12 Age(ing) and things – methodological perspectives

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This chapter sketches the theoretical foundations for researching material things which arise from the social and cultural sciences. It offers a brief introduction to material culture studies and science and technology studies and presents approaches toward and findings on material things in gerontology. The chapter sets out how to investigate material objects and look into their meaning for age(ing) and their part in the constitution of age and ageing. To this end, it draws on the analysis of an object within the ethnographic study “TechnoCare”. It reveals how material things co-produce age and ageing in a society which is making increasing use of assistive technology. Finally, the potential of such a focus in studying age and ageing is discussed.

The chapter demonstrates that studying material things can be used to pinpoint the role which objects play in constituting old age. This is possible if things are not merely examined as resources for older adults, or characterized only in terms of their function, but are also seen as participants in socio-material practices. This is precisely how associated societal issues and social implications can be addressed.

Introduction

Things are found everywhere, including in the lives of older adults. However, it is only in recent years that researchers of age and ageing have begun to study things in old age from a social and cultural science perspective (e.g., Twigg, 2013; Endter and Kienitz, 2017; Kollewe, 2017; Höppner and Urban, 2018; Alftberg, 2017). In the social and cultural sciences, by contrast, interest in things has greatly increased in recent decades in the course of the “material turn”. A small number of studies on old age and ageing include these perspectives, often inspired by material culture studies and/or science and technology studies (STS). Studies of this kind analyze the role which things play in age(ing), how older adults interact with things and the role things play in “doing age”.

This adds to the conventional perspectives adopted in gerontology. Until now gerontological research has mainly focused on social relationships and interactions between human beings. Although material objects have sometimes been taken into consideration, they have largely been seen as part of an environment which needed to be designed to give old people the highest possible quality of life. In contrast, recent gerontological research echoing the “material turn” has mostly been concerned with how age(ing) is produced in socio-material practices.

At the same time, this relatively small but growing interest in things in gerontological research raises the question of which methods can be used to collect data on objects and their meanings and how people and things interact. In gerontology and ageing studies,

however, this debate on methods and methodology is still in its infancy. As yet, there are no works providing an overview of corresponding methods, or practical instructions for putting any such perspective into operation in actual research designs.

From a perspective informed by material cultures studies and STS, this chapter thus describes how objects and their role in the production of age(ing) can be studied, including the methods which can be applied. First, a short overview is provided of material culture studies and STS. Then some studies of material objects and their role in later life from a cultural and social science perspective are depicted. This is followed by a presentation of a methodological approach of how to investigate things as parts of socio-material practices, their materiality and meanings. Experiences and findings from an ethnographic case study named “TechnoCare” add a concrete dimension to this depiction. The example taken is a socio-technically networked, sensor-based system for monitoring older adults living in private households, mostly alone. Finally, there is a discussion both on the opportunities which the study of material things opens up for gerontological research, and on the challenges and limits it presents.

Material culture studies and science and technology studies

The interdisciplinary domain of material culture studies is a heterogeneous field of research linked by a focus on things as an important component of social life and of cultures (Tilley, 2006, p. 1). The researchers, mainly from cultural studies, are interested in dialectical relationships between people and things: what do people do with things and what do things do to people (Tilley, 2006, p. 4)? In the 1970s, influenced by structuralist and semiotic approaches, scholars of material culture studies began to intensively examine what things meant to people. Objects were often regarded as signs or symbols and treated as similar to language (Hahn, Eggert and Samida, 2014, p. 8). However, for some time now, objects are no longer viewed primarily as bearers of meaning; instead, their haptics and materiality are coming back into focus (cf. Hicks, 2010, p. 75f.). The question is now also asked of what things “do” (Hicks, 2010). Among other things, this involves linking approaches from hermeneutic phenomenology with elements from Latour’s Actor-Network Theory (ANT), which emerged in the context of STS (Hicks, 2010). Currently, there are calls from the field of material culture studies for objects’ various complex facets to be identified by viewing things from different perspectives, focusing on their ambiguities and contradictions (Hahn, 2018, p. 17).

Meanwhile, STS (e.g., see Felt et al., 2017) deals with the (natural) sciences and technology and how they come about in a societal context. Taking a social constructionist perspective, this starts out by establishing that technology is not neutral and objective, but instead an element of socio-cultural contexts and practices (Bijker and Law, 1997, pp. 3ff.). At the same time, technology requires or enables certain behaviors because preconceptions of users, of cultural norms and of values are inscribed into technology. Technology therefore affects people’s behavior and, thus, in the long run, social structures and knowledge (Akrich, 1997, p. 207). Proponents of ANT called for the social constructionist perspective to be left behind (e.g., see Latour, 1995; Callon and Law, 1989). Adopting a relational perspective, for example, Latour advocates an approach which examines humans and non-humans (animals, artifacts etc.) in the same way. He sees objects as participants in actions, for example, by enabling, preventing, prescribing, authorizing or suggesting them (Latour, 2005, pp. 71ff., 83). Seen in this way, things have agency or are a constitutive element of a relationally understood agency.

Studying material things in old age from a social and cultural science perspective

Within the study of age(ing), some investigations have taken inspiration from material culture studies and STS. They explore the question of what role materiality – understood as things and sometimes also as bodies – plays in age(ing) and in the production of old age. These studies not only focus on the function which things serve and what they mean to older adults, but often also examine how people and things interact, and how things are embedded in societal discourses and ideals, e.g., that of anti-ageing.

This developing field within the study of age(ing) is sometimes known as “material gerontology” (Höppner and Urban, 2018). It is characterized by a variety of influences. For example, researchers take their lead from social constructionist paradigms, approaches based on the theory of practices, post-modernist theories and the perspectives of new materialism. This means that material gerontology takes on a different focus from, for example, the interdisciplinary field of environmental gerontology (e.g., see Lawton, 1977; Wahl and Oswald, 2010). Influenced by environmental psychology, for some decades now the latter field has delved into issues related to how people are connected to their environment in old age. The focus of such research has often been on (living) space. In recent years, new technologies have also aroused the interest of environmental gerontologists.

Studies falling under material gerontology deal, for example, with what objects mean to older adults and their construction of identity, e.g., using clothing (Twigg, 2013). Some authors explore the role which objects play in the context of care (e.g., van Hout, Pols and Willems, 2015; Artner et al., 2017). One example is an investigation into how things are sorted out when someone moves into a care institution (Depner, 2015). Research has also revealed how objects co-produce care in care institutions (Artner and Atzl, 2016; Depner, 2017; Artner, 2018). The importance of objects when caring for and supporting people with dementia has also been shown (e.g., Buse and Twigg, 2014; Depner and Kollewe, 2017). In addition, there are some studies on new technologies used in old age (e.g., remote monitoring technologies); influenced by STS, these focus on the relationship between technology and society. Studies of this kind have yielded insights into the social and societal implications of such technologies for the elderly and for shaping old age in society (e.g., Kollewe, 2017; Urban, 2017; Aceros, Pols and Domènech, 2015; Mortenson, Sixsmith and Woolrych, 2015; Mort, Roberts and Callen, 2013; Pols, 2012). They frequently examine power and aspects of domination. With their critical perspective grounded in basic research, studies of this nature have a different emphasis compared with mainstream applied and evaluation research, which primarily present technologies of this type as a solution to the challenges of demographic change.

Analyzing objects: methods

As set out above, the study of material things takes place in an interdisciplinary field and has emerged from widely differing starting points. Accordingly, the different disciplines that deal with material things (e.g., archaeology, social anthropology, art history, museum studies, sociology, psychology) have developed different methods for analyzing objects (cf. Hahn, Eggert and Samida, 2014). After all, different questions are in the foreground when analyzing a painting than, for example, when investigating how people and technology interact. Depending on their theoretical and methodological inclinations, researchers thus use different methods to collect and analyze data. In qualitative studies, for example,

participant observation and interviews are frequently conducted. This data is then, for instance, used to create a “thick description” after Geertz, or analyzed based on ethnomethodological conversation analysis or grounded theory (cf. Depner, 2017, p. 208). While approaches of this type can be valuable to gather data on how people use things, and how people and things interact, most are not geared to investigating things in terms of their materiality (Depner, 2017). That requires approaches emerging, for example, from the way in which museum studies deal with objects. The description of an object, for instance, starts out from a thorough analysis of the item in question. Building on this, the context of the object is then considered.

The research questions differ depending on the research interest and the researchers’ theoretical perspective. To paint a clearer picture of the different steps taken during object research, the methodological description is now followed by an illustrative case example. Following the example set by STS, the qualitative “TechnoCare”¹ study (Kollewe, 2017; Depner and Kollewe, 2017) explored the question of how care is produced involving assistive technologies. The study scrutinized the practices into which the objects in question – remote monitoring technologies – are integrated, and investigated the meanings ascribed to these objects by older adults, their relatives and social workers. It also took into account the societal context and the discourses into which the objects are integrated.

Investigating objects

As things cannot usually speak for or about themselves, the analysis of objects involves on one hand deriving information about the thing from its materiality and form, and on the other collecting information about the context in which it is or was used (Ludwig, 2011, p. 5f.). Objects are, after all, polysemic (Barthes, 1988 [1966]) and cannot simply be “read” to extract a single, clear meaning. This means that it has to be studied, for example, on how a thing is used and how it is integrated into an ensemble of objects. This is the only means of reconstructing whether and how a thing plays a role in practices and whether people attach a certain meaning to it.

How are things chosen for investigation?

Especially in the countries of the Global North, older adults are surrounded by a variety of objects – e.g., mobile phones or handbags – some of which they actively use. Which objects out of this large number of things are selected for closer examination in the context of research depends primarily on the researcher’s question. For example, if the research interest is on care, then different objects play a role compared to an investigation into leisure activities. In addition to this, the specific researcher and her or his sensitivity to the relevance of certain objects affects the choice of thing (cf. Froschauer, 2009, p. 330). One approach which lends itself to deciding which objects should be examined more closely in their context is participant observation. When observing certain situations, researchers notice which objects are used, and which are not. Another approach is ethnographic discussion or qualitative interviews, which can be used to ascertain which objects people consider relevant for certain actions or processes; or which objects are ascribed meaning. Participant observation combined with ethnographic discussion is a particularly effective means of drawing researchers’ attention to what are sometimes unexpected objects. However, alongside this inductive approach, it is also possible to proceed deductively. This means that a certain group of objects is already selected when developing the research question.

The description of an object

Following the selection, the original object in question is precisely examined and described. This includes the object's function, form, color, size, material, feel, date of production and any signs of wear and tear or texts written on it. Also, as things are rarely alone – they are usually part of an ensemble of things – the question must be asked how objects are or are not related to other things. This description is written down. The question is then asked of what conclusions can be drawn from this first descriptive step. Might the description offer an indication of usage practices, what the thing could mean, or any connections with other things and possibly discourses?

The object in its context

The next step is to reconstruct the context of an object. To this end, a record must be made of how the object is used in everyday life, e.g., using ethnographic methods such as participant observation, (ethnographic) interviews, photographs and videos. In other words, methods are used which have been tried and tested during research into objects (technological and otherwise) and work processes (e.g., cf. Knoblauch, 2009; Tilley, 2001). Moreover, written documents and images are analyzed which refer to the object in question (e.g., advertising material, public and political discourses). This can reveal how objects are connected to other things, or to various societal fields and topics such as economics or politics. It is recommended that a heterogeneous team interprets interviews and other documents to avoid any hasty assumptions being made about the objects' meanings and interpretations (cf. Froschauer, 2009, p. 332).

If there is a research interest in the different stages of an object, for example, from its production to its destruction, in the different ways it is used, the different meanings ascribed to it or the different ways in which it is evaluated, one method which can be used is to create an object biography (Kopytoff, 1986). This type of investigation of the different stages and contexts an object goes through has proven particularly useful with things used in various historical or societal contexts, such as historical or ethnographic objects integrated into museum collections.

One inspiring approach which can be used to analyze the relationships between people and objects, how things are integrated into practices and how they are interwoven with discourses is Adele Clarke's situational analysis (2012). This method adds postmodern perspectives to Glaser and Strauss's grounded theory (1967). For example, when analyzing situations, Clarke includes discourses, power relations and non-human actors, borrowing from Foucault and ANT. She combines the classical methods of grounded theory (such as coding empirical data and memoing) with the creation of various maps. The first maps are intended to depict important human and non-human elements of the research situation, for example. They also document discursive, historical, symbolic, cultural and political aspects. The goal is to analyze the relationships between the elements (Clarke, 2012, p. 38). The two subsequent maps are intended to determine social arenas and discursive positions (Clarke, 2012, *passim*). The idea is thus, for instance, to use a situational map to visualize not only the things but also the discourses connected to them, along with political and economic elements and socio-cultural aspects.

Case study: "TechnoCare"

The "TechnoCare" study at Heidelberg University (Germany), which was realized from 2014 to 2017, focused on the question of how care is organized using assistive

technologies. Observations were made of how care is produced in an arrangement involving older adults, their relatives, the social services and technology. The study's specific example was two different activity monitoring devices, both of which are currently being introduced into older adults' households in Europe. These systems combine personal alarm pendants, already a very familiar concept, with various sensors which register movement. These sensors are designed to recognize whether there are "significant deviations" from what is considered a person's "normal" daily schedule. The device which I am focusing on here is designed to flag up a possible emergency (for a more detailed presentation of the study, see Kollewe, 2017). The following paragraphs outline a brief description of the object, which builds the foundations for a subsequent analysis of the object as part of practices and in relation to societal discourses.

Brief description of the monitoring device

The sensor-based monitoring system analyzed here consists in several things that are connected in a network:

- 1 a motion sensor,
- 2 a door sensor,
- 3 a base station connected to the Internet,
- 4 a computer,
- 5 a smartphone,
- 6 an app for the smartphone or the computer.

All of these are objects that were made at the beginning of the twenty-first century and are connected to each other via the Internet or radio waves. This description is only a very brief outline of the most important components.

The *motion sensor* consists of a white, square plastic box. On it there is a plastic hemisphere which looks like frosted glass, i.e., not transparent, but translucent. The motion sensor is placed in a central location in the person's flat where there is "normally" a lot of everyday movement, e.g., in the hall or living room. This sensor registers the movements of the person or people in the flat.

The *door sensor* consists of two small white, rectangular plastic boxes. These two parts are attached to the door frame and the door so that one is positioned directly over the other when the door is closed. This sensor records the door's movements, i.e., whether and when it opens or closes. One notable point is that the sensors are designed and installed so that they are as unobtrusive as possible to the observer: they are relatively small and white, so that they do not stand out against a light background.

The data collected by the *motion* and *door sensors* are sent to a *base station*. This little black box, reminiscent of an answering machine, is usually placed next to the telephone. From there, the data is sent via the Internet to a cloud, where it is processed and then visualized in the form of information. The information is then sent as a message to one or more previously nominated responders, for example a monitoring center and/or a relative.

The message arrives on the *computer* or *smartphone* if the corresponding program or *app* is installed there. The message consists of text and a symbol informing the recipient that there has been "activity" or "inactivity" in the flat where the sensors are located. The device indicates "activity" with a green smiley face. In contrast, a noticeably long period of "inactivity" is indicated with a yellow dot that has a large exclamation mark in the middle.

Figure 12.1 Door with motion sensor (left) and door sensor (right).

Source: Thomas Bruns, Berlin.

What information does this object description provide, for example, about the meanings ascribed to the monitoring device? Visualizations of the data collected by the monitoring device in the app indicate how “activity” or “inactivity” are understood and evaluated. The term ‘activity’ is used by the producers of the device synonymously with motion and is therefore understood as physical activity. “Inactivity” means that there “was no movement in the apartment” according to the information on the home page of the producer. Moreover, the system takes the category “inactivity” to be the opposite of “activity”. The green smiley, which indicates “activity”, is a sign of the positive evaluation associated with “activity”. In contrast, the yellow dot that has an exclamation mark in the middle and indicates “inactivity” is used in our society usually when something needs attention.

The monitoring device in its context

Now that the function and materiality of the object has been described, the question arises of how it is used in everyday life. Technologies are, after all, part of practices, i.e., people use them in certain situations in everyday life (cf. Suchman et al., 1999). Seen from this perspective, to understand how a technology works, the question also needs to be asked of

Figure 12.2 Schematic procedure of the sensor-based monitoring device.

what people do with it and, vice versa, what it might do to people. This involves studying or reconstructing the practices of which these technologies are an integral part (cf. Suchman et al., 1999; Marres, 2017, p. 46).

During my fieldwork, the sensor-based monitoring system described here was located in a total of five flats in an elective assisted living facility for the elderly in Germany. For this monitoring device to work, a “normal profile” and tolerances must be set up using a computer program. In other words, the operator defines when a person “normally” gets up and “normally” goes to bed. So that the system can recognize “significant deviations” from a person’s normal profile, for example, if a person does not get out of bed in the morning, a tolerance is also set, e.g., of one hour. If no movement is detected in the flat within this defined time window, a message is sent to the nominated responders, e.g., a relative and a monitoring center. These responders are then expected to take appropriate action, starting out by contacting the person. If there appears to be an emergency, corresponding measures are to be taken.

As part of the “TechnoCare” study, several ethnographic interviews were conducted with the residents of the housing complex who were able to use the object analyzed here, along with interviews with their relatives and with people working for the social services involved. These social services workers were also accompanied and their activities watched by a participant observer. The interview transcripts and the reports on the participant observation were used to reconstruct whether and how the objects were used and what practices they were embedded in, if at all.

Echoing Clarke’s suggestions, after some participant observation sessions and interviews, a situational map was created showing the different participants involved in the settings studied. Figure 12.4 is an initial visualization of the sensor-based monitoring device and shows that as well as the objects described here (sensors, smartphone, etc.), a large number of other objects, people and “invisible” participants are required for the sensor-based monitoring system to “run”.

Figure 12.3 Smartphone with app. Thomas Bruns, Berlin.

Figure 12.4 Relational analysis developed from the initial situational map.

The social service workers' car is required, for example, so that they can drive to a person's flat if they suspect an emergency. As another example, the technical system also depends on algorithms, radio transmitters and electricity. At the same time, the situational map shows which discourses and political and economic institutions are connected to the monitoring device which was studied. During the time in which the research was carried out, these discourses were on the care situation in Germany, active ageing and independence in old age. The situational map can be expanded or revised depending on what further findings emerge during the research.

The interviews and the participant observation revealed that people dealt with the technology in a wide range of ways: some residents did not want to use it as they did not (yet) see any need for it, or because they were afraid of being kept under surveillance. One resident was satisfied and felt safer with the system. Another resident, however, (Mrs Wolle) felt that her daily life was disrupted by the technology. It is specifically disruptions that clearly show how technology works and how it is integrated into daily life (Hörning, 2001, p. 96).

The case of Mrs Wolle

The empirical material on the case of Mrs Wolle reveals links between the activity monitoring device which she used, the resulting categorization of her movements by this technology as "activity" or "inactivity" and discourses about activity within gerontology and active society. Mrs Wolle moved into the assisted living facility with assistive technology devices when she was 86 in order to be nearer her daughter. It was important to her that the facility offered a wide variety of services for elderly individuals, which she took full advantage of. From chair aerobics to game afternoons, Mrs Wolle participated in many of the offerings.

In the interviews I had with her over a period of more than a year, she articulated that in her daily life the monitoring device installed in her apartment was disruptive. In one interview, she described the disruption she experienced and the strategies she had to deal with it as follows:

And one time, I was doing fine but I got in bed at 11 a.m. I wasn't sleeping; I was just reading and lying down because I was afraid I would fall over. And at 4 or 4:30 in the afternoon, they called me: "Mrs Wolle, what's wrong? Can we help you?" Then I said, "No, why do you ask?" "Well, you haven't got up or moved around for four or five hours." And then I replied, "I'm doing fine", I said, 'that's not true, I have moved. It's nothing.' Now we have extended the time frame [the tolerances of the device]. So that now usually when I go to bed at noon I sleep for two or two and a half hours until 2:30 or 3 p.m., ... then after I've got up, at one hundred percent. Then I get up and go to the bathroom or somewhere else and then go back to bed. They take note of that somehow.

(Interview April 2016)

Mrs Wolle reported in this interview that it had been a hot summer and her blood pressure was fluctuating a lot and as a result she had lain down frequently. She had fallen multiple times in the past, and she thought this would help prevent another fall. This practice of self-care – resting in bed and reading – was categorized by the device as an "inactivity" that had lasted too long. The monitoring center then contacted her to check if there might be an emergency. In our conversations, Mrs Wolle explained that she felt it was disruptive to

continually get calls from the monitoring center during her afternoon naps or other times of rest. And in this particular summer, she reported that the calls sometimes came every other day. Apparently, her daily routine did not fit into the regular pattern that older adults were assumed to have and that the features of the device were based upon. To prevent such disruptions in her daily life, the settings in her profile were adjusted. In addition, after using the system for a year, Mrs Wolle developed a strategy to prevent unnecessary calls: if she planned to stay in bed for a longer period of time, she would simply make sure to get up briefly at some point. The motion sensors then registered her movement, and this was categorized as “activity”. She was then able to take advantage of the new maximum allowed amount of time for “inactivity” and was able to again rest in bed.

As her daughter emphasized, Mrs Wolle had found a way to “manage” the device so that the way the device “ran” was not disrupted and it also did not cause any “disruptions” in Mrs Wolle’s daily life. Her strategy consisted of intentionally moving in such a way that it would be recognized as movement by the sensors and categorized as “activity” by the device. This meant that she had to become “active” as defined by the technology and its inscribed categories of movement. It was only by becoming “active” in a certain way that she could enjoy peace and quiet. Mrs Wolle actually became “active” as a result of the technology – not only through maintaining several social contacts and taking part in a number of programs offered at her facility, but also through physical activity that was recognized by the technology as such. Mrs Wolle, who did not have the kind of regular daily routine that corresponded to the categories inscribed in the technology, had to adjust her life to the technology and manipulate it.

How can these co-produced forms of dealing with “activity” and “inactivity” be understood, when theory is brought in? In a certain way, Mrs Wolle can be said to have been manipulated and disciplined by the technology. As a result of using the device, she developed practices and integrated these into her daily routines. Building on Suchman (1994), who was inspired by Foucault, the categorization of Mrs Wolle’s daily activities can be seen as a way to control and discipline Mrs Wolle. Yet the various descriptive and interpretative findings from object analysis within an encompassing ethnographic study also suggest that a closer look should be taken at how these socio-material practices are linked to wider societal issues and how they impact on these practices. Therefore, in the example, I asked how the concept of “activity” which is inscribed in the device related to discourses on activity in gerontology and active society. I will offer answers to this question in the following.

The concept of “activity” in gerontology and the activating welfare state

The term “activity” and the category associated with it are connected to needs-based approaches in nursing science such as “activities of daily living”. But it is also connected to the term “activities” in the gerontological debate, which Katz (2000) focused on from a Foucauldian perspective. He has shown that “activity”, understood in a very broad sense, has increased greatly in importance in gerontology since the 1960s (Havighurst, 1960). While disengagement theory (Cumming and Henry, 1961) conceived the role of older adults to be that of a retreat from society, activity theory emphasized the importance of activity for a satisfying and “successful” old age. Against the background of activity theory, the model of “active ageing” (WHO, 2002) was developed. This concept has proven influential in many areas of gerontological theory and practice, as well as in politics.

Approaches that emphasize the activities and resources of the elderly have helped work against the image of this age group as passive and having deficits (e.g., Walker, 2002). At the same time, according to critical voices (van Dyk and Lessenich, 2009; Denninger et al., 2014), the debate on active ageing is also in danger of overemphasizing activity and its importance for life satisfaction. As several critical gerontologists have shown, this can lead to a situation in which older adults are primarily viewed as needing to be activated, and then feel pressured into activity.

Alongside the meaning of “activity” in gerontological approaches and practical models, “activity” also represents a norm that pervades many of the social spheres in the activating welfare state, writes Lessenich (2013). People in an active society are required to be active and take responsibility for themselves. In this way, they are expected to contribute to social well-being (Lessenich, 2013, p. 121).

Adding this knowledge to the various analytical steps that were exemplified above, the following outcomes can be formulated based on a thorough engagement with things in ageing studies, and can be generalized to a certain degree. The case of Mrs Wolle offers evidence that discourses, ideals and images of older adults materialize in technologies. Assistive technologies contribute to the practices of individuals in old age and of society by suggesting that people should conform to certain behavior. A well-informed assumption would be that the newly generated, standardized data and information makes older adults more standardized and disciplined. As such, these technologies shape their lives in old age and the way in which they experience old age. Technologies such as the system investigated here should therefore be viewed not as neutral technical tools, as is frequently the case in most of the practical literature on assistive technologies, but as “normative actors” (Pols, 2010, p. 172).

Things in ageing research: possibilities and limits

To sum up, the argument here is that a focus on material objects informed by material culture studies and STS adds to our view of age(ing). As a result, it is no longer only interactions between human beings which are examined, and objects are no longer only understood as part of a purely physical environment. Instead, this method can be used to pinpoint the role which objects play in constituting old age. This is possible if things are not merely examined as resources for older adults, or characterized only in terms of their function, but are also seen as participants in socio-material practices. This is precisely how associated societal issues and social implications can be addressed based on solid foundations, i.e., on a precise analysis of socio-material practices.

There are various advantages to the method of analyzing objects in their context. Things are easily accessible for analysis, as they surround people almost everywhere (cf. Froschauer, 2009, p. 344). They sometimes also provide information about aspects which are difficult to examine in interviews (Froschauer, 2009), such as conflicts, if, for example, objects are ascribed different meanings or used in different ways. Objects can be used as a starting point for discussion during research. They are particularly important in historical research, as they survive the test of time and bear testimony to the past (Froschauer, 2009).

However, research into objects in their context poses many challenges due to their polysemy and polyvalence. The meanings and value of objects can undergo constant change. Without reconstructing the context and practices in which they are or were used, they are not easy to decode. Another challenge which arises is that objects often seem to be “invisible”: people frequently use things “incidentally”, without consciously thinking about it or paying continuous attention to them.² This can sometimes make it difficult to ask people

about their relationship with things and the actions they carry out with those things. In cases of this kind, participant observation would appear to be an important means of observing the practices in which objects may be involved.

Objects such as the monitoring technologies which serve as an empirical example in this chapter co-constitute life in old age. Things bring order into people's lifeworlds (cf. Hahn, Eggert and Samida, 2014, p. 8) and give structure to work processes (Heath, Knoblauch and Luff, 2000). Conversely, this means that studying objects in their context and as a part of socio-material practices can help gain a better understanding of people's lifeworlds and working lives (see Hahn, Eggert and Samida, 2014, p. 8). In a society where people live a long time, and in which technical things, in particular, are gaining increasing significance for life in old age, it seems necessary to more closely examine the things and socio-material practices of old age, and thus gain a more comprehensive understanding of age(ing).

Notes

- 1 The study "TechnoCare" was part of the interdisciplinary research project "Objects of Care", which was funded by the German Federal Ministry of Science and Research from 2014 to 2017 (01UO1317A-D).
- 2 For the lack of attention paid to objects, see also Hahn (2018) and Depner (2017).

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