

LOCATING THE MOBILE

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Locating the Mobile: Australian Research Council Report

RMIT University
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Acknowledgement of country

RMIT University acknowledges the Wurundjeri people of the Kulin Nations as the traditional owners of the land on which the University stands. RMIT University respectfully recognises Elders both past and present. We also acknowledge the traditional custodians of lands across Australia where we conduct business, their Elders, Ancestors, cultures and heritage.

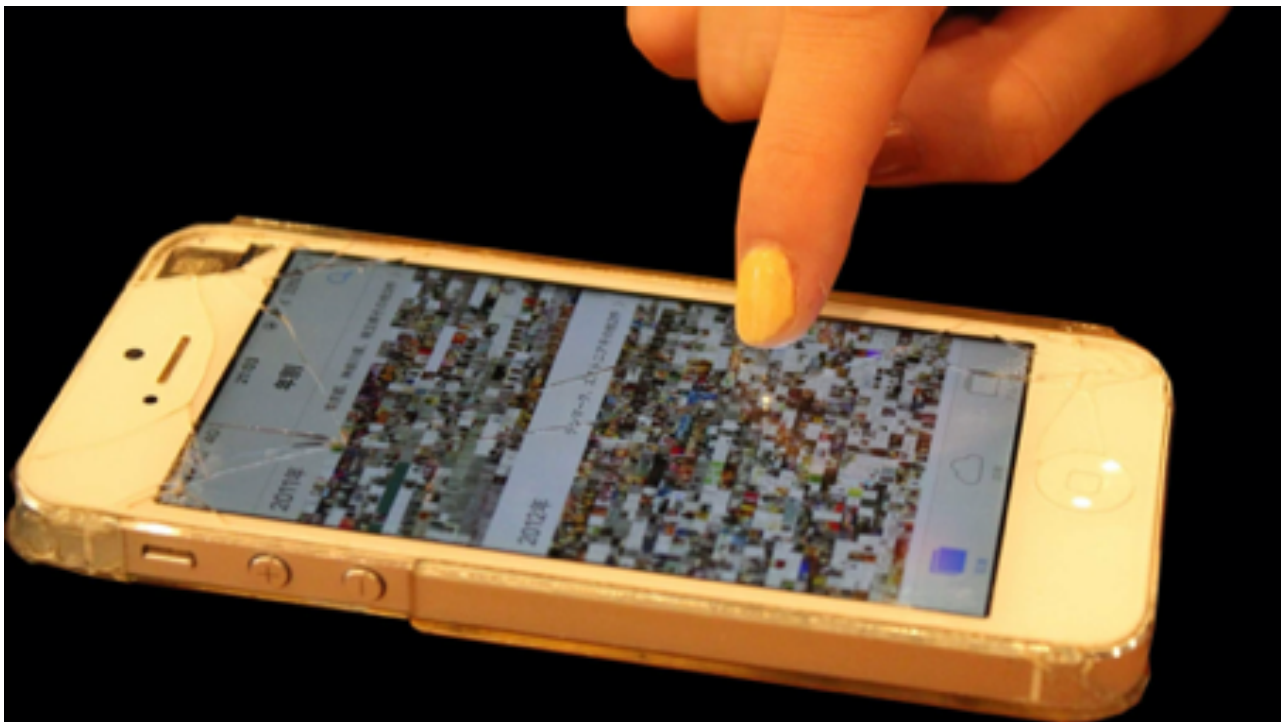
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In a Snapshot

The Australian Research Council Linkage with Intel, *Locating the Mobile*, followed ethnographically 12 households over three years (2014–17) within the three purposefully very distinct locations (Melbourne, Tokyo and Shanghai) to gain a sense of cultural differences and similarities with respect to intergenerational use of locative media.

Methods

To understand how locative media fits into the rhythms of everyday life—with its mundane routines and intimacies—requires us to go beyond standard interviewing methods. Instead we developed ethnographic techniques that enable the researcher to engage empathetically with people's intimate experiences in mundane life. Often mundane experience of digital technologies is difficult to access or to observe as a researcher, precisely because it happens at moments when people are alone and in situations where they are unlikely to usually share with others, let alone with researchers. Ethnography, which focuses on understanding culture through practices such as everyday rituals, allows insight into motivations — something Big data can't give us. We deployed various ethnographic methods such as video interviewing, scenarios of use, and re-enactment. We were interested in both the spoken and tacit gestures in and around the screen as a form of mundane haptics.



Introduction

In *Locating the Mobile* we traced the cross-cultural and intergenerational role of mobile media practices in three locations—Shanghai, Tokyo and Melbourne. Over three years we followed 12 households in each city to understand the ways in which locative media and data was perceived and practiced intergenerationally. Each location offers a different phase in locative media adoption.¹

From social media like LINE, WhatsApp and WeChat and self-tracking health apps on smartphones and Apple watches to wearables like fit bits, *Locating the Mobile* explored the multiple ways in which intergenerational practices play out around mobile media for care at a distance. This can involve locative and non-locative possibilities. We recognized that quotidian forms of locative media are often embedded in social and mobile media practices. Within the all-pervasiveness of everyday mobile media, we can find multiple and contesting forms textures and gradations of location that inform our contemporary ways of being in place. Thus, understanding locative media needs to be done in the context of the embedded mobile media practices.

While datafication (data collected through digital devices) and its potential ownership and corporate repurposing has taken much attention, the role of locative media to care at a distance by loved ones in mundane ways has been relatively overlooked. Through the concept of Digital Kinship, we brought together the continuities and discontinuities in and around the negotiation of mundane intimacies in the digital and non-digital worlds. *In particular, through the practices of our participants we reflected on the quotidian and often-invisible forms of care at a distance constituting contemporary Digital Kinship.*

Data, families and care: Digital Kinship

As datafication—that is, generating digitised information about people using digital devices—becomes all-encompassing, many are questioning the ethical and cultural ramifications. Often datafication is conflated with dataveillance—that is, the watching of people through data. These processes are often defined as exploitative. And yet, datafication and dataveillance can also be used in creative, consensual and participatory ways by citizens. That is, rather than exploit, they can be used to care.²

In particular, intergenerational use of data for informal care—between grandchildren, parents and grandparents—can help us to understand societal transitions, translations and continuities beyond the fetish of technological futurism. Kinship focuses on the ways in which the digital is part of a continuity, rather than a “disruption”, of rituals and practices. Digital kinship is about the different ways generations deploy media in their everyday to connect and care at a distance. Through ethnographies of intergenerational mobile media practice we explored the role of “Digital Kinship” whereby the digital is providing ways in which families can extend practices of care and surveillance in what can be called careful and friendly surveillance.

¹ CNNIC 2011; Australian Bureau of Statistics 2011; Our Mobile Planet 2012

² Hjorth and Lupton, forthcoming.



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Stories from the field

Rika

When we meet 32-year-old female flight attendant Rika she lives alone in an apartment just a stone's throw away lives her 72-year-old mother. While traditionally families in Japan would **live together** in bygone times, now it is common for them to **live apart**. It is the smartphone (*sumaho*) that has helped navigate a 'care at a distance', allowing moments of ambient intimacy that also afford a sense of constant contact. Unlike Jeanette Pols' notion of care at a distance which was set in a Netherlands palliative telecare context², we can find many forms of 'care at a distance' in which data and social mobile media are used to create enduring forms of intergenerational connection—that is, **digital kinship**.

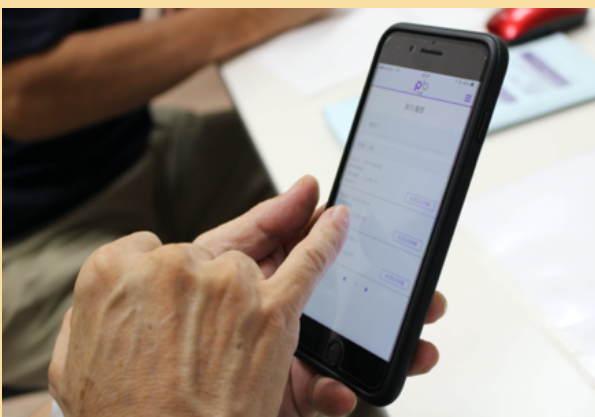
Like many Japanese of her generation, Rika grew up with the mobile (*keitai*) and viewed her phone as an integral part of her everyday life. Rika's first *keitai* was bought while she was in junior high school as a form of personal security—or what Misa Matsuda calls "mom in the pocket".³ Matsuda talks in detail how the rise of children's use of *keitai* was born out of press media's "aura of crime"

and resulted in further complicating mother's emotional labour as micro-coordinated through the phone.

As the mobile phone had grown and transformed into the *sumaho*, so too has Rika and her mother's relationship evolved through its constant co-presence. For Rika—who is often on overseas trips for work—the use of LINE to keep a friendly eye on her elderly mother has been crucial in providing care at a distance. In sum, LINE reflects Digital Kinship through careful surveillance practices.

While there are various different words in Japan to denote watching and surveillance of both horizontal and vertical types, mobile media practices enact the familial notion of 見守る (*mi-ma-moru*)—that is, a type of watching that involves care towards someone's safety. While first generation *keitai* were more about **parents watching children**, the smartphone has created different avenues for horizontal social intergenerational watching—parents watching ambiently grandparents, parents watching children.

In a post Fukushima disaster Japan known as 3/11, there has seen the rise of watching apps to allow families and loved ones to keep track of each other in ways that are non-invasive and caring. Apps for watching older adults while they drive and to keep track of people with early onset of dementia are indicative of these horizontal ways of watching. Here, in Japan, **dataveillance can also be consensual, participatory and creative**, rather than just exploitative.



¹ Jeanette Pols (2012) *Care at a distance*. Amsterdam: Amsterdam University Press.

² Misa Matsuda (2009) Mobile Media and the transformation of the family. In Goggin and Hjorth (eds) *Mobile Technologies*. London: Routledge.

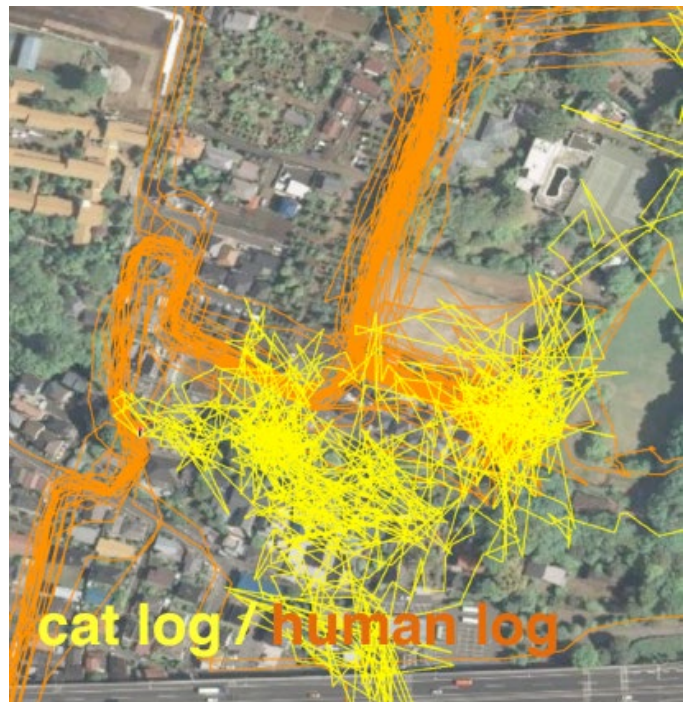
Early Adopter

In Tokyo, landscape architect Hajime Ishikawa is an early adopter of new technology. In 2000, when the first examples of GPS became available for general consumption, he began conscientiously self-tracking all of his movements. He has tracked all of his movements every day since. He creatively plays with his data trails, exploring how data visualisations can make us think differently about experiencing place. He was a 'quantified self' a decade before the term was invented.

Ten years ago, he became curious about how tracking data could help him make sense of the more-than-human world. He put a GPS device on his pet cat collar. He had expected that the device would show nothing—that his cat just slept all day. However, the data

proved his assumptions wrong. Instead he found that his cat was active all day—not only did it patrol the town but it seemed to have many secret “homes” and families!

For Ishikawa, curating of data cartographies is an act of **creativity**—it provides another layer and understanding of how we constantly **make** and **remake** places. **Maps** have always been about **power**. But, with mobile media, our capacity to shape maps, as much as they shape us, has transformed. Geographies are discursively constructed, reflecting the ideologies of their invention. We also need to think about how our data is entangled in the lives of our more-than-human counterparts in ways that need more understanding.

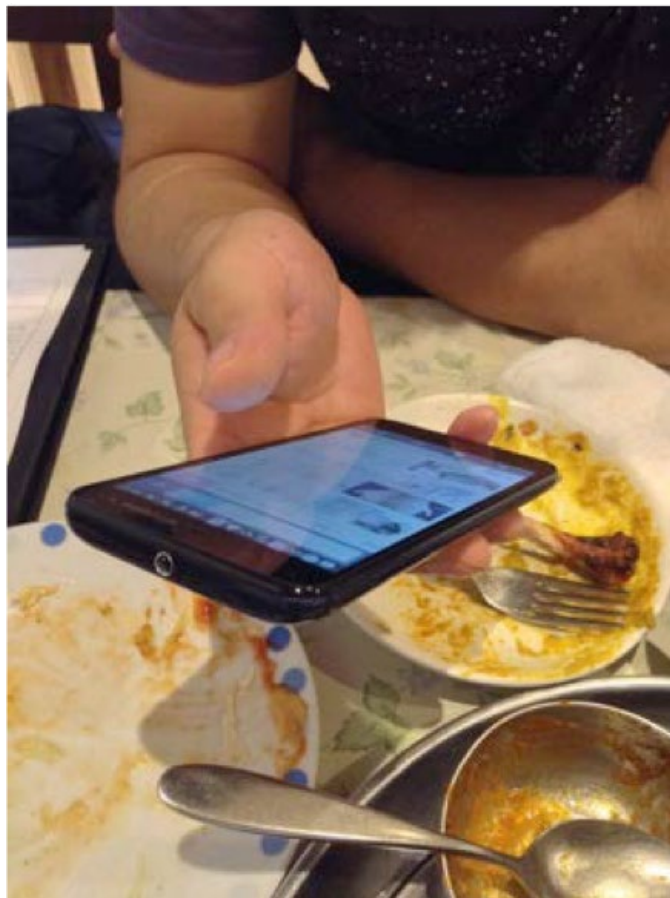


WeChat and informal care

WeChat also plays an important role in informal ways of caring at a distance. This care can take the form of everyday sociality in helping with healthcare issues. Li Wei had 600–700 WeChat friends and 40–50 WeChat groups—including classmate groups, family groups, activity groups and co-worker groups. Talking about WeChat groups, Li Wei believed that the family group promoted long-distance communication between family members and facilitated the guidance and care with his daughter. Li Wei usually sent articles to his daughter, mainly about health information, in hopes that his daughter would pay more attention to health. Li Wei's wife was more actively involved his daughter's

life—she constantly checked the weather and air quality app in relation to her location. Often they cooked and discussed co-presently and discuss.

Care and watching is often unidirectional. Adult children also use social media to watch their parents' lives and keep a friendly eye on them. As the only child, their 24-year-old daughter would also use WeChat to keep abreast of her parent's lives and health. She was worried that her parents were lonely when she was studying abroad. Therefore, she often sent updates to her family through WeChat, including photos and interesting stories.



Pulling back from data



Unlike Tokyo and Shanghai which saw main social media LINE and WeChat being used to not only care at a distance but also to choreograph ways of thinking about data and health, in Melbourne we find many of our participants using a diversity of media and techniques. In Melbourne we find 30 year old Jasmine—a participant whose practices have been greatly affected by the Cambridge Analytica debacle. After being hacked she is now vigilant about privacy settings for herself and her mum. Indeed, much of our discussions with Jasmine—as with other

Melbourne participants—foreground more ambivalence towards apps than in Tokyo and Shanghai.

As Jasmine noted, whilst she and her friends had made a concerted effort to “pull back” from apps and datafication, Jasmine recognized that the future would be even more “datafied.” Previously Jasmine and her friends would induct their older parents to new mobile apps—however now there has been a wide uptake of mobile technologies in what has been called the “savvy surfers”.⁴



⁴ Maccora, J., Rees, K., Hosking, D. & McCallum, J. (2019) *Senior Surfers: Diverse levels of digital literacy among older Australians*. Brisbane: National Seniors Australia.



We will need tools to *create* and *curate* spaces for conversation and public debate as we navigate the paradoxes of datafied cultures that have deep material and social effects in our lives, deaths and afterlives.

Four key findings

1

DIGITAL KINSHIP: CONTINUITY AND DISCONTINUITY

In fieldwork, technology often played a role in notions of continuity (kinship) rather than discontinuity (digital disruption). Digital Kinship allows us to think through the digital historically, conceptually, and methodologically, enabling a holistic approach when contemplating our connective and empowering digital future.

Increasingly we are witnessing different forms of informal data surveillance practices emerging that require new forms of understanding and care. We focused on the notion of careful and friendly surveillance to highlight some of the ways in which familial care at a distance plays out in culturally specific ways. Emergent literature in this area suggests that there are new forms of relationality between the apps economy, mobile parenting and documentation of young people's lives by parents in which the ramifications we are still yet to fully understand.⁵



2

DIGITAL AFTERLIVES

In the study, many participants' grappled with reflections about their data use and how it might be used in "afterlives". Indeed many described experiences in which both life and death are all happening in the palm of our hand. These digital lives have social and material dimensions too that shape how we experience and define place. We need to constantly put the **digital in context**—socially, culturally and historically. Data trails and traces haunt our quotidian lives in ways that have material, social and emotional lives.

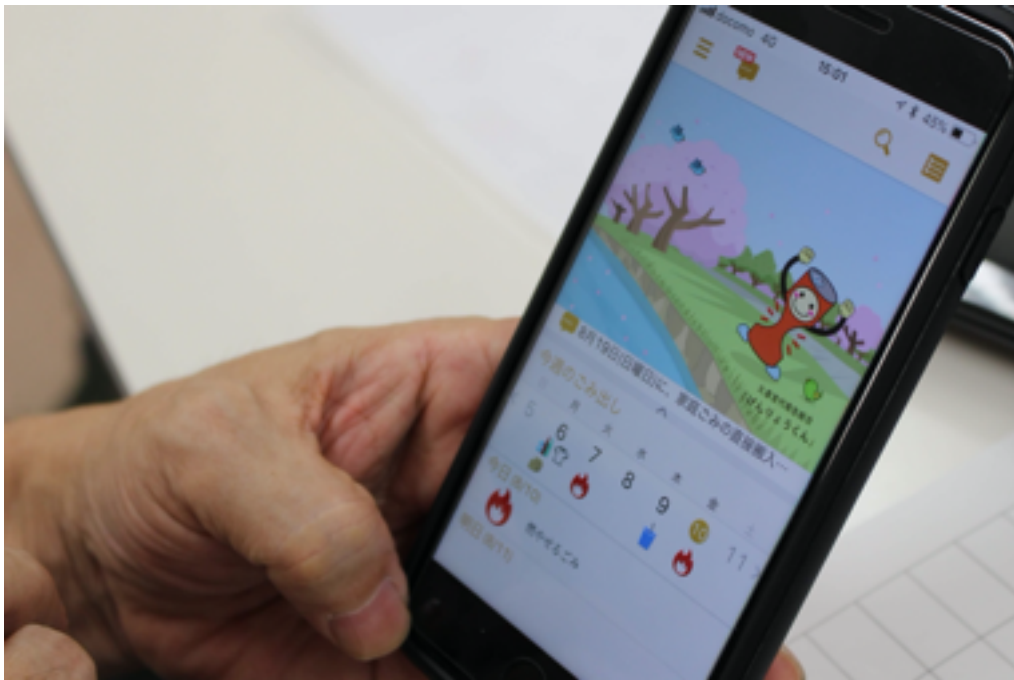
Through ethnography we can put the stories of lived experience at the core of our understanding. We will need tools to *create* and *curate* spaces for conversation and public debate as we navigate the paradoxes of datafied cultures that have deep material and social effects in our lives, deaths and afterlives.

⁵ Benjamin Burrows (2017) "YouTube Kids: The App Economy and Mobile Parenting," *Social Media & Society*. April–June 2017: 1–8. DOI: 10.1177/2056305117707189; Tama Leaver (2017) "Intimate Surveillance: Normalizing Parental Monitoring and Mediation of Infants Online," *Social Media & Society*. April–June 2017: 1–8. DOI: 10.1177/2056305117707192.

3

EXTERNAL TO INTERNAL TRACKING AND MAPPING

As we have discovered, while locative media was once about tracking through public spaces and places, through the rise of self-tracking we see the notion of locative media being recalibrated in ways that cater to more internal types of mapping. As we start to see, the rise of datafication can allow for us to explore the emotional and social cartographies of being in the world. This can be understood as *feeling* locative media—that is, the tacit and sensorial ways in which techniques of locative media—where location involves both internal and external cartographies—are being deployed in everyday life.



4

CAREFUL DATA: TAKING CARE SERIOUSLY

In our study we investigated the evolving intergenerational media practices over three years to reflect on the quotidian (and often invisible) forms of care at a distance enacted as part of contemporary Digital Kinship. As we have explored, within different cultural contexts we are seeing diverging forms of intergenerational *perceptions* and *practices* around media, data and care. Over the three years, we witnessed the growth of self-tracking health apps which are being taken up in diverse intergenerational ways. As we note, understanding intergenerational care at a distance is about complicating care beyond medical notions of health and social services. In sum, taking care seriously as part of intergenerational media practices.



As family structures transform with increasingly ageing populations and decreasing birth rates we need to rethink sustainable ways to care and the role data can play in these processes.

Provocations for future research

Firstly, there is a tremendous need for methodological innovation and intervention when it comes to studying locative media as part of social mobile media (and data) practice. Much of the literature around locative media doesn't study it over time, over cultures, over changes and transitions. While behavior can be tracked, mapped or visualized on apps, the interpretation of and motivations for practices are difficult to study in depth. It also misses out on the experiences of social mobile media use.

We also believe this study highlights the need for new theories and language on surveillance as an iterative and social practice. For most of the participants in our Melbourne study, privacy—with a Capital P—was an abstract concept associated with transnational corporations and the government who might mine their data for profit, information and so on. Yet privacy was of paramount concern. The privacy that played out in a tangible way for the individuals and the families in our study was the monitoring and surveillance of people they knew. As argued through the fieldwork, surveillance is often participatory, playful and about different gradations of care. Through the examples of notions and practices of surveillance across three different contexts, our study highlights the importance of more complex, dynamic and micro understandings of the relationship between media and sociality.

This study makes inroads into understanding how the datafication is creating paradoxical ways of being in the world. For our participants, while some enjoyed the aspects of self-care afforded by self-tracking fitness apps, others were concerned about where this data would end up. With the fallout of the Cambridge Analytica debacle, participants were increasingly concerned how their data could be manipulated for non-ethical means. And moreover, what is the life of data once someone dies? And how does this matter get addressed by the family?

Finally, we believe that this study contributes to the understanding of families—collocated, proximate, separated or transnational—across different cultural contexts. Although we are clearly aware of the limitations of claiming broad societal shifts from studying 36 (concluding with 30) families across three different cultural contexts, the practices witnessed across multiple contexts clearly highlights a series of intimate and domestic practices worth paying attention to in the future. Emergent vernacular such as paralinguistics—emojis, Stickers and Stamps—can provide insights into intergenerational understandings of care at a distance. As family structures transform with increasingly ageing populations and decreasing birth rates we need to rethink sustainable ways to care and the role data can play in these processes.

Outputs: Publications & Non-traditional Outputs

TRADITIONAL OUTPUTS

BOOKS

- Hjorth, L., Sinanan, J., Ohashi, K., Kato, F., Horst, H., and S. Pink (forthcoming) *Digital Media Practices in Households. Understanding Digital Kinship*. Amsterdam: Amsterdam Uni Press.
- Hjorth, L. and S. Hinton (2019) *Understanding Social Media*. London: Sage.
- Cumiskey, K and L. Hjorth (2018) *Haunting Hands*. London: Oxford Uni Press.

COLLECTIONS

- Hjorth, L., Horst, H. G. Bell and A. Galloway (eds) (2016) *The Routledge Companion to Digital Ethnography*. London: Routledge.

JOURNAL SPECIAL ISSUES

- *New Media & Society* 'Storing and sharing: Everyday relationships with digital material (2019). Edited by H. Horst, J. Sinanan, L. Hjorth

BOOK CHAPTERS

- Sinanan, J. and L. Hjorth (2018) Careful families and care as 'kinwork': An intergenerational study of families and digital media use in Melbourne. In B. Neves and C. Casimiro (eds) *Connecting Families? Information & Communication Technologies in a Life Course Perspective*. Bristol: Policy Press.
- Pink, S., J. Sinanan, H. Horst and L. Hjorth. (2018) Sensory Encounters: mundane intimacies as a site for knowing. In M. Halatcheva-Trapp, G. Montanari and T. Schlinzig (eds) *Family and Space*. Oxford: Routledge.
- Hjorth, L., Horst, H., Pink, S., Zhou, B., Kato, F., Bell, G., Ohashi, K., C. Marmo, and M. Xiao (2016) 'Digital Kinships: Intergenerational Locative Media in Tokyo, Shanghai and Melbourne'. In Hjorth and Khoo (eds) *The Routledge Companion to New Media in Asia*. London: Routledge.
- Hjorth, L., Horst, H., Pink, S., Zhou, B., Kato, F., Bell, G., Ohashi, K., C. Marmo, and M. Xiao (2016) 'Locating the Mobile: Intergenerational Locative Media in Tokyo, Shanghai and Melbourne'. In Martin and T. Lewis (eds) *Lifestyle Media in Asia*. London: Routledge.

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- Hjorth, L., Horst, H., Pink, S. (2018) Privacy at the margins. *International Journal of Communication*. Vol 12.
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- Pink, S., J. Sinanan, L. Hjorth, and H. Horst (2016) Tactile digital ethnography: Researching mobile media through the hand, *Mobile Media & Communication*, doi:10.1177/2050157915619958
- Pink, S. and L. Hjorth (2014) New Visualities and the Digital Wayfarer: Reconceptualizing camera phone photography, *Mobile Media & Communication* 2(1): 40-57.

NON-TRADITIONAL OUTPUTS

WORKSHOPS & CONFERENCES

- “Digital Kinship”, keynote at *Digital Asia conference*, University of Lund, Sweden, December 2019.
- “Intergenerational play in the city”, *B/OLD: Aging in the City*, Concordia, Montreal, May 2019.
- “Comparative intergenerational locative media”, *ICA*, Fukuoka, June, 2018.

EXHIBITION

- *#dearfuturecitizen*, participatory installation about digital legacy, RMIT Gallery, February, 2019.



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