Domestication outside of the domestic: shaping technology and child in an educational moral economy

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Abstract
This article explores the usability of domestication theory in an educational setting integrating a wide variety of information and communication technologies (ICTs). More specifically, the article analyses domestication of digital media in the Swedish leisure-time centre (LTC), an institution in which children receive education and care before and after compulsory school. The study draws on qualitative in-depth interviews with 21 teachers as well as observations of LTCs. The article reveals what it means to have limited agency as an educator when ICTs are appropriated, and further illustrates the contradictory fact that mobile phones are objectified as stationary technologies. It also shows how both devices and content are incorporated in ways that are perceived suitable to the LTCs’ educational moral economy. An especially interesting finding is the extent to which domestication theory sheds light on power relations when applied outside of the domestic sphere.

Keywords
after-school programmes, digital media, domestication theory, education, leisure-time centres, moral economy

The first issue of Media, Culture & Society in the year 1990 published an article by David Morley and Roger Silverstone. The title was ‘Domestic communication – technologies and meanings’. In their article, they pointed towards the need for the field
of media studies to ‘recontextualize the study of television in a broader framework’ (Morley and Silverstone, 1990: 31). This broader framework urged researchers to pay additional attention to the simple yet often overlooked fact that television, the dominant medium at their time of writing, also is a technology. As a technology, they argued further, it has a ‘double articulation’ (Morley and Silverstone, 1990: 48) in the sense that it is meaningful both in itself, as a technology, but also as a carrier of meanings. This fact was often ignored by media researchers, who instead preferred to prioritize the study of television as a carrier of meaning rather than television’s technological aspects.

The orientation suggested by Morley and Silverstone included a number of facets. By emphasizing television as a technology, they asked researchers to pay additional attention to the spatial and temporal aspects of everyday life, how television, as a broadcasting technology, becomes incorporated into and contributes to re-shaping of household routines – how households tame new, ‘wild’ technology. The fact that television is a broadcasting technology also inspired them to remind researchers to pay attention to how it also contributes to re-negotiations of the boundaries between the public and the private (Morley and Silverstone, 1990: 37). Above all, however, their argumentation pointed repeatedly and very directly towards the need for further media research into the domestic. They are clear on this point and they define ‘television as an essentially domestic medium, to be understood both within the context of household and family, and within the wider context of social, political and economic realities’ (Morley and Silverstone, 1990: 32).

The approach suggested by Morley and Silverstone in 1990 was to be further developed. In a number of publications during the following years, Roger Silverstone, together with a variety of different co-authors, developed on a theory of *domestication* (see Silverstone, 1994; Silverstone et al., 1992). The notion of domestication points to how media technologies always become subject to social and cultural shaping – or even re-shaping – by their users. Media technologies are encoded (Mackay, 1997) with different meanings (through their design, by marketing, through public discourses, etc.) and have technological affordances built into them (Hutchby, 2001). These meanings and affordances do not, however, in themselves determine how media come to be used. They instead become subjects for negotiations, as they enter users’ everyday lives and households’ moral economy.

After becoming established, the notion of domestication came to travel, or in the words of Roger Silverstone (2006) himself: ‘all concepts, once having gained the light of day, take on a life on their own. Domestication is no exception’ (p. 229). It is possible to discern at least two overarching directions in this development. On the one hand, researchers have come to apply the concept in studies of continuously new media technologies. This was, for instance, the case with Maria Bakardjieva’s ethnographic studies of Canadian households (Bakardjieva, 2005; Bakardjieva and Smith, 2001) as well as Tobias Olsson’s analyses of Internet usage in
Swedish working-class families (Olsson, 2002, 2006). The concept has since travelled to also become included in analyses of additional new media technologies (Hartmann, 2013; Luomanen and Peteri, 2013; Matassi et al., 2019).

The other line of development has brought the concept into new contexts, applying it outside of the domestic realm. These include studies of laptop usage in café environments, looking at how ICTs become objects of ‘situational domestication’ (Henriksen and Tjora, 2018: 354), as people bring their computers into semi-public environments. Another variation has been to bring the concept into the public sector in order to analyse how local governments shape website technology for their users (Liste and Sørensen, 2015). Yet, another variation has considered the growing interest in various forms of e-health solutions and has analysed use and perception of telecare among elderly recipients (Brintazzoli, 2018). The concept has also been used for analyses in business contexts (Harwood, 2011).

Aim and research question

This article aligns itself with both of the abovementioned lines of development, trying out the viability of the concept. First, we too apply the notion of domestication to a new social context, specifically, the institution Swedish leisure-time centres (LTCs). We will introduce the institution in further detail below, but briefly put, it is an integrated part of the Swedish education system and provides education and care for children (6–12 years of age) before and after school (Klerfelt and Stecher, 2018). It thus constitutes an intersection between leisure time and school time as well as the private and the public for young people. As such, it is an interesting spot for a rich variety of negotiations regarding how media should be understood, made use of and regulated. Second, we test the concept’s viability for dealing with a whole plethora of media. Swedish LTCs usually have access to a wide variety of media. Hence, how various media are perceived, employed and regulated has to be understood with reference to the wider media environment.

The aim of this article is to contribute to our understanding of domestication processes outside of the domestic, and to test the viability of the domestication framework in a new setting. The main research question guiding the study reads as follows: How are different ICT devices as well as different media content domesticated within the moral economy of Swedish LTCs?

Theoretical contextualization: phases of domestication and the concept of moral economy

In his 1994 book Television and Everyday Life, Roger Silverstone thoroughly explained and developed his notion of domestication. The book has inspired a large number of empirical studies of ICTs in everyday life (see Bakardjieva, 2005; Chambers, 2019), and it has also been a reoccurring reference in theoretical reflections (see Couldry and Hepp, 2013; Livingstone, 2019). For our purposes, to contribute to our understanding of domestication processes outside of the domestic, and to test the viability of the
domestication framework in a new setting, Silverstone’s discussion on phases of domestication, together with his take on the concept moral economy, are specifically relevant.

Domestication is most often described as a process of four phases (Haddon, 2016; Silverstone et al., 1992): appropriation, objectification, incorporation and conversion. Regarding appropriation, Silverstone (1994) argued that this is a phase which takes place,

at the point at which it [a media device] is sold, at the point at which it leaves the world of the commodity and the generalised system of equivalence and exchange, and is taken possession of by an individual or household and owned. It is through their appropriation that artifacts become authentic (commodities become objects) and achieve significance. (p. 126)

Appropriation is, hence, an early encounter between a new ICT and a household, or an individual. During this phase the household, or the individual, draws on its various resources (for instance, material, symbolic and social resources) in its decision to acquire (or to not acquire) a new ICT and/or new content (or services). For Silverstone (1994), appropriation ‘reveals itself in possession and ownership’ (p. 127). For the purpose of this study, however, it is necessary to point to the fact that similar negotiations also take place within social entities other than households or individuals, as new ICTs are acquired. The early encounters between new ICTs and social entities can just as well involve contexts such as working places, classrooms or cafés. Also, in these contexts new ICTs inspire questions such as ‘How should we use it?’ or ‘What is it good for?’

The concept objectification points towards ICTs’ spatial integration into everyday life, how they are placed, where they are used and – potentially – stored. Silverstone (1994) himself points out that ‘[o]bjectification is expressed . . . in the physical dispositions of objects in the spatial environment of the home. It is also expressed in the construction of that environment as such’ (p. 127). He further indicates how objectification ‘reveals itself in display and in turn reveals the classificatory principles that inform a household’s sense of itself and its place in the world’ (Silverstone, 1994: 127). These ideas are immediately transferable to other everyday environments, besides households. Despite the fact that this was what Silverstone had in mind, such sense-making and – more concretely – placing of ICTs also occur in any social environment that brings them to use.

Whereas objectification pays interest to the spatial organization of ICTs in everyday life, the concept incorporation is concerned with their temporality: When are they used? By whom are they used? And for what purposes? Silverstone (1994) puts it like this: ‘To become functional a technology has to find a place within the moral economy of the household specifically in terms of its incorporation into the routines of everyday life’ (p. 129). Once again, he is obviously concerned with households, how they shape and reshape media by organizing them into the everyday temporal structures.

Whether and how ICTs are used in everyday life depends on a number of different factors. In analyses of household domestication aspects such as gender dynamics (Van Zoonen, 2002), social class (Murdoch et al., 1992) and age (Olsson et al., 2019) have often been considered in order to explain how everyday usage is shaped. In other social
contexts, additional factors come into play. In the case of LTCs, such factors include the educational ambitions of the social setting.

Regarding conversion, Leslie Haddon (2016), who has made numerous important contributions to domestication research, explained that it deals with ‘how people mobilise these ICTs as part of their identities and how they present themselves to others, for example, in how they talk about and display these technologies’ (p. 20). One particularly interesting aspect of this phase of domestication is the ways in which various users talk about and present their ICT practices to the outside world. Traditionally, domestication research has paid interest to how individuals and households put their ICTs and ICT practices on display. For our purposes, however, it becomes important to reflect on how LTCs, as an educational and also professional context, present their practices and negotiate their self-presentation.

The notion of moral economy has already been touched upon regarding incorporation. It is relevant to comment on it somewhat more specifically. According to Haddon (2016), the concept originally referred to ‘the values of household members and how the symbolic meanings of goods were judged against those values’ (p. 20). On the one hand, the values within the moral economy shape how new ICTs are domesticated within different households. They shape how appropriation, objectification and so forth are played out. On the other hand, it is also a dialectical process, where a new ICT ‘as medium and as message, will extend and plausibly transform’ (Silverstone, 1994: 50) the household and its moral economy. It is also relevant to reflect on the fact that a household’s moral economy is neither a reification, nor monolithic in its character. The moral economy is instead subject to continuous change and amendments with reference to the outside world. It is an economy within which negotiations take place between household members’ varying values, opinions and preferences.

The Swedish LTC: background, moral economy and previous research

The Swedish LTC provides education, recreation and care for children from 6 to 12 years old, before and after school, as well as during holidays. In 2019, 84% of children aged 6–9, and 20% of 10- to 12-year-olds, were enrolled in LTCs (Swedish National Agency for Education, 2019). The LTC is an integrated part of the education system both legally and physically; it is regulated by the Education Act and the national curriculum, and LTCs are most commonly located in school buildings (Klerfelt and Stecher, 2018). At the same time, LTCs are commonly constructed as a different space compared to compulsory school, with a different pedagogy (see further below), and with a more home-like environment with, for instance, sofas and toys (note that the institution in Swedish is called fritidshem, that is, ‘leisure-time home’). Similar institutions exist in the other Nordic countries, while school-age educare in other parts of the world – such as after-school programmes in the United States and after-school clubs in the United Kingdom – vary greatly in their organization (Afterschool Alliance, 2014; Falkner and Ludvigsson, 2016; Out of School Alliance, 2019).
The moral economy of the LTC is to a large extent shaped by the different pedagogical ideas that have influenced the institution. The German pedagogue Friedrich Fröbel (1792–1852) and reform pedagogy have had a major influence, putting creativity and children’s active engagement with the world at the centre. The idea is that children learn with all senses, through music, painting, handicraft, physical activities and play (Ankerstjerne, 2015). The social pedagogical tradition, with its focus on children’s social development and competence, has also been influential (Lager, 2018), as has democratic fostering with a focus on children’s participation and own initiatives (Ankerstjerne, 2015). These pedagogical ideals are materialized in the national curriculum, which says that the LTC should stimulate children’s learning and development and provide a meaningful leisure time, by emphasizing learning that is group oriented, situation based and experiential. It further says that the LTC should take its point of departure in children’s interests, initiatives and needs, but also stimulate children to engage in new experiences (Swedish National Agency for Education, 2018: 22–25).

Previous research on the Swedish LTC has mainly focused on the leisure-time teacher profession and professionalization, the integration of the LTC into the education system and practices in LTCs (Falkner and Ludvigsson, 2016). A few studies touch upon the use of digital media; however, none of these use domestication theory. Saar et al. (2012) and Dahl (2014) showed how teachers have a negative view of children’s use of computers. Computer use is often not considered a meaningful pedagogical activity and is perceived as antisocial. Apart from these studies, research on digital media in school-age educare has primarily been conducted in American contexts, where digital media is an integrated part of many after-school programmes (see Vakil, 2014; Vickery, 2014). These programmes commonly aim to empower disadvantaged children by motivating them to learn more about school subjects, to learn about their community and, at the same time, learn how to use and produce digital media in an engaging context.

Compared to the limited body of research on digital media and LTCs, there is extensive research on the use of digital media in compulsory school. These studies mainly focus on the role of digital media in teaching specific school subjects, and the effects on learning (Haelermans, 2017). Domestication theory has been used, but only loosely within a few studies, such as in some publications from the European project Net Children Go Mobile. For instance, Mascheroni and Ólafsson (2014) showed that it is common among European schools to ban children’s use of smartphones, but that policies also vary greatly among European countries. Compared to these studies, this article takes the domestication approach more thoroughly into consideration. It makes analytical use of all phases of domestication in order to grasp the social shaping of ICTs in an educational moral economy.

**Method**

This study is based on qualitative interviews conducted in 2018 with 21 leisure-time teachers working in the south of Sweden, and observations of the LTCs in connection with the interviews. This study is part of a larger project that centred on how leisure-time teachers work with digital media and promote children’s digital competence in Swedish LTCs. Qualitative interviews were considered relevant, as we wanted to gain in-depth
descriptions of teachers’ experiences (Kvale and Brinkmann, 2009). The observations complemented the interviews, and focused primarily on routines and rule setting regarding digital media, which were commonly displayed on posters and whiteboards in the LTCs. The observations also focused on the spatial environment and placement of digital media devices.

The participants were selected to gain variation among participants and LTCs, primarily in terms of age, gender and the ages of children they worked with, as well as geographical location (urban and rural, and high- and low-income areas). The participants comprised 12 women and 9 men, most of them educated as leisure-time teachers. The interviews were conducted as individual interviews (19), while one interview was conducted with two participants who worked in the same LTC. Most interviews were conducted face-to-face in their workplaces; however, three interviews were done by telephone, due to geographical distance. Interviewing through telephone enabled us to include more geographically distant participants. Observations of the LTCs were not made in these cases.

The interview guide included questions about their work with digital media and digital competence, routines and rule setting regarding digital media, and how they approached children’s self-selected activities (such as playing digital games). The interview guide also contained questions on challenges and opportunities connected to digital media and digital media use in the LTC. These questions elicited detailed information on all four phases of domestication. The interviews were transcribed verbatim and include significant tones of voice and pauses. The interview data were analysed using qualitative coding (Bazeley, 2013), with a focus on the four phases of domestication.

**Domestication of digital media in Swedish LTCs**

In the results section, we present the analysis of the different phases of the domestication process and what characterizes these phases in the context of the LTC.

** Appropriation**

Unlike appropriation processes in the household, where family members make decisions on which technology to obtain (Silverstone, 1994; Silverstone and Hirsch, 1992), teachers in the LTCs had generally little agency in the phase of appropriation. Purchase decisions were made by other actors higher up in the organization, such as the school’s principal or officials in the municipality. This concerned mainly the most expensive technology such as laptops and tablets, and infrastructure such as access to the Internet, but in some cases also what apps they were allowed to download. Teachers described how they took part in the consumption process by trying to make their opinions heard, and, as they said, by forwarding ‘wishes’ or ‘lobbying’ to obtain certain technology.

The teachers’ limited agency did not hinder access to technology, as decisions made by other agents provided the LTCs with technology. In all LTCs, they had access to laptops (mainly Chromebooks) and/or tablets (iPads), but the number of devices varied. In some centres, children used their personal tablets or laptops (school-issued devices that children borrow), while in some LTCs they had only a few devices to share. However,
the limited agency in the appropriation phase could affect the domestication process in negative ways. Samuel said,

Right now we are doing really well here. We have many personal computers. But now there is some kind of municipal reform to buy Chromebooks, and they’re practically useless, seen from a leisure perspective . . . You can’t edit a video or record a song or play a game, because they don’t have hard drives . . . So I’m a bit worried there, because I can’t arrange 25 laptops. It’s completely beyond my power; it’s completely in the hands of the management and even higher up at the municipal committee level, what they choose to spend money on.

In this quote, Samuel describes how decisions in the municipality to substitute PC laptops for Chromebooks will negatively affect their ability to play digital games and edit videos. Agents higher up in the organization do not have knowledge of the particular practices and needs of the various LTCs. Hence, the distance between where purchase decisions are made and the actual space in which media are used has consequences for the domestication process. This distance can result in involuntary reverse domestication (Karlsen and Syvertsen, 2016), as already established media practices have to be abandoned when new devices are introduced.

The fact that other actors had agency in the appropriation phase also became evident regarding infrastructure. The teachers commonly described how they could not use the Internet on their devices outside of the school building. However, a few teachers bypassed the structural constraints and created their own space of agency. Sandra described how she had participated in a contest and won a portable router:

I’m online watching a lot and participate in many competitions and so on, so I won a router. So I have it in my pocket, you see, so when we walk, not all the kids have Wi-Fi, but now we do have it and if you walk beside me, we’ve got 579 GB there. So we walk and catch Pokemon (enthusiastically) . . . I’m so grateful that I won it, because we have almost no money in the municipality.

In this quote, Sandra states how she – because she won a wireless router – can play Pokemon Go outside with the children. In this way, personal initiatives in the appropriation phase sidestep the organizational constraints and create new possibilities in the domestication process.

While appropriations of laptops and tablets were part of formal decision processes, there were also media devices that entered the LTCs in more informal ways. There was a flow of media devices from the home to the school and the LTC, as children brought their own mobile phones, and decisions had to be made on how to appropriate these technologies. In some LTCs, mobile phones were rejected altogether, as the LTCs belonged to ‘mobile-free schools’. In other LTCs, children’s mobile phones were appropriated to some extent, however, under strict control. Their use was mostly restricted to specific activities, such as calling parents, or during a limited time, under supervision. The arguments behind rejection and restriction referred to the difficulties of controlling children’s mobile phone usage. This shows how children’s mobile phones, in the context of the LTC, were considered a particularly ‘wild’ technology that required strict handling in the
domestication process. It is analytically interesting to note how something that has already been domesticated in the home context becomes rewilded as it enters the LTCs as educational contexts.

**Objectification**

The most frequently used devices in the LTCs – laptops and tablets – were commonly stored in locked spaces and did not have a permanent position and display in the LTCs. The only media which had fixed positions were console games, which often had a room of their own. Hence, the most commonly used devices were not available for children to bring forth whenever they wanted; they needed to ask for permission to use them. Keeping media devices in locked spaces was a way to regulate children’s access to them, but also to comply with insurance requirements and to hinder theft. Hence, objectification of media devices in the spatial environment was constantly created and recreated through different arrangements. Compared to the appropriation phase, the teachers had substantially more room for agency in the objectification phase, as they could decide on the organization of children and media devices in the LTC space.

The teachers arranged children and mobile devices together in such a way as to create a social activity. Hence, the moral economy of the LTC, where social relations and cooperation are highly valued, certainly shaped objectification. Children were commonly grouped together in different constellations. For instance, they could be placed together in the same room, or the teachers might design activities where two or more children shared one device. Sociality was also encouraged by projecting media images using a projector, or a smartboard, so that the children could share media experiences. Johanna described how she and her colleagues arranged a social activity by grouping the children and framing the activity as a LAN party:

Then we turned the light off in the whole room and you got to go in and take your computer and sneak into that room and sit down. And it was fantastic to see, because then we started making jokes about ‘now we’re going to LAN’ . . . It has to be dark and ‘you have to sit at the tables’. And then we put the tables up around like this. More and more came. And then we teachers stood up and looked at them and said, ‘Oh, my God, those two usually never talk with each other, check those two there. Wow, do you see?’

In the quote, Johanna describes how the teachers arrange the children, laptops, tables and lights, and how they observed children interacting in new ways. This shows how objectification becomes part of a purposeful pedagogic activity where teachers seek to steer children’s social behaviour.

The perhaps most mobile device – the mobile phone – became the least mobile technology for children in the LTC. As described in the previous section, children’s mobile phones were rejected or appropriated under strict regulation. The regulation also became manifest in the objectification phase, as the teachers either collected the phones and placed them in locked places, or as the children were instructed to keep the phones in their bags. In the few LTCs where children were allowed to use their mobile phones,
movements with the mobile phone were constrained. For instance, the children had to sit in a special room so that the teachers could monitor their use.

This demonstrates how teachers controlled and steered children’s media practices by using and regulating the spatial environment. Through objectification, hence, teachers both expressed and created the power relationship between children and teachers in the LTC. And rather than constructing personal identity and status through objectification, teachers instead constructed themselves as being in control and taking responsibility for the children and their social development.

**Incorporation**

The teachers similarly had more room for agency in the incorporation phase, as they could decide on routines and rules for media use, and which media content to incorporate or reject. In this section, we focus on three aspects of media use discussed across the interviews: watching YouTube, playing digital games and making videos. First, we focus on how the moral economy of the LTC shaped incorporation, and then we analyse routines and rule setting around media use.

*How the moral economy of the LTC shapes incorporation of digital media.* Playing digital games and watching YouTube were integrated activities in most LTCs. Allowing children to play and watch certain videos and games, which they also use at home, was a way to involve children’s own interests, which is a central part of the moral economy of the LTC. However, these activities were highly regulated by the teachers, and they accepted and rejected games and videos referring to other core values of the LTC. Some teachers stated how they negotiated with children around incorporation, but the power to decide was ultimately in the hands of teachers.

Different types of games were used in the LTCs, such as Minecraft, Fifa, Just Dance, and Pokemon Go, and various websites of ‘pedagogical games’. Playing digital games was motivated based on children’s interests, but also with reference to other central values. The teachers referred to game play as a *social activity* (playing together, having a dialogue and cooperating), as a *physical activity* (dancing in relation to Just Dance, Pokemon Go), as a *learning opportunity* (such as learning about the ecosystem through Minecraft) and as a *moment of relaxation*. Rejection of digital games in the LTC was based primarily on two characteristics. Games with violence (blood, shooting or war) were not allowed, nor were games with age restrictions. The participants stated that they as an ‘institution’ could not allow these types of games, and that they considered the opinions of parents and colleagues.

Regarding YouTube, teachers allowed children to watch music and dance videos, funny videos and videos with cute animals. Watching YouTube based on children’s own interests was also related to other values, such as the value of *recreation*, engaging in *social activities* (when they watched YouTube videos together and had conversations) and the value of *physical activity* (when they danced to Just Dance videos). YouTube was furthermore used in most LTCs to display instructional videos (tutorials) when children engaged in creative activities encouraged by teachers, such as drawing and making pearl
beads. YouTube was described as particularly valuable when it was used for practices that the teachers could regard as related to learning and creativity.

The teachers described how they constantly exerted control when using YouTube. They argued that inappropriate and even very destructive videos were just one click away, and that children could accidentally or on purpose click on inappropriate videos displaying violence, injured or dead people, sex and alcohol, inappropriate language or pranks as well as videos showing video games with age restrictions. In a few LTCs, the children were not allowed to watch YouTube based on their own interests, and this restriction was founded on the arguments that children already watched at home and that they could too easily access undesirable content.

Making videos was also a common activity in the LTCs. In contrast to playing digital games and watching YouTube, such media-related activities were described only in positive terms. However, there was one exception; filming with children’s own mobile phones was considered highly problematic and was prohibited in the LTCs. This was considered a risk and a threat to safety, as the children could upload these videos on their social media apps. The schools’ tablets did not contain such apps and were therefore easier to control. Hence, social media apps (such as Instagram) made children’s mobile phones particularly ‘wild’ within the context of the LTC.

Making videos using the apps iMovie and Stop Motion on tablets was described as a creative activity. Creativity is a core value within the moral economy of the LTC, which thus shaped the incorporation of digital media. The teachers also accentuated other positive dimensions of making videos, describing this as a social activity and a learning event, as the children most commonly were instructed to write a manuscript before filming, often in groups. Some teachers expressed that children must learn to produce and not only to consume digital media. Niklas said,

But [we have to] also in some way get them interested in things other than what they have already discovered themselves, that don’t come from their friends and aren’t some other game of some YouTuber that you should watch, but that we work that in as a creative tool too. Because we are supposed to do that too, according to the curriculum. You’re supposed to learn to express yourself digitally too. Not just get impressions.

In this quote, Niklas argues for the need to engage children in creative media practices and to steer children’s media practices so that they do not engage only in activities they choose themselves. Hence, balancing children’s own media interests with teachers’ ideas of other valuable practices was a central part of the domestication process in the LTC. This idea of providing children with new experiences is one of the goals of the LTC, which thus shaped domestication.

**Routines and regulations around digital media use in the LTC.** Media use which took its point of departure in children’s interests was surrounded by the strictest routines and regulations. There were rules regarding which days and for how long children were allowed to use these media, and one common way of regulating this was to allocate one or two afternoons per week when children could use digital media more freely during a certain amount of time (commonly 1 or 2 hours). In some LTCs, playing games
or watching YouTube were restricted to late afternoons after children had done other activities and were tired. There were also centres where playing digital games and watching YouTube occurred more occasionally, on a rainy day, or as a special event to make something extraordinary fun for the children. There was, however, one exception to the strict routines surrounding YouTube. When this platform was used for specific purposes related to creative activities and learning (such as finding instructions on how to make origami), this platform could be accessed more spontaneously. Hence, media use connected to traditional and highly valued activities in the LTC was more fully integrated into the flow of everyday life.

The teachers explained how they had established routines for regulating children’s use of YouTube. They regulated children’s media use by sitting with the children and accepting and rejecting videos, or by being nearby and walking around the rooms supervising. Some teachers noted that children police each other, and that they tell the teachers if their friends are watching inappropriate videos. The need to constantly supervise children’s use of YouTube indicates that this digital space was considered particularly ‘wild’ and difficult to tame, in contrast to digital games that could be selected in advance and thus be more easily controlled.

While watching YouTube and playing digital games was most commonly requested by children, the practices related to making videos were mostly initiated by teachers. They often introduced these activities in organized learning events, and the children could then more spontaneously ask for an iPad to make videos. These activities were hence not in the same way restricted to certain weekdays and time slots. This shows again that media use encouraged and valued by teachers was subjected to less strict routines and rule setting.

**Conversion**

In the context of the LTC, conversion mainly manifested itself in the communication between teachers and parents, and more specifically, when teachers presented and justified the LTC’s media use to parents. The teachers described how they motivated their practices to make parents understand their pedagogical ideas and to create a positive attitude among them. This communication took place in face-to-face meetings, in parent–teacher conferences and in open houses as well as through digital media (the LTCs’ blog or in the digital monthly newsletter).

Conversion took place through either *proactive* or *reactive* communication. In proactive communication, the teachers informed about and motivated media use to prevent negative comments, as they knew that media use is a sensitive issue among parents. Reactive communication took place in situ, for instance, in situations when parents came to pick their child up and made negative comments about their child sitting with the tablet. In the quote below, Samuel describes how he engages in proactive communication:

> We’ve completely overwhelmed them with information. Blog posts, YouTube channel, open house, interactive maps over our Minecraft world. That they are generally updated on what we do, and have in that way come to the same insights as I have done, that ‘Like, it wasn’t that bad. This is actually just bloody fun’ . . . And in particular that we have started at that end, that we
have informed them about what it is that we do. Is it about them [the children] each sitting by a computer totally insulated and becoming aggressive and forgetting to eat and drink and pee and so on? Is that what we are doing or is it that we are sitting in a social climate, playing together, learning things?

In this quote, we can see how Samuel motivates their use of Minecraft based on central values they share with the family, such as being social and learning new things. The teachers also drew on values that are central to the school, for instance, that they fulfil the goals of the curriculum, and that their activities are well thought through and have an ‘aim’. Children’s well-being was also brought up in both proactive and reactive communication, such as the need to relax after a long school day, and the fact that the children do many different activities in the LTC, where digital media is just one component. Through these different arguments, the teachers legitimized their work and constructed themselves as responsible and professional teachers.

**Conclusion**

As we stated in the introduction, this article aligns itself with two lines of development within domestication research. It has, on the one hand, applied the notion of domestication in an analysis of media practices that take place outside of the domestic sphere. It has also – on the other hand – brought the concept into use in an educational environment that is permeated by an array of technologies and applications rather than one single media technology.

Following the subthemes inherent in the notion of domestication has helped reveal important insights regarding contemporary ICTs (and their various applications) as well as Swedish LTCs as educational contexts. When looking into LTCs’ appropriation of ICTs, two insights are particularly striking. First is the fact that the teachers’ professional agency becomes a limited agency. The teachers’ preferences concerning what ICTs and what applications to appropriate are framed by others’ preferences. What ICTs and what applications to appropriate rely on decisions made by others, higher up in the school organizations, such as school principals and school directors. Hence, in this context, appropriation has little to do with expression of personal identity and more to do with expression of professional relations of power between employers and employees. Focusing on appropriation also reveals, second, an interesting tension when it comes to children’s own mobile phones. The children’s mobile phones are already domesticated parts of the children’s home environments and everyday lives. In the LTC context, however, these devices appear to become wild again, and are perceived as unwanted, potentially dangerous. Hence, the mobile phones are deemed to be in need of careful control by the teachers. It is, in fact, possible to speak of reversed domestication.

When looking into the phase of objectification, it was evident how the teachers had a significantly stronger agency. The spatial organization of ICTs in the LTC – where they are placed, how they are framed by restrictions and so forth – is to a large extent decided by the teachers. Their decisions are mainly inspired by their sense of professional identity. The teachers make spatial choices to foster ‘good’ values in media usage and sociability among the children. They make these decisions in ways that align with fundamental values of the moral economy.
In both objectification and incorporation, there are new power dynamics being played out, in these cases between teachers and children. During the incorporation phase, the power relation becomes especially evident when it comes to which ICT practices are favoured by the teachers and the children, respectively. Whereas children express preferences for ICT practices such as playing online games and watching YouTube, the teachers feel a need to embed such practices within values of the moral economy. Hence, they only allow such activities when they can be aligned with values such as ‘social activities’, ‘learning opportunities’ or ‘creativity’. This is also how the actual use of ICTs is shaped in the everyday lives of the LTCs, and the power to decide on when, how and by whom various ICTs should be used largely rests with the teachers. As one consequence, teachers often make sure to involve ICT use in practices that they perceive to be creative, such as when children produce something. This relates to the LTCs’ moral economy, and specifically to what sort of children – and what sort of citizens of tomorrow – they aim at shaping.

Originally, conversion referred to how a household put its media technologies and practices on display (see De Reuver et al., 2016). This also happens in the LTCs, but most often with a specific audience in mind: parents. In the teachers’ interaction with parents, they are keen on presenting the pedagogical ideas behind their ICT practices. To a large extent, this is a result of the fact that teachers have to negotiate with the parents’ concerns regarding ICT use within LTCs. The parents’ concerns, and sometimes negative views of children’s ICT use, brings to mind a broader cultural phenomenon, that is, the moral panics which often surround children’s media use. This necessitates regulation of children’s media use to prevent potential negative effects (Clark, 2011). Hence, the teachers feel a need to explain and defend ICT use, with reference to core values of the moral economy. Simply using devices such as mobile phones or game consoles is most often not considered a good enough practice. Such practice needs to be motivated with reference to higher values. The teachers’ interaction with parents regarding ICT practices also reveals a power dimension, in which teachers sense a need to establish authority and professional independence vis-à-vis the parents.

The extent to which the concept domestication sheds light on power relations when applied in a moral economy outside of the domestic sphere is especially interesting. Power was an important analytical instance already in the original studies using the domestication approach, but then with a focus on household relations of power, for instance, gender relations. When applied outside of the domestic, a number of additional power relations surface – in our case between employers and employees, between teachers and children, and between teachers and parents. The ways in which ICTs become domesticated depend on such power relations.

In our view, this is promising, as it emphasizes the wider and continuous usefulness of the notion of domestication for studies of additional social contexts, not least, educational ones. Swedish LTCs are a particular educational context. They are related to, but also separate from preschools, primary schools, secondary schools and so forth. Hence, the notion of domestication promises also to be a useful point of entry for analyses of ICT practices in additional educational contexts, and to become a resource for offering insights regarding their pedagogical as well as practical implications. As we established previously, to date, there are but a few studies covering domestication processes in...
educational contexts. This is a direction for media research to develop further, as educational contexts, all over the world, have come to involve additional ICTs.

There are also few indicators pointing towards a decreasing educational interest in making use of ICTs. For instance, at this very moment, there is an ongoing development of a whole variety of artificial intelligence (AI) applications. In the years to come, their introduction into both domestic and institutional settings is in need of a wide range of analyses to grasp their social and cultural significance. In such AI-permeated contexts, the notion of domestication can help reveal important insights regarding how technologies are integrated into, are socially shaped by and are re-shaping our educational contexts.

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1. In Television and Everyday Life, however, Silverstone conceptualized it as six phases, adding commodification and imagination to capture what he perceived as an overall process of consumption.

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