Diffracting Dementia: Co-Creative Experiments with Agential Realism and Multisensoriality in a Residential Care Home in Northern Norway

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#### Abstract

Alzheimer's Disease and other dementias (ADD) challenge Western economies, in which biomedical human-centric understandings of ADD as deficit dominates. To imagine lives with ADD differently, we have facilitated and researched co-creative art sessions rooted in feminist posthumanities in residential care homes in Northern Norway. We have experimented with Karen Barad's diffractive methodology, analysed human—nonhuman entanglements and observed the emergence of new diffraction patterns allowing for ADD to be enacted differently than human loss. We present our findings in the form of a conversation and extrapolate the significance of diffractive methodology for critical dementia studies and beyond.

### Introduction

Alzheimer's disease and other dementias (ADD) emerge in western societies as dreadful neurodegenerative disease syndromes that, according to an ideal of successful ageing, an individual should fight against (Bülow and Holm 2016). The overall emphasis is on curing ADD by puzzle-solving microbiological processes within the brain (Moser 2008). The biomedical practices fetishise the brain as the locus of ADD that ruins individualist cerebral humanness (Åsberg and Lum 2010). Together with neoliberal worldmaking practices, biomedical practices contribute to the stigma of ageing with ADD (Latimer 2018). Shifting the focus from these human-centric individualised practices to human-nonhuman entanglements, feminist posthumanities emphasise that we have never been humans after all (Haraway 1997; Barad 2007; Åsberg 2016; Åsberg and Braidotti 2018); rather, humans have always been partially becoming with nonhumans. Additionally, creative care and arts-based practices (Zeilig et al. 2018; Zeilig et al. 2019; Basting 2020) have challenged the biomedical and sociological understandings of ADD that associate it with irreversible decline and loss.

This book chapter explores how we, human and nonhumans of the world, could "become with" (Haraway 2007) each other in less harmful ways though multisensorial "co-creative" art practices (Zeilig et al. 2018). More specifically, the chapter offers a partial and situated account of ADD-encounters where ADD may be "enacted" (Mol 2002, 33) differently than as a human individualist loss. In other words, we aim to revalue ADD existence as less about loss and more

about a different form of existence—valuable and creative in its own right—without disregarding the pain and social stigma these diagnoses still foster in society. Our practice intertwines insights from the arts and social sciences, as we want to contribute to research about dismantling disciplinary hierarchical distinctions and institutional dualisms. To achieve this, we build on Karen Barad's (2007) diffractive methodology agential realism, because this methodology intertwines disciplinary knowledges through one another, rather than exploring disciplines separately against each other.

First, we explain the phenomena of diffraction and introduce agential realism and its tools for the analysis. Second, we elaborate on our co-creative practice of studying ADD within multisensorial human-nonhuman entanglements. Third, we present a conversation on such entanglements during a multisensorial session in which we made musical instruments. Fourth, we discuss the entanglements that generated diffractive patterns of living with ADD and their effects. We conclude with a discussion of the significance of diffractive methodology in and for our practice, and beyond.

## Diffraction and diffraction patterns: Introducing agential realist tools for our analysis

Inspired by Haraway's (1997, 16) concept of diffraction as a critical practice for making differences in the world, Karen Barad (2007, 90) develops diffractive methodology for discerning the patterning effects of differences in social power and nonhuman materiality. Unlike reflection that produces "the same elsewhere" (Haraway 1997, 16) and representational tripartite practices that require a distance and distinction of "knower" from "known" (Barad 2007, 46, 86), diffraction accounts for the "knower" and "known" as being ontologically inseparable. In diffractive methodology, the "knower" and "known" co-constitute each other within any given phenomenon, in what Barad has called an "entanglement". Entities, such as a human or a table, do not pre-exist their relating but come into existence together and form an entanglement (which is Barad's way of working against classical ontological dichotomies such as matter and meaning, nature and culture). An agential cut—a change or a mobile reconfiguration of space, time, and matter that constitute the phenomena, delineates boundaries and properties of "knower" and "known" within the phenomena (Barad 2007, 345; emphasis our own). So, the properties of "known" are not fixed in advance, but are becoming determined within the agential cut, not as a part of the "known". Thus, diffractive methodology promises an "objective" inquiry, because as in Haraway's (1988) situated knowledges, this understanding of objectivity acknowledges that producing knowledge is not a distanced affair but direct worldly re-configuration, of which "humans" and "nonhumans" are a part (Barad 2007, 91).

Barad calls her diffractive methodology agential realism, which is a relational ontology against particularism—an assumption that the world is made of individuals and things with defined borders and properties. In agential realism, matter is an active agent in the continual becoming of worlds (Barad 2007, 151). Matter of the world consists of human-nonhuman entanglements that during artistic encounters become materials for different worldmaking with ADD. These emerging possibilities of living and forming life differently are new "diffraction patterns", or "patterns of difference that make a difference" in the world (Haraway 1997, 274; Barad 2007, 72; Lukić and Lotherington 2019). Diffraction patterns, in the inspirational sense of the basic physics experiment, emerge when water, sound, or light waves supersede each other when encountering an obstruction and thus create new diffraction patterns (Barad 2007). Diffraction patterns entail agency that is never foreclosed, yet are performative patterns (Barad 2003). This is where Barad saw the philosophical use of this physics phenomenon.

Diffraction patterns do not just arise by themselves but arise through iterative 'intra-acting' agencies of humans and nonhumans, meanings, and matter-makings. Barad uses the term 'intra-action' to point out material-discursive co-constitution of agencies, not individuals or things. Individuals with determinate boundaries and properties do not exist as such but are becoming differentiated and determinate in specific agential cuts through intra-actions (Barad and Kleinman 2012). Likewise, ADD is not an inherent property of an individual, but is becoming materialised, coming to matter in performative intra-actions, constituting 'people living with ADD'. Materialisation of boundaries and properties entails exclusions. When we attune our multisensorial practices to study intra-actions, ADD may not come to matter, or ADD may come to matter differently than loss.

### Developing our multisensorial practice through co-creative art sessions

Following Barad's (2007, 93) work on diffractive methodology, our practices are an intertwinement of art and science in the making. Our research has been conducted within the Artful Dementia Research Lab (ADLab, 2017) at UiT —The Arctic University of Norway, and this research project gained ethical approval from the Norwegian Centre for Research Data, as social science practice. The purpose of our research is to investigate if artistic practices could contribute to different understandings of dementia and living with dementias. Our way of

exploring this question was to organize weekly co-creative arts sessions during a five-month period from November 2018 to August 2019 with residents living with ADD, employees, and research assistants in a residential care home in Norway. We built on the concept of co-creativity that implies "a focus on shared process, the absence of a single author or outcome (and instead the idea of shared ownership), inclusivity, reciprocity and relationality" (Zeilig et al. 2018, 138). Co-creativity indicates that even apparent passivity and silence directs mutual creation. To work truly co-creatively, one must become receptive to multisensorial impulses and sensual vulnerabilities that may occur due to ageing and the course of ADD (Brenowitz et al. 2019).

Research found that all senses may be affected differently; for instance, sight and hearing affecting misperceptions, contrast sensitivities, hemianopia, and hallucinations, position sense orientation difficulties and balance, touch oversensitivity or reduced sensitivity, and olfactory function is even a diagnostic clue for people living with ADD (Behrman et al. 2014; Houston and Christie 2018). However, one important trait of our practice was that none of us knew the diagnoses of the residents. Neither did we know who in the room were residents and who were care home employees. We did know that multisensoriality of the arts affords conversations and connectivity, despite cognitive or linguistic barriers. With multisensoriality we mean the intertwinement of all traditionally divided senses—sight, hearing, touch, taste, smell, and beyond, within an embodied way of knowing (Pink 2009). Knowing that ADD affects the parietal lobe (the part of the brain involved in creativity) rather late (Ellena and Huebner 2009), made us focus on explorations of multisensoriality of materials that could tigger co-creativity. Our interest has been to investigate human—nonhuman intra-actions in which boundaries of able-bodied and disabled, healthy, and diseased are co-constituting what it means to be human (Haraway 2007; Shildrick 2012).

Our practice is based on multisensorial intra-actions with various nonhuman-human materials and art forms that may flow into one another: collage into writing and singing, painting into sound and music-making and dancing, and sculpting musical instruments into playing and a party. The structure of our sessions and the stability of the group is loose. We plan, start, and end the sessions and type of activity with materials. However, we usually do not know when the group gathers to start the activity, and many changes regarding the activity and materials happen in the flow. Nobody knows in advance who will join, what is going to happen, and how ADD may play out, which makes us all vulnerable in the process. We have learned to welcome

unpredictable outcomes and build on such outcomes, transforming them into co-creative impulses. Yet, we have also experienced getting stuck with materials that did not trigger the specific engagement that we expected them to trigger.

Consequently, leadership in the sessions functioned as being alongside (Zeilig et al. 2018). We have built on Latimer's (2013) concept of being alongside dementia, which pertains to differences within the encounter, drawing from human—nonhuman "worldings" (Haraway 1988; Haraway 2007; Lukić and Lotheringthon 2019). As Latimer argues: "Being alongside can involve cooperating with one another, even working together, but not with the same materials and not necessarily to the same ends" (Latimer 2013, 80). While being alongside, "each part remains partially connected but also partially divided" and there remains "a quality of temporary mutuality" (Latimer 2013, 96). This temporal mutuality makes "co-creative" processes possible and meaningful, allowing for unpredictable transformations and differential becoming of both parties involved without enhancing them to the humanised whole or enhancing "their" properties. Drawing from "feminist posthumanities" (Haraway 2007; Barad 2007; Åsberg 2016; Åsberg and Braidotti 2018), we have reframed the temporal mutuality in differencing as "becoming alongside dementia" (Lukić and Lotheringthon 2019).

The artistic quality of our sessions is not limited to professional skilful craftsmanship, conventionally grounded in artistic humanist traditions (Lykke 2018), or the demand to achieve high-quality art by doing "arts for art's sake" (Zeilig et al. 2018, 136). Rather, our practices draw on "relational aesthetics" (Bourriaud 2002, 18), where the focus is on creation of relationships in aesthetical intra-actions (Lotherington 2019) of human-nonhuman materials (Ingold 2014). We want to be part of the formation of new ADD worlds, co-constitute new patterns of diffraction that to some extent can make a difference to people living with or around ADD. Hence, there is no risk of failure to fit in within aesthetical cannons of different art genres/forms, or to achieve a collective satisfaction. In a sense, it is art for art's sake of being an ever-unfinished process, a pattern of creativity without authorship or disciplinarity.

# Conversing on multisensorial human-nonhuman materials: enfolding of new diffraction patterns

In this section, we present our knowledge in the form of a conversation which relates to experiments with creative writing styles (Richardson and St. Pierre 2005; Lykke 2014). However, while this form is often associated with an interview, evolving predefined questions

(Werner et al. 2018), in our case the conversation is part of our co-creative practice (Mittner et al. 2021). Writing and developing an interwoven conversation enabled us to point to intraactions taking place. While a research interview would recount individual voices assessing the events and self-reflecting their personal involvement, our conversation developed through an intra-active inquiry. In a sense, we are becoming individual authors through the conversation, and only within the conversation.

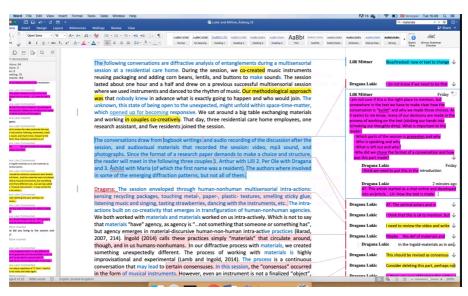


Figure 6.1. Working intra-actively on textual materials. © ADLab/UiT, CC BY 4.0

We built our conversating practice through the following steps. We started chatting about distinct moments in the sessions in Microsoft Teams. While creating a general outline (purpose statement, structure, and topics), the "instrument making" session became a reference point for our mutual inquiry. We reviewed video, mp3 sound, and logbooks materials from the session. When we transferred the chat into a Word document, the text emerged through co-creative practices. Figure 6.1 illustrates a part of this process. Coloured text and the main body text are intertwined in a way that differs from individualist self-reflections. We could not in any way control or predict how the text would flow. Therefore, even the general outline was changing. Diffractive patterns wave through crafting the conversation.

The conversation presents multisensorial human-nonhuman entanglements where we cocreated musical instruments by reusing packaging and adding kidney beans, corn-mixture, lentils, and buttons to make sounds. The session lasted about an hour and a half and drew from a previous carnival session. That day, three residential care home employees, one research assistant, and five residents appeared. The big table with a bunch of materials at the right side of the room was the place for gathering our intra-actions. After some time, we started working in couples. The conversations mainly analyse human-nonhuman entanglements emerging within three of them: Arthur and Lilli, Per Ole and Dragana, and Anne and Maria, of which the resident is the first name. We also mention other material entanglements interfering with these three entanglements in co-creating diffraction patterns.

During the session, we both worked on materials and materials worked on us intra-actively. The process of working with materials is highly improvisational and experimental (Fogelberg 2014). The process is a continuous conversation that may lead to certain consensuses that we call musical instruments. However, even an instrument is not a finalised 'object', but material in the continuous becoming (Ingold 2014) that transforms through different intra-actions and is enacted differently in situated agential cuts. One can never know materials just by reading about them or sensing them; one has to get one's hands dirty (Lamb 2014). In addition, the scientific and artistic knowledge of materials is not enough for co-creativity to emerge, rather, becoming part of materials, and ADD as a material.

Lilli: At the beginning of the session, I demonstrated how red and green lentils sound in oval metal coffee packages. Per Ole, another resident, Malin, and a healthcare employee, Karen were particularly thrilled with the sharp metal sound. In addition, I brought some white dotty stickers (quite small to handle for someone with less precise fine motor skills), glossy paper, and some coloured prints showing sea landscapes of Northern Norway by the 19th century painter, Betzy Akersloot-Berg, as well as some printed sheet music (musical notation) by Norwegian 19th century composer Agathe Backer Grøndahl. Such classical chamber music is often associated with the bourgeoisie—the upper class—composed for and meant to be everyday music, written mostly by and for women, for use at home while engaged in leisure activities like knitting, reading or stitching. We do not know if Agathe Backer Grøndahl and Betzy Akersloot-Berg ever met, but they started intra-acting in the material (Mittner et al. 2021). Both prints and music, which means the sheet music, the sound from the CD player and the compositional idea became the materiality we were working within. What did you bring to the session and why?

Dragana: I brought everyday life's cheap "trash"—a bunch of used food and beverage packages for recycling: egg packages, carton toilet paper rolls, mackerel tin cans, plastic bottles, etc. A mackerel tin can even smell fishy. Embarrassed, I cleaned the tin and placed it beside a set of

design papers with patterns and flowers from a knick-knack store. The papers appeared a bit melancholic and pathetic alongside the second-hand buttons of different shapes and colours. The idea was to mix and match and give a new life to "trash", thus transforming its previous purpose.

When I explained that we are going to make instruments out of those materials, Lise, a resident with whom I was co-creating in a previous session, said: "That's just nonsense". I got so discouraged. While I struggled to explain why the activity is not childish, Malin defended the activity: "You can't say that!" She hurled her words harshly from the other side of the table. "I refuse to believe that...[to make] i-n-s-t-r-u-m-e-n-t-s" she spelled it out, pedagogically irritated. Nobody knew if Lise would stay or go: "I can wait a bit and see...", she grumbled and stayed.

Lilli: Arthur entered the room with a walker. We knew each other from another music session and there was a shared feeling of familiarity between us. Having earlier established a relation in sound and music mattered for us to re-connect.

I invited Arthur to sit together. He pulled a chair close to me. The group was already focused on the activity. The soundscape was filled with murmuring, cutting, chatting, and gentle piano music playing in the background. He followed me, secure and trusting. If there wasn't this music and the group being engaged with the materials on the table, the colours, the paper, the silver coffee boxes and much more, we would have intra-acted differently or probably not at all. Arthur might have become irritated, defensive, or even aggressive, and I would have been less confident to invite him to create something together.

Arthur was sensing the music and the room. He appeared to be distracted. He was looking out of the window, following what happened at the big table, and even gazing towards the ceiling. There were several moments when I wondered if the colours, music, and beverage packages were appropriate to intra-act with. I opened one of the coffee boxes, smelled it and invited Arthur to do the same. The act of smelling something familiar (coffee) together, connected us. Arthur nodded in an appreciatory and confirmative manner, and the coffee box become our material to start working with. I began putting kidney beans into the box. A high rattling sound disrupted the 19th century chamber music. "Should I put more in here?" I asked. Arthur nodded

again. Yet, none of us enjoyed this moment very much, so I stopped throwing those beans, that became very ugly due to its sound, into the coffee box.

I continued making a rattle out of the coffee box, beans, sheet music copies and small white pearl stickers. Arthur was listening to the music, following the rhythm with his body and head while leaning forward. We barely talked. I asked him to hold the box between his legs while I stuck the white pearls on it and adjusted the beans to the size and sound of the box. He was observing my action while looking into my eyes. I wondered how much he cared about what was going on and if he might have been medicated. He probably was, as he was very tired and groggy. I knew that dementia plays out through forgetfulness, uncertainty and a lack of motivation or passiveness. However, as Latimer argues, the passiveness and state of being "apparently introverted and disconnected" can also be understood as calmness and peacefulness (Latimer 2018, 5). The apparent passiveness may be a way of listening, resting, and reclining. I gave the rattle to Arthur, and he looked carefully at it by turning it around (see figure 6.2).



Figure 6.2. Arthur holding the rattle-instrument, turning, and investigating it. © ADLab/UiT, CC BY 4.0

The moment Arthur asked if the music came from the black CD player next to him revealed that he was with the music. I put the last pearls onto the box that became an instrument when the music culminated in a high "c". The ritardando (slowing down of the piano music) occurred at the same time as we were leaning back, looking, and smiling at each other. The dramaturgy of the intra-action became so well curated like an improvised choreography of a dance that is co-created in the resonance of the moment.

Dragana: There were many agential cuts where my and Per Ole's hands were touching and coming together to finely adjust the tonality of coloured prints of Betzy's sea and sky landscapes to a long toilet paper roll. Per Ole admired the prints and suggested that we use them. For a moment, I was contemplating if it would be possible to create a more advanced form of the instrument. Yet, the difficulty of attaching different shapes of toilet paper rolls together for such a short time immediately blocked this artistic ambition. Per Ole was also up to more simple and stylish solutions, as materials were resisting the process. Materials tend to behave in a certain way under certain conditions; our task was to discover what the limitations are and "... what the materials can do" (Lamb 2014, 67). It mattered how we adjusted tonality of "sea" and "sky" so that two different papers could blend into a new landscape. While Per Ole held a toilet paper roll, I glued. The diffractive dark and light bluish sky and sea waves gave movement to the pale brown background. We were conversing while being alongside, not bothering if we did not completely understand one another linguistically. Although we worked with the same materials and had the same aim, we stayed different in mutuality, partially connected, and partially divided intermittently (Latimer 2013).

As gluing turned out to be difficult and I disliked the idea of using tape, we started using stickers. So, I asked Per Ole which stickers he would recommend. He pointed at a white glossy circle on the sheet where a sticker had been before somebody used it. Suddenly, I realised that he did not perceive things as I did. Although we worked with the same materials, we did not perceive them the same and perhaps we did not aim for the same end? I explained that we couldn't use the "white glossy sticker", but the other stickers with patterns. Perhaps he did not like the patterns? At one point, I ran into the activity office to pick up the yellow carton and cut the ending circles for our instrument. While Per Ole held a roll, I taped the bottom. At the end we had to use the tape! We did not have control over materials, rather, as in this agential cut, only the gluing agency of taping could enable continuation of the intra-active process.

Then the question was what to use to create sound. What should we fill the roll with? I showed Per Ole pinkish lentils and corn-mixture in boxes: "Which do you like best?" He clearly preferred the lentils, as lentils had a nice small shape and a lovely warm colour. The cornmixture looked dusty and pale. It is refreshing to use valuable and beautiful materials. Aesthetics of materials affect how people intra-relate with each other (see figures 6.3 and 6.4).





Figures 6.3. and 6.4. Co-creating with Per Ole, Betzy, Agathe and stickers. ©ADLab/UiT, <u>CC</u>
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Lilli: On our side of the table a feeling of getting stuck with the rattle unfolds. I had to leave Arthur for a moment to search for other materials that I thought would be more attractive to both of us. I picked up a white paper lamp. Arthur was observing every movement. When I returned, we decided to put the same pinkish lentils that act as sound co-producers of the instrument you were co-creating with Per Ole into the paper lamp. A bluish paper glued both the sides of the lamp, making another kind of rattle. I asked: "Do you want to paint?" while holding the brush up for Arthur and holding the lamp in the other hand. He defended himself by raising both hands. No, he didn't want to paint. I was prepared for this reaction and said: "Ok, then you could hold the lamp". And unexpectedly, something beautiful happened. Arthur became more engaged, and we were doing the lamp together. At this point I had no sense of time and place, but as the video recording revealed, within about 30 minutes Arthur turned the lamp around many times, holding it between his hands, his legs and between the two of us who were sitting opposite each other. The lentils where gently crackling inside the paper lamp while I was painting one line after another on the lamp. Arthur preferred dark colours, such as black and dark blue. And even though there was no plan for how to paint the lamp together, we made a new line with every new song. The music was part of our co-creative practice. We did the lamp in music.

Dragana: While becoming alongside Arthur, your relationship transformed into the new world's patterns of difference where dementia did not matter. Making new lines with new songs was like creating new liveable patterns, new ways of living together, of forming a different world together. Intra-actions of music-colour brush movements-paper lamp turning enabled this

diffractive meeting. Corporality of music, the gestural power of the music contributed to this transformation.

Lilli: Yes, you are right. The materials opened up different ways to connect. Arthur turning the paper lamp and I, drawing the coloured brush. We were both focused on painting the paper lamp, which, however, does not mean that we did it with the same goal in mind. By painting and turning—the brush sometimes not in motion, whereas the lamp turning was what produced a line—one cannot say who was actually making the lamp. It was a moment of co-creation. Both of us were eagerly trying and making sense of the world, of us, the moment, the materials, and the relations that emerged.

Arthur was very careful with "our" lamp that connected us in such a beautiful and aesthetical way. When we needed a break, he put the lamp carefully on the table next to him, being cautious not to blur the coloured lines, which were still wet. Arthur looked at the lamp, placed it on the table and investigated it once more, giving me the feeling that he was appreciating and valuing what we just made. Since the lamp was filled with the lentils, it started rolling on the table and Arthur took the initiative to keep it still (see figure 6.5)

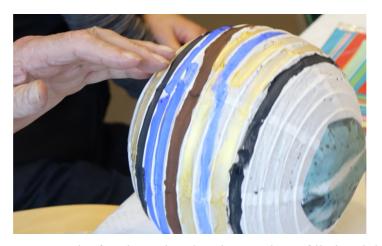


Figure 6.5. The cautious touch of Arthur's hand and paper lamp filled with lentils rolling on the table. ©ADLab/UiT, CC BY 4.0

Painting together with each song became an agential performative routine. An iteration, ostinato, repetition—making our entanglement with the 'nonhuman' world (music, colours, and other materials) possible. Even though we were not talking much, we communicated all the way through and with the lamp.

Beside us sat the activity coordinator Solveig with Jonas, intra-acting with an empty plastic margarine box, transforming it into a multisensorial instrument, combining a rattle with guiro. The instrument became beautiful and diffracted waves of admiration. However, Jonas showed more interest in the lamp arising from Arthur and me. His side glance attached to the lamp, his smiles and acknowledging sights—all those expressions were co-creating the lamp with us, within an evolving diffraction pattern.

Dragana: There were many intra-actions happening simultaneously in the room, diffracting, and affecting surrounding intra-actions. For example, I noticed that Malin and Karen, sitting next to Per Ole and me, took the same yellow cartoon we were taping to close the endings of "their" instruments. On our left, the activity assistant Elin, alongside Lise, continued decorating a mackerel tin that she got from me at the very beginning, as I could not work on the tin with Per Ole. Lise was calmly observing the assistant's hands while folding the paper around the tin and later on an oval coffee-package. Yet, after some time, Lise closed her eyes, resting.

Beside Lise, another couple worked silently: Maria and Anne. In her note, Maria described how they co-created their beautiful instrument.

I helped a resident to make a musical instrument. I chose material and demonstrated how to use it. I encouraged the resident to make some simple decisions herself, for instance, design of colours. The resident used glue, tape, and stickers to decorate the instrument. We cooperated well with each other. In the beginning, I led the process. But when I failed to put thread through buttonholes, the resident said: "Give it to me. I can do it." The resident showed me how and was diligent. It was clear that the resident had done this before. The resident put thread on all four buttons. We felt mastery and joy together. At the same time, I felt that the resident was like my grandmother who taught me something.

This note demonstrates how human-nonhuman agency triggered in relation to materials (a needle, a thread, and buttons), enabled co-creativity and connectivity. At the beginning of this agential cut, Maria was leading the process, leaving it to Anne to participate. Yet, when Maria could not place a thread into a buttonhole, Anne took over. Anne continued to lead the process, as she has mastered threading the needles and sewing on buttons. The intra-action between

Anne-music instrument-Maria transformed their relationship and the instrument (see figure 6.6). The instrument got four more buttons to diffract a sound from, creating shared feelings of mastery. A "resident"—a repetitive term and very common way to "ethically" address (distance from) people living with ADD in residential care homes—suddenly turned into a term 'grandmother'; this implied intimate closeness between Maria and Anne. In Barad's words, the intra-active process created a new pattern of difference about ADD and a new effect: a figure of Maria's grandmother from whom Maria learned useful things in life



Figure 6.6. Maria's and Anne's nonverbal creation. © ADLab/UiT, CC BY 4.0

Lilli: The intra-action between Maria and Anne, while working with the instrument, was both including and excluding discursive-materialist agency, in different agential cuts. For instance, when Maria was creating an origami swan using yellow origami paper—something that only Maria's hands know how to do in a disciplined and cultural relationship to paper —this did not leave any options for Anne other than to look at the process. Though, in the next agential cuts Anne chose a blue colour for the next swan and continued to decorate the swans. Anne and Maria shared the process intermittently while being alongside.

Nevertheless, at the beginning of the session, Anne was complaining about her leg pain, hesitating to remain seated. Then a nurse literally fixed her to the table, reminding her that she should sit. In this specific agential cut, the patronising attitude enabled co-creativity between Anne and Maria to emerge, as Anne did not go out. During a plain origami session, Anne did go out with her walker due to the pain in her leg and she did not return.

Dragana: This time, Anne endured the process, and she finally felt shared satisfaction at the very end by contributing to a beautifully designed instrument. Important note: the thread and needle were not on the table. Maria asked for them in the middle of the session and I brought those materials on her demand. Several times I had to leave the process with Per Ole to fetch new materials from the office. You also asked for brushes and colours.

These interruptions revealed the significance of "materials" for co-creativity and how materials are "on the move" in constant transformative change. The interruptions were diffraction effects of surrounding intra-actions, which could temporarily "block" one diffraction pattern to enable the other one. However, the interruptions were not a matter of cause and effect, as the diffractive interferences were co-constituting all parties involved (Barad 2007, 175). Particularly, your intra-action with "Arthur-paper ball" was so inspiring and diffracting to the co-creativity with Per Ole. I was sensing very touchy moments while looking at you, which I had immediately to catch with the camera.

On my invitation, half an hour before the end of the session, a "dancing star" from the residential home cantina introduced a loud rap intervention that transformed the room into a dancing club, generating new diffraction patterns. My notes the day after the session describe one of them:

I saw Per Ole holding "our" instrument in one hand and dancing with it as though with a sword! Moving it up and down in circles. On many sides. I was so proud and happy. He was also smiling. He looked like a cheerful and blithe boy. He did not really care how he looked and if somebody was looking. It was just about having fun. Something that everybody could do in the room that day, except Lise and Arthur.

I saw Per Ole as different. I saw human and nonhuman materials we started to work with differently than what we ended up with. We transformed each other along the process. In this agential cut, Per Ole-instrument is enacted as free from a "patient" identity. I smiled, astonished. What had that moment of dance with the musical instrument transformed in us? And what did such a free dancing entanglement of sword-Per Ole-I sensing mean in that cut? I felt like the sword was empowering. It was harmless to circulate it.

I came to think of another moment with Per Ole in the locked ward where he lived. I brought in a bunch of wool and Per Ole immediately took white and violet wool, shaping it into something specific. He knew exactly how and why. And yes, as I was filming the process, I realised he created a sword (see figure 6.7). This time sticking his hand into wool and green soap. I imagined the independent and self-sufficient "Universal Man" of the Anthropocene (Åsberg and Radomska 2019) holding this wool-sword, in stark contrast to this figure as a poetic story of vulnerability and dependency. How had the dancing switch changed your intraaction with Arthur and the paper lamp?



Figure 6.7. Per Ole intra-acting with a sword. ©ADLab/UiT, CC BY 4.0

Lilli: The dancing-activity created new ways of relating to each other, as if the size of a slit had been adjusted, which resulted in different kinds of diffraction patterns. When the group was rising to dance with the instruments, I knew it would become difficult for Arthur to dance. He didn't even want to dance, when I asked, so we stayed at the table. I started dancing around Arthur, throwing our paper lamp into the air towards him to the rhythm of the music. Throwing became a certain kind of touching. Even though we were not touching each other at all, the moment of catching the lamp became a moment of catching each other. This was an agential cut in which the rattling paper lamp transformed to a dance device—a rattling paper ball. We had found our way of becoming part of the atmosphere in the room. The group was singing, smiling, and dancing.

Dragana: When we co-created a bridge—a dancing game where one group is lifting up their hands together forming a passage for another group to bend down and pass through—I felt Arthur was excluded. He was sitting alone beside the window. After the bridge, I came close to him and asked: "Do you want to dance?" "No." "You do not like to dance?" "No." "But you can just watch. Do you like to look at us and be here?" "Yes," he answered firmly. Arthur liked being in the room alongside us and the music. The moment you threw the paper ball to him, he opened his eyes smiling. He intra-exchanged the ball, also with me, Maria, and Anne. Anne's robust hands sensitively caught the fragile ball to hold still the force from Arthur. Anne was very careful not to drop the ball. After a while she continued dancing with Maria. Their hands were mirroring each other repetitively in circles from left to right, rhythmically. New performative patterns included everybody differently into a shared moving atmosphere, except Lise who had already gone.

Lilli: So, it wasn't only throwing the paper ball beside the windows that impacted the bridge in the middle of the room, but the throwing further diffracted other human-nonhuman intraactions. Earlier in the session, Arthur had been very concerned about wet colours soiling his hands, and I told him it didn't matter while picking up a washcloth. However, when the dancing started, the diffraction pattern changed totally. Suddenly, it was me who was concerned about the paint soiling his hands, as the paper ball decoration became dirty with the paint. But what, to my great surprise, happened? Arthur smiled and said: "No, it doesn't matter" while continuing to throw the ball back and forth. This moment of transformation happened after we had painted, listened, being and becoming alongside for at least an hour. Our entanglement with the materials obviously made the transforming relation possible. And it made me to think once more: what matters to whom and why?

Dragana: We created multisensorial possibilities for unusual and even intimate dancing entanglements. According to Latimer and López Gómez (2019), intimate entanglements have been common, but denied, in nursing practices due to the claim of disembodied professionalism and medical knowledge-making. At the very end, while the group was going out thanking us for the day, Per Ole approached the most exciting dancer, Jonas, shaking his hands and greeting with: "Happy New Year!" The atmosphere of the New Year's Eve celebration of people unknown to each other but connected in the shared feelings, marked the beginning of something new.

### **Concluding remarks**

We started this paper with the purpose of inquiring into how life with Alzheimer's disease and other dementias can be enacted differently than human individualist loss through experiments, using feminist agential realism and multisensoriality. Agential realism allows us to understand and simultaneously move beyond ethical limitations that arise from the dilemma of a worlding in which the healthy research artist and the vulnerable elderly emerge as separated. Developing our analysis of entanglements, as described above, opens for innovative forms of citizenship in which no one and nothing is ill-fitted in advance, but entangled in co-creative practices. Building on Barad's ethics, we have been developing co-creative practices that have the potential to transform relations and create less hurtful worlds, or diffraction patterns of mattering that are less about cognitive, linguistic, and memory deficiencies.

We particularly stressed multisensoriality of the arts—intra-acting agencies within humannonhuman material entanglements – for co-creation of new diffraction patterns. Objectivity, in this regard, presupposes accountability for new diffraction patterns and their created effects during the multisensorial session; in other words, for different understandings of lives with ADD, and ADD itself.

Within Lilli's intra-actions with Arthur, the world was forming differently, both for Lilli and for Arthur. Multisensoriality of human-nonhuman materials, particularly music, enabled them to re-connect. Moreover, the paper lamp worked as a slit for differential becomings with ADD; also for Jonas, Dragana and Per Ole. Materials were both resisting and enabling for Dragana's intra-action with Per Ole. The pale toilet paper roll suddenly turned into a sea-sky musical instrument, that during the dancing slit transformed into a sword. The entanglement, Per Olesword-Dragana, created a new diffraction pattern with the effect: dancing boy with a sword. This figure enacted the cut when Dragana saw Per Ole dancing, free from his resident status and patient identity. Per Ole had become differently, and Dragana changed 'her' perception of ADD. Maria's intra-action with the origami-swan musical instrument and Anne diffracts an intimate figuration of Maria's grandmother. A distanced 'resident' became somebody so near, and someone from whom it is possible to learn. Feeling connected, Anne and Maria continued to dance together as one person, in an evolving diffraction pattern with Arthur.

These new diffraction patterns interweaved with each other, forming a new world for living differently with ADD in the residential care home. Particularly, multisensoriality and relational

aesthetics of different human-nonhuman materials contributed to transformations of all human-nonhumans involved. In situated agential cuts, ADD did not matter as a neurodegenerative disease syndrome which leads to irreversible death of the self, because other diffraction effects appeared to matter; solid fingers, a boy with a sword, and the figure of a grandmother. These diffraction effects change our perception of ADD and the meaning of life with ADD.

However, the intra-actions entailed exclusions, and the exclusions were happening intermittently. We were also the subjects of exclusions. While a modification of the slit, such as dancing, became a constructive interference for some of us, it became more of a destructive interference, or exclusion, for others, such as Arthur, for instance. One could argue that Lise did not find a way to intra-act as she was lacking a companion. We were not caring enough for and caring with her either, as we could not be at several places at once. We could not be a part of all diffraction patterns evolving in the room to the same extent. Even with the pattern created while intimately being and becoming alongside with other human and nonhuman materials, we could not intentionally control, just intra-act; we could stick our hands within it and see what happens. In a sense, discursive-material intra-actions made us a part of the materials, becoming materials of the intra-actions. If the accountability is situated within the particular agential cuts within entanglements, then what makes us (less) humans are those entanglements with materials. Through transformative intra-actions with materials, we are enacted as different humans, as different than nonhuman materials.

Diffractive methodology, such as agential realism, emphasises involvement of nonhumans in worldmaking. As this methodology acknowledges that the world is made of human-nonhuman entanglements, then the entanglements matter, not particularisms. Agential realism stresses transformation of human-nonhuman agencies involved, and thus a possibility to create liveable diffraction patterns. For dementia studies, this contributes to different doings and meanings of ADD beyond humancentric individualism and an understanding of ADD as brain pathologies. In dementia caring practices, the presence of multisensorial materials holds potentials to form friendly words in which it is possible to communicate through multisensorial art practices, beyond cognitive and linguistic barriers. For academia, entangled ways of knowing a phenomenon, such as ADD, intertwines artistic and scientific knowledge as a part of diffraction patterns. Yet, to study entanglements based on relational ethics is our future recommendation because entanglements are crafting differential patterns of living, relating, and dying together

within a more-than-human world, which is significant not just for figuring different ways of relating with people living with ADD, but all within academia and beyond.

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Dragana Lukić is a PhD candidate in Gender Research at the Centre for Women's and Gender Research, HSL-Faculty, UiT the Arctic University of Norway. Her PhD thesis entitled: "Feminist posthumanist engagements with Alzheimer's disease and other dementias in popular expressions and co-creative arts sessions" explores transformative powers of creative arts for crafting different understandings of dementias. The thesis embraces analysis of popular fictional films adaptations about dementias and co-creative multisensorial arts sessions that she initiated in a residential care home in Northern Norway. As Dragana has educational background in fine arts and gender studies, her explorations occur in intertwinement of artistic practice and gender theory, and the arts and sciences. Dragana's research interests include posthumanist feminist theories, material feminisms, politics of care, science and technology studies, health care practices, and fine arts.

Lilli Mittner is trained as a musicologist and practices as a violinist. Currently she holds a postdoc position in feminist art intervention at the University of Tromsø The Arctic University of Norway. Lilli is broadly interested in art making processes and how people create new spaces of possibilities through different perceptions of conventional social practices. In her project she addresses methodological challenges in artists' practices of working with people living with dementia by diffracting the theoretical basis of art interventions with feminist theory and relational aesthetics. Her research is situated in a broader context of arts-based research and the humanities. Lilli's scientific background touches upon the fields of history, sociology, pedagogy, anthropology, and psychology of music as well as media and communication studies.

<sup>&</sup>lt;sup>2</sup> All conversations were in Norwegian, and we translated them to English.