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Domestication Analysis, Objects of Study, and the Centrality of Technologies in Everyday Life

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ABSTRACT *The article first introduces the domestication approach, its origins, its key elements, and its general contributions and limitations. It then examines ways in which the domestication analysis could be developed. One issue concerns contemporary objects of study and research questions given developments in information and communication technologies since the earliest domestication studies. Other issues include developing the analysis of the centrality of ICTs in our lives. Where appropriate, these issues are illustrated by considering examples of the computer, the Internet, and the mobile phone. To illustrate how the domestication framework can inform wider academic and policy fields, the final section considers its contribution to debates about the digital divide.*

KEYWORDS *Technology theory; Telephony; Internet; Personal computers*

RÉSUMÉ *Cet article porte sur la domestication en tant que théorie sur la manière dont l'individu intègre de nouveaux objets dans son quotidien. Il décrit les grandes lignes de cette approche, ses origines, ses éléments clés et ses contributions et limitations générales. Il examine ensuite certaines manières dont on pourrait faire avancer cette théorie aujourd'hui. Une possibilité concernerait le développement des technologies de l'information et de la communication (TIC) depuis les premières études en domestication, et l'impact des TIC sur les objets d'étude et les questions de recherche contemporains. Une autre possibilité consisterait à approfondir l'analyse de la centralité des TIC dans la vie quotidienne. Cet article, quand cela s'avère pertinent, a recours aux exemples de l'ordinateur, de l'Internet et du téléphone mobile. La section finale considère la contribution de la domestication aux débats sur le fossé numérique, afin de montrer comment cette théorie peut jeter de la lumière sur des questions académiques et politiques plus vastes.*

MOTS CLÉS *Théories sur la technologie; Téléphonie; Internet; Ordinateurs personnels*

Introduction

The aim of this article is twofold: first, to introduce the domestication approach to those less familiar with it; and second, to indicate future potential directions in which it might develop and challenges it might face. By way of introduction, the first sections discuss the origins of this approach, the original key elements, how the approach has evolved over time to address various issues, how it can provide insights, but also its limitations.

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The second aim, to contribute to the ongoing development of the framework by also addressing domestication researchers, involves reflecting on two aspects. One is how the object of research in domestication analysis may well have to change since the earlier studies using this framework. The second aspect is how domestication analysis can approach the issue of the centrality of information and communication technologies (ICTs) in our lives, which in turn introduces the issue of how domestication analysis can handle change over time. Where appropriate, these issues are illustrated by considering three ICTs: the computer, the Internet, and the mobile phone.

Lastly, to illustrate how the domestication framework can inform discussions beyond academia, including areas of policy debate, the final section considers how this approach can contribute to debates about the digital divide.

Origins and elements of the domestication framework

The domestication approach as first developed in the U.K. originated in part from anthropology (e.g., Douglas & Isherwood, 1980) and from consumption studies (e.g., McCracken, 1990). Both of these disciplines asked how goods and possessions enter into our lives and what symbolic meaning they have (e.g., Bourdieu, 1986), both of which relate to how we use them. When applied to ICTs, an additional impetus to develop this framework related to a particular strand within media studies interested in the contexts in which established media were experienced (e.g., Hobson, 1980; Lull, 1988; Morley, 1986). At the same time as this British version of domestication analysis was being formulated, Norwegian researchers in Trondheim (Lie & Sørensen, 1996; Sørensen, 1994) helped to develop the concept by linking it to the social shaping of technology literature, a body of work concerned with why and how technologies emerge in the form they do. These researchers were interested in asking how that shaping process continued once ICTs started to be consumed.¹ Outlines of the domestication framework emerged at the start of the 1990s (Silverstone & Haddon, 1996; Silverstone, Hirsch, & Morley, 1992), subsequently reaching a wider European audience partly through the European academic networks in this field that were emerging in the 1990s (for a review, see Haddon, 2006). Subsequently, the approach was used further afield in Australia, Canada, the United States, Korea, and Singapore.²

The framework that emerged considered the processes shaping the adoption and use of ICTs, but in so doing also asked what the technologies and services mean to people, how they experience ICTs, and the roles that these technologies can come to play in their lives. In fact, the term “domestication” itself evoked a sense of “taming the wild,” and we see in many domestication studies the processes at work as people, both individually and especially in households, encounter ICTs and deal with them, sometimes rejecting the technologies, at other times working out how exactly to fit them into their everyday routines. This is the micro-level of domestication discussed in the rest of this article, although some other authors explore the processes of domestication in society: Sørensen (2005) on the car, Morley (2005) on TV.

In the earliest work on domestication in households, a number of (much-cited) processes were identified regarding how ICTs find a place in the rest of (in this case domestic) life. In brief, “appropriation” captured the types of negotiations and considerations that led to the acquisition of technologies, “incorporation” referred to how

the ICTs were located spatially within the home, “objectification” drew attention to how their use was scheduled in people’s routines and hence time structures, while “conversion” dealt with how we mobilize these ICTs as part of our identities and how we present ourselves to others, for example, in how we talk about and display these technologies. Such terms can help to sensitize researchers to the kind of consumption questions they could be attentive to in order to understand not just the meanings that technologies have for different people, but also, sometimes, how users try to constrain their use (to be developed later in this article) and how they evaluate these ICTs. At one level these questions could be treated as something akin to a research “checklist,” but perhaps characterizing domestication analysis as a “framework” or “approach” does more justice to the systematic attempt to think about the wider consumption, rather than just the use, of ICTs.

Contributions and limitations

If the above provides a broad outline of the framework, what are its contributions, how does it provide insights, and what are its limitations in practice? Essentially, the domestication approach provides contextual information about households and individuals to better appreciate why they use ICTs in the way they do. Part of that research process involves allowing those researched to explain their actions in their own words, although this is only ever part of the picture. After all, people are to varying degrees articulate, they in part react to the interview situation (and sometimes return to change their story a little on reflection), they are presenting themselves to the researcher, and they are sometimes concerned to provide justifications for their decisions. But if we complement this verbal feedback with other information that can include an understanding of their wider values and aspirations, their general circumstances (e.g., their organization of time, the spaces in which they live, their financial situation) and their relationships with others (e.g., parents making rules about how their children can use technologies, social network commitments), then we can formulate a broader understanding of people’s different forms of engagement with ICTs. In other words, while the ultimate research interest is in technology, this approach also relates ICTs to the non-technological aspects of people’s lives. This means that an in-depth approach is often favoured, which can include interviews, observation, and a range of other methodologies to illicit this information. Obviously, like detective work, it involves fitting the pieces together and hence interpretation. But in reporting findings the evidence can be cited—the quotations, the ambivalences they may reflect, the description of circumstances—allowing readers to judge whether the interpretations are reasonable.

In practice, the above process does not simply produce a set of descriptions of unique individuals and households. Inevitably there are patterns, often a (limited) range of certain common experiences, albeit experienced in slightly different ways. There are parallels with the way in which Goffman’s observations about everyday life led him to formulate a taxonomy of ways in which we manage the impressions we present to others (Goffman, 1959). In domestication studies we have the teleworkers who display their technologies to visitors because they are concerned that others may think that if they are at home they are not really working. We have the young elderly who did not engage with some new technology because it was coming into their work-

ing life just before they retired. We have those single parents who are relatively poor, and sometimes stressed, in large part because of that status, for whom some new technologies do not make it onto their horizons. We have the managers and professionals who have very limited time slots for media consumption in the weekday evenings (Haddon, 2004). And we have those who for various reasons are isolated or belong to diasporas, which motivates their particular uses of the Internet (Bakardjieva, 2005a).

Insights from this research process—and to an extent this is true of qualitative approaches in general—can obviously complement quantitative data. They can draw attention to the patterns noted above, so that we can then follow up with questions about their prevalence, as when one of my previous domestication studies then led me to explore quantitatively how much and in what ways people try to control their incoming communications. These insights bring statistics to life, because we now have a better idea about how a particular experience is lived. They can also make us think about the similar circumstances but also the different circumstances that may lie behind a set of statistics, as when people answered yes to a question but for different reasons. And they can encourage us to reflect on the nature of what people are trying “do” with their technology beyond a more narrow definition of “use” (e.g., to include managing impressions, controlling communications), and so generate further research questions.

If the strength of the domestication approach lies in providing the context to people’s ICT decisions (over and above looking at, say, gratifications, as in the “uses and gratifications” framework), one drawback is that the approach can be time-consuming, and this may well have limited the number of domestication studies that have taken place. If you ask many questions requesting elaborated answers this can take more than one interview, and to build up the necessary rapport can entail a lengthy process of setting up relations with participants in the study. Subsequently it takes time to analyze the information generated. For example, whenever I have conducted a study of a particular group and/or technology the research has taken a year, although I have sometimes done other things at the same time. Others have conducted domestication studies as their doctorates. So domestication analysis can be a resource-consuming approach.

Moreover, one “problem” is that you can always add more context. This has led to a number of limitations in particular studies, which have to various degrees been subsequently addressed. One is that the very earliest studies especially focused on the more immediate factors influencing decisions about ICT acquisition and use. Subsequently there has been some work on the longer-term dynamics and circumstances of individuals and households, looking at the experiences over many years and what factors brought about changes in their ICT practices.

Perhaps a more problematic limitation was the focus on the home and household, true not just of early studies but also of many later ones. Clearly this is an important site, when we think about negotiations over family finances and how to spend money on ICTs, moments of collective consumption in the home (as in watching TV together), and the efforts of some household members to influence the behaviour of others (the strongest, but not sole, example being parents making rules for children). However, the home is by no means the only place where ICTs are used (as became clearer with

the growth of mobile technologies, especially the mobile phone), and household members are not the only influential “others,” if we think about children’s peers or social networks in general. Domestication studies often asked about these, as when we can appreciate the role of “warm experts” who help us to use technologies, or conversely the lack of people in social networks who could show how a particular ICT could play a role in one’s life. Moreover, there are some studies in sites outside the home.³ But in general, it seems that less attention has been given to life outside the home, and indeed, if interviews take place in homes, you do not “see” that wider context but only hear some reports about it.

A third, more recent, observation is about the lack of reflection upon cultural context. Many European studies did not ask about, or at best only paid a limited amount of attention to, country specificities—e.g., British studies usually do not ask what is “British” about the context being described and how this might be different from, say, a German study. Although there were some non-European domestication studies, this cultural aspect did not receive much attention until the greater availability of Asian studies that provide more contrasting circumstances. Hence, in an argument to de-Westernize domestication, one study of China noted how the one parent-policy might affect both parent-child and peer relationships, with implications for ICTs (Lim, 2005). Japanese, Chinese, and Korean studies have drawn attention to how the housing stock differs from Europe (smaller space, thinner walls), which has implications for young people meeting out of doors rather than developing an ICT-rich “bedroom culture” (Ito, 2005; Lim, 2005; Yoon, 2003). And the strict Japanese norms of regulating (mobile phone) sound in public spaces has a bearing on decisions to use text rather than voice (Ito, 2005). Clearly, there is scope for reflecting more on cultural context.

The other issue is less about potentially expanding contexts and more about what this framework sensitizes us to—or, conversely, what, in practice, it often explores less. First, while it can examine the aspirations, or catalysts, that lead people to acquire technologies or use them in a certain way, it can make researchers sensitive to constraints: the pressures from and also obligations to others (e.g., finding time for being with partners, having a face-to-face social life that can compete with ICT use as much as stimulate it), the nature of the time structures that we have, the norms associated with certain spaces or events (e.g., disturbing mobile phone calls), et cetera. No wonder that some of the earliest work stressed the fact that while our use of technologies changed, this was often not as revolutionary as some pundits would suggest or hope for (Silverstone, 1995). Habits change, but sometimes they change slowly. Time can be found for a new practice, but sometimes that can be a limited amount of time. Meanwhile, one other key line of argument that follows from this sensitivity to constraint involved looking at why certain technologies or applications are not adopted, or are adopted only in a limited way, thus using domestication research to engage with the digital divide (or, more accurately, social exclusion) debates. That is a strength of this approach, but it can prioritize certain questions, certain perspectives on technology, over others.

The related, but slightly different, issue is the consequence of focusing, in effect, on the social shaping of technology use.⁴ When the key question is often how we man-

age the technology, less attention has been given in practice to the consequences it can have for our lives or relationships, our quality of experience—or, in a critique of trends in domestication studies, if and how technologies “empower” us (or indeed have negative implications) (Bakardjieva, 2005b). In contrast to widespread academic discussions of the “effects” of technologies, the consequences of ICTs entry into people’s lives has in fact not been one of the key questions asked in many domestication studies, and this probably reflects its focus on how people incorporate such technologies into their lives.

Objects of study

Some developments in the history of ICTs may have implications for the objects of study in domestication analysis. But first, we can appreciate how the focus of research may change over time for qualitative researchers in general through reflecting upon the history of mobile phone studies (reviewed in Green & Haddon, 2009). Many of the first studies of the mobile phone were interested mainly in the phone as an object (e.g., issues of fashion, of how ringing disturbed public spaces) and in mobile communications (e.g., how calls were managed). As more elements have been added to the device, such as the camera, audio recording and playing options, and Internet access, one direction of research has been to keep the more general focus on the mobile phone, but now as a “platform” around which a variety of functions are converging. A researcher might ask when, for example, mobile phone functions are used rather than those of more dedicated devices (such as digital cameras and MP3 players). Other studies have become more focused on specific aspects of mobile phone use, as illustrated in the sub-literatures devoted respectively to the cameraphone (i.e., use of the camera on the phone) or to the practice of texting. Parallels in Internet studies would be the studies looking at use of the Internet as a whole compared to those looking at the experience of, say, social networking sites.

Arguably, the decisions about the objects of study that were made in the former waves of domestication research were influenced by the state of technological adoption in the early 1990s. In the early years of domestication analysis a range of new technologies were either first appearing or else were becoming established. Although home PCs had been a mass market since the 1980s, they were still in only a minority of (European) homes by the start of the 1990s, and so they were still novel for many people. Mass markets for the Internet and mobile phone only started in the mid-’90s, and so at this stage research was often still dealing with the domestication of these three technologies in general. They were “new” for many households at this point in time, and “appropriation” meant fitting ICTs into people’s lives when they had not been there before—as opposed to growing up with radio and television, for example. The metaphor of “taming the wild,” the unknown, was clearly more appropriate for these three technologies.

What has changed is that these three technologies are no longer new. How should domestication researchers respond to this? One possibility is suggested by the way those early studies also asked about the place of television in people’s lives. There were, of course, some relatively “new” parts of the television ensemble to ask about even at that moment in time, such as cable and satellite, which were still relatively re-

cent developments (and the VCR before that). But even though TV on the whole was not new in the 1980s, one could still ask about its consumption within households' time structures and spaces, and, indeed, how this differed between households.

The example of TV suggests one direction in which current domestication studies would be different from early ones—they can still deal with the mobile phone, the computer, the Internet in general, but they would be about technologies that people have grown up with or which had at least been present throughout a significant part of their lives. Of course, these ICTs themselves evolve, as when the experience of television changes, given current interactive digital services and televisual material accessed through the Internet. We also saw earlier that people's circumstances alter, meaning research could increasingly address the issue of how ICTs may be domesticated differently at different points in the life course: in the family of origin, in early adulthood, if couples form, with the transition to retirement, et cetera. To stretch the original metaphor, in any future studies it may not be so much that ICTs are “wild” as that they are “tamed” in different ways at different times, reflecting both technological and personal change.

The other more obvious research direction is to follow the pattern illustrated by the mobile phone research cited earlier and simply develop a narrower focus. Instead of the PC, the laptop, instead of the mobile phone, the smartphone, instead of the television, the mobile television, and so on. Or if the focus is less around the material objects such as the above, then we might consider the domestication of electronic communication, or of social networking sites. So far I have seen little evidence of such studies,⁵ but they do seem to be one option given that there is ongoing innovation. That said, the regular innovations relating to the computer, mobile phone, and Internet are not of the same order as when these major technologies were first established in the 1990s.

The changing centrality of ICTs

We have seen that domestication studies have explored how ICTs find a place in our lives, in terms of how and why we use them in certain ways and what they mean to us. But there is scope for saying more about the centrality and integration of ICTs in daily life, since it is a way to address those wider discourses, noted earlier, about how much “impact” new technologies might have, about how much change they will bring about in our lives. In practice, some devices and services can have a very niche role, useful at certain moments but used only relatively occasionally. People may also have varying degrees of commitment toward the ICT in question—that is, they could be more or less willing (and able) to manage without it. This section explores these gradations a little more in order to understand the implications for how we feel about domesticated technologies and in so doing also addresses those longer-term dynamics highlighted earlier whereby the significance of technologies for us can alter over time.

For some people our three prime examples—mobile phones, the Internet, and, partly because of the latter, computers—are for many relatively central in life. One influencing factor is the sheer range of things that we can do with these technologies. But it is not just growth in functionality that can affect the role of ICTs in our lives. Social factors also play a part, such as the critical-mass effect when enough members of

our social networks adopt a technology, especially one offering a communications channel, making it more attractive because of network effects. In addition, the fashion element associated with some new innovations, such as instant messaging (IM) among youth in many countries, plays a part, as one does not want to be “left out” of what one’s peers are doing. One further consideration is the degree to which we become locked into using some ICTs because we have reorganized parts of our life around them or developed new practices that rely on having them. For example, for many people, youth especially, the more spontaneous organization and sometimes reorganization of meetings (e.g., “Are you free for lunch?”) is based on having a mobile phone. Hence some studies have indeed explored our dependency on these devices—asking about the implications of losing access to them. When technologies are so integrated into our lives, this is not just a matter of inconvenience; they can also have a significant symbolic meaning, as captured in statements that the mobile phone feels like an “extension of the body” (Oksman & Rautianinen, 2003) or in studies of the emotional attachment that we feel to such ICTs (Vincent & Fortunati, 2009). Although the centrality of ICTs in our lives is by no means identical to our dependence on them, this example suggests that the two might be at least somewhat related.

If, however, we go back to our three key technologies, they were not always so multifunctional and so central to our lives. For example, when home computers first appeared in the U.K., although they often promised versatility, even those who bought this new technology, and certainly those promoting it, sometimes struggled to find credible uses: one could do things like manage household accounts and chart family trees, but often these felt like somewhat peripheral activities.⁶ In a British, and to some extent European, context the home computers of the early 1980s were mainly used for games playing in practice, given that printers were until the mid-’80s expensive add-ons. Eventually (after a decade in the U.K.) word processing overtook games playing, but even then not everyone has to word process daily, especially in their leisure time. Arguably the PC became more central from the mid-’90s when speakers and sound cards made the computer into a multimedia player, followed shortly afterwards by the arrival of the mass-market Internet, enabling, especially, forms of online communication that provided a rationale for even more regular computer use.

The PC example has been developed in some detail to draw attention to the fact that it took some time for technologies to become more central. But the same point could be made for the Internet itself—it has evolved to offer more over time, but in the mid-’90s one sign of its limited appeal was that in the United States in 1996 the dropout rate equalled the take-up rate (Katz & Aspden, 1998). Moreover, various studies over the years have pointed out that there is always a spectrum of Internet use, including going online intermittently, as people use the Internet more or less at different points in time (Horrigan, Rainie, Allen, Madden, O’Grady, Boyce, & Lenhart, 2003). From the author’s own interviews over the years, for instance, there have been examples of people who are users going online occasionally to look up some information if they are visiting certain locations, such as opening times, travel details, and so on. But the fact that they do not communicate online so much, for example, by email, means that the Internet remains useful at particular moments for particular purposes, but is

not accessed on a daily basis. If we change the focus from ICTs like the Internet in general to particular services and applications, many might occupy even more of a niche role in the lives of some people—for example, family websites, satellite navigation systems, games on mobile phones, and traffic news updates on the radio.

If the earlier PC example illustrated how ICTs could become more integrated into the lives of (at least some) people over time, the other time issue is how might their significance for us decrease. For example, what happens when “functional alternatives” appear. In other words, up to a point we may have developed practices, have organized lives on the basis of using certain technologies and services, even if only occasionally. But then other ways of achieving those same goals appear, especially new ICTs, which mean that we can more easily give up the old technology or, to use the term from Norwegian domestication researchers, the technology becomes “de-domesticated.” Certainly this happens: it is one of the processes that bring about changes in the repertoire of technologies that we deal with, but in practice it can involve a greater degree of complexity than first appears.

A variety of authors, including those interested in the history of technologies, have looked at the impact of new innovations on our use of existing ICTs. A key idea emerging from this is captured in the concept of “remediation” (connecting with concept of “re-domestication,” whereby our relationships to those old technologies are re-assessed) (Bolter & Grushin, 1999). Perhaps one large-scale example of this was, certainly in Western historical studies, the implications of the arrival of television for radio listening. On the one hand, TV became the main form of broadcasting consumed in a majority of households, but people did not stop listening to radio—the latter just played a different role in their lives.

On the one hand, domestication research can capture some of these shifts in the role and centrality of ICTs over time at the level of the individual and household, when researchers ask about what has changed in people’s lives and why. But here we also have an example of when the micro-analysis of domestication benefits from being complemented by a more macro-analysis of trends over time.

Implications: The case of digital divides

To demonstrate how the insights from domestication studies can be relevant for wider academic and policy debates, we can examine the example of the Internet “digital divide.” Since that particular term can be problematic since it implies too simple a binary division between those with and without access (Gunkel, 2003; Haddon, 2004; Selwyn, 2004), we might instead talk of degrees and forms of potential social exclusion (originally) related to non-use of the Internet. This issue has generated a substantial debate and literature, concern about new forms of (relative) disadvantage for non-users, and suggested solutions such as initiatives to increase awareness of the benefits, to enable access in various ways, and to promote skills (for a summary, see van Dijk, 2006).

Clearly the development of online services or information has implications for various walks of life, creating substantial barriers for non-users if the only way to achieve some goals is via the Internet (as in the case of applying for something online). Alternatively, using the Internet may simply increase the chances of achieving goals, offer more choices, allow cheaper options, or save time, to provide a few examples.

Meanwhile, online communications also open up possibilities, be it in the form of email, IM, or communication on social networking sites. But at the same time, this can mean degrees of exclusion from participating in communities for those who are not online (but whose peers are, for instance). Although some researchers have encouraged a critical approach to the benefits of the online world (Wyatt, Thomas, & Terranova, 2002), of interest here is the fact that over the years researchers from various backgrounds have looked at the non-use of diverse ICTs (Katz & Aspden, 1998; Punie, 1997; Selwyn, 2005).

Domestication studies may not be unique in providing insights into people's judgments about (not) using ICTs in general or the Internet in particular, but the type of detailed examination of people's lives that this approach provides can make such decisions more understandable. In fact, because the approach is sensitive to the constraints in people's lives, alongside tackling claims about the revolutionary nature of ICTs, this question of non-use was one of the earliest issues the domestication studies addressed (Haddon, 2000). For example, we have already seen how not being in the right social networks, competition for time with other commitments that have a higher priority, and poverty and social pressures may constrain use. But constraint is not the only consideration. One of the commonest rationales for non-use is that people can manage to achieve what they want to achieve in life through other means, often pre-dating the arrival of the new technology. While not meaning to imply that all decisions are entirely rational calculations, non-users can be viewed as being critical consumers to the extent that they are trying to balance a range of considerations in their lives at any moment and "on balance" a new technology does not fit in, or is a low priority, or is not worth the effort or cost.

Such an understanding can question an oversimplified view that there are various barriers to Internet use and if such barriers were to be removed, current non-users would be willing adopters. In fact, the digital divide debate is becoming more nuanced as the Internet evolves, such that we can ask why some people stick to narrowband access rather than migrating to broadband (although there are increasingly fewer of these), why some people use certain aspects of the Internet but not others, and why, for example, the Internet may have a place in some people's lives but, as we saw earlier, not necessarily a central one. Domestication studies, among others that often take a holistic view of people's circumstances, can shed some light on such behaviour as debates about the digital divide themselves evolve.

Conclusions

For those less familiar with domestication analysis, this article first described its origins and elements, also conveying a sense of how it works, what type of effort it involves, and what type of contributions it can make. This critical account also articulated the challenges the approach has faced, the extent to which it has evolved to meet them, and the aspects of our experience of technologies to which it is more and less sensitive.

The second part of the article addressed the questions of how domestication studies might be further extended. In particular it raised questions about future objects of study, given the way that ICTs have themselves developed since the early days of this framework, and how it domestication analysis might address more the centrality (and

integration) of ICTs in our life. Finally, the example of how domestication analysis might contribute to areas such as debates about the digital divide brought together a range of observations made earlier.

Clearly this article is a summary, in part a review from a particular researcher, albeit one with a long-term involvement in domestication studies. Other researchers using this approach have carried out their studies in slightly different ways, experimenting with different combinations of methodologies (e.g., using participant observation, online research methods, virtual tours of PCs) and complementing the domestication aspects with insights from other frameworks. They will have additional ideas about how this approach might be developed, and this review is just one contribution to that discussion. As the founding father of the domestication approach once said, “All concepts, once having gained the light of day, take on a life of their own. Domestication is no exception” (Silverstone, 2005, p. 229).

Notes

1. For a later work developing this link further, see Silverstone and Haddon (1996); see also Mallard (2005) on this theme.
2. For example, Lally (2002) in Australia, Barkardjieva (2005a) in Canada, Russo Lemor (2005) in the U.S., Yoon (2003) in Korea, Lim (2005) in Singapore writing about China. Arguably one other factor leading to the predominance of more European studies has been that the research community in many Europe countries has been more encouraging of qualitative research than in some other parts of the world.
3. For example, see Håpnes (1996), on hobbyists in computer clubs, and Hynes and Rommes (2005), researching participants in an introductory Internet course.
4. Domestication studies are not alone in focusing on adoption and use—the “diffusion of innovations” and “uses and gratifications” approaches also do this, albeit in different ways.
5. Although its authors cover a range of ICTs, the Italian study by Mascheroni, Pasquali, Scifo, Sfardini, Stephaneli, & Vittadini (in press) does examine a number of very specific Internet practices, but with a limited amount on how the online world fits in with the rest of everyday life.
6. The author was researching home computers in the early to mid-'80s for his PhD. See Haddon (1988).

References

- Bakardjieva, Maria. (2005a). *Internet society: The internet in everyday life*. London: Sage.
- Bakardjieva, Maria. (2005b). Domestication running wild: From the moral economy of the household to the mores of culture. In Thomas Berker, Maren Hartmann, Yves Punie, & Katie Ward (Eds.), *Domestication of media and technologies* (pp. 62-79). Maidenhead, UK: Open University Press.
- Bolter, Jay David, & Grusin, Richard. (1999). *Remediation: Understanding new media*. Cambridge, MA: MIT Press.
- Bourdieu, Pierre. (1986). *Distinction: A social critique of the judgement of taste*. London: Routledge & Kegan Paul.
- Douglas, Mary, & Isherwood, Baron. (1980). *The world of goods: Towards an anthropology of consumption*. Harmondsworth: Penguin.
- Goffman, Erving. (1959). *The presentation of self in everyday life*. New York, NY: Doubleday Anchor Books.
- Green, Nicola, & Haddon, Leslie. (2009). *Mobile communications: An introduction to new media*. Oxford: Berg.

- Gunkel, David J. (2003). Second thoughts: Toward a critique of the digital divide. *New Media and Society*, 5(4), 499-522.
- Haddon, Leslie. (1988). The home computer: The making of a consumer electronic. *Science as Culture*, 2, 7-51.
- Haddon, Leslie. (2000). Social exclusion and information and communication technologies: Lessons from studies of single parents and the young elderly. *New Media and Society*, 2(4), 387-406.
- Haddon, Leslie. (2004). *Information and communication technologies in everyday life: A concise introduction and research guide*. Oxford: Berg.
- Haddon, Leslie. (2006). The contribution of domestication research to in-home computing and media consumption. *The Information Society*, 22, 195-203.
- Håpnes, T. (1996). "Not in their machines": How hackers transform computers into subcultural artefacts. In M. Lie and K. Sørensen (Eds.), *Making technologies our own? Domesticating technology into everyday life* (pp. 121-50). Oslo: Scandinavian University Press.
- Hobson, Dorothy. (1980). Housewives and the mass media. In S. Hall, D. Hobson, A. Lowe, & P. Willis (Eds.), *Culture, media, language* (pp. 93-103). London: Hutchinson.
- Horrigan, John, Rainie, Lee, Allen, Katherine, Madden, Mary, O'Grady, Erin, Boyce, Angie, & Lenhart, Amanda. (2003). *The ever-shifting Internet population: A new look at Internet access and the digital divide*. Pew Internet and American Life Project. URL: <http://www.pewinternet.org> [April 16, 2003].
- Hynes, Deirdre, & Rommes, Els. (2005). "Fitting the Internet into our lives": IT courses for disadvantaged users. In Thomas Berker, Maren Hartmann, Yves Punie, & Katie Ward (Eds.), *Domestication of media and technologies* (pp. 123-44). Maidenhead, UK: Open University Press.
- Ito, Mizuko. (2005). Mobile phones, Japanese youth and the replacement of social contact. In Rich Ling & Per E. Pedersen (Eds.), *Mobile communications: Renegotiation of the social sphere* (pp. 131-48). London: Springer.
- Katz, J., & Aspden, P. (1998). Internet dropouts in the USA: The invisible group. *Telecommunications Policy*, 24(4/5), 327-339.
- Lally, Elaine. (2002). *At home with computers*. Oxford: Berg.
- Lie, Merete, & Sørensen, Knut H. (1996). Making technologies our own? Domesticating technology into everyday life. In Merete Lie & Knut H. Sørensen (Eds.), *Making technologies our own? Domesticating technology into everyday life* (pp. 1-30). Oslo: Scandinavian University Press.
- Lim, Sun Sun. (2005). From cultural to information revolution: ICT domestication by middle-class Chinese families. In Thomas Berker, Maren Hartmann, Yves Punie, & Katie J. Ward (Eds.), *Domestication of media and technologies* (pp. 185-204). Maidenhead, UK: Open University Press.
- Lull, James. (1988). *World families watch television*. London: Sage.
- Mallard, Alexandre. (2005). Following the emergence of unpredictable uses? New stakes and tasks for a social scientific understanding of ICT uses. In L. Haddon, Enid Mante, Bartolomeo Sapio, Kari-Hans Kommonen, Leopoldina Fortunati, & Annevi Kant (Eds.), *Everyday innovators: Researching the role of users in shaping ICTs* (pp. 39-53). Dordrecht: Springer.
- Mascheroni, G., Pasquali, F., Scifo, B., Sfardini, A., Stefanelli, M., & Vittadini, D. (in press). Young Italians' crossmedia cultures. In Leslie Haddon (Ed.), *The contemporary Internet: National and cross-national comparative European studies*. Berlin: Peter Lang.
- McCracken, Grant David. (1990). *Culture and consumption: New approaches to the symbolic character of consumer goods and activities*. Bloomington, IN: Indiana University Press.
- Morley, David. (1986). *Family television: Cultural power and domestic leisure*. London: Comedia.
- Morley, David. (2005). What's "home" got to do with it? Contradictory dynamics in the domestication of technology and the dislocation of domesticity. In Thomas Berker, Maren Hartmann, Yves Punie, & Katie J. Ward (Eds.), *Domestication of media and technologies* (pp. 21-39). Maidenhead, UK: Open University Press.
- Oksman, Virpi, & Rautianinen, Pirjo. (2003). "Perhaps it is a body part": How the mobile phone became an organic part of the everyday lives of Finnish children and teenagers. In James Katz (Ed.), *Machines that become us: The social context of personal communication technology* (pp. 161-70). Piscataway, NJ: Transaction Publishers.

- Punie, Y. (1997, May). *Imagining "non-users": Rejection of ICTs in Flemish households*. Paper presented at the conference Penser Les Usages, Arcachon, France.
- Russo Lemor, Anna Maria. (2005). Making a "home": The domestication of information and communication technologies in single parents' households. In Thomas Berker, Maren Hartmann, Yves Punie, & Katie J. Ward (Eds.), *Domestication of media and technologies* (pp. 165-84). Maidenhead, UK: Open University Press.
- Selwyn, N. (2004). Reconsidering political and popular understandings of the digital divide. *New Media and Society*, 6(3), 341-362.
- Selwyn, N. (2005, November). *An immobile minority? A study of middle-class non-users of mobile phones*. Paper presented at the First European Communication Conference, Amsterdam.
- Silverstone, Roger. (1995). Media, communication, information and the "revolution" of everyday life. In Stephen J. Emmott (Ed.), *Information superhighways: Multimedia users and futures* (pp. 61-78). London: Academic Press.
- Silverstone, Roger. (2005) Domesticating domestication: Reflections on the life of a concept. In Thomas Berker, Maren Hartmann, Yves Punie, & Katie J. Ward (Eds.), *Domestication of media and technologies* (pp. 229-248). Maidenhead, UK: Open University Press.
- Silverstone, Roger, & Haddon, Leslie. (1996). Design and the domestication of information and communication technologies: Technical change and everyday life. In Roger Silverstone & Robin Mansell (Eds.), *Communication by design: The politics of information and communication technologies* (pp. 44-74). Oxford: Oxford University Press.
- Silverstone, Roger, Hirsch, Eric, & Morley, David. (1992). Information and communication technologies and the moral economy of the household. In Roger Silverstone & Eric Hirsch (Eds.), *Consuming technologies: Media and information in domestic spaces* (pp. 15-31). London: Routledge.
- Sørensen, Knut H. (1994). *Technology in use: Two essays in the domestication of artefacts* (STS Working Papers 2/94). Trondheim, Norway: Senter for Teknologi og Samfunn.
- Sørensen, Knut H. (2005). Domestication: The enactment of technology. In Thomas Berker, Maren Hartmann, Yves Punie, & Katie J. Ward (Eds.), *Domestication of media and technologies* (pp. 40-61). Maidenhead, UK: Open University Press.
- van Dijk, Jan. (2006). Digital divide research, achievements and shortcomings. *Poetics*, 34 (4/5), 221-235.
- Vincent, Jane, & Fortunati, Leopoldina (Eds.). (2009). *Electronic emotion: The mediation of emotion via information and communication technologies*. Oxford: Peter Lang.
- Wyatt, Sally, Thomas, Graham, & Terranova, Tiziana. (2002). They came, they surfed, they went back to the beach: Conceptualising use and non-use of the Internet. In Steve Woolgar (Ed.), *Virtual society? Technology, cyperbole and reality* (pp. 23-40). Oxford: Oxford University Press.
- Yoon, Kyongwon. (2003). Retraditionalizing the mobile: Young people's sociality and mobile phone use in Seoul, South Korea. *European Journal of Cultural Studies*, 6(3), 327-343.

