

No Product is an Island: The Case of Incontinence Pads in a Nursing Home

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Abstract: This paper critically examines product durability through an ethnographic study of incontinence pad usage in a Danish municipal nursing home. By focusing on incontinence pads—which are referred to as “diapers” in this setting—we demonstrate that their durability cannot be understood in isolation from their surrounding environment. Instead, diapers attract auxiliary products, which, when integrated into the care practices of the nursing home, take part in enacting the diapers’ durability in distinct ways. We conceptualize these enactments as either supporting or challenging the durability of the diapers. Combining this ethnographic work with design theorist Arturo Escobar’s interweaving of ontological relationality and design theory, we argue that durability should not be viewed as an inherent property of an object or as determined solely by its human users. Instead, we propose understanding durability as a relational effect that emerges from situated sociomaterial practices. This analytical move challenges modernist assumptions that separate subjects from objects and offers a more nuanced framework for analyzing product durability. Future research on product durability would benefit from adopting this relational approach, as it opens—we hope to show—new ways of thinking and designing with sociomaterial practices and for product durability.

Introduction

Globally, the geriatric population is growing. As a result, the market for single-use disposable incontinence products is also growing. This paper focuses on one of these products—adult incontinence pads. Such incontinence pads are considered medical devices, so they must be European Conformity marked (CE-marked) in the European Union (EU). Producers of incontinence pads must ensure and prove their product’s durability. For instance, incontinence pads are evaluated in laboratory settings to verify that they maintain functionality over extended use and that their material strength endures with prolonged or heavy loads. In a laboratory setting, then, incontinence pads support the most dominant definition of product durability, that is, “product characteristics, such as sturdiness, quality of materials and technical solutions,” which consequently embodies “a more technical perspective on product longevity” (Jensen et al., 2021, p. 2; see also Cooper, 2010).

For the moment, we bracket this laboratory setting because it does not support our aim of

developing a critical perspective on product durability. Instead, we focus on a municipal Danish nursing home. However, this choice should not be understood as us choosing social over technical determinism. We do not intend to simply shift “the focus of [the] investigation of durability from the object (with or without its qualities of enchantment and attachment) to the behaviors, habits, and material expression of the person using it” (Fletcher, 2012, p. 230).

At a nursing home, people and things as well as affective forces and sensory experiences work together to enact care. Agency is distributed, meaning that “agency is not an a priori given feature of an actor but is the outcome of interactions between the heterogeneous actors in the network” (Oudshoorn et al., 2005, p. 86; see also Latour, 2005). Our setting, a Danish nursing home, thus allowed us to explore the durability of incontinence pads as an outcome of how people and things, sensory experiences, emotions, and affective forces connect and disconnect in situated day-to-day practices. It also allowed us to follow design theorist Arturo Escobar’s request to “put one foot in a relational

world (or worlds)” (Escobar, 2018, p. 165). We asked “how does the durability of incontinence pads come into being at a nursing home?” We also asked, “how might an answer to that question aid us in developing a critical view of product durability?”

Methodology: Exploring care and durability at a nursing home

One of this paper’s authors, Ankerstjerne, currently conducts design ethnographic fieldwork (Müller, 2021) at a municipal nursing home in a mid-sized Danish city. She follows and contributes to the work of the nursing home’s caregivers during the day, evening, and night shifts. The fieldworker is interested in how care practices unfold at this nursing home by focusing on the use of incontinence pads (Nicolini, 2009). The reason for this focus is that incontinence pads have significant climate-related and environmental impacts. And, as mentioned, with a globally aging population, the production and use of incontinence pads are expected to grow significantly. Therefore, the questions naturally arise whether it would be possible to use different, less resource-intensive pads, whether it would be possible to use fewer pads, and how these solutions could be implemented without compromising but rather developing existing care practices in caring ways. In terms of incontinence pads, specifically, how might matters of care be harmonized with climate-related and environmental matters?

Our fieldworker conducted her empirical investigations in the context of work on care undertaken in the field of science and technology studies (STS). One point we took from this body of work and seek to bring into dialogue with discussions of product lifetimes and the environment is that technologies and products participate in enacting care. That is, care is not given from one human to another, nor is it purely human. As this body of work suggests, care is enacted in situated sociomaterial practices (see, for instance, Pols, 2023; Puig de la Bellacasa, 2017; Mol, 2002, 2008; Mol et al., 2010). In this vein, Annemarie Mol and colleagues, all key contributors to the field, wrote, “Technologies . . . do not work or fail in and of themselves. Rather, they depend on care work. On people willing to adapt their tools to a specific situation while adapting the situation to the tools, on and on, endlessly tinkering” (Mol et al., 2010, p. 14–15). For our fieldworker, this meant methodologically

eliciting and listening to the stories of the residents, caregivers, and nursing home managers about how “living with” an incontinent body “is done in practice” (Mol, 2002, p. 15). It was about listening to—and sensing in all other possible ways—these stories “in a realist mode” (Mol, 2002, p. 15). Instead of “acting on” (Pickering, 2022) a specific health condition, in this case, incontinence—which has been the focus of health and medical sciences since the modern breakthrough and has led to a vast and often unsustainable range of care products, medications, documentation, artifacts, and technologies—understanding care practices in a realist mode allows us to develop ways of “acting with” (Pickering, 2022) existing care practices in our collaborative attempts at “sustainabilizing” them through “care-full research” (Law & Lin, 2020).

Diapers as attractors of challengers and supporters

As of the time of this writing, our fieldworker had observed and contributed to care work at the nursing home for 160 hours. Building on our understanding of care as enacted through “webby” (Law & Lin 2020, p. 1) and materially, discursively, and socially heterogeneous relations, our fieldworker explored how the “diapers”—the word used for incontinence pads at the nursing home—became connected to and disconnected from a range of other entities in the course of the unfolding of care practices. In the following sections, we offer accounts of how this happens. We show how diapers in the nursing home setting attract the use of other products and equipment and how these other items both challenge and support the diapers’ durability.

Diapers as attractors

During an evening shift, our fieldworker observed and assisted a caregiver in preparing a resident, whom we will call “Mrs. X,” for bed. For Mrs. X, as for many of her fellow residents, wearing a diaper goes along with using a commode chair and with using a wheelchair to get around. In preparing Mrs. X for bed, the caregiver first utilized a lift to move Mrs. X from her wheelchair to the commode chair. When on the commode chair, the caregiver placed a blanket over Mrs. X’s lower body to keep Mrs. X warm and to protect her modesty. The caregiver also drew the window curtains. Our fieldworker observed that the caregiver always did this when conducting intimate care tasks.

The caregiver asked our fieldworker if she could stay with Mrs. X while she was placed on the commode chair so that the caregiver could attend to other matters. “Yes,” our fieldworker answered. Before leaving Mrs. X’s apartment, the caregiver turned on the television. “Mrs. X likes to watch the news while on the toilet,” the caregiver explained. Mrs. X started touching and fiddling with the blanket covering her as the caregiver left the room. Our fieldworker rearranged the blanket three or four times. Our fieldworker then decided to hand Mrs. X the straps that are part of the mechanical lift to give Mrs. X something for her hands to play with, after which Mrs. X left the blanket in place.

The caregiver returned 20 minutes later. She used the lift to release Mrs. X from the commode chair and enable her to clean Mrs. X with disposable wipes and a washcloth. Next, the caregiver placed an incontinence pad on the bed. Then, assisted by the caregiver, Mrs. X put on her nightgown, and the caregiver transferred her into bed using the mechanical lift. The caregiver applied a body lotion to Mrs. X’s legs.

The caregiver removed the plastic bag from the commode chair and emptied its limited contents into the toilet. That plastic bag—and the remaining waste—was put into another plastic bag in a wastebasket. The caregiver took this plastic bag with her as she left Mrs. X’s apartment and put it in a garbage can in the nursing home’s common area.

At the nursing home, and, more specifically, in Mrs. X’s apartment, the durability of the incontinence pads she uses cannot meaningfully exclusively be attributed to the incontinence pads. Many other products are attracted and enrolled to support the functioning and durability of the incontinence pads used in Mrs. X’s day-to-day care: a lift, a wheelchair, a commode chair, blankets, curtains, a television, lift straps, disposable wipes, washcloths, and latex gloves. This combination of supportive items suggests that when developing a critical perspective on product durability, we should be skeptical of approaches that urge us to isolate the product under exploration.

Attracting challengers

All caregivers at the nursing home carry a mobile phone. The caregivers receive calls from residents and colleagues who need everything from urgent help to assistance with simple tasks. During day and night shifts, the caregivers’ phones do not ring that often. During day shifts, more caregivers are on call.

And, during the night shifts, the nursing home calms down. However, during evening shifts, when fewer caregivers are on duty, the caregivers’ phones do ring quite often.

Several caregivers talked to our fieldworker about their phones and their ringing. The caregiver who looked after Mrs. X explained that “it’s damn annoying” if her phone rings during intimate care, such as the changing of a diaper, as she must take off her latex gloves to answer the phone. In this setting, phones and latex gloves do not collaborate. Phones dominate latex gloves and affect the sensitive and intimate practice of changing a diaper.

A second caregiver told our fieldworker that the nursing home will be getting new phones for the caregivers. On these new phones, the caregivers can choose their ringtone. The ringtone of the current phones is very stress inducing. “It almost sounds like a machine at McDonald’s,” the caregiver explained. Some residents react negatively to the ringtone by accidentally kicking at the caregiver during a diaper change. This reaction is especially common for residents with dementia or other cognitive difficulties. The caregiver described a workaround she had developed. To keep residents’ hands busy and minds occupied during diaper changes, she gives sensory items to them to—hopefully—prevent the residents from kicking her—advertently or not. A third caregiver described another workaround. She leaves her phone in the hallway during intimate care tasks to avoid making the residents anxious. Anxiety disturbs their sleep and can impact their well-being during the night and into the next day.

For the diapers to perform up to their expected durability as tested and evaluated in a laboratory setting, they must be placed correctly. A ringing phone and a leg that kicks out as a response make this correct placement difficult. Furthermore, the resident wearing the diaper needs to leave it in place. Anxious and cognitively impaired residents might fiddle with a diaper or even tear the diaper apart.

Diapers and diapering practices are associated with other products as well as challenges from other locations—such as a need in another part of the nursing home being made present in a resident’s room through a phone call. These products and practices are also associated with time-related challenges, such as concerns about how a lack of sleep will impact the residents’ well-being the next day. Therefore, at a nursing home, product durability

is a precarious achievement. An achievement that hinges upon the coordination of multiple things and temporalities. Approaches for engaging critically with product durability should enable us to understand this coordination of things and temporalities.

Attracting supporters

One night, our fieldworker learned that at this specific nursing home, the caregivers wear pajamas at night. “Why?” she asked one of the healthcare assistants on duty. The healthcare assistant told her that the staff wearing pajamas visually lets the residents know it’s nighttime and, therefore, time to sleep.

The healthcare assistant described a specific resident, Mrs. Y, who often wandered the halls at night. Along with many other residents, Mrs. Y has dementia. She had typically been quite difficult for the healthcare assistant to manage and collaborate with. For instance, Mrs. Y refused to allow the healthcare assistant to guide her back into her apartment by using touch. It is difficult to enact care when touch is excluded.

One night, Mrs. Y—as usual—was walking the hallways. However, when Mrs. Y saw the pajama-wearing healthcare assistant, she said: “Did I wake you up? I’m so sorry! I’ll go back to bed now.” Moreover, with the pajamas enrolled in the nightly care practices, Mrs. Y allowed the healthcare assistant to touch and guide her.

Our point again is that, at a nursing home, product durability is a precious achievement. Further, product durability can be achieved through creative and “artful integrations” (Suchman 2002, p. 99) of supporting products, such as integrating pajamas into the caregivers’ work at night. Yet another way of developing a critical view of product durability would be to look for such artful integrations, understand how they support product durability, and understand how they may be harnessed to advance less resource-intensive ways of caring and living.

Product durability in relational worlds

Recently, several scholars within the social sciences, humanities, and design research fields have begun to conceptualize the sustainable transitioning of our societies as an ontological issue (see, for instance, Escobar et al., 2024; Tonkinwise, 2023; Mol, 2021). Escobar, Osterweil, and Sharma, for instance,

suggested that finding answers to today’s societal challenges—sustainable transitioning being one of them—is not only about epistemology, that is, “how we know” (Escobar et al., 2024, p. 35), but also “what we think about reality, about the contemporary modes of being human, about the relation between being, knowing, and doing” (p. 36), that is, ontological issues. Escobar, Osterweil, and Sharma further suggested that at the root of current climate and environmental crises lies the ontological assumption of “the radical separateness of objects and subjects, of selves from the environment” (p. 36). The authors urged, instead, that we start thinking relationally to understand “the radical interdependence of all things” much better (p. 36).

Linking the points from Escobar and colleagues to the dominant understanding of product durability, we see that this understanding of product durability is a term of separateness. That is, it forcefully delegates the question of durability to the product itself, thereby rendering its answer a technical one, or to the people using the product, thereby rendering its answer a social one. One way of developing a critical perspective of product durability would, thus, be to attempt to loosen its tight connections to modernity’s ontological commitment to objects and subjects as separate.

In an attempt to put some empirical flesh on this otherwise rather esoteric argument about radical interdependence, we visited a nursing home to focus on the use of diapers in such a setting. Diapers are never isolated in a nursing home. Aging legs inadvertently kick, phones ring and ring and ring, and pajamas can calm down a restless resident. Durability in care is for people and things akin to withstand or absorb, deal with, move on from, or move with such challenges. That is, at a nursing home, durability in care as a day-to-day sociomaterial practice is the concern, not product durability.

What do these realities imply for our understanding of the notion of product durability? The nursing home and the care practices that unfolded there urged us to leave behind any ideas of standalone products and to ask a different question: what if we understood product durability as performed through product ecologies? Further, in care practices, the temporal durability of a diaper is somewhat unruly. This is not because the diaper is poorly designed but because other products—the pajamas or phones, for instance—perform

other temporalities and intervene in the diaper's temporality.

We hope to have demonstrated that future work on the notion of product durability can fruitfully begin to tackle the thorny question of how the material and the temporal relate and what kinds of effects their interrelations have.

Conclusions

In this paper, we sought to develop a critical perspective on product durability by visiting a nursing home to focus on understanding the use of incontinence pads in this setting. Second, we related our findings to the work on relationality by Escobar and colleagues (2024). We showed that the durability of incontinence pads is a precarious achievement in the nursing home setting. This is due to the incontinence pads never being separate and isolated but rather, in day-to-day care practices, incontinence pads attract and are associated with many other products and items that can act as challengers and supporters of the incontinence pads' durability.

These insights, however, align poorly with the dominant definition of product durability as either being inherent to the product or in people's use of said product. This misalignment led us to suggest a shift from product durability to durabilities and transformations in sociomaterial practices as a new research strand within the field. Such a shift also implies developing a better understanding of how the material and the temporal relate in caregiving contexts.

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