

How do user practices and connected narratives of sense making affect product longevity?

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Abstract: This study investigates how user practices and connected narratives of sense making affect product longevity by drawing on practice theory and the narrative paradigm. Empirical basis is provided by qualitative interviews with consumers about their use of electronic devices. By zooming in into the everyday life of consumers the six common narratives newism, functionality, sufficiency, quality, repair does not work, and planned obsolescence are described. This analysis outlined how the narratives are used as justification for practices regarding product lifetimes. The narrative of planned obsolescence, for example, shows how certain attributions of meaning can be connected with life-extending or life-shortening practices. The perspective on user narratives reveals that while consumers may act inconsistently overall, their practices may well make sense when viewed and understood as embedded in the social context and in relation to other narratives. The discussion explores how sustainable narratives which characterizes devices as valuable might promote life-enhancing practices. In the conclusion, we zoom out to outline the role of narratives in the linear economy.

1 Introduction

Product longevity is an important factor for sustainability - especially for electronic devices - yet products often see shorter lifespans. The lifespan of devices depends not only on the product design; it relies significantly on user practices too. Studies show that users act inconsistently with regard to their attitudes and actions towards the different phases of use like acquisition, use and disposal (Echegaray, 2015; Evans & Cooper, 2010). This study aims to investigate the relationship between "doings and sayings" (Schatzki, 2000, p. 56) as regards to product lifetime by answering the question: How do user practices and connected narratives of sense making affect product longevity? The basic assumption is that usage practices are often routine (Jaeger-Erben, Winzer, Marwede, & Proske, 2016) and are supported by narratives that provide orientation and give meaning to actions. By zooming in into the everyday life of consumers, common narratives that accompany everyday consumption practices are presented. In the discussion, the connection between practices and narratives is briefly outlined. In the conclusion, we will be zooming out to discuss the role of narratives in the linear economy.

2 Bringing social practices and narratives together

Practice theories assume that structure influences actions and actions form structure (Giddens, 1984). Thereby, they emphasize the materiality of the social and cultural on the one hand and the implicit, informal logics of the social life on the other hand (Reckwitz, 2003). Individuals are conceptualized as the carriers of practices (Reckwitz, 2003), using artefacts meaningfully therefore needing a specific know-how. Based on the actor-network-theory (Latour, 1994), artifacts are ascribed a certain degree of agency – whether as a reference object, as part of the negotiation between people or as a teammate in the practices – and they are conceived as part of practices as material arrangements and providing context for practice (Brand, 2011; Hillebrandt, 2014; Reckwitz, 2002; Reckwitz, 2003). Almost all social practices are associated with consumption, since the performance of practices often requires consumption (Warde, 2005). Schatzki points out that "sayings and texts contribute to what makes sense to people to do and the intelligibility of things in the world" (Schatzki, 2017, p.134).

The narrative paradigm (Fisher, 1984; Fisher, 1985) is based on the assumption that humans connect events in a narrative way. The connection between episodes constitutes meaning. Narratives, in turn, influence how the world is perceived as they convey values and emotions (Richardson, 1990). According to Wagenaar, narratives give practices coherence in time and in space. They reduce complexity and grant certainty of action by providing the basis for judging actions (Wagenaar, 2011). Narratives play a strategic role in constituting and stabilizing society (Müller-Funk, 2008). From a practice theory perspective, the epistemic question is not asked (is it truth?), instead it is interesting what function the narrative takes within the network of social practices (Bueger, 2014; Neumann, 2002).

3 Methods

To investigate the affect of user practices and connected narratives of sense making regarding lifetimes of electronic devices, 15 qualitative in-home interviews with users in Germany from different social segments (age, gender, education level, size of residence) were conducted. The sampling was based on theoretical sampling according to the methodology of the grounded theory. Each interview lasted about 90 minutes. The topic was the use of electronic devices with a focus on smartphones and washing machines. Data was analyzed using grounded theory (Bryant & Charmaz, 2011; Strauss & Corbin, 1996).

4 Results

The interviews indicate that devices are mostly gradually devalued by the user during the use phase (Hipp, 2020). The devaluation of devices was not only due to partial defects and aesthetic wear, but with regard to symbolic meaning and expectations too. The devaluation of used devices was mostly not expressed directly, but is revealed through the usage practices and connected narratives. For example, narratives and not fact-based calculations were predominantly used to justify what lifespan consumers expected, depending on their experience of how long devices had lasted in the past. How long the expected lifespan was estimated influenced in some cases how carefully devices were handled and whether repair was considered in the case of a defect.

Interviewees themselves connect practices and narratives and traced them to three origins: memories of experiences with devices, stories from friends about their device use, and narratives reproduced by media. These stories about longer and shorter periods of product lifetimes and about the meaning of products function as a reference system that structures social practices through sense-making. People's stories reflect wider social narratives on durability, usability and object-related values and serve as justification for different actions. In the interviews, these stories correspond with the users' self-image and perspectives on devices too. People described themselves, for example, as powerless consumers, advice seekers, smart repairers, rational users or early adopters. Devices are pictured, for example, as helpers, best friends, logically acting machines, invisible infrastructure and ticking time bombs. Product designers are characterized as great inventors, superficial and deceivers.

In the following, six main narratives and connected practices are presented, that were frequently mentioned in similar form in the interviews:

- **Newism:** early adopter narrative; promotes new purchases through passion for innovation; found in advertisements and self-description of users
- **Functionality:** rationality narrative; device as infrastructure for the management of everyday life; users' self-presentation as benefit-maximizing actor; influence on product life span is linked to benefit-cost calculation
- **Sufficiency:** renunciation narrative; own needs are negated, either because of criticizing digitalization or sustainability in order to distinguish from "throw-away society"; serves as justification for ownership of few devices and little usage; can have a resource-saving effect
- **Quality:** Narrative of differentiation of devices according to their product design; self-image as connoisseur of quality; used as explanation for spendings on high quality devices, often combined with willingness to do time-consuming research; often also higher willingness to repair
- **Repair does not work:** Narrative about unsuccessful repair; frustration connected to useless effort and high repair cost; used as justification for not repairing, sometimes

strengthens intention to consider reparability in purchasing decision

- Planned obsolescence: victim-perpetrator narrative; according to which manufacturers intentionally build predetermined breaking points into devices in order to increase sales; justification used by consumers to buy cheap devices and neglecting repair, as well as repair themselves to check for built-in obsolescence

How narratives as practices of saying are connected with the practices of doing is complex, because Interviewees mention and combine narratives depending on the setting, although narratives can appear contradictory from an object perspective. Thus, no straight causal connections can be drawn between the narrative and the practice of doing. For example, in the interview, Person A attributed the defect of a device to intentionally installed predetermined breaking points by the manufacturers (narrative planned obsolescence). „*And I think it's just a bit mean, because you can manufacture these devices nowadays, so that they are indestructible, but it is not done, because then simply the economy suffers from it, because then the company then says: Yes, then I sell to everyone only one washing machine in life. That's not profitable.*” He argued that devices are always manipulated, and repairs are generally not worthwhile¹, which he additionally justified referring to bad experiences (narrative repair does not work). In another part of the interview, this person described that he had some high-priced devices because this brand would last longer and justified this with reported experiences (narrative quality). The obvious contradiction was not noticed by the person himself.

Person B too believed in the narrative of planned obsolescence. He checked defective devices for manipulation by opening them himself. He justified his commitment to repair by saying that sufficiency is important regarding sustainability. Person C was not sure, whether planned obsolescence exists or not. He stated that as long as he does not experience a premature break down of a device himself, it does not affect his actions.

¹ The hypothesis that the belief in planned obsolescence can promote lifespan-shortening consumption practices was a conclusion of a study in Vienna too (Wieser, Tröger, & Hübner, 2015).

Anyway, it is less important to him to use his equipment for a long time, because he is very interested in technical innovations (narrative newism). To sum it up, the narrative of planned obsolescence can be – like other narratives too – interwoven with practices in different ways, depending on settings, and other connected narratives.

5 Discussion

Analyzing the connection of narratives and practices illustrates that people's actions are less likely to follow a stringent logic overall, but are embedded in the context. Everyday narratives about product use can become deep convictions, but they are constantly reproduced or modified by practical experience. Narratives are not fixed, but are told and modified in different ways, depending on the setting and the audience (Gubrium & Holstein, 2010). Studies indicate that consumers often express a strong interest in long product use, but still behave differently (Echegaray, 2016; Evans & Cooper, 2010; Wieser, Tröger, & Hübner, 2015). The “attitude-behaviour gap” often noted in social sciences (Perry & Chung, 2016; Shaw, McMaster, & Newholm, 2016) is here replaced with taking a practice theory perspective (Shove, 2010; Spurling, McMeekin, Southerton, Shove, & Welch, 2013) and embedding social practices back into the social settings in which they are performed, and are coupled with connected narratives.

When people tell stories about their possessions, they are also talking about their own identity as moral agents in society. Humans are not only consumers, but also “producers of cultural displays and co-constructors of meaning” (Hurdley, 2006), p. 13). Overall, it can be said that narratives that occur together with short periods of use predominantly portray a rather negative image of devices. In such narratives, devices are associated with a rapidly declining symbolic value. The devices are considered to be less robust, hardly repairable and beyond the user's control. Narratives that are connected with long periods of use (“sustainable narratives”), on the other hand, often convey a rather positive image of devices. Such sustainable narratives sketch an image of robust and repairable devices that the user can understand and influence, and whose ascribed symbolic value is maintained for a

comparatively long time. Meanwhile, notions of convenience, money, time efficiency, and practical know-how are woven into the narratives and are shaping the options of more or less sustainable consumption.

Studies indicate that narratives might be more convincing than fact-based argumentation (Winterbottom, Bekker, Conner, & Mooney, 2008), which is why narratively composed reviews might have a stronger influence on purchase intentions than fact-based ones (Hamby, Daniloski, & Brinberg, 2015). Fischer sees a strong potential for sustainability communication, as storytelling can be used to explain complex issues in a simplified, low-threshold way. However, he also mentions the risks, because simplifications can lead to misconceptions (Fischer, Schäfer, & Borner, 2018; Fischer & Storksdieck, 2018).

6 Conclusions

The paper has shown that practice theory combined with a focus on narratives offers new perspective beyond the often lamented "attitude-behavior gap" that can help to better understand how users embed their usage experiences and the stories told by media and friends about short and long product lifetimes into structures of meaning. This understanding, in turn, can help develop new narrative communication approaches and strategies to support long product lifetime.

In this regard, not only product designers influence product lifetimes of device, the stories conveyed in marketing might influence behavior too (Harmon & Mazmanian, 2013). Overall, there are a lot of factors which affect the lifetime of a device like product design, innovation cycles, intensity of use, contextual factors like repair infrastructure, and user competences. However, it seems obvious that social narratives on material objects, their "proper lifetime" and associated values also develop a practical relevance, similar to a self-fulfilling prophecy, because: only those who try to repair a device can experience that the repair was worthwhile.

By zooming out and looking at the dominant economic regime of linear production, parallels between the narratives of everyday product use and the prevalent narratives in current policies for innovation and technological development can be made. The process of product use and lifetime is accelerated and driven by powerful and influential narratives on

the privilege of short-term monetary value over long-term social or ecological value and the predominance of novelty and acceleration over reproduction and durability. However, sustainable narratives can be found in examples of social innovation like repair initiatives, everyday practices of care, and current policy strategies for the Circular Economy. These narratives alone will not change the consumption pattern, but together with product innovations supporting longevity, with a transformation of the provision systems, and with settings and knowledge, narratives can play a significant role in transforming consumer culture.

Narratives circulate through private conversations as well as through media reports, depending on whether they are fitting to existing narratives and worldviews (Andrews, 2002; Bueger, 2014; Kruck & Spencer, 2014). How narratives could influence lifetime enhancing practices remains open to further research. One strategy could be to portray old devices as usable and valuable to normalize long product lifetimes. For this purpose, a turn to communication studies and especially to the wide-ranging research on framing theory seems promising (Chong & Druckman, 2007; Dewulf et al., 2009; Yang & Hobbs, 2020). Framing emphasizes aspects of a phenomenon and excludes others to create a specific view that is not only associated with a causal relationship and a moral judgment, but also suggests specific actions (Entman, 1993, p. 52).

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