

THINKING BEYOND THE PRODUCT MOMENT: ADDRESSING ISSUES AROUND “KEEPING”

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ABSTRACT

Designing for a more sustainable economy implies consideration for the whole of longer, more optimised product lifetimes. It is increasingly important to encourage reflection on the multiple aspects of product life beyond conception, production and sales moments. This concerns the much longer period when “products” are integrated into everyday life and progressively become “things” and “stuff”. A major part of longer product lives that may currently be overlooked is “keeping”. In circular consumption models’ everyday goods need to be maintained in conditions permitting repurposing, repair and remanufacturing, implying various forms of shorter and longer term keeping. Existing product consumption phases don’t adequately represent the periods of passivity where products are kept awaiting reuse or divestment. While keeping possessions seems inherent in many of the transitions between phases of active use to phases of devaluation and divestment, our attitudes to keeping things are ambiguous. Design and design education traditionally focus on use and rarely on passivity in relations with products or services. In this context, the notion of “keeping” may be useful for encouraging different ways of thinking about our everyday material relations.

Part of ongoing research into how issues around keeping might be successfully integrated into design education, two recent case studies are presented and discussed. This research highlights the need to give a more holistic view of the different forms of keeping existing today. Our research also indicates how studying keeping can help sensitise students to everyday aspects of circular and sustainable behaviour.

Keywords: Sustainability, circular economy, sustainable behaviour, longer product lifetimes, keeping

1 INTRODUCTION

As designers, researchers and educators we are getting better at thinking about sharing, circularity, repairing, reconditioning, about collection systems and recycling. But as leading researcher in sustainability Conny Bakker [1] highlighted in her *Ten Golden Rules of Design for Sustainability* (2019) “design for long use and reuse... creating products that last and that can be loved and cherished, maintained, repaired, reused, upgraded, adapted, personalised, refilled and repurposed for as long as possible” remains a key priority. This involves encouraging design approaches applied to everyday life behaviour, to living with artefacts more than their acquisition [2]. This concerns the second, often overlooked moment in (product) design projects. The design act is clearly incomplete “if we do not address what happens to the project’s output when it starts its life in the social world” [3]

The notion of keeping [4] might be a useful way of framing thinking around part of sustainable behaviour, as it questions our everyday relations with materiality in the short and longer term, and relations that are often passive. Keeping does not only concern widely researched emotionally durable objects [5, 6], but also products that have become simple “things”, stuff and clutter [7].

Given this possible gap in sustainability thinking, and by extension teaching, seeking ways to address the passive phases of product lives in the design curriculum seems relevant. The aim of this paper is to define keeping in relation to existing research into longer product lifetimes. Based on ongoing research, some findings that help to structure understanding of domestic keeping are introduced and discussed. Finally, two recent design teaching modules on the theme of keeping are presented. These examples of introducing the keeping theme highlight aspects that appear successful, but also illustrate a certain number of issues that could be improved for more effective teaching of the subject.

2 PASSIVE PHASES IN LONGER PRODUCT LIFETIMES

The link between keeping and longer product lifetimes would appear to be evident, for example “...keeping existing products in use for longer periods of time can theoretically slow consumption” [8]. Keeping can be linked to continued use, but equally can be linked simply to not replacing, to holding-on-to [4]. Keeping can refer to passive states in product lives, awaiting repair [9] or linked to hibernation [10], which might be described as a ‘dead storage period’ of goods no longer in use, but whose value could be ‘reawakened’ and recaptured [11]. In a study of stored small Waste Electrical and Electronic Equipment) [12] objects are described as being abandoned/lurking, consciously stored, or kept due to emotional attachment. These different states highlight how kept objects within the home can exist on very different levels of status and visibility [13] and indicate the possibility of multiple keeping moments ranging from relatively active use through to pre-divestment.

Models of product ownership [14], e.g., proposing six phases: Acquisition, Appropriation, Appreciation, Devaluation, Divestment, Disposal, give structure for understanding evolving relations with things. But a drawback of this type of structure is the implied linearity and notion of logical transitions.

Addressing keeping involves questioning the regularity of our everyday practices and involves trying to look at stuff that is no longer the focus of our everyday attention, things ‘that should have been left unspoken... inappropriately foregrounded’[15]. Focussing attention on kept stuff also may imply looking at the meaningless or disturbing intervals between animated, useful phases, things out of context and out of control [16]. This definition echoes Steve Baker’s [17] definition of “clutter”: “disordered things that impede movement... that part of our “self” that escapes “our” control, “proper” control...the revenge of objects on design.” Studying keeping may be a valuable exercise for designers.

3 ASPECTS OF KEEPING

Given that the theme “keeping” covers a very wide range of everyday material relations and also objects and contexts, it is important to highlight some ways of structuring our understanding. As keeping may overlap with passive phases of product lives awaiting repair, the dimensions identified by Hielscher &

Table 1. adapted from Hielscher & Jager Erben, dimensions relevant to repair (and keeping) in daily life

Objects in need of repair as part of performing everyday life	Socio-spatial arrangements of objects in everyday life
- Invisible workhorses,	- Hidden spaces: garages, cellars, second ceiling, spaces at the back of the cupboard, top drawers and cupboards
- Visible workhorses	- Waiting spaces: cupboard, baskets
- Daily tools	- Rotation spaces: laundry basket, dishwasher
- Home-making objects	- Routine spaces: kitchen cupboards, shoe rack
- Collections	- Display spaces: mantel piece
- Memory objects	- Spaces outside the home
- Assemblages & containers	-
- Overflow objects	
- Morally worn-out objects.	

Table 2. overview of attitudes towards domestic keeping

co-existing reactions/attitudes/coping strategies	Sub themes
Oppressive	too much, stigma (hoarding, laziness, procrastination) easier to bin, declutter, guilt...
Coping / Questioning	hard to throw away, illogical, storing problems: ‘mess’ place, judging/evaluating...
Projection / keeping for...	useful for, just in case, might use, plan to give away, plan to sell, in transit...
Managing visibility / presence	disappearing, convenience of out of sight, staying aware of, access, finding...
Conscious use / keep using	keep using, reuse, long use, using ‘right up to the end’, want to repair...
Attachment / reassurance	safely stored, protect, attachment, reassurance of things, memories...

Jager Erben [18] can be a useful start point, establishing categories of object types and spaces concerned - both by repair, but also by keeping. See Table 1.

As part of ongoing research [4] into the theme of keeping as a longer product lifetime and sustainability issue, six different attitudes towards keeping in the domestic context can be identified (See Table 2).

The research highlighted that generally these different attitudes, ranging from the very negative (feeling of oppression) to the very positive (keeping for attachment, pride and reassurance reasons) co-exist, and also should be considered as potentially in flux, and likely to evolve.

4 KEEPING IN THE DESIGN CURRICULUM

The theme of keeping was used in two different teaching modules in 2021. These two examples are interesting to compare and discuss, as both involved 15 students, but at two different levels of study. The theme was addressed with a group of second year Product and Service design students, as part of a project-based design methodology module. Building on some of the insights from this module, the keeping theme was also addressed in a week-long intensive workshop with 5th year students on a Design for Social Innovation Masters course. "Keeping" in this module was used as a case study for exploring user-research tools for everyday behaviour [19](e.g., Probes) [20]. The structure of the two teaching modules is outlined in Tables 3 and 4 (heavy type indicating the more successful activities).

Table 3. Overview of teaching module - 8 weeks, 2nd year cohort (15 students)

INTRODUCTION TO SUBJECT, SELF-ANALYSIS, SENSITISATION (2 DAYS)	Auto-ethnography - observe throwaway things I keep
	Analyse reasons why I keep some throwaway things
	Creativity exercise - reapplying "keep" qualities
GUIDED USER RESEARCH (1 WEEK)	In-depth interviews into keeping behaviour (2 per student minimum) verbatim transcribed
	Analysis of results (in groups) and mapping findings
	Presentation and class discussion
"OBJECT"/ARTEFACT RESEARCH (2 DAYS)	Research (benchmarking) on existing furniture for keeping things
	Analysis of a piece of existing "keeping" furniture through cardboard modelmaking
INDIVIDUAL DESIGN PROJECT , WRITE-UP PROCESS (5 WEEKS)	Furniture design project based on an identified "keeping" issue/opportunity (<i>see table 3</i>)
	Detailed written report covering all steps on the "Keeping" theme

In both cases the students were introduced to the theme of keeping through exercises encouraging them to explore their own keeping behaviour [19] [7], followed by a phase of user research. In the case of the 2nd year cohort, the user research was guided, with students carrying out a small number of in-depth in-situ interviews. Students were asked to produce a verbatim transcript and were given some possible questions that they could use as a start point for building their own semi-structured interview framework.

Table 4. Overview of teaching module - 2 weeks, 5th year cohort (15 students)

INTRODUCTION TO SUBJECT, SELF-ANALYSIS, SENSITISATION (2 DAYS)	Illustrate an emotionally durable object I own
	"Everything I touch" exercise, inventory (evening to following morning)
	Auto-ethnography, on some aspect of what, why, how I keep things - mini report (see table 4)
	Reading all reports and in-class discussion
USER RESEARCH - IN TEAMS OF 3 (1 WEEK)	Identification of a keeping related research question (based on previous exercises)
	Design a probe kit to investigate the question
	Make the probe kit
	Hand out probe kit to 3 different people/households
COMPILE RESULTS, WRITE - UP PROCESS (1 WEEK)	Analyse results of completed probes
	Document the process in the form of a written report, including participant and student feedback.

The interview transcripts were analysed by students in groups of three, and each team created a map to represent their understanding of keeping behaviour. These maps were presented to the class and discussed by the cohort as a whole.

For the much shorter 5th year workshop module, the initial sensitisation to the theme involved three different exercises, including two encouraging them to observe their own keeping behaviour at home [21]. Following this immersion in the subject, working in teams of three, students defined research questions related to keeping, and then focused on developing a probe tool to explore their questions. The main teaching content for this group of students during the week-long workshop was related to

testing and designing user research tools. The analysis of their research findings, the evaluation of their probe tool and their feedback on the subject were compiled into written reports. In the 2nd year module, the user research findings were used as a first phase of analysis to help students individually identify a keeping-related issue to be addressed in the context of furniture. As part of this design project, students explored existing furniture that could in-part answer the issues identified. These existing furniture archetypes were explored in a short model-making exercise. Working to personal re-briefs, students spent four weeks on their design project, and made both a short visual presentation and a written report of their project.

4.1 Towards understanding keeping

Both of these modules were first experiences addressing everyday behaviour issues using “keeping” as a framework, so should not be considered definitive. Nevertheless, these case studies can be assessed in terms of effectiveness for holistically exploring domestic “keeping” with design students at different levels of study. The small size of cohorts permits illustrating aspects of keeping addressed by the whole of each group (see Table 5) and comparing these to the object families identified in repair research [18] as well as the six attitudes [4] towards domestic keeping mentioned above.

Table 5 illustrates the keeping questions that each student (in the 5th year cohort) chose to investigate, in-situ, in relation to her or his own behaviour. The majority of this research addresses what could be termed positive keeping. Memory and symbol-related keeping are well represented, perhaps reflecting the idea [22], that designers may be more concerned with sign value than materiality in objects. It is also possible to conclude that students tended to focus on the keeping of objects with a certain value. Keeping in more mundane categories such as [18] “assemblages & containers” was not at all present. This may indicate the natural tendency, mentioned by Chapman [23] to not focus on the “myriad objects ... [that] fill the rooms, cupboards and pockets of our daily lives”. It is important to note that the workshop was carried out at the start of the school year, and that for many students what they had in their lodgings was already the result of a strict selection of what to “keep” with them.

Table 5. Auto-ethnography exercise on keeping habits, 5th year cohort

Research themes as described by students themselves (heavy type added by author)	Concerning which objects?
Why I keep them?	books, notebooks, wine stoppers, guitar
I wanted to explore my memory box ...what it contains, its usefulness	Papers, birthday cards, flyers, gift wrapping
I wanted to explore where we store or display emotional objects and why	Soft toys, jewellery, gifts, “special” things
I have a habit of collecting ...they all have one thing in common: memory	Hats, lighters, notebooks & perfumes
I wanted to explore the jewellery that adorns my body... sentimental value	Jewellery
explore what I keep.. and what I digitalise to improve personal organisation	Historical coins, medals etc. vs papers
Keep it? Things I left at home and things I brought with me	All his stuff - with him and in parents’ home
How do I sort out my stuff? I classified things I keep (6 categories) and don’t keep	All stuff in student lodgings
What objects I have trouble throwing away or that I always keep?	Un-worn clothes, empty perfume bottles...
I started to think about a memorable object ...which can give you stars in your eyes	Sneakers with a story attached
What objects do I keep and why? “They represent me ” vs “They are useful ”	All stuff in student flat, beginning of term
...explore all the objects in my house that I don’t use everyday	electric appliances, collections, old clothes...
What I wear in my daily life? ...and all the clothes I don’t wear and why ...	all clothes in closet
...explore my dressng room. Where I accumulate the most things I don’t use	all clothes
Moving out after more than 20 years...what to keep, what to throw, decluttering	Family house contents

Student briefs generated after more substantial user research by the 2nd year cohort, as could be expected, cover a slightly wider range of objects kept and attitudes to keeping. These briefs were also the result of research on a much wider user cohort, from teenagers through to grandparents. These briefs illustrate the prevalence of the *Projection/Keeping for* and *Managing visibility/presence* themes, which were much less present in the initial approaches by the 5th year cohort. Nevertheless, an over-representation of briefs related to attachment/memory objects can be identified. Equally, these briefs do not address the more negative attitudes towards keeping (*Oppressive, Coping/Questioning*). And again, the more mundane keeping issues related to low value objects (assemblages + containers, morally worn-

out objects) [18] are not treated, suggesting that there are aspects of keeping that need to be better illuminated in order to have a more holistic understanding.

4.2 Effective research/teaching tools

The two teaching modules clearly highlighted the need to encourage students do both exhaustive exercises (e.g., Everything we touch) [21] and also very focused research in the initial sensitisation stages. Examples of this could be the memory-box inventory or answering the question exploring “all the objects I don’t use every day” (table 5). In both cases students did detailed hands-on inventories, followed by photographic documentation, classification and analysis. The three fold sensitisation steps for the 5th year cohort seem to have been more successful than the approach with the 2nd year cohort. Also illustrating the importance of a hands-on approach, students commented very positively on the exercise of exploring furniture artefacts through modelmaking. This exercise also had the benefit of placing current keeping habits in a longer historical context.

User research from in-depth interviews by the 2nd year cohort generated very rich data - but detailed data analysis was hard for year 2 students. Nevertheless, students commented on the eye-opening nature of their interviews, and the shared mapping exercise collectively generated valuable insights.

The probes exercise given to the 5th year cohort produced more contrasting results. Certain teams lost focus of the keeping issue, and also a tendency to use existing “game like” strategies for their probe kit may not have been appropriate in keeping research. Nevertheless, two out of five groups did work very relevant to keeping issues - one exploring reasons for keeping, throwing away and triggers for changes in behaviour, showing how a negative vision of keeping often prevails. A second group was much more focused on mechanisms around keeping memory objects, a theme that may be a more automatic choice, but one that nevertheless exists in this context. We can note that the two fifth year groups who designed and successfully used probe tools to better understand aspects of keeping included students who did very detailed hands-on work in the sensitisation exercises, suggesting the importance of effective introduction exercises. Equally the students who had more difficulty in the probe exercises appeared to have built less on their self-documentation exercises.

4.3 Weaknesses and strengths

Using the term “keeping” aimed at covering the widest possible range of passive material relations in the domestic context - but the term did generate some definition difficulties for students. Another issue that needs to be kept in mind are the preconceptions that may automatically link keeping to emotional durability, overlooking, as mentioned previously, the majority of what is actually kept. The current media coverage given to de-cluttering [24] may also give a certain bias that needs to be anticipated.

Over-all “keeping” appears to be a theme students were able to relate to. The breadth of the subject also has the potential to initiate a very wide range of design briefs.

Beyond “keeping”, these modules generated secondary benefits. Being a fine-grain subject to address in user research represents a good challenge in terms of creativity in research tool design (at Masters level). Student feedback also highlighted how the subject had raised personal awareness of the invisibility of stuff, which may be valuable learning for designers. The subject as a whole encouraged questioning the importance of emotional attachment and reassessing notions of function. Students also underlined how their research highlighted unexpected incongruities, divergence and idiosyncrasy in daily behaviour, showing numerous paradoxes and ‘not easy answers’.

5 CONCLUSIONS

The two case studies presented here do not enable us to determine whether this type of subject is better addressed early in design studies, or at Masters level. We can, however, conclude that this theme could not be treated in short format for younger students, and even for 5th year masters’ students a slightly longer format would have been beneficial. While the two case studies can certainly be improved, “keeping” appears to be a valuable framework for addressing over-looked passive material relations, particularly in the context of (product) design studies. We can conclude that exploring keeping involves addressing fine-grain aspects of sustainable behaviour and constitutes a way of (encouraging) looking at everyday paradoxes and complexity, rather than certitudes and templates. Finally, this theme appears to be an accessible way of confronting mundane but highly divergent material relations, which will be increasingly important for understanding and designing for sustainable behaviour and behaviour change.

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