup> cultures are rarely recognised as important in EC settings (Arndt & Bartholomaeus, 2022). This is problematic, especially in a field where there is a strong focus on children's cultures and cultural belonging in curriculum documents, such as in the contexts where we are working: the national Australian Early Years Learning Framework (EYLF) (Department of Education, Employment and Workplace Relations [DEEWR], 2009) and the state-level Victorian Early Years Learning and Development Framework (VEYLDF) (Department of Education and Training [DET], 2016). Indeed, the EYLF has a section on Cultural Competence (pp. 18-19) which largely focuses on teachers being culturally competent to work with children and their families, with little consideration of teachers' own cultures and cultural wellbeing, apart from the need to be "aware of one's own worldview" (DEEWR, 2009, p. 19). Others have also highlighted the lack of attention to early childhood teachers' cultures, specifically on the diversity of cultures in countries such as Australia (Gide, et al., 2022) and New Zealand (Cherrington and Shuker, 2012).

Engaging in this work is a social justice and equity imperative, that, by recognising its inherent uncertainties, elevates the importance of engaging with teachers' individual and collective stories as constantly in construction, multiply entangled and affected (Braidotti, 2013, 2022; Kristeva, 1998). Inspired by the innovations and philosophical methodological thought emerging in research with human and more-than-human relational identities in recent years (see for instance Myers,

2019; Sauzet, 2021; Gunnarson, 2021; Braidotti, 2022; Arndt, 2020), this project focuses on the dearth of philosophically innovative research on and especially with EC teachers' cultural identities and wellbeing. With very few exceptions such as Paley's writing in the US, which includes reflections on her own experiences (e.g. 1979 [2000]), and Osgood's work in nursery rooms (2012), there has not been an ongoing commitment to considering the importance of EC teachers' cultural wellbeing and belonging and to the ways in which these fundamentally shape their pedagogies and attitudes to diversity in their teaching teams, EC settings, and in wider society.

In our exploratory project, we engaged with four early childhood teachers in Melbourne through their culture stories. Our collective engagement in and with these culture stories pushed our methodological reimaginings to think about what is possible when conducting this kind of work. What appeared to arise was a need to pay as much attention to the sensitivities of the concept of culture, that is, what culture is, does or can do, as to how the research might be conducted at a practical level. This paper thus focuses on the conceptual and methodological thinking that arose by placing Kristeva's (1991) feminist philosophical notion of the foreigner in a diffractive relationship with the teachers' stories, and Barad's (2003, 2007, 2014) notion of diffractive aeration. While we find these theories useful to think with, it is not our intention to engage with every aspect and complexity of Kristeva's and Barad's work. Instead, Kristeva and Barad gave us what we might see as a diffractive permission to think with and through teachers' stories.

In this paper the focus, then, is on philosophical ideas, using Kristeva's and Barad's philosophies to help us to unpack the intra-relationalities – what some might call the “big ideas” – between EC teachers, their relational and temporal contexts, and their teaching teams. Following Deleuze and Guattari (1991), doing philosophy has to do with “forming, inventing and fabricating concepts” (p. 2). Thinking, they say, has to “determine its moment, its occasion and circumstances, its landscapes and personae, its conditions and unknowns” (p. 2). Furthermore, historian of philosophy Rom Harré (2000), says that to do philosophy is to examine life and the way we live it, with the aim of “bringing to light the hidden pre-suppositions and assumptions implicit in all sorts of discourse and practices” (p. 8). Our project uses philosophy as an ongoing and constantly forming “aeration” of teachers' culture stories as fluid, slippery, and contested concepts arising in intra-actions between human and non-human matter, beings and relationships (Barad, 2003, 2007). By aerating culture, we refer to the process of turning the concept of culture over and over, in relation to its moment, occasion, circumstances or landscapes, as a Deleuzo-Guattarian philosophical method. Aeration describes the processes of viewing culture and its implications for EC teachers' stories and pedagogies from diverse perspectives, depending on which aspects come to light, after it is turned this way and that. Barad (2014) explains this process metaphorically through earthworms' activity as they dig and turn the earth, elevating diverse sections, crumbly and aspects, as they emerge, hiding others in turn.

### **What do we mean by culture?**

When we consider culture, we take a broad view where it relates “to ways of knowing and being, including the values and beliefs arising from Indigeneity, race, ethnicity, histories and backgrounds” (Arndt & Bartholomaeus, 2022). Culture can be a troubling concept, sometimes

viewed as able to be captured in statistics, or as something which is unsayable and unknowable. In Australia, culture is sometimes reduced to the country in which someone was born, or someone may be viewed as belonging to a singular language or cultural group. However, while official Australian statistics include a broad range of categories that may be seen as *relating* to culture and used in relation to aspects such as country born, ancestry, Indigenous status, and language spoken at home (e.g., by the Australian Bureau of Statistics, see Arndt & Bartholomaeus, 2022), we view this as only one of many ways of thinking about culture. Furthermore, such categories are inherently problematic in being able to discuss people's cultures in a sophisticated way (Kukutai & Broman, 2016). Although not unique to Australia, culture is often viewed as being the domain of those who are not of the "dominant" culture(s), where it is even difficult to find a word to describe what that dominant culture might be. Or, sometimes, people from the dominant culture(s) are not even viewed as having a culture. This can be seen, for example, in written curriculum and policy, and consciously or unconsciously enacted, unwritten (and often exclusionary) processes used in education settings (Rahman, 2013). We follow Harré (2000), then, in considering culture as the way individuals live life, including the inherent assumptions and pre-suppositions, discourses and practices, including of humans, matter, things and other beings (Barad, 2003; Braidotti, 2022; Haraway, 2016).

Within this broad view on culture, Kristeva's (1991) notion of the foreigner pushes us to reconceptualise teachers' cultural otherness through the nuances arising through their stories. Teachers in our project reflected on the othernesses elevated in their teaching teams when particular ways of being and doing life, such as in behaviours, languages, rituals or food were deemed acceptable, and others not. This could be seen as akin to what Ritchie and Skerret (2014) see as an expectation of fitting into a dominant (white) mold, which they refer to as "whitestreaming", where all that does not fit into this dominant cultural mold becomes exoticised, appropriate on so-called "culture days" but not valued – even actively discouraged – on others (Arndt, 2017). Through their (re)encounters, the teachers in this project help to broaden conceptions of culture as more than what is visible, classifiable, measurable. They variously engaged in dialogue on what culture is, saying "this is how I grew up... this is my cultural identity", "it's just the way you do things", referring to what has been learnt from family. Rather than reifying "culture" as a term, the importance of considering a broad range of experiences and narratives beyond only thinking about individuals who may be considered culturally and/or linguistically diverse became heightened (Arndt & Bartholomaeus, 2022). Conceptualising culture as something beyond "Culturally and Linguistically Diverse (CALD)" (or other acronyms such as BAME ["black, Asian and minority ethnic"] in the UK), this project worked with teachers' wider conceptions of histories, stories, ways of being, knowing and doing. Indeed, as Kristeva suggests, the deeper we engaged with the teachers, in diffractive ongoing questioning, the deeper the sense of inner foreignness that appeared to arise, as previous ideas became unsettled and new ones came to light in intra-actions with themselves and each other.

What is noteworthy in terms of diffracting cultural relationalities in EC settings, is that while culture and cultural belonging is mentioned throughout the EYLF and VEYLDF, "culture" does not appear in the glossary of either document. However, the EYLF elevates the importance of

considering culture as not only the things that are obvious like ethnicities, race, and historical backgrounds. The EYLF and VEYLDF positionings of cultural ways of knowing and being include, for instance, that:

Children are born *belonging* to a culture, which is not only influenced by traditional practices, heritage and ancestral knowledge, but also by the experiences, values and beliefs of individual families and communities. Respecting diversity means within the curriculum valuing and reflecting the practices, values and beliefs of families. Educators honour the histories, cultures, languages, traditions, child rearing practices and lifestyle choices of families. They value children's different capacities and abilities and respect differences in families' home lives. (emphasis in original, DEEWR, 2009, p. 14 – 4. Respect for diversity)

The VEYLDF guides early childhood professionals to work together with families in support of their children, embracing and responding to the cultural and linguistic diversity of the Victorian community and diverse approaches to child rearing (DET, 2016, p. 4).

For teachers to respond to these mandates, multiple diffractive readings of their own culture stories are critical. As an iterative process, diffraction, as Barad (2014) states, involves “iteratively intra-acting, re-diffracting, diffracting anew, in the making of new temporalities” (p. 168). This intra-relationality (Ceder, 2019), potentially elevates and re-elevates the ways in which the teachers intra-act within themselves, with each other and with children's and families' cultural realities, as their responses can be seen as always contingent in unknowable ways, shaping and forming their enactments of and responses to the curriculum documents, and their human and more-than-human environment. Diffraction, then, occurs over time, involves a “multiplicity of processes” (Barad, 2014, p. 168) and is different to reflection. The diffractive process disrupts and moves beyond what can be seen, made meaning of or even be humanly understood (Arndt, 2020; Jenkins, et al, 2021, Moxnes & Osgood, 2018). Conceptualising culture through teachers' culture stories thus evokes what both Barad and Kristeva suggest is an inner, constantly shifting, sense of otherness, creating space for socially and more-than-socially just encounters.

### **Why philosophical ideas?**

Taking a diffractive approach to researching teachers' cultural realities in EC settings pushes us towards first and foremost grappling with this inner otherness as a set of evolving and shifting intra-actions and ideas. Drawing from others' earlier work with a Baradian diffractive lens on teacher storytelling (Moxnes & Osgood, 2018) and the notion of playfulness with ideas (Sparrman, et.al., 2023), we focus specifically on two philosophical ideas. We are concerned with diffraction as what happened with the teachers' culture stories as they not only arose in their intra-actions and relational engagements whilst sharing them, but continued to evolve, re-determine and re-shape themselves, as teachers opened up to their own and each other's experiences of otherness (Arndt & Bartholomaeus, 2022). In addition, we are concerned with the idea of diffraction as our re-imagining of research methodologies, as constantly emerging and contingent, arising, turning, and re-turning, affirming the importance of thoughtful, considered, ethical methodological engagements (Tesar, 2021). In a similar way to Barad's (2014) description of earthworms continually digging and turning the soil in different ways, our research methodologies too, benefit

from such a process. Earthworms, Barad says, revel in processes that might be imagined as:

helping to make compost or otherwise being busy at work and at play: turning the soil over and over – ingesting and excreting it, tunnelling through it, burrowing, all means of aerating the soil, allowing oxygen in, opening it up and breathing new life into it (Barad, 2014, p. 168).

Our questioning is inspired by a focus on “re-turning – not by returning as in reflecting on or going back to a past that was, but re-turning as in turning it over and over again” (2014, p. 168), a process which Barad further elaborates on as “a mode of intra-acting with diffraction” (2014, p. 168), where:

the notion of intra-action recognizes that distinct agencies do not precede, but rather emerge through, their intra-action. It is important to note that the “distinct” agencies are only distinct in a relational, not an absolute, sense, that is, agencies are only distinct in relation to their mutual entanglement; they don't exist as individual elements (Barad, 2007, p. 33).

Such mutual entanglements became elevated through the lens of Kristeva's (1991) notion of the foreigner. As the teachers' stories became further and further enmeshed in each other, bouncing off certain experiences, elaborating on others, they became increasingly aware of differences not only between them, but *within* themselves. They *ongoingly became* the philosophical stance that all of us are not only foreigners to each other, as Kristeva claims, but also to ourselves. “Strangely” Kristeva writes, “the foreigner lives within us” and otherness is “the hidden face of our identity” (Kristeva, 1991, p. 1). In countries like Australia where culture is often seen in the “other” and not in people from the dominant culture(s), the critical aspect we are concerned with is what the fluidity of meanings, relationships and experiences of culture – and otherness – might be or do in such ongoing becomings. Kristeva (1991) adds to this fluidity when she suggests how we might approach otherness. “Let us merely touch it, brush by it, without giving it a permanent structure” (p. 3), she says, hinting at the openness suggested also by the teachers in our project, affirming in their intra-actions that all peoples' cultures are ongoingly evolving – in sometimes known and sometimes not known ways. The more deeply we engaged in the project with teachers and their culture stories, the more we saw “the togetherness of those foreigners that we all recognise ourselves to be” (Kristeva, 1991, p. 3) emerge. Uncertainties arose in the iterative processes of teachers' becoming, with themselves, with each other, in diffractive, philosophical encounters with their *own*, as well as with each other's, stories. The ethics of this experience arose in the sense of otherness as at times merely touching it, brushing by it, without giving it permanent structure, and then moving on – rather than insisting on or expecting one definition or way of being to emerge.

Such entangled conceptions then raise further concerns with documenting a research process. Instead of documenting, we consider what Fox and Alldred (2015) call a “research-assemblage”. In this paper teachers' culture stories are considered as assemblages, that is, as groupings that bring to life diverse, agentic elements of teachers' lives (Bennett, 2010). As mutual entanglements of

human and non-human, matter and meaning, intra-acting through stories (Tesar & Arndt, 2016), the stories serve as a kind of vignette, blurring boundaries and shaping new becomings. We “think with” Barad, Kristeva, and the teachers to consider how we start the stories, how we encounter the stories, and what we do with the stories. These engagements with and through philosophy act as an ethical imperative in particular contexts, times and spaces, and as often uncertain, raw and potentially chaotic (Koro-Ljungberg, Carlson, Tesar & Anderson, 2015; Tesar, 2021), especially in response to criticisms of the inherent humanism in much research with people, by writers in and beyond postqualitative inquiry (e.g. St. Pierre 2014, 2021) and the thoughtful engagement in these criticisms by researchers working with people (e.g. Allen, 2019; Gerrard et al. 2017; Sparrman, et. al., 2023). In conceptualising our encounters with the teachers' stories, the importance of thinking differently when researching in and beyond human conceptions and experiences became a crucial and continuing process which may look different for each project.

### How do we start the stories?

Thinking about how we “start” the stories, we consider how our encounters with teachers might elicit multiple layers of intra-relational culture, temporalities, things and beings (Barad, 2003, 2014). St. Pierre reminds us that researchers always begin in the middle:

If you think the “researcher begins a study,” then you think the researcher exists before the study, ahead of language and materiality, that the researcher is not always already in the middle of everything, in the middle of many different studies that have already begun that she might continue (St. Pierre in Guttorm et al., 2015, p. 15).

Thus, our work for this project began in the middle. It began in the middle of our own situatedness, uncertainties, foreignness within this country and within ourselves, diffracting and intra-acting in new and old ways. This non-linear, relational, and sometimes chaotic way of thinking moves beyond conventional ideas of collaboration. As St. Pierre continues:

Collaboration is one of those concepts based on the humanist subject that doesn't work. It assumes there are separate individuals who decide to work together. If we think we do not have a separate existence, if we think we are not individuals separate from other people and everything else, then the word *collaboration* doesn't make sense. If we believe we exist in assemblage, in entanglement, in haecceity, then collaboration doesn't make sense. That's one of those words that brings an entire ontology along with it.... I certainly think we need others to help us think—we're dangerous when we're alone in our own heads. It's in those conversations, that, for me, the humanist subject disappears. This is much more than conventional collaboration (St. Pierre in Guttorm et al., 2015, pp. 17-18).

This notion of doing research as much more than collaboration may be further elaborated, as the way in which research is shaped intra-relationally, entangled with academic processes such as grant applications and institutional ethics, and the ways in which people are found (“recruited”) to participate in research. What if we not only need others to help us think, but consider our thinking as constrained within certain parameters, such as through research approval processes?

## Designing research for approval

Academic research involves ontological and epistemological conceptualisations of “setting up” projects, influencing the production of research in certain ways, as potentially open and imaginative, or conventional and restrictive. These influences affect the language used to talk about research, and orientations towards and opportunities for possibilities for different approaches and ways of thinking and conceptualising. In “conventional” research processes the research questions and design of the project are often required in advance, for instance for grant applications and institutional ethics (IRB) applications. The *Pedagogies of difference* project was bound by both conventions. Within these parameters, the project was framed around three (research) questions:

1. How do teachers experience their own culture stories and identities?
2. In what ways do teachers' culture stories and identities influence their teaching orientations and practice?
3. In what ways can teachers' intercultural understandings and pedagogical implementation of the curriculum (VEYLDF<sup>3</sup>) be strengthened through more nuanced engagements with their own cultural identities?

Such research questions can appear reductionist and deceptively but necessarily neat. They might appear to narrow the scope of the project and to focus and demonstrate a clear purpose of the research. Seen in this way, research questions themselves may not allow for its complexities, ongoing-ness and entangled intra-relationalities. In this project the questions supported a dynamic model of critical questioning developed in an earlier philosophical study by Sonja (Arndt, 2017). The depth of the teachers' stories continued to evolve as the teachers and their stories intra-acted in iterative ways with each other, and with us, always in the middle. For example, one teacher commented “I think thanks to [other teacher] because that memory came back to me”, as her memory was sparked and then read diffractively through what another teacher said. The richness of such insights reminded us of the limitations of a narrow framing in what Nordstrom (2018) calls the need to purposefully frame academic research in “strategic enactments of royal science” (p. 221):

Specific to IRB [Institutional Review Board], I have to organize the study, the matter, into particular practices, specifically positivist epistemologies and ontologies. For example, I have to clearly delineate research questions even though I anticipate and know they will change with individuation and ontogenesis. Likewise, I have to position the methodology and methods of data collection as static entities. I have to anticipate all the data I will collect and all the ethical issues that might arise during the study. I have to anticipate how participants might respond to interview questions and any possible discomfort and gains from participating in the study. (Nordstrom, 2018, p. 221)

Such institutional constraints, she laments, are heightened by the need to draw on commonly used words such as “data” to universalise the work, and make it easier for others to understand what researchers do (Nordstrom, 2018).<sup>4</sup>



## Finding teachers

Inviting teachers to explore their culture stories, offered another opportunity to move beyond the recognised shorthand terms of “recruitment” and “participant”. These were difficult to avoid, however, as they are commonplace in researching with people. While we tried to use phrases like “finding teachers” (recruitment) and “teachers” or “teachers who were involved in the project” (participants), these nevertheless at times seemed like different words for the same processes.

Four teachers responded to our project flyer where we sought teachers from *any* cultural backgrounds to join the project. Geographically located within the wider Melbourne area, and employed by multicultural EC settings, these teachers felt they fitted the criteria and were willing to be involved (additional teachers expressed an interest but could not commit to the project). Of the four teachers, two had migrated from India about 10 years ago, another from the UK about 12 years ago, and one from New Zealand about three years ago.<sup>5</sup> Prior to moving to Australia, none of the teachers had worked in EC. Despite our call for teachers from *any* cultural background, we were interested that the four who participated were all born in countries other than Australia. We wonder what this might say about the affective ways in which our flyer spoke to them, who self-selects to participate in projects, and the possible narratives available to people when asked why they become involved in a particular research project. The two teachers from India seemed to already have been forced to think about culture and their presence in Australia. As other research has indicated, this is in comparison to those in the dominant culture(s) who may think that culture is outside them or does not apply to or concern them. Cloonan et al. (2017) write, in relation to their research with schoolteachers, “In contrast to those teachers who were relatively recent migrants, a recurrent theme among those whose families had lived in Australia for several generations was that they were ‘Australian’ and this meant they lacked a cultural identity” (p. 136). In the present project, the two teachers from English-speaking backgrounds (from the UK and New Zealand) seemed predominantly interested in learning from the project and one specifically spoke extensively and often about the multicultural nature of ‘her’ EC setting. The two teachers from non-English-speaking backgrounds (both from India) more strongly thought that they could contribute something to the project. We were most struck by this response from a teacher, when she mentioned that she joined the project because she considered herself to be “what you were looking for”:

somehow, I think I also fit into your, what you were looking for, you know, from, I come from a diverse cultural background, um, and I've been here for a short period of time and I'm learning about education in Australia and I have a, sort of have experience in both the worlds

This is a logical response in relation to the framing of culture in Australia. Despite our specific intention to have a broad project in which we emphasised that *all* teachers have cultures, this did not diminish the importance of providing space for teachers to share their culture stories and contribute to changes in orientation. As the other teacher from India said:

this project really resonates with what, because I have a strong culture, I have my own stories to share, I think I, that was my, ah, strength that I could bring to your, to this project. Um, and I would love to share those stories and see where those stories can

contribute to this project and what, what intercultural understanding can be enhanced through these stories.

The teachers all spoke about the relational benefits of being part of the research, where they were spurred on by talking to others to share their culture stories.

### **How do we encounter the stories?**

Being always in the middle, we think here about the methods-data-analysis entanglement, again, all commonly used shorthand terms which are now viewed by some as problematic (e.g. St. Pierre, 2021). At the same time, they continue to be used in various guises by those who research with people, even when different words may be used.

### **Multi-layered approach**

Conceptualising “methods” in this project meant engaging with ways that potential intra-actions with teachers might enable and limit how culture might be felt, acted on, understood, or done. We used a multi-layered approach to research teachers’ cultures, using the research questions above as a way of *being* and *questioning*. This entailed ongoing involvements across four parts: “focus group”<sup>6</sup> – culture story – interview – “focus group”. In an introductory “focus group” or workshop we (the researchers), introduced ourselves and the project, and the teachers introduced themselves. For logistical reasons this worked as two focus groups with four people in each (two teachers and the two of us). The process of shaping, engaging with and sharing their culture stories emerged as we asked the teachers to create and tell their own culture stories in multimodal ways (e.g. written, visual, oral) over the next couple of months. Teachers’ culture stories were then explored in one-on-one conversations (interviews) with Sonja. Based on a small number of broad questions emerging from the dynamic model of critical questioning, we asked teachers to share their culture stories and reflect on the processes of their unravelling. Finally, we all met for a second “focus group” or workshop to share these stories with the group and work on ideas to start the process of drafting a framework/resource for culturally relevant practices in EC teaching teams. One teacher was unable to attend so instead sent us written responses to some of the prompts we had indicated would be included in the second focus group. The global COVID-19 pandemic meant we spoke via Zoom, bringing us together and producing the research in particular ways.

### **Constantly evolving culture stories**

The multimodal culture stories arose in the process of the research, by teachers digging into their own lives and experiences in response to the critical questioning we used. Building on this initial expression, the creation of culture stories expanded as teachers intra-acted with their thoughts, memory, each other, and our provocations. When we asked teachers to email us a version of their culture story they responded to many prompts from us: where to start or what they might like to address, how they viewed culture in general, how they viewed their own culture, their views on children/EC and culture, and their views on teachers and culture in EC settings. The format and content was up to them. As one teacher noted, being able to ‘tell’ these in any format benefited

the arising culture stories: “what helped was there was a lot of autonomy in giving the evidence, so I, I felt really comfortable about doing those audio clips... I just felt quite comfortable that I didn't have to give the evidence in a certain format”. Notably, the use of the word “evidence” is interesting in this context, perhaps illustrating how she viewed her participation in the project (as needing to provide “evidence”) - or perhaps it was simply a language choice.

While we gave the teachers prompts with suggestions for how they might start thinking about their culture stories, we encouraged them to approach their culture stories and the methods they used in ways which had meaning to them. In a sense using philosophy as a method meant we straddled “between the “qualitative underground” and methodological “prominence” (Koro-Ljungberg, et. al., 2015, p. 612), as the stories took different forms – written (free writing, writing responding to our prompts), visual (simple diagrams, a detailed drawing), and oral (two short audio clips). One teacher wrote his culture story directly responding to the questions we had posed as prompts, in part basing these responses on discussions with his parents about culture, which he initiated in relation to the project. He sent these as a four-and-a-half-page pdf document. Another teacher also responded in writing, more freely telling her culture story rather than responding to each prompt. This teacher also included a simple diagram in her response and emailed us the two page pdf. Another teacher recorded two short audio clips telling us about her culture story, as well as a three-page PowerPoint with writing and a simple diagram. Finally, one teacher drew an image of a hand, with each finger used to represent what for her was a key characteristic relating to her culture story and forming teacher identity at that time: People, Place, History, Knowledge, Pedagogy.

Our open and multi-layered approach included discussing these culture stories with each teacher in individual interviews before coming together for a final “focus group”. While the emailed culture stories offered fascinating early insights from individual teachers' perspectives, these became complicated and elaborated on through the teachers' intra-actions with each other in the final gathering, or “focus group”, where their diffractive, iterative turning and re-turning to their culture stories and experiences produced collectively entangled stories far beyond any one individual.

Thinking about (continually) creating the stories in the multi-layered methods and in our returning to what this produced, raised the problem of how we might refer to the teachers who were involved. We asked the teachers to choose pseudonyms after the second focus group, but have decided not to use them, at least for now. The teachers' stories and identities were co-produced intra-actively, meaning that while we speak about individual teachers and stories, we cannot emphasise them or their stories as individual. This also raises further questions, however, about what this means for the teachers in the research who may be expecting to see their chosen pseudonyms and their stories reflected back to them when we send them our writing based on the project.

## Transcribing as (re)presentation

As part of our engagement with the teachers' contributions, we are further confronted with the question of what we write about the spoken interviews and focus groups, or, more specifically, the use of transcribing. Again, the concept "transcribe" and "transcription" have particular meanings and uses in conventional research processes. While we did not seek a "truth" in teachers' contributions, it was more practical to have written versions of their words for us to read and re-read. St. Pierre criticises transcribing, where she suggests that qualitative researchers "transcribe the interviews word for word as if the words are somehow sacred" (St. Pierre, 2014, p. 11). While we acknowledge the seeming privileging of text and language that occurs when focusing on static words said in interview contexts (and (re)presented in transcriptions), we are not quite so dismissive as to the usefulness of transcriptions (or people's words in interviews). Instead, we are interested in how transcripts are constructed/created, or at least to recognise they are created, and what they *do* (e.g. Shelton & Flint, 2019). Clare created the transcripts, listening and re-listening to the recordings. This already was a way to turn and re-turn, think and re-think about what was said, how it was said, and the nuances of the encounters emerging in each iterative listening of each audio recording. The transcript itself could be viewed as another layer of our own diffractive encounter, questioning and offering yet another opening to the teachers, as we re-engaged with them and they with each other through their stories.

This small exploratory project offers an opportunity to consider research methodologies as more than words. It includes not only thinking about but re-experiencing in affective ways, gestures, tones of voice, feelings we had and cannot quite put into words. We turn them over and over again, diffractively bringing up topics, ideas, memories the teachers shared (verbally and non-verbally) that have stayed with us and trouble us or bring us joy. That we are sometimes lost for words or how to process some of the experiences elicits a sense that more is occurring through the mattering of this research, than mere words on a page, or "data" (Barad, 2003). One such sense arose as a teacher recounted how her director told her not to speak her home language in the centre because children were going home and repeating some of these words – we return to this shortly.

## Intra-acting with the stories

We read and re-read these stories through and with each other, as well as through Kristeva's (1991) notion of the foreigner within, allowing new ways of seeing them to emerge in intra-related ways (Barad, 2007). We resist the dominant thinking which would be to find a "solution" to a "problem". Maybe rearticulating the "problem" would be useful in the case of our research, while still fitting with Biesta's quote from Dewey at the start of the paper as being more than "the problems of philosophers". Throughout the project we have diffracted the stories through theory, re-turning to certain aspects, both human and beyond the human (Barad, 2003; Braidotti, 2013). In this iterative process, the stories and "data" are constantly in construction, continuing to morph and form in new ways. Crucially, the stories did not stop when we stopped talking to the teachers, they continue to intra-act and evolve as we read them through the Baradian (2014) idea that diffraction itself is an "infinity of moments-places-matterings, a superposition/entanglement, never closed, never finished" (p. 169). It is not a temporal, linear, "moving beyond", or "leaving

the 'old' behind" (p. 168), but rather a constant, agentic reforming, re-shaping, of humans, things and beings with which they are intra-related.

This diffraction of stories rather than of teachers' experiences produced not only by the lives of individual teachers, but through assemblages of teachers, intra-actions in and between each other, their contexts, us, and the stories, entangled inseparably within the project. They played out as always in process-incomplete-continuing, elevating the ethics of this approach to humans, times, matter, things and other beings, and to each iteration of the evolving stories.

### **Intra-relating with culture's doing**

Different ideas arose on what could be considered "culture" and what culture does in the (EC) workplace. This process became more than a co-creation of stories and culture's doing. Rather the intra-relationalities of stories acting upon each other formed something that seemed to be greater than the teachers who had shared them, as Kristeva (1991) suggests, both knowable and unknowable. They brought together the thinking and being of who the teachers are and their expectations of the environment around them, including structural and material, relational and affective expectations. The teachers talking about their work and cultures offered fresh ways to conceptualise intercultural relationships and wellbeing in EC teaching teams, based for instance on what they were "allowed" and "not allowed" to know, do, celebrate, wear, share and bring into the workplace, and how these 'allowances' evolved.

Culture as a concept became increasingly ambiguous, both discursively and materially, in different ways. In some cases, teachers spoke about culture's complexity and multiplicity in unexpected ways, and in other ways their stories reflected previous thinking and studies on culture in educational settings (see for example, Cherrington & Shuker, 2012; Cloonan et al., 2017; Gide et al., 2022; Ritchie & Skerrett, 2014). Reading the stories through each other culture becomes more than a linear or knowable or singular thing and works in different ways in and around different settings, situations and individuals. The teachers' stories continued to grow and shift as ongoingly evolving stories.

Notably, the two teachers who were from the dominant cultural groups in English-speaking countries (the UK and New Zealand) spoke in ways in which they sometimes appeared to view themselves as outside of culture (for one teacher culture related to the children, families, and staff in her centre), or spoke about culture in specific ways (such as workplace culture). These views of teachers seeing themselves as outside of culture could be an elevation of Kristeva's (1998) notion of abjection, where the surrounding environment acts on the teachers in ways that heterogenise and defamiliarise to the extent that they feel vulnerable, removed, even by their own culture. Viewing themselves outside of culture could also be an indication of the humbling effect that seeing oneself as a foreigner has on perceptions of other "foreigners" (e.g. within a teaching team), drawing again on Kristeva's notion that we all are, at least to some extent, foreigners to ourselves (Kristeva, 1991). Our turning and re-turning of the culture stories continue to come up with different angles, different ways of thinking, and perhaps the realisation that the notion of being foreigners within emerges and re-emerges at different times, in different ways, for different people.

## Culture everywhere

Diffracting teachers' stories illustrated that, to them, culture is everywhere. It is both inside their workplace and outside of the workplace, impacting on the way in which culture works in ways of being, thinking and acting in EC settings. Whether known or unknown, culture is infused in and shaped by the teachers' professional and private lives and intra-relationalities with things and beings which are already acting and intra-acting within themselves and each other. One example of this 'both-and' was how talking in what teachers referred to as their "home language" brought comfort to one teacher, who felt an ease and joy when coming across someone at work who spoke this same language. It was "always comfortable" to slip into this. Yet, reactions from others inside and outside of the workplace complicated this sense of comfort. Outside the workplace this teacher spoke about her earlier feelings that she should speak to her own children in English in public in Australia, meaning that they had lost some of their culture (although she was now making focused efforts on teaching them Hindi and making sure they knew both Australia and India). Inside the workplace this teacher was told by her director not to speak to children at the centre in their shared home language as other children were going home and repeating Hindi words to their parents. As this teacher told us this story, she said this was at odds with Outcome 2 of the curriculum relating to diversity, and if she was the Director, she would have felt it was her responsibility to draw on this in response to complaints from families. Reading this through the VEYLDF, we could see a clear indication of the importance of languages in multiple places:

The acquisition and maintenance of first or home languages has a significant and continuing role in the construction of identity. This is supported when early childhood professionals respect children's cultures and languages. In Victoria the rich array of languages and cultures enable many opportunities for valuing and strengthening multilingual capabilities, respecting cultural diversity, supporting common values and building social cohesion. (DET, 2016, p. 18 – Outcome 1: Children have a strong sense of identity)

The importance of cultural celebrations *and* the need to move beyond these was discussed by the two teachers from India. One teacher expressed excitement at others being interested in her cultural celebrations and being inspired to set activities and events up at her centre because of this (which, in turn, inspired teachers from other cultures to do similar things). After setting up a display and doing a cooking demonstration she was able to push further with sharing more about the mythological stories and other more nuanced aspects of the culture that went with the celebrations. Yet culture is not fully "known" even to those who feel part of the culture. This teacher spoke of researching her own culture to teach others as she wanted to get it "right", at the same time. Drawing again on Kristeva (1998), we can see that new insights led occasionally to leaving prior beliefs behind, as they became superseded or no longer relevant.

Reading this story through the story of the other teacher from India shed light on another focus. In her centre there was what she called a "tokenistic" rather than "authentic" approach to Diwali, despite the context of the centre where she said about 70% of the staff were Indian and a high proportion of children came from Indian families. The centre had displays, artwork, and dress ups to celebrate Diwali, but the significance of the event was not valued in her view, as demonstrated

when there were issues with her taking the cultural leave from work to which she was entitled. She was openly criticised by a colleague for intending to take time off, even though she had agreed to work half a day to support the other teacher. The frustration and depth of feeling relating to this was evident in what she shared with us: "it really hurt me that, you don't actually value people's feelings about their, their culture, all you want is what you did, you just want to put up a show". The "food, flags and festivals" approach it seems, is common in Australian education settings, reflecting a superficial approach to culture which positions everyone as the same, aside from these 'exotic' aspects (Ohi et al., 2019). Even the teacher from New Zealand in our project spoke about the culture shock of moving to Australia, now being "a small fish in a big pond" and noticing unanticipated cultural differences, despite their shared language and similarities in many ways.

### Why no conclusion?

As with the research itself, there is no beginning or end, and therefore no conclusion to this paper. It is merely a snapshot from the middle. The purpose of this paper is to share our reimagining of philosophical knowledges, epistemologies and ontologies of research and working with EC teachers. Rethinking culture and its intra-actions within and amongst teachers, through the poststructural feminist philosophy of Julia Kristeva and Karen Barad's notion of diffraction, has enabled a view of research involving human participants as bigger than the methods that are often prescribed and expected. It is more than words, more than people, and more than the researchers and their onto-epistemological standpoint/s. Bringing Kristeva, Barad and teachers' culture stories together has offered insights into the ways that teachers' cultural selves are not only always in construction, but that this construction is an ongoing, inexplicably entwined process, that happens in vibrant relationships with and in the overall teacher-culture-research assemblage, including all that intra-acts in and surrounding it, in contingent, constantly forming ways. Our writing in this paper is an attempt to elevate the importance of exploring the underlying ideas of research and of philosophical methodological positionings before, or even in place of, descriptively portraying any research "data", "methods", or "outcomes". In such a re-positioning, whilst our writing unsettles how we "should" do research, it is simultaneously a recognition that the potentialities it opens up to are steeped in the uncertainties and multiplicities of research relationships as always in the middle. In its attempt, to return to Nordstrom, to counter the dominant requirement "to both discursively and materially produce a study within positivism so that it will be sanctioned by those in power" (such as institutional ethics committees) (2018, p. 221), methodologically bringing Kristeva and Barad into relation with teachers' stories has reinforced a need to elevate what occurs in these middles. Reimagining methodologies in such ways is thus humbling, freeing, uncertain, and often chaotic, and space must be made for nuances and multiple potentialities for researching difference differently.

### References

- Allen, L. (2019). Reconceptualizing qualitative research involving young people and sexuality at school. *Cultural Studies ↔ Critical Methodologies*, 19(4), 284-293.  
<https://doi.org/10.1177/1532708618784325>

- Arndt, S. (2015). Otherness 'without ostracism or levelling': Towards fresh orientations to teacher foreigners in early childhood education. *Educational Philosophy and Theory*, 47(9), 883-893.
- Arndt, S. (2017). *Teacher Otherness in early childhood education: Rethinking uncertainty and difference through a Kristevan lens*. Unpublished PhD dissertation, The University of Waikato. <https://researchcommons.waikato.ac.nz/handle/10289/11259>
- Arndt, S. (2018). Early childhood teacher cultural Otherness and belonging. *Contemporary Issues in Early Childhood*, 19(4), 392-403. <https://doi.org/10.1177/1463949118783382>
- Arndt, S. (2020). Diffractional relationalities in early years pedagogies of care. *Global Studies of Childhood*, 10(4), 347-357. <https://doi.org/10.1177/2043610620974016>
- Arndt, S., & Bartholomaeus, C. (2022). What about teachers' cultures? Elevating early childhood teachers' culture stories through a Kristevan lens. *Contemporary Issues in Early Childhood*. <https://doi.org/10.1177/14639491221141726>
- Arndt, S., & Tesar, M. (2016). A more-than-social movement: The post-human condition of quality in the early years. *Contemporary Issues in Early Childhood*, 17(1), 16-25. <https://doi.org/10.1177/1463949115627896>
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press. <https://doi.org/10.2307/j.ctv12101zq>
- Barad, K. (2014). Diffractional diffraction: Cutting together-apart. *Parallax*, 20(3), 168-187. <https://doi.org/10.1080/13534645.2014.927623>
- Barad, K. (2003). Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter. *Signs: Journal of Women in Culture and Society*, 28(3), 801-831. <https://doi.org/10.1086/345321>
- Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Duke University Press. <https://doi.org/10.1215/9780822391623>
- Biesta, G. (2012). Philosophy of education for the public good: Five challenges and an agenda. *Educational Philosophy and Theory*, 44(6). <https://doi.org/10.1111/j.1469-5812.2011.00783.x>
- Braidotti, R. (2013). *The posthuman*. Polity Press.
- Ceder, S. (2019). *Towards a posthuman theory of educational relationality*. Routledge. <https://doi.org/10.4324/9781351044196>
- Cherrington, S., & Shuker, M. J. (2012). Diversity amongst New Zealand early childhood educators. *New Zealand Journal of Teachers' Work*, 9(2), 76-94.
- Cloonan, A., Fox, B., Ohi, S., & Halse, C. (2017). An analysis of the use of autobiographical narrative for teachers' intercultural learning. *Teaching Education*, 28(2), 131-144. <https://doi.org/10.1080/10476210.2016.1212005>
- Department of Education and Training. (2016). *Victorian Early Years Learning and Development Framework: For all children from birth to eight years*. East Melbourne.
- Department of Education, Employment and Workplace Relations. (2009). *Belonging, being & becoming: The Early Years Learning Framework for Australia*. Canberra.
- Deleuze, G., & Guattari, F. (1991). *What is philosophy?* (H. Tomlinson & G. Burchell, Trans.). New York, NY: Columbia University Press.
- Fox, N. J., & Alldred, P. (2015). New materialist social inquiry: Designs, methods and the research-assemblage. *International Journal of Social Research Methodology*, 18(4), 399-414. <https://doi.org/10.1080/13645579.2014.921458>
- Gerrard, J., Rudolph, S., & Sriprakash, A. (2017). The politics of post-qualitative inquiry: History and power. *Qualitative Inquiry*, 23(5), 384-394. <https://doi.org/10.1177/1077800416672694>
- Gide, S., Wong, S., Press, F., & Davis, B. (2022). Cultural diversity in the Australian early childhood education workforce: What do we know, what don't we know and why is it important? *Australasian Journal of Early Childhood*, 47(1), 48-61. <https://doi.org/10.1177/18369391211057292>



- Guttorm, H., Hohti, R., & Paakkari, A. (2015). "Do the next thing": An interview with Elizabeth Adams St. Pierre on post-qualitative methodology. *Reconceptualizing Educational Research Methodology*, 6(1), 15-22. <https://doi.org/10.7577/rem.1421>
- Haraway, D.J. (2016). *Staying with the trouble: making kin in the Chthulucene*. Duke University Press. <https://doi.org/10.1215/9780822373780>
- Harré, R. (2000). *One thousand years of philosophy: From Ramanuja to Wittgenstein*. Oxford, England: Blackwell Publishers.
- Jenkins, N., Ritchie, L., & Quinn, S. (2021). From reflection to diffraction: Exploring the use of vignettes within post-humanist and multi-species research. *Qualitative Research*, 21(6), 975-989. <https://doi.org/10.1177/1468794120920258>
- Koro-Ljungberg, M., Carlson, D., Tesar, M., & Anderson, K. (2015). Methodology brut: Philosophy, ecstatic thinking, and some other (unfinished) things. *Qualitative Inquiry*, 21(7), 612. <https://doi.org/10.1177/1077800414555070>
- Kristeva, J. (1991). *Strangers to ourselves*. Columbia University Press.
- Kristeva, J. (1998) The subject in process. In P. Ffrench (Ed.), *The Tel Quel reader* (pp. 133-178). Routledge.
- Kukutai, T. H., & Broman, P. (2016). From colonial categories to local culture: Evolving state practices of ethnic enumeration in Oceania, 1965–2014. *Ethnicities*, 16(5), 689-711. <https://doi.org/10.1177/1468796815603755>
- Myers, C.Y. (2019). *Children and materialities: the force of the more-than-human in children's classroom lives*. Springer. <https://doi.org/10.1007/978-981-13-8168-3>
- Nordstrom, S. N. (2018). Antimethodology: Postqualitative generative conventions. *Qualitative Inquiry*, 24(3), 215-226. <https://doi.org/10.1177/1077800417704469>
- Ohi, S., O'Mara, J., Arber, R., Hartung, C., Shaw, G., & Halse, C. (2019). Interrogating the promise of a whole-school approach to intercultural education: An Australian investigation. *European Educational Research Journal*, 18(2), 234-247. <https://doi.org/10.1177/1474904118796908>
- Osgood, J. (2012). *Narratives from the nursery: Negotiating professional identities in early childhood*. Routledge.
- Paley, V. G. ([1979] 2000). *White teacher* (Reprint with a new preface). Harvard University Press. <https://doi.org/10.4159/9780674041790>
- Rahman, K. (2013). Belonging and learning to belong in school: The implications of the hidden curriculum for Indigenous students. *Discourse: Studies in the Cultural Politics of Education*, 34(5), 660-672. <https://doi.org/10.1080/01596306.2013.728362>
- Ritchie, J., & Skerrett, M. (2014). *Early childhood education in Aotearoa New Zealand: History, pedagogy and liberation*. Palgrave Macmillan. <https://doi.org/10.1057/9781137375797>
- Sauzet, S. (2021). What "what we know" does – a posthuman review methodology. *Reconceptualizing Educational Research Methodology*, 12(1), 79-98. <https://doi.org/10.7577/rem.4246>
- Sparrman, A., Hrechaniuk, Y., Smith, O.A., Andersson, K., Annerbäck, J., Arzuk, D., Bodén, L., Blaise, M., Castañeda, C., Coleman, R., Eßer, F., Finn, M., Gustafsson, D., Holmqvist, P., Josefsson, J., Kraftl, P., Lee, N., ... & Cardell, D. (2023). Child Studies Multiple – Collaborative play for thinking through theories and methods. *Culture Unbound: Journal of current cultural research*, 15(1), Linköping University Electronic Press: <http://www.cultureunbound.ep.liu.se> <https://doi.org/10.3384/cu.3529>
- Shelton, S. A., & Flint, M. A. (2019). The spacetime-mattering and Frankenstein-esque nature of interview transcriptions. *Qualitative Research Journal*, 19(3), 202-212. <https://doi.org/10.1108/QRJ-03-2019-104>
- St. Pierre, E. A. (2014, 2 December). *Post qualitative inquiry*. Australian Association of Research in Education, New Zealand Association for Research in Education, Brisbane.

<https://www.aare.edu.au/assets/documents/Elizabeth-Adams-St.-Pierre-ppt-presentation.pdf>

St. Pierre, E. A. (2021). Post qualitative inquiry, the refusal of method, and the risk of the new. *Qualitative Inquiry*, 27(1), 3-9. <https://doi.org/10.1177/1077800419863005>

Tesar, M. & Arndt, S. (2016). Vibrancy of childhood things: Philosophy and political ecology of matter. *Cultural Studies-Critical Methodologies, Special issue on new empiricisms/new materialisms*, 16(2), 193-200. <https://doi.org/10.1177/1532708616636144>

Tesar, M. (2021). "Philosophy as a Method": Tracing the histories of intersections of "Philosophy", "Methodology", and "Education". *Qualitative Inquiry*, 27(5), 544-553. <https://doi.org/10.1177/1077800420934144>

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<sup>1</sup> The term "otherness" is used here to refer to teachers' culture, that is, their ways of knowing, being and doing their lives and everyday realities (see Author 2015, 2017, 2018).

<sup>2</sup> We use "teacher" and "teachers" to describe all members of teaching teams in early childhood settings in Australia (see Authors, 2022).

<sup>3</sup> The VEYLD is the Victorian Early Years Learning and Development Framework, the early childhood curriculum used in the state of Victoria in Australia (Department of Education and Training, 2016).

<sup>4</sup> These institutional constraints can also carry through to the academic peer review process for journals. For an earlier paper from this project (Authors 2022) we received enthusiastic reviews during the peer-review process, particularly for our thinking with Kristeva. Yet, at the same time, and what may be viewed as differing from our strategic approach to how we wrote about the research, the teachers, and the culture stories, we were also asked for more "conventional" additions to the paper, such as a writing a detailed (and conventional) methods section, providing more profile background to each teacher, adding more direct quotes from teachers, and providing a brief summary (or findings) as a bridge between the "methods" and "analysis". We wonder what this says about how research methodologies can be reimagined in the context of academic research.

<sup>5</sup> Throughout this paper we make brief comment to situate the teachers and use wordings relating to their cultural backgrounds in an attempt to provide some context. We are aware of the limitations of language and the assumptions that are evident in doing this. Even talking about teachers' cultures is troubling, as it is not just which country the teachers came from, but it is who they were within this country, and their culture more broadly. It is difficult to find wording which is not problematic.

<sup>6</sup> We use "focus group" in quotation marks as we used this wording as it was a concept likely familiar to people who may participate in research. Other methods we used, such as "interview", are also referred to as a standardised term in qualitative research, even though they take different forms, in this project becoming more of attempted articulations of teachers' entangled culture experiences.