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(In)visible materialities in the context of dementia care

Helena Cleeve, Lena Borell and Lena Rosenberg

Department of Neurobiology, Care Sciences and Society, Division of Occupational Therapy, Karolinska Institutet, Huddinge, Sweden

Abstract Seemingly mundane materialities are intertwined with important, but often neglected, care interactions. It has been argued that if healthcare professionals paid more attention to the roles materialities can have, everyday routines could become important occasions for care. In response to such proposals, we argue that it is relevant to examine how materialities are currently understood. In this article, we explore materialities as part of work in a dementia unit. Using abstracted illustrations of everyday materialities to elicit reflections, we conducted 11 individual interviews with certified nursing assistants. Through phenomenographic analysis we explain our findings as three different categories conceptualising understandings of materialities as: 'tools for care', 'a set of principles for care' and 'caring relationships'. Our analysis indicates that understanding materialities as instruments was reinforced and made visible through the healthcare organisation while understanding materialities as part of specific relationships with residents appeared informal and less visible. How materialities were understood seemed to have several implications for residents. While care practices could benefit from nursing assistants' abilities to alternate between ways of understanding materialitites, such competence seemed dependent on how professional care was organised, structured and materialised.

Keywords: dementia, Alzheimer's disease, phenomenography, material culture, care practice, illustration

Introduction

In this article, we examine how nursing assistants understand materialities as part of their work in a dementia unit. The study of materiality in care has been brought into view by scholars from fields such as Science and Technology Studies, "new materialism", and material culture studies who argue that material things, for example, health technologies, buildings and household objects, underpin care practices and that this needs to be recognised when examining and transforming care (Buse *et al.* 2018a). However, great focus has been on technologies and less attention has been paid to seemingly trivial, everyday forms of materiality (Maller 2015). In response to this, Buse *et al.*(2018b) initiated a collection of articles on "materialities of care" exploring everyday material culture in different social and health contexts. Buse *et al.* (2018b) use the term "materialities" to highlight that care practices involve multiple materials and Latimer (2018) concludes that drawing analytical attention to seemingly mundane things may elucidate that which tends to go unnoticed in care interactions.

In the context of dementia care, we see this focus on "ordinary" material things as a lens that can yield insights regarding how to support individuals living with dementia. When assisting people with dementia it has been argued that it is crucial to recognise identity as embodied and enacted in daily life, challenging assumptions that dementia diseases involve a loss of selfhood (Kontos and Naglie 2009). Dementia is a medical term describing a collection of brain disorders involving a gradual decrease in cognitive functions (Daroff 2012). People in the early stages of dementia tend to continue to live on their own, with help from family members, friends and/or care services (Hydén 2014). In later stages, many people move to nursing homes for increased support. While the progression of dementia varies between individuals, these disorders often become noticeable through altered relationships with everyday things. That is, material interactions that used to be more or less subconscious and taken for granted, can become pronounced and cumbersome (Phinney and Chesla 2003). This could include preparing a meal, washing one's clothes or recognising one's belongings. In this sense, dementia could be seen as a growing mismatch between a person and his/her environment (Moser 2011).

Yet, materiality in dementia care is relatively unexplored. Among the studies that exist, some are concerned with formulating frameworks describing how individuals with dementia interact and relate to specific objects (see e.g. Stephens *et al.* 2013, Treadaway *et al.* 2018). In contrast, a number of scholars explore how materialities facilitate collective life in dementia care wards and support relations, identities, collaborations and interactions (Buse and Twigg 2014b, 2018, Hydén 2014, Majlesi and Ekström 2016, Moser 2011). Rather than focusing on particular objects these scholars are concerned with how several materialities in everyday activities allow individuals with dementia to participate. For instance, Moser (2011) describes how the adjustment of objects may enable someone with advanced dementia to eat, emphasising meals as important moments for healthcare professionals to build relationships with people with dementia. Similarly, Buse and Twigg (2018) draw attention to how dressing routines provide opportunities to spend time with residents who have dementia, and they also suggest that clothing and dress can support identity. Other studies are focused on collaboration and describe how particular material arrangements facilitate caregivers and individuals with dementia to cook or bake together (Hydén 2014, Majlesi and Ekström 2016). Hydén (2014) argues that it is possible for healthcare professionals to *learn* how utilise materialities so that persons with dementia can be involved as collaborators. Comparably, Buse & Twigg (2014a,b, 2018) call for care institutions to recognise the importance of dress when caring for individuals with dementia and they underline that this would require education and guidance for staff concerning dress practices. Thus, both Hydén (2014) and Buse and Twigg (2014a,b, 2018) propose that healthcare professionals should be given training to better account for the role of materialities in various care situations.

We argue that in order to imagine how healthcare professionals *could* understand materialities in care practices, it is relevant to ask how they *already* understand this. In what follows, we present an analysis on how materialities are understood by nursing assistants in a dementia unit. We base our analysis on individual interviews where illustrations were used to elicit reflections about everyday materialities. HC is a designer and illustrator and these illustrations and interviews were made as part of her thesis project on materiality in dementia care in the Transdisciplinary Design program at Parsons the New School for Design in the United States. The analysis of these interviews and the synthesis of this article was however done as part of HC's doctoral research, which is situated within a larger research initiative focused on exploring environments in dementia care settings. This research initiative involves an interdisciplinary research team, located in Sweden. In this article, we use the term "materialities" to refer to that which is tangible, including various spatial elements, objects and bodies. By using

this broad term, we deliberately avoid making assumptions about the materialities that could be of interest in this context. We agree with Mol *et al.* (2011) that central concerns should be opened up, instead of prematurely defined. Underpinning this openness is also the physicist and post-humanist theorist Karen Barad's (2007:155) argument that all physical matter is entangled and that there are no pre-existing boundaries. She writes " ... seemingly self-evidentiary nature of bodily boundaries, including their seeming visual self-evidence, is a result of the repetition of (culturally and historically) specific bodily performance". As mentioned above, living with dementia can involve altered relationships with things, further motivating that materialities in this context are explored in an encompassing manner. The aim of this article is to explore understandings of materialities from the perspective of nursing assistants in a dementia care unit. Through analysis we discuss how these understandings are made visible or invisible in the organisation of dementia care and the implications this might have on care interactions.

Methodology

The study was conducted at a dementia care unit in a non-profit nursing home located in New York City in the United States, following ethical approval by the New School University Institutional Review Board (#5-2013). The nursing home comprised 520 resident beds, and about 500 staff members including physicians, nurses, physio-therapists and certified nursing assistants. The dementia unit had about 40 residents where some residents lived in private rooms at a higher cost and others shared rooms at a lower cost. To familiarise herself with the setting, HC volunteered in the unit for about a month before beginning data collection. As a volunteer, HC primarily spent time with the residents in the unit.

Participants

HC purposively invited the certified nursing assistants working in the dementia unit to participate in the study because they were the healthcare professionals who spent most time with the residents. They were informed about the study through a poster and in person by HC who gave verbal information about the study. All certified nursing assistants (a total of 16) in the unit were invited to participate and 1 man and 10 women volunteered to partake. These nursing assistants worked in different shifts (morning, evening, and night) at the unit and they were between 35 and 58 years old. Their experience from working in dementia care ranged between 5 and 27 years. The interviews were conducted in English because this was the language they used in their work. However, English was not the first language of any of the participants.

Developing illustrations to elicit reflections

To inquire about nursing assistants' reflections on materialities, HC made illustrations (Figure 1). Approaches using images to access experience have been developed for different purposes in various arenas, such as market research (Boddy 2005), the evaluation of products (Desmet 2003), as well as in healthcare research (see e.g. Gong *et al.* 2012, Holmlund *et al.* 2018, Justesen *et al.* 2014). Some of these methods ask participants to take their own photo and some ask individuals to pick an image out of a selection. In making illustrations for this study, HC saw abstraction as a possibility for participants to influence the interviews. A crucial aspect is the argument that the absence of seeing an actual object makes the mental image clearer and helps our memory to understand the meaning of the object better (Bollas 2008). In an abstracted image the real object is absent but the mental image of the object is paradoxically reinforced. A photograph of a bed is not quite the same as a realistic illustration and

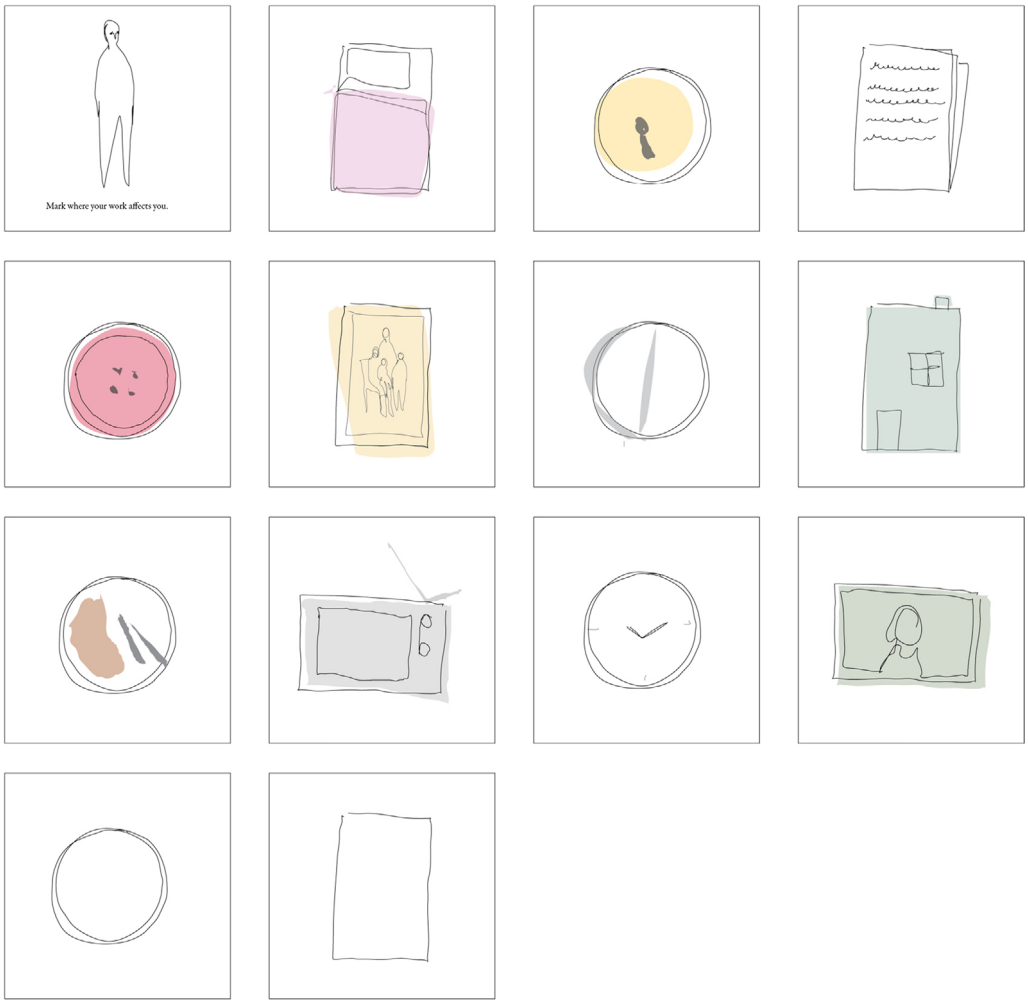


Figure 1 *Abstracted illustrations used as prompts in interviews with nursing assistants.*

different again from an abstracted sketch. The first is literal, the second refers to the idea of a bed, the third evokes "bed" but it is not absolute that it will be interpreted as a bed. Abstraction is therefore useful in giving and evoking freedom of interpretation. HC created abstracted illustrations (Figure 1) based on her time volunteering in the unit. A number of objects were used as inspiration (body, bed, keyhole, notepad, button, family, pill, building, plate, TV, clock, and dollar bill) with two criteria for how they should be depicted. First, the object should relate to various situations in the nursing assistants' work and the everyday lives of the residents in the dementia unit. Second, the image should be possible to interpret from several different perspectives to avoid too literal understandings. That is, the illustration should invite individuals to discern different things. As Figure 1 indicates, all cards except one (top left row) were based on the same shape of a circle and rectangle (bottom row, Figure 1). The illustrations were thereby subject to approximately the same degree of representational abstraction. The top left card refers to a human body and when participants were shown this card, they were asked to "mark where your work affects you". This was intended as a reflective introduction and an invitation for participants Think about their work and their body. The cards

showing a circle and a rectangle were included as the last two cards in the interviews, assuming towards the end of the interview participants would be adjusted to abstracted illustrations as reflective prompts.

Interview process

Over the course of two months, HC conducted individual interviews with the nursing assistants. The interviews took place in a separate room in the unit and ranged between 16 and 49 minutes, median 25 minutes. The interviews were structured around the illustrations in Figure 1, with interviewees being handed one card at a time. The cards were presented in the same order in each interview and with the image facing down to allow for the interviewee to determine what was considered to be up or down, inviting an even greater variety of interpretations. As the cards were handed out two questions were asked: "What do you see in this image?" and "How would you relate that to your work?". The purpose of the first question was to allow for the participant to articulate an interpretation of the image. The purpose of the second question was to relate that interpretation to their experiences in the unit. Participants were reminded that there were no wrong or right answers and encouraged to talk about whatever came to mind as they looked at the cards. If participants were not able to interpret a card, they were given time to think and eventually HC handed them a new card. Follow-up questions were determined in the context of each interview to elicit clarifications or to enable interviewees to develop reflections. Two pilot interviews were conducted to test the use of illustrations and trigger questions. Because the images and questions seemed to prompt relevant insights about materialities relating to work in the unit as well as inviting for different interpretations, no changes were made and the pilot interviews were included in the study. The interviews were audio-recorded and transcribed verbatim.

Data analysis

HC led the analysis process in discussion with co-authors LB and LR. To obtain an overview of the data, HC repeatedly read the transcripts and listened to the audio-recordings while taking notes about their content. Through this familiarising process it was noted that the nursing assistants talked about materialities in quite different ways. In our continued analysis we decided to utilise a phenomenographic approach (Stenfors-Hayes *et al.* 2013) as this method is aimed at identifying qualitative similarities and differences in how individuals experience a certain phenomenon (Barnard *et al.* 1999). We continued the analysis by identifying excerpts in our data specifically pertaining to material things. Notes about content were made in the transcripts by HC using words and sketches to begin to interpret and analyse reflections about materialities. The excerpts from the interviews were considered in relation to individual interviews as well as the complete dataset (Stenfors-Hayes *et al.* 2013). Different excerpts were compared and those that appeared similar were grouped to discern their common qualities using NVivo. Initially, these groups were constructed from a selection of the interviews, and later these were reviewed and revised in relation to all interviews. In our findings we use exemplifying quotes with illustrations made by HC (see Figures 2–5). Throughout our examples, pseudonyms are applied. Pauses are indicated by "...", omitted phrases indicated by "(...)" and "[]" indicate authors' comments.

Findings

We present our findings in three categories, describing understandings of materialities as: "tools for care", "a set of principles for care" and "caring relationships". How nursing

assistants understood materialities as part of their work differed. Several interviewees expressed more than one way of understanding but not all interviewees conveyed all three understandings.

Tools for care

Nursing assistants talked about materialities as tools to help residents with 'basic' care needs such as eating, washing, and dressing. Through illness a person's relationship with things can become 'disrupted' (Buse and Twigg 2018, Chapman 2006, Cleeve *et al.* 2018). Consequently, routine activities that are usually carried out almost subconsciously can become burdensome procedures (Buse and Twigg 2018, Phinney and Chesla 2003) and care work comes to involve attending to, and managing these disrupted embodied practices (Buse and Twigg 2018). In our interviews materialities were described from functional perspectives with a bed explained as enabling a resident to rest and sleep, and a hamper as allowing nursing assistants to arrange residents' dirty clothes.

Figure 2 shows how Maria associated a plate with food with helping residents to eat. She suggested that a spoon as well as her voice could be useful as tools to guide the residents. Maria noted that a plate, dining room and bed could be related to meals and the residents were briefly described in relation to their ability to eat. There was an implicit sense of distance in these descriptions, which resonates with Twigg *et al.*'s (2011) observation that 'body work' in professional care-giving is often dealt with through distancing techniques in which healthcare professionals objectify care recipients 'as things' to be cleaned, dressed and fed. In our interviews the nursing assistants' own bodies were similarly objectified, as they described them as tools to conduct various caring activities. A tool, suggests that something is to be accomplished and directs focus to a specific objective. In Figure 2, Maria's choice of words 'I have to feed the resident…' could imply that this was a prescribed assignment. The cards elicited similar responses by other nursing assistants who talked about 'having' to help residents with everyday needs. Indeed, the completion of tasks appeared to be in focus in these accounts. This reflects Latimer's (2018) point that personal 'basic' needs are conceptualised as tasks to be delivered within certain time frames in professional care organisations.

Maria's description was representative of how interviewees' accounts in this category were succinct, implying that there was nothing important to say about materialities in care. This could indicate that the nursing assistants saw materialities and their roles as obvious in relation to these tasks, not requiring further explanation. It could also signify that helping residents with these activities were done routinely. Berg (1997) describes that routines are usually carried out without people paying attention to how and why something is done in a certain way. Latimer (2018) writes that in care practices, some actions are considered to be so mundane that they become inconsequential and immaterial. Therefore, the materialities of routine practices may go unnoticed because of their ordinariness.

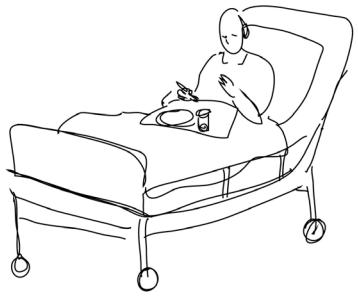
There seemed to be a relationship between the insignificance attributed to materialities and the documentation of care tasks. An example can be seen in Figure 3 where Florence outlined that care tasks had to be documented. A variety of material things were associated with this documentation, exemplifying how in health care, routines are materialised through documentation (Berg 1992). Florence explained that she had the personal digital assistant (PDA) and round sheets 'to do'. Hence, documentation was portrayed as a task in and of itself echoing the notion that this work involves a 'dual orientation' of doing the work and reporting it (Suchman 2007: 204). Nursing assistants talked about how they would consult forms and protocols to see what care that they were to provide at a specific time, indicating that documentation reflected care work in the unit but also that documentation directed the work.

Maria:

I don't know what is that //giggles// mhm... not a plate right? (...) a plate with food inside?

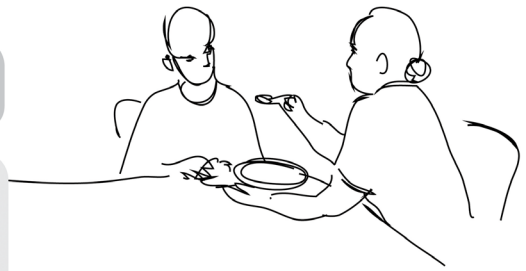
...I have to feed the resident too, when I'm in the dining room or...

...some eat in the bed (mhm). You have to feed them. If this is food, this is a plate of food (...) some of them eat well. Some of them don't want to eat.



... Some of them you have to encourage them to eat at least two spoon or three spoon...Some of them eat by themselves, you don't have to encourage them

So you ask them to "eat one more spoon"?



Yes, yes! To encourage them to eat (...) Some of them it helps a lot cause you just put the food in front and they don't want to eat. You just sit down, try to feed them. Some of them eat all, all everything.

Figure 2 *Excerpt from interview with nursing assistant Maria.*

Florence:

It's a letter.

Mm. How would you relate that to your work?

Everything you did for them you have to document it. If they feel good, or not. If they eat, or not. Sometime at night we have to give them snack. If they take it you have to document it. If they press the call light and you went to them and they sleep, if they not sleep you write it down to let them know

So there's a lot of documentation?

Yeah, we have the PDA[handheld computer] to do, we have the round sheets [round checklists] to do. (...) If they sleep, or if they're awake you have to put it in the round sheet.

Beatrice:

Uhm, this reminds me of all the recording that we're doing, for every resident that we have. And we usually do some statements every time something happens, that not usually happens every day, like an accident, or falling.

We put it, you know we put it in writing, what you see, what you didn't see...

...this will will give the athourities or some supervisors how to react or how to judge the things that happen, like some falling, or some accidents (...) So these are the kind of (...) materials that the supervisors will use to judge what really happened.

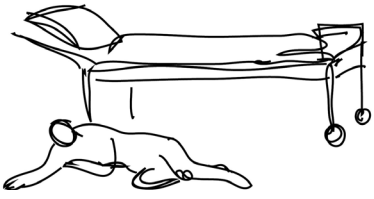


Figure 3 *Excerpt from interview with nursing assistant Florence (top) and Beatrice (bottom).*

Beatrice's account in Figure 3 implied that the documentation was done to pass on information to nurses, supervisors or managers in the healthcare organisation. She explained that in case of an accident, documentation allowed supervisors to 'judge what really happened'.

Through documentation the situation was determined afterwards, by people not directly involved in the situation. This hints at the hierarchical organisation in the nursing home, which favoured those distanced from actual care practices. Berg (1997:1086) argues that 'many rationalities coexist in medicine – and what/whose rationality gets embedded in a protocol is an empirical question' but that 'management needs often predominate'. In this way, documentation can act as a tool for control and surveillance in the healthcare organisation, showcasing what has been done and in what amount of time. The documentation described in Figure 3 exemplifies how work was made visible and known to others in the organisation. The question of visibility of work is important, since it is often synonymous with formal and authorised work (Allen 2014). However, it has been noted that documenting work tends to frame explicit and quantifiable information as more important (Berg 1997). Along these lines, Bowker and Star (1999) point out that in care there are aspects of work done, which do not fit into predetermined matrices, and therefore may become invisible. Yet, Florence (in Figure 3), and other interviewees, talked about documenting 'everything', implying that they perceived the documentation as exhaustive. When a recording system is seen as more or less complete, that which is not accounted for becomes twice invisible (Bowker and Star 1999).

To summarise, nursing assistants talked about materialities as tools to help residents with everyday routines. The completion of these routines appeared central and the documentation of this seemed to emphasise care as tasks, reinforcing the idea of materialities as instruments with certain functions. In addition, the documentation was in itself talked about as something that had to be done, making aspects of care visible to others in the healthcare organisation.

A set of principles for care

The nursing assistants also talked about how to handle materialities, almost as a set of principles, to ensure safe and dignified care. These actions were more or less directly related to guidelines and policies at the unit. For instance, one nursing assistant described making sure that the bathroom floors were dry, that rooms were uncluttered and that residents wore shoes, in case they would attempt to go to the bathroom by themselves. A critique of such approaches is found with Latimer (2018) and Pols (2017) who argue that dominant safety perspectives might overshadow other important issues within everyday activities such as going to the toilet, eating, dressing, or sleeping.

Another example is seen in Figure 4, where Alicia described that she knocked on residents' doors and drew curtains to 'give privacy'. Several interviewees described knocking as the unit's policy. The objective of providing privacy was thereby translated into certain ways of acting, involving how doors and curtains should be handled. Alicia pointed out there was a risk of being reprimanded if they did not knock on the door, suggesting that knocking functioned as an indicator that the nursing assistants complied to certain sentiments. In this way, knocking was not only a matter for the nursing assistant and the resident but also for other people within hearing and seeing distance. In the previous category we discussed visibility in terms of work that was documented and thus made discernible to others after or before the execution of a task. Here, discernibility concerned the audibility and visibility at the moments when doors and curtains were handled. In similarity to the previous category, visibility seemed to enable shared perspectives and understandings of materialities to be established within the care unit.

Still, several interviewees described that some residents were unable to hear the knocking, or that they would not answer because they were unalert. This raises questions about why and for whom the knocking was done. Did the knocking ensure privacy or did it merely signal this to onlookers? Comparably, it has been noted that family members, staff members and managers sometimes perceive outer appearances of residents in institutional care settings as

Figure 4 *Excerpt from interview with nursing assistant Alicia.*

indicators for care quality (Ward *et al.*, 2008). Ward *et al.* (2008) criticise this assumed symbolic value of clothing in care, arguing that this seems to erase other things that residents find important. In Figure 4, Alicia hinted at another aspect of privacy as she mentioned how the pace of touching someone was important if a resident did not hear well. It is possible that actions (such as knocking) that were visible and audible to others overshadowed more subtle gestures. Hence, there could be a potential conflict between what signals privacy on a general level and what might in fact ensure it in a particular situation. In another example from our data a nursing assistant described how a resident, who lived in a shared a room suddenly undressed:

> [she] took off her top, she cover her breast, I say: "No you cannot stay like this, even though you cover, you cannot stay like this" (. . .) I make her sitting down and (. . .) I took a shirt and I put it on her (. . .) it's not a private room".

Although the nursing assistant described resolving the situation, the example serves to illustrate the complexity of privacy and its connections to materialities (in this case, the resident's clothing, breasts and room). Even though the resident was in her (albeit shared) room, the nursing assistant did not allow her to undress. In the field of disability studies, Struhkamp *et al.* (2009) have critiqued the tendency to strive after as much independence as possible, arguing that it is more relevant to ask *which kind* of independence that is desired in a specific situation. From the examples above we could raise similar questions about what constitutes privacy in a situation, how it is supported and for whom. From our data we noted that knocking did not resolve issues of privacy but this appeared to demand continuous attention and negotiation. As Struhkamp (2005) argues, ethical questions in care, such as privacy, should not be viewed as rights as much as material negotiations that could vary from person to person.

The examples in this category demonstrate how materialities became symbolic and predetermined answers of what constituted appropriate care in line with policies and guidelines. It is possible that the tangibility of the material was important because it made routines observable and 'proved' (to colleagues, supervisors, family members) that nursing assistants adhered to certain values.

Caring relationships

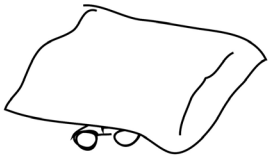
Some interviewees talked about materialities as constitutive of configuring caring relationships with residents. Examples in this category ranged from general comments about residents' preferences of food or entertainment to reflections about how to care for things that mattered to specific residents.

In Figure 5, Lynne talked about taking care of residents' glasses. Lynne explained that she understood the value of this because glasses were important for her personally. This comment can be likened to what Hamington (2004: 56) refers to as an 'internal logic to caring habits'. That is, some caring habits make sense because we assume that it is what we would have wanted under similar circumstances. Instead of advocating a standardised approach to how residents' glasses should be handled, Lynne described how two residents wanted their glasses to be cared for, suggesting that this was important for their sense of identity, which therefore had to be addressed in relation to each person and situation. Drawing on Puig de la Bellacasa (2011) we could also say that Lynne, together with the two residents and their glasses, made the placements of the glasses into 'matters of care' and that this work was not only practical, but affective, and ethical too. Interviewees talked about how residents' relationship with various things could alter over time, indicating that these things were seen as dynamic elements in

Lynne:

Another haha, another circle! Oh, ok this could be glasses! Yes! Yes, that's the glasses (...) the reading glasses...

....Oh, their glasses are important (...) right now, there's a lady uhm, the glasses are always just lying by her (...) when I see her glasses I make sure they're in the case, I put it inside her drawer, beside her, she always get it... because most of the time they're by the bedside (...) And sometimes, you come, in the nighttime and you still see the glasses you know, on their face and they're sleeping so you take it out and put it...



....There is one lady (...) she always like her glasses to be under her pillow, so anytime I make the rounds, I make sure her glasses are right there, you know, beside her pillow //shows with her hands//...

....The glasses you have to take care of because (...) glasses are important to *me*, so for all my residents that are using glasses, I make sure that you know they're glasses are properly placed...

....One likes to place her glasses on, she wants, she likes her - even when you're changing her she's asking "where is my glasses?" she put her hand under the pillow, she likes it under her pillow, beside her

... Then 43, she always place her glasses beside, on the bedside (...) she will open the drawer in the morning to get it, so when I see her glasses just right there by the, on the bedside, I put it in the drawer for her so that nobody will pick up her glasses cause she knows they're in the drawer in the morning.

Figure 5 *Excerpt from interview with nursing assistant Lynne.*

these relationships. This resonates with Mol *et al.* (2010) who write things need to be 'tinkered' with persistently in care. Tinkering involves a sort of experimentation where materialities and situations are adapted to one another. As Barad (2007) argues meaning and matter are inextricably linked, and the property of something does not precede a situation but emerges from it.

It has been suggested that in dementia care, it is important to recognise that identity is embodied and enacted (Buse and Twigg 2014a, Kontos 2004). Along these lines materialities could provide a lens to expand on ideas about personhood in relation to dementia. The importance of drawing attention to this is underlined by Kelly's (2010) concern that expressions of identity are often overlooked and remain unnoticed in institutional dementia care. In our interviews, some participants stressed the relevance of discussing materialities in relation to specific resident with colleagues but it was also explained that such reflections and insights were often passed on casually, for example in the locker room when changing shifts. This suggests that the care organisation did not allocate *time* or *space* for this knowledge. It is also possible that these insights were not acknowledged by managers and nurses because they were not visible to them. This invisibility might have been enhanced as some of these material negotiations were conducted as part of formal care assignments – as seen in Lynne's account of looking after residents' glasses while making the rounds.

In contrast, some nursing assistants talked about transgressing prescribed professional roles. One interviewee described bringing home a blouse that one of her residents was very fond of, so that she could wash it and mend it for her. She asked permission from the nurse to do this, indicating that this was an initiative outside assigned responsibilities. Compared to Lynne caring for residents' glasses, which might remain unknown to others in the unit, the mending of the blouse became partly visible to the nurse through this request. This example aligns with Scales *et al.*'s (2017) study on power structures in dementia care in which they observed that some carers undertook the challenge of individualising care in a more or less subversive way. Mol *et al.* (2011) argue that there is potential in this kind of disobedience as it embodies the creative and generative nature of care practices.

In this category, materialities were portrayed as constitutive of the relationships between residents and nursing assistants. The roles of the materialities appeared to shift over time and some interviewees talked about continuously having to adjust their understanding and handling of things. Compared to the two previous categories, relational insights about materialities appeared to be less visible in the healthcare organisation.

Discussion

Interactions involving seemingly trivial things may reveal important but neglected aspects of care practices (Buse *et al.* 2018a, Cleeve *et al.* 2018, Lovatt 2018, Mol *et al.* 2010, Twigg *et al.* 2013). This article adds to this knowledge, elucidating how nursing assistants understood materialities as part of their work in a dementia unit. Through individual interviews where participants were asked to interpret abstracted illustrations, we conceptualised understandings of materialities as 'tools for care', as 'a set of principles for care' and as 'caring relationships'.

It has been suggested that if healthcare professionals were more attentive of materialities, 'basic' routines could be become important occasions for care (Buse and Twigg 2018, Moser 2011). Our findings in category 3, suggest that nursing assistants to some extent already utilised materialities to create occasions for care, either through partly reconfiguring prescribed tasks, or through transgressing their given roles. Simultaneously, as seen in categories 1 and 2, contrasting understandings existed, which framed materialities as predefined elements

facilitating the execution of tasks along with prescribed ideas of how certain things should be handled. Thus, different understandings not only coexisted but their various objectives appeared to conflict and interfere with one another. Moser (2011) writes that ideally, diverging understandings complement one another, but that relational insights often remain implicit in dementia care. In relation to this, the underlying pedagogical argument and intention of phenomenographic studies becomes applicable (Booth 1997). That is, that articulating various ways that something is understood could facilitate learning and allow individuals to shift perspectives, which could be especially important for the nursing assistants in our study who described materialities from only one or two perspectives. To know about different understandings could be important when developing communication, interprofessional collaboration and clinical practice (Stenfors-Hayes *et al.* 2013). Since we have focused on nursing assistants' perspectives we emphasise that it would be relevant to explore these issues from other viewpoints too. Furthermore, while abstracted illustrations seemed conducive to elicit reflections about materialities, decisions concerning what to illustrate and how, partly determined what the interviewees talked about. Thus, it would be valuable to explore the reflections prompted by other types of images and motifs. It would also be relevant to utilise other research methods. What people *say* might differ from what they actually *do*, and observational studies could yield complementing insights about tacit dimensions of the everyday materialities. We also think that exploring specific care activities in-depth could elucidate additional understandings about the materialities of dementia care.

Our findings indicate that understandings of materialities depended on the organisation of care. Documentation notably seemed to reinforce some understandings, while others remained unarticulated and therefore became less visible. Hence, if the roles of materialities are to be given more attention in care, this needs to be addressed as a question of social practice rather than something merely relying on the choices made by individuals. As Maller (2015) and Shove *et al.* (2012) suggest, it is more constructive to recognise care practices as composed of materialities, competences and meanings, which are inextricably linked to one another. Furthermore, while we problematise how relational understandings of materialities seemed less visible in the care organisation, we are not convinced that it would be beneficial to make these aspects completely visible. Like Allen (2014) writes, there are positive and negatives aspects in making work visible and there can be value in keeping aspects of care hidden so as to protect them from reductionist organisational values (Star and Strauss 1999).

The ways that materialities were understood seemed to have concrete ethical implications for the residents. For instance, nursing assistants described that issues concerning privacy and selfhood needed ongoing material negotiations but they feared reprimands if they did not follow given directives. To act in line with directives, even when there is a dissonance with the actual situation, illustrates how care may lose focus and become 'self-referential', mainly concerned with the wellbeing of the organisation (Vosman and Niemeijer 2017:469). Yet, as mentioned earlier, nursing assistants described sometimes purposively transgressing given directives to accommodate a situation. Thus, they weighed what protocols, documents, guidelines said against what the situation demanded, which has been acknowledged as a reason for healthcare professionals to bend or break rules (Kontos *et al.* 2011, Mondaca *et al.* 2019, Scales *et al.* 2017, Vosman and Niemeijer 2017). Facing such situations, nursing assistants and other healthcare professionals could benefit from collegial discussions and opportunities to share knowledge. Arguably, this could be of particular importance in dementia care where residents tend to have little control and where organisational rules and routines can be experienced as restricting (Farsund *et al.* 2018).

To conclude, this article adds insight into materialities as understood by nursing assistants in a dementia unit. Understanding materialities as instruments was reinforced and made visible

through the healthcare organisation while understanding materialities as part of specific relationships with residents appeared informal and overlooked. Abilities to alternate between ways of understanding materialities in care practices was not dependent on individuals alone but appeared to be a matter of how professional care was organised, structured and materialised. We suggest that it would be valuable to allocate time and space for healthcare professionals to reflect and work on the material aspects of their work, especially the ones less visible in the care organisation. This would allow for recognition (and advancement) of nursing assistants' knowledge about specific residents and everyday situations, encouraging questions about how to care. Importantly, healthcare organisations need to make issues of materialities visible in a way that is not prescriptive, but that enables those involved to act based on the situation at hand.

Address for correspondence: Helena Cleeve, Department of Neurobiology, Care Sciences and Society, Division of Occupational Therapy, Karolinska Institutet, 148 83 Huddinge, Sweden.
E-mail: helena.cleeve@ki.se

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