Drawn in All Directions

Heritage Language Families' Use of Technology

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Abstract

This chapter explores the experiences of parents from a variety of cultural and linguistic backgrounds, specifically focusing on their use of digital technology as a means to support the development of the heritage language with their children. Based on both a quantitative and a qualitative study, the chapter explores family tensions linked to emotions as part of heritage language use, and the internal struggle parents face when it comes to their ideological assumptions on use and over-use of technology, versus the motivational pull they know technology has for their children. As well as focusing on data from the study, the chapter critically engages with the literature around digital technology for language learning and explores the special "niche" heritage language families occupy in this context.

Keywords: heritage language, technology, family, children, digital

Introduction

This chapter focuses on ways in which parents of different cultural and linguistic heritages use digital technology to support heritage language developments in their children. Based on a study involving 212 families via a questionnaire, followed by ten family interviews, the chapter explores family tensions between varying emotions attached to the heritage language, with parents occupying multiple spaces as gatekeepers, facilitators, instructors in the heritage language, and parents.

Lim's notion of "transcendent parenting" (Lim, 2016) argues that, in the modern era, parenting goes beyond traditional childcare, having to transcend the online as well as the offline interactions of the child, dealing with constant connectivity, and incorporating multiple media environments the child might engage in. In her conclusion,

Lim argues for the need for researchers to look at interactions between parents and their children within the sphere of technological connectivity. For heritage language families, "transcendent parenting" is old news, although not in the meaning implied by Lim (2016). On a day-to-day basis, heritage language families must transcend various cultural assumptions, discrepancies between the home and the school environment, and multiple languages. For these families, digital technologies offer both a potential bridge (if used to connect the younger generation to parental language and culture) and a barrier, if it illustrates yet another aspect of differentiation between the generations.

This chapter begins by exploring the literature around heritage language families and related technology use, before, in the second part, highlighting in brief a research study with 212 heritage language families, drawing out key findings to assist in the discussion around heritage language development through technology, and transcendent parenting in multicultural, plurilingual families.

Heritage language families

The term "heritage language" describes a scenario where language is "inherited", passed down the generations. This term is as problematic as it is realistic – like a biological inheritance, other factors may influence the strength with which the language is passed on, like a material inheritance, it can be either adopted or rejected (Bourdieu, 2000). Like a family heirloom or keepsake, the language may have more meaning for some family members than others – for some family members, it may be an integral part of their identity, while for others, it may merely be a burden or additional chore (Little, 2017a).

As far back as 1959, Borrie recognised the importance to remain connected to cultural roots, with Fishman (1991) problematizing the "language shift" that occurs between heritage language families across the generations. This language shift describes the way in which language priorities – and, ultimately, knowledge and understanding – change between generations, often leading to neglect of the heritage language by the third generation at the latest (Little, 2017b).

Families may have a multitude of reasons to maintain the heritage language, ranging from the emotional to the pragmatic (Little, 2017a). Some families further make links between the language and other cultural values, such as customs and behavioural traits (Mu, 2014), and thus, the language is viewed as a considerable part of the family identity. These factors mean that those seeking to pass on the heritage language – typically the parents – are looking to identify ways to create emotional and motivational connections between the children and the heritage language, typically drawing on a variety of resources in order to expose the child to the heritage language (e.g. books, videos, apps) and to facilitate family interaction and communication (e.g. trips abroad, phone calls, Skype conversations).

Attitudes towards technology – family and cultural perspectives

Literature which focuses on the distinct difficulties of heritage language families in the area of technology use is difficult to find, necessitating a more over-arching look at available research. Hamilton and colleagues (2016) point to the role of parents as gatekeepers, controlling screen time and the purse strings in terms of which games, apps, etc. are purchased. This means that parental values with regard to technology are of particular importance, and, just like with heritage languages, there are distinct differences across families as to how technology is viewed. While Ortiz, Green and Lim (2011) found that parents viewed technology use among their children as advantageous to future career prospects, other studies warn of its impact on well-being (Hinkley et al., 2014), childhood obesity (Hamilton et al., 2016; Sanders et al., 2016), and damaging consequences of increased screen time in low-income families (Dubois et al., 2008). Studies within spheres of non-Western cultures are even rarer, although Samaha and Hawi's (2017) study with parents in Lebanon comes to similar conclusions, adding the important note that parents should avoid using screen time as a lever for reward or punishment with their children. Atkin and colleagues (2014), in a study comparing screen time data across various studies spanning twelve years, eight countries, and over 11,000 children, conclude that parental education remains a factor in screen time, but that, across all studies, two thirds of children exceed the two hours daily maximum, recommended by the American Academy of Pediatrics' Council on Communications and Media (Strasburger, 2011).

While several of such studies make it into the public domain, the issue is that results are often simplified for public consumption, creating headlines and bite-size interpretations that make it impossible for parents to adequately assess whether information is relevant for their child. Many studies, for example, do not differentiate between different types of screen time, although Hinkley and colleagues (2014) come to the conclusion that time spent in front of the television is more detrimental than time spent in front of the computer. With the rapid advance of technology, however, and children's adaptability to it, there are a multitude of possible scenarios that remain unexplored – in one family explored in the study described in this chapter, a child would watch an English gaming tutorial on the internet (with audio), while playing the actual game (in the heritage language, with written descriptions to advance the game-play) on a small gaming device. The lines between active and passive technology use, and what we can confidently say about how children make use of technology, continue to blur and move positions, leaving researchers scrambling to keep up, and parents struggling to "transcend" their children's technological and cultural experiences.

Studies on children's screen time also frequently neglect the active involvement of key participants – the children. Berríos, Buxarrais and Garcés' (2015) study, for example, shows that screen time among children is perceived as participation in social activities, via social media, including both age-appropriate and age-inappropriate activities. These findings, drawn together, illustrate that "screen time" is a much more complex

term than a first glance might predict, encompassing both active and passive technology use, gathering of information, language learning, and social activities. For parents to try and "transcend" their child's virtual life, this understanding is important, as is an understanding of how language and literacy development in the heritage language may fit into the children's portfolio of their digital lives.

Usefulness of technology in acquiring language and literacy skills

While many parents are concerned about the time their children spend engaged in digital activities, there are also undeniable motivational attributes of technology for language acquisition and practice, which chimes with the parents' wish to pass the heritage language on. Again, the field of heritage language education has to "borrow" from the more over-arching area of languages education, meaning that much of the literature is aimed at second-language or first-language literacy learners, with all related connotations this brings in terms of identity construction.

The research field around technology in the early years is particularly vibrant, with a plethora of research aimed at learners' developing literacy skills in the mother tongue (Kucirkova et al., 2014; Merchant et al., 2012). In contrast to those researchers who point towards negative implications of technology use, Marsh and colleagues (2017) explored young children's emergent digital literacy practices in the family context, arguing for a shift in literacy development to a more multi-modal approach (Kress, 2010), and suggesting a change in focus, from "family literacy" to "family digital literacy". If literacy in digital and multimodal contexts is viewed as an introduction to family practices, and an apprenticeship into exploring the world, then heritage language families, once more, need to consider to what extent digital practices represent (or, indeed, transcend) the languages and cultures in the home.

An issue related to research with heritage language speakers is that they are by no means a homogenous group – children's level of competence in the heritage language may range from virtually non-existent to a level equal of monolingual native speakers. As such, trying to group these children together is doomed to failure, unless the focus is on small-scale, comparable groups of children. Eisenchlas and colleagues (2016) reported a study of three custom-created games for a group of nine heritage language children, aged 5 to 8, speaking German. The game was perceived as motivational, and aided in the acquisition of literacy, showing the potential of custom games, despite the doubtlessly poor potential financial return on any game created with such a small minority in mind. Other research with older learners shows the potential motivational benefits of learner choice and control (Lam & Rosario-Ramos, 2009), with older learners choosing to spend time on multiplayer games online in another language (Rama et al., 2012).

Exploring technology attitudes with heritage language families

The study outlined in this chapter was conducted with 212 families in the U.K. via an online questionnaire, followed up by ten family interviews. Volunteers were drawn from bilingual parenting groups on social media, thus assuming a certain level of interest in heritage language education, and a certain level of technological understanding. Questions in the questionnaire covered the language level parents hoped for in their children, resources used, and a sub-group of questions explicitly related to technology attitude, efficacy, and usage. From the data, it became obvious that parents essentially occupied one of three distinct stances in their attitude towards technology, being either forcefully positive, forcefully negative, or "curious", i.e. having made some use of technology so far, but admitting to little awareness of availability, and wanting to learn more. In general, the younger the children, the more negative the parental attitude towards technology, mirroring the notion of gatekeepers explored by many researchers previously (Hamilton et al., 2016; Samaha & Hawi, 2017). Nevertheless, 24 per cent of children of primary-school-age in the study had access to their own mobile device with internet access, with 54 per cent using a parental device, 12 per cent owning a computer, and 36 per cent using a family computer (multiple answers were possible). This shows that ownership of a mobile, internet-ready device is twice as ubiquitous as computer ownership among primary-school-aged children, and, although there is obviously a considerable difference in age at primary-school level, shows the trend for parents to facilitate internet access for their children. Looking specifically at language and motivation, it may not be surprising that 66 per cent of parents said their children were interested in computer games, 56 per cent said their children were interested in browser-based games, and 82 per cent stated their children were interested in mobile games and apps. This was matched by 55 per cent of parents who themselves stated an interest in apps and games. More interestingly, though, an encouraging 78 per cent of parents stated their children were interested in learning the heritage language – yet only 10 per cent used apps and games for language learning at least once a week, and only 15 per cent used apps or games in the actual heritage language at least once a week, with these two groups overlapping almost completely. This shows that parents are not necessarily making use of their children's motivated attitude towards both the heritage language and the use of technology, and further responses may give us a reason to understand the reasons for this: Only 17 per cent of parents stated they were confident about the market of apps and games available to support the heritage language, and cost was an issue for about a quarter of parents (27%). Over half the parents (57%) wished for more availability of apps and games to support the heritage language.

These findings, when taken together, show that parents in multilingual families have to do more than just "transcend" their children's technology use. In Lim's (2016) work, parents might struggle to keep up with their child's knowledge and understanding of technologies, and an awareness of the child's digital social spaces. Unless they are guided, however, younger heritage language children are unlikely to come across technologies,

games, apps, or social spaces which support the heritage language. Unless children and families are part of a strong, digitally aware heritage language community, games and apps are unlikely to be shared via "word of mouth" among children, and they are unlikely to stumble across them as part of "standard English" digital practices. Therefore, parents have an additional role, not only as "gatekeeper", but also as "facilitator", in identifying opportunities for children to enjoy and engage with the heritage language. Interview data showed that parents would expect technology to serve as a means to keep children entertained, as well as expose them to the heritage language – one mother commented:

> We started using Youtube with him in order for him to watch some Peppa [Pig] and Fireman Sam in German but we gave up because he would click the options on the right-hand side and end up going through Peppa episodes in this order every time! German – Polish – Czech – and he would invariably end up with the English episodes, […] so we have stopped using Youtube altogether for now. (Mother of son, age 4, German)

This example is illustrative of the triple expectations several parents had of technology – namely, to *expose* the child to the heritage language, to *motivate* the child to engage in the heritage language, and to do so *without parental input*, essentially entertaining the child independently of parental engagement. The son showed significant technological aptitude, being able to navigate the side menu to arrive at a situation which he deemed more enjoyable – watching the programme in English, not German. However, rather than engaging in co-viewing, the mother here decided to stop the use of the technology altogether. This example illustrates potential dangers in parents making assumptions in what their children might find motivating, and how the multiple roles of language teacher, facilitator, motivator, gatekeeper, and parent may play out within the concept of transcendent parenting in heritage language families. Another mother further illustrated her control over the child's digital engagement with the heritage language:

> The gaming [apps in Chinese] he likes but there's another new one I'm getting him to do which is a Chinese writing one, so the writing one sometimes I think it's like homework in a way so he'll basically…sometimes I find he's not doing it correctly or just simply doing it. (Mother of son, age 5, Malay, but choosing Chinese as heritage language)

The app in question seeks to "gamify" character writing, awarding points for accuracy, but is obviously not perceived as engaging by the child. One mother was categorical in rejecting all technology, preferring to use books to introduce her child to Russian. She comments that this approach is most familiar to herself and explains how she learnt to read from her great-grandmother. As a family, the parents take the position that screen time is "addictive", and thus technology is kept away from the child. This illustrates Hamilton and colleagues (2016) notion of the parents as gatekeepers, and is a long way away from Marsh and colleagues (2017) proposed "family digital literacy". In interviews, it was interesting where parents saw the "usefulness" of apps. Several children did not

have the language skills to engage in apps aimed at monolingual native speakers, but found the apps aimed at learning the language to be confusing to their identity as heritage language speakers, with one 8-year old referring to them as apps for "proper German children". Again, a lot rested on parents' ability to navigate website, identify suitable digital material, and introduce it to their children. In this context, educational apps would sometimes win over apps aimed at more straightforward gameplay, with parents not always seeing the benefit of simple exposure to the heritage language in a context enjoyed by the child.

Conclusion

Parents in the study outlined in this chapter made use of the motivational aspects of technology to support their children's heritage language, but still functioned as gate-keepers (Hamilton et al., 2016) in terms of which aspects of digital technology they considered suitable for children to engage with, often focusing on formal learning above entertainment. As such, parental expectations were that technology would not only motivate the child to learn the heritage language, but also do the actual teaching, and preferably without parental input, i.e. functioning as a motivator, teacher, and ba-bysitter. These triple expectations are difficult to uphold, especially bearing in mind the complexities of identifying suitable technology specifically aimed at heritage language children. In line with Samaha and Hawi's (2017) concerns surrounding screen time as reward or punishment, this translates into the heritage language context through parental assumption that use of technology is a reward in and of itself, suggesting that children will more likely engage with heritage language resources if they are presented in a digital format. While this was true for some families, there is a loss of value from missing out on shared, constructive family experiences around the heritage language. Playing online games together, taking an interest in reasons behind children's digital choices, and involving children in accessing and selecting games, apps and other digital content could help parents not only to transcend their children's digital practices, but also create further stimulus for conversation and communication both in and about the heritage language. These changes in family practices, in turn, help to empower children to chart their pathway into the heritage language and culture, taking on the role of expert in their own digital practice, and mutually negotiating family digital practices.

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