

This article was downloaded by: 10.3.98.93

On: 17 Jan 2019

Access details: *subscription number*

Publisher: *Routledge*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London SW1P 1WG, UK



Edited by Michael Bull

The Routledge Companion to Sound Studies

Bull Michael

Sound Transformations in Space

Publication details

<https://www.routledgehandbooks.com/doi/10.4324/9781315722191-20>

Kytö Meri

Published online on: 02 Nov 2018

How to cite :- Kytö Meri. 02 Nov 2018, *Sound Transformations in Space from: The Routledge Companion to Sound Studies* Routledge

Accessed on: 17 Jan 2019

<https://www.routledgehandbooks.com/doi/10.4324/9781315722191-20>

PLEASE SCROLL DOWN FOR DOCUMENT

Full terms and conditions of use: <https://www.routledgehandbooks.com/legal-notices/terms>

This Document PDF may be used for research, teaching and private study purposes. Any substantial or systematic reproductions, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The publisher shall not be liable for an loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

17

SOUND TRANSFORMATIONS
IN SPACE*Meri Kytö*

During the past few years, voice command devices or “intelligent personal assistants” as they are also called, have been brought to market. These are software that can be used with voice interaction like Microsoft’s Cortana, Amazon’s Echo and Apple’s Siri. They “listen” to commands, answer questions and perform tasks by accessing online resources. Having a voice, they seem somewhat reminiscent of sentient computers familiar from science fiction films like the serene HAL-9000 from Stanley Kubrick’s *2001: A Space Odyssey*. Although the devices are not sentient (yet), their users have puzzled feelings concerning the style and the aim of communication one has with a machine, and also because it feeds information into the guts of a multinational company. A *Guardian* journalist finds himself sympathizing with the Echo software, activating it with its name (the key word is “Alexa”):

It was not that [the Echo] seemed human, exactly, [–] but that it – she – seemed to merit respect. Yes, partly out of anthropomorphism. And partly out of privacy concerns. Don’t mess with someone who knows your secrets. The device, after all, was uploading personal data to Amazon’s servers. How much remains unclear.

(The Guardian 2015, November 21)

The concern over sonic data privacy, storing indexed personal data, surveillance and developments in automated voice and sound recognition is one of the many current topics in discussions of privacy and technological advancements. The ubiquitous use of mobile devices and online connectivity form a specific type of spatial relationship with technology, what geographers Rob Kitchin and Martin Dodge call code/space (Kitchin & Dodge 2011). With this kind of spatial formation becoming more common, privacy is perceived to be under threat and gradually disappearing, causing deterioration of social order ending up in Orwellian future. In this argument, privacy is understood as a synonym for data protection.

Although questions of data privacy are important and current, a broader perspective on the issue of public and private *space* reveals that there are far more ways to approach these concepts than guarding one’s personal information. Especially when approaching the matter through auditory culture – as sounding out and listening in – the complexity of cultural formations begins to show. This chapter explores the elusive relationships of public and private

spaces through sound and listening. The aim is to introduce and ponder various aspects of the public–private phenomena, especially in relation to sound and space.

Conceptual approaches

Conceptualizing public and private space takes some effort as the concepts are often used in implicit ways. The rather loose and somewhat normative or idealistic use of the words has meant that they have gathered qualities as floating signifiers. As concepts that cause immense social and material repercussions, this is rather unfortunate.

The relationship between public and private is often presented as a dichotomy in the vernacular. They can refer to many types of polarizations depending on the context they are used in. These polarizations include official/unofficial, political/apolitical, general/specific, explicit/implicit, state owned/owned by private sector, national/local, written/orally communicated, common/personal etc. In his thorough book on privacy Daniel Solove, who specializes in data security and privacy law, claims quite laconically that no one can articulate what privacy means (Solove 2009: 1). Solove categorizes the Western definitions of privacy into five themes: right to be left alone; limited access to the self; secrecy and control over personal information; protecting personhood; and right to intimacy (Solove 2009: 12–38). The need for dichotomic spatial taxonomies often springs from the normative need to interpret laws and regulations, from the vertical relationship between the state and the citizen. Some of these categories can be understood as spatial formations, and not only metaphors of space. The so-called “spatial turn” (Soja 2000), a theoretical discussion originating from cultural geography in the 1980s, has influenced the ways space and place have been conceptualized. In arguing that spatiality is fundamentally constructive of social life and this needs to be taken seriously if one is to make sense of society is an argument easily understood in relation to soundscapes and the lived sonic environment.

In different fields of research the conceptualization emphasizes different views on the relationship and supposed essence of public and private space. A common discourse in understanding the public, especially in studies that draw from communication research, is to place it in relation with normative models of democracy, that is how democracy should work. This becomes apparent in the vocabulary used (for example “participation”, “voice”, “listening to the people”). The emphasis on normative democracy is based on the theory of the “public sphere” (*Öffentlichkeit*) by Jürgen Habermas (1962), who developed the model of communication as a function in structuring civil society. The oral history of mediated communication and media representations is also portrayed in a spatialized term used by Marshall McLuhan and Edmund Carpenter when they talk about “acoustic space” (McLuhan & Carpenter 1966: 65–70).

Besides the normative point of departure there is the bottom-up methodology in tackling public and private space and how it is sensed. The descriptive approach takes on empirical methods in asking how technology reforms the sense of public and private space, who or what regulates what can be heard in certain spaces, what are the uses and functions of public and private sonic space etc. Despite the conceptual insolvabilities, the frame of categorical opposition serves endless potential for the researcher interested in auditory culture. As analytical tools, they present themselves as ideal types but everyday sonic environments are more often in a dynamic relationship: something in-between or in a state of becoming. Because of these dynamics, it is more relevant to analyze what kind of public is being constructed against what kind of private than to define what privacy or publicness in themselves are (Peteri 2006: 58). Following along the same lines is anthropologist Christena Nippert-Eng, who emphasizes that for a researcher it is more interesting to listen to what level of publicness or privacy people want to keep things and information in (Nippert-Eng 2010:4). Political theorist Hanna Pitkin concludes that because

there are so many ways to understand the relationship of public and private, it is crucial to sort out who gets to define what is going on in these relationships (Pitkin 1981: 238–239).

The use of power over sonic spatial privacy in urban space is a subject of interest especially in the context of sonic surveillance and neural networks capable of sound source identification. Also negotiations of sonic territoriality and noise are an ongoing debate, where intentional sound sources like loudspeaker systems on the street (for example Kreuzfeldt 2010) are discussed in a different tone than sound sources that are understood as a by-product or otherwise inevitable to the public infrastructure. Sound does not have to be electrically mediated to be part of the noise debate: the history of busking shows that the problem of social differences has been a key factor of irritation in the commercialized urban environment (Kytö & Hytönen-Ng 2015).

The history of mediated sounds and sound technology is scattered with dystopic thoughts concerning the development of personified design. Radio was seen as passivating its audience who were not able to speak up and be heard (Lacey 2013: 144). Overtly personified (media) content could lead to people not encountering each other, not involving themselves in discussions of common issues, dissolving of the sense of community and thus of societal structure. People might not feel connected to the democratic community they should be part of (Couldry & Turow 2014; see also Mouffe 2000: 74, 97). Media history scholar Kate Lacey writes in her meticulous book *Listening Publics: The Politics and Experience of Listening in the Media Age* that politics itself is made possible only by the listening attention of another: listening constitutes “a kind of attention to others (and otherness) and, importantly, being attended to that is the prerequisite both of citizenship (as distinct from community) and of communicative action” (Lacey 2013: 165). In her argument public space is equally or even more about listening than speaking up or finding a voice. A public is then contingent on there being people willing to actively take up listening to others, who are not part of a pre-given collective identity (Lacey 2013: 172, see also Warner 2002: 58).

Nippert-Eng (2010: 324) emphasizes the importance of that: “like the work on gender the work on privacy is dynamic and done in response to a specific interactional context”. Musicologist Georgina Born (2015) elaborates:

interpreted adjectivally, in the active sense of the publicizing (or public-making) and privatizing propensities of music and sound – they register processes that are at once social, material and spatial. Moreover, abandoning the merely dualistic conception of the terms makes it possible to highlight the relational nature of their articulation, their mutual constitution and multiplicity.

Privacy and publicness can thus be something *done* in relation to others. Public and private spaces are to be understood as changing spatial relations in which social practices, values and belongings are shared and contested in.

A sense of place and the everyday

Space can be understood as embedded spaces in a spatial taxonomy where the public space contains the smaller more private spaces, from the impersonal and institutional public space to the communal space of social relations and onwards to the intimacy of the home and finally to the personal space of one's body (Madanipour 2003). If approached through listening, the experience of space is an articulation of overlapping categorizations or combinations of interrelations, in the veins of “semi-public” – like shopping malls and public lavatories – or

“quasi-private” – like open-plan offices and women’s prayer area in mosques – or “publicly private” (see Schwartz 2011: 336–337) – the telephone booth (Picker 2016) and the confessional. Understanding and knowing place acoustemologically – that the experience of place potentially could always be grounded in an acoustic dimension (Feld 2005: 185) – helps in understanding the phenomenological aspects of spatial experience.

To understand the multiplicity of doing public or private, it should be pondered from several intersectional, cultural and contextual angles. Privacy of the individual – which in itself is historically a relevantly new idea – is usually connected to Western culture (Warner 2002: 26–31) where it is taken as a privilege and of positive value. The favorable associations of either privacy or publicness are usually linked to a legitimation of a bourgeois view of life, “the ultimate generalized privilege, however abstract in practice, of seclusion and protection from others (in public); of lack of accountability to ‘them’, and of related gains in closeness and comfort of these general kinds” (Williams 1976: 243).

As an example of positive connotations, in Finland the talk of privacy is very commonplace and effortless. It might be surprising or even confusing to a Finn to think that speaking out loud about one’s need for privacy can in other situations be understood as rude and a sign of distrust of your friends and family. It is considered normal within Finnish society to seek exclusion and to abandon most forms of social interaction when leaving to spend the summer in a secluded forest cottage, and this is not considered as a radical parting message to one’s community or a sign of mental problems (Kivimäki 2012: 68).

One should remember that being or becoming westernized does not explain the need for privacy (Miller 2001: 15; see also McDougall 2002). On the other hand, it is noteworthy that privacy can signify privacy of groups (families or minorities) more so than privacy of individuals. Ethnographer Lydia Sciamia, who has studied Mediterranean cultures in the context of privacy, urges us to observe methods of communication: How are things communicated, what is communicated and to whom? What is done in separation from others? (Sciamia 1993: 96). Listening closely to these ways of doing, interpretation of the line between public and private sense of space can be achieved. It is also important to identify which groups value and do privacy actively.

The bourgeois division to public and private is part of the historical narrative of modernization. To distance oneself from the metanarrative of modernization and repositioning oneself in relation to the culture at hand and the language it uses is what sociologist Nilüfer Göle calls for. In her book *Modern mahrem (The forbidden modern, 1997)* she refers to intimacy, home, secrecy, women’s space, the space that is forbidden for outsiders and the family of the man to see. By using the word “mahrem” Göle points to the difficulty of describing private space in the Western / modern sense of the word. It becomes more than a question of translation, seen as an analytical category to understanding intimacy, sexual segregation and morals in Muslim communities. If she had used the word “private” instead of the Turkish word “mahrem” it would have possibly ignored the special qualities and features of the Muslim home (Göle 2011: 20).

Social anthropologist Yael Navaro-Yashin questions this metanarrative by noting that westernization in itself is a category of historical analysis, one that is still seen in postorientalist studies and their references to the “modern”. If talking about westernization of a culture, one has to accept the notion of the historical differences of the East and West. This is the way to reveal categories that are used in arguments about “cultural origins” (Navaro-Yashin 2002: 10).

Spaces are reproduced in everyday life. Many researchers have been interested in the everyday because it is often boring, banal and taken for granted. The critical view, originating from Henri Lefebvre (1991) and Michel de Certeau (1980), emphasizes that the seemingly normal habits can conceal structures that can in return (if unnoticed) lead to inequality between people.

Leaning on the thoughts of Lefebvre one could say that the production of sonic space – our ways of structuring it as something done or understood – is part of constructing meaning in the everyday. Spaces may seem trouble-free, even “natural”, but they still enable us to certain kinds of social relationships and crop other kinds out. Everyday practices form up most of the ways we use sonic media and sound in general. The repetitious, common and non-dynamic way of structuring doing is what the everyday consists of: consuming, leisuring, routining and using tacit acoustic knowledge. These situations can be conceptualized as practices that value and categorize, are part of identity work or sense of belonging. Regardless of current the ubiquity of sonic media (see Kassabian 2013) and the possible homogenization of sonic space the everyday media is always concrete, experienced in contextualized time and space.

Secrecy, domesticated soundscape and regulating the acoustic horizon

A key method to achieving privacy is through secrecy. Secrecy may cover positive or negative pieces of information; it might mean indifferent or dangerous, happy, sad, small or larger things. Secrecy is the means by which we try to assure that things really are as private as we wish them to be. The selective processes of secrecy and disclosure are essential in the endeavor to privacy (Nippert-Eng 2010: 2, 17, 24–25). Secrecy is closely connected to the feeling of control over the soundscape. Privacy is called for when there is a need to deny, restrict access to acoustic space or to shut out individuals or groups, excluding disturbing factors and making sure one is not under surveillance. Musicologist Ola Stockfeld writes in his article, “Cars, Buildings and Soundscapes” (1994), that time he spends driving a car may be the only chance for recurring self-reflection, an option for a peaceful moment of attentive radio or music listening: in the car you can be who you want, and be at peace (Stockfeld 1994: 31). Similar spaces for escaping social pressure for concentration and sonic tranquility can be found in library reading rooms, working compartments in trains and by using personal stereos in a crowded bus (see Bull 2013). For some parents of small children the only place for a peaceful moment in a restricted acoustic space is the home bathroom.

These kinds of sonic seclusion techniques are an illuminating example of how different sonic spaces are embedded and the ways sound transforms space. When using a personal stereo with headphones the private space can continue at a click of an icon when going out of the front door. Paradoxically the public space then becomes sonically private, and only when one returns home the personal stereo is switched off and the listening can “open up” to the environment (Thibaud 2003: 324).

Controlling spatial acoustic information is controlling the acoustic horizon (see Truax 2001: 67). Sometimes this is accomplished by the formation of a masking effect (like fountains and ventilator hum), but sometimes, acoustic communication can also be regulated by spatial elements like windows and doors. In Northern Italy it is customary to regulate the acoustic horizons of homes by opening and closing window shutters. As important acts of achieving sonic privacy, the shutters also visually communicate the connection the inhabitants have with the street and community outside: in the evenings the closed shutters cut off the domestic space from the street. During the day, the open shutters indicate the resident is up and awake, doing chores and duties according to local work ethics (Vikman 2007: 128–129). Architect Olivier Balaÿ has noted that in 19th-century France, city houses were built with broad thresholds or even smaller in-between rooms between bigger rooms with sitting areas for socializing. These smaller rooms had double doors in both ends and the doors could be kept closed, slightly ajar, or open depending on the need for privacy that the masters of the house desired from their house servants (Balaÿ 2003: 244–246).

Domestication of acoustic space means the practices and choices involved in the interpretation and shaping of the acoustic environment that aim to create a pleasant, anticipated, familiar, safe or homely soundscape. The acoustic spaces or urban homes in particular are porous and in continuous flow, consisting of the city as public acoustic space and the private lives of neighbors carried by sound leaking into the interior of homes. This spatial conflict, together with related cultural codes and values, causes city dwellers to adopt a variety of approaches to both sound and management strategies concerning listening.

Domestication of technology is a theme of research that intersects many strands on the construction of private and public space, looking into the use and construction of technological systems in their historical and societal context and seeing gadgets as socially produced artifacts (MacKenzie & Wajcman 1999). Domestication of audio technology is audible in the ways we regulate the acoustic horizon of our private space: how we monitor the volume of our TV sets at home, use headphones with our laptops in the library or belt out choruses together with the car radio.

Digitization affects sonic spaces not only in “adding up” the availability and mobility of audio, but also in “shutting down”. The transformation of various acoustic spaces can be partly explained by changes in the technological and material environment producing what is commonly called the self-service society. Advances in digitalization have changed various soundscapes (shops, libraries, banks, schools, offices) that formerly required interaction with another person in public. For example the ambiance of university exams, which have moved from large auditoriums to solitary computer rooms and were previously written in hand on paper but now on the screen with a keyboard, is an example demonstrating the subtle but effective influences on the everyday lived environment (Uimonen, Kytö & Ruohonen 2017). Regulating one’s acoustic horizon when running banking, shopping or other errands is much simpler sonic regulation-wise when sitting next to one’s own laptop than standing in a line with other clients in a public space. The presence of others, if perceived as pervasive, also affects the topics people are willing to talk about during mobile phone conversations. A study showed that students from Finland, Germany, Korea and the United States differ in what topics they avoid discussing on mobile phones, for example: grades, sexual activity, interpersonal relationships, money or medical conditions (Worthington et al. 2012: 52).

Philosopher Julie Inness sees intimacy in the core of privacy, saying that privacy “is the state of possessing control over a realm of intimate decisions, which includes decisions about intimate access, intimate information, and intimate actions” (Inness 1996: 140). Sonic intimacy and corporeal resonance of sound are aspects of sonic space that are being studied more and more. Intimate information and sonic privacy in general are methodologically and ethically challenging topics. What, then, is the relationship between listening to a private soundscape and eavesdropping? The Swedish word for eavesdropping is “tjuvlyssna”, “to thieve listen”, underlining acts of criminality, stealing information, as well as the Finnish word “salakuunnella”, secret listening. Intentionality is crucial in eavesdropping as intentionality reveals the immorality of the act. When writing about listening, adapting and plagiarism in music history, philosopher Peter Szendy writes that merely listening to something may be considered theft, which is later courteously disguised as transcription or adaptation (Szendy 2008). This extreme interpretation, however, does not add to the understanding of social situations concerning violation or stretching the rules of cultural privacy.

In addition to the avoidance of conducting research in secret, people should also be given the freedom to decide for themselves what kind of information they provide to others in everyday life. Researchers in this respect must be alert and open-minded, and not assume too much. Sometimes the things that the researcher considers beyond the line of privacy are issues

that the participants want to share and make known. When considering domestic sonic space, not everything that occurs in the home is felt necessary to be concealed. Anthropologist Daniel Miller encourages us to forget the fear of intrusiveness in a situation where the researcher is present in the home environment. According to him, we must empathically understand the diverse ways in which important and intimate relationships with the domestic space are constructed (Miller 2001: 1, 15). What remains is the discursive relationship between the private and public soundscape. Public space gets its meaning in relation to private space and this means different things in different cultures and in different situations. Sometimes there is no need to enter the private space to listen to where the line between appropriate and inappropriate is drawn.

References

- Balaÿ, O. (2003) *L'espace sonore de la ville au XIXe siècle*, Bernin: A la croisée.
- Born, G. (ed.) (2015) *Music, Sound and Space: Transformations of Public and Private Experience*, Cambridge & New York: Cambridge University Press.
- Bull, M. (2013) "Remaking the urban: the audiovisual aesthetics of iPod use," in C. Gorbman, J. Richardson, J. & C. Vernallis (eds.) *The Oxford Handbook for New Audiovisual Aesthetics*, New York & Oxford: Oxford University Press.
- Carpenter, E. & Marshall McLuhan (1966) "Acoustic Space," in E. Carpenter & M. McLuhan (eds.) *Explorations in Communication*, Boston, Beacon Press, pp. 65–70.
- De Certeau, M. (1980) *L'invention de quotidien*, Paris: Folio essais.
- Couldry, N. & Turow, J. (2014) "Advertising, Big Data, and the Clearance of the Public Realm: Marketers' New Approaches to the Content Subsidy," *International Journal of Communication*, 8 (2014), pp. 1710–1726.
- Feld, S. (2005) "Places sensed, senses placed: toward a sensuous epistemology of environments," in Howes, D. (ed.) *Empire of the Senses: The Sensual Culture Reader*, Oxford: Berg, pp. 179–191.
- Göle, N. (2011 [1991]) *Modern mahrem: Medeniyet ve örtünme*, Istanbul: Metis.
- Habermas, Jürgen (1990/1962) *Strukturwandel der Öffentlichkeit: Untersuchungen zu einer kategorie der bürgerlichen gesellschaft*, Berlin: Suhrkamp.
- Inness, J.C. (1996) *Privacy, Intimacy, and Isolation*, Oxford: Oxford University Press.
- Kassabian, A. (2013) *Ubiquitous Listening. Affect, Attention, and Distributed Subjectivity*, Berkeley: University of California Press.
- Kitchin, R. & Dodge, M. (2011) *Code/space: Software and Everyday Life*, Cambridge, MA: MIT Press.
- Kivimäki, S. (2012) "Aito Suomi-kuva. Lektio," *Kulttuurintutkimus* 29(3): 67–69.
- Kreutzfeldt, J. (2010) "Acoustic territoriality and the politics of urban noise," *Soundscape the Journal for Acoustic Ecology*, 10(1), pp. 14–17.
- Kytö, M. & Hytönen-Ng, E. (2015) "Busking and negotiations of urban acoustic space in South Bank, London," in M. Bull & L. Back (eds.) *The Auditory Culture Reader, 2nd edition*, London: Bloomsbury.
- Lacey, K. (2013) *Listening Publics: The Politics and Experience of Listening in the Media Age*, Cambridge & Oxford: Polity.
- Lefebvre, H. (1991) *The Production of Space*, Oxford: Blackwell.
- MacKenzie, D. & Wajcman, J. (eds.) (1999) *The Social Shaping of Technology*, Maidenhead: Open University Press.
- Madanipour, A. (2003) *Public and Private Spaces of the City*, London: Routledge.
- McDougall, B. (2002) "Particulars and Universals," in B. McDougall & A. Hansson (eds.) *Chinese Concepts or Privacy*, Leiden, Boston & Köln: Brill.
- Miller, D. (2001) "Behind closed doors," in D. Miller (ed.) *Home Possessions: Material Culture Behind Closed Doors*, London: Berg, pp. 1–19.
- Mouffe, C. (2000) *The Democratic Paradox*, London: Verso.
- Navaro-Yashin, Y. (2002) *Faces of the State. Secularism and Public Life in Turkey*, Princeton & Oxford: Princeton University Press.
- Nippert-Eng, C. (2010) *Islands of Privacy: Disclosure and Concealment in Everyday Life*, Chicago: University of Chicago Press.
- Peteri, V. (2006) *Mediaksi kotiin. Tutkimus medioiden kotouttamisesta*, Tampere: Tampere University Press.
- Picker, J. M. (2016) "The telephone booth: Fixed mobility and the evolution of sonic space," in M. Bull & L. Back (eds.) *The Auditory Culture Reader, 2nd Edition*, London: Bloomsbury.

- Pitkin, H. (1981) "Justice: On relating private and public," *Political Theory*, 9(3), pp. 327–352.
- Schwartz, H. (2011) *Making Noise: From Babel to the Big Bang and Beyond*, New York: Zone Books.
- Sciama, L. (1993) "The problem of privacy in Mediterranean anthropology," in S. Ardener (ed.) *Women and Space: Ground Rules and Social Maps*, Oxford: Berg, 88–112.
- Soja, E. (2000) *Postmetropolis. Critical Studies of Cities and Regions*, Oxford: Blackwell.
- Solove, D. (2009) *Understanding Privacy*, Cambridge, Mass. & London: Harvard University Press.
- Stockfeld, O. (1994) "Cars, buildings and soundscapes," in H. Jarviluoma (ed.) *Soundscapes. Essays on Vroom and Moo*. Tampere: Tampere University Press.
- Szendy, P. (2008) *Listen – A History of Our Ears*, New York: Fordham University Press.
- The Guardian (2015) "Goodbye privacy, hello 'Alexa': Amazon Echo, the home robot who hears it all," November 21, 2015.
- Thibaud, J.-P. (2003) "The sonic composition of the city," in M. Bull & L. Back (eds.) *The Auditory Culture Reader*, Oxford & New York: Berg, pp. 329–355.
- Truax, B. (2001) *Acoustic Communication, 2nd edition*, Westport, CT: Ablex.
- Uimonen, H., Kytö, M. & Ruohonen, K. (2017) *Muuttuvat suomalaiset äänimaisemat*, Tampere: Tampere University Press.
- Vikman, N. (2007) *Eletty ääniympäristö. Pohjoisitalialaisen Cembran kylän kuulokulmat muutoksessa*, Tampere: Tampereen University Press.
- Warner, M. (2002) *Publics and Counterpublics*, New York: Zone Books.
- Williams, R. (1976) *Keywords: A Vocabulary of Culture and Society*, London: Harper Collins.
- Worthington, D., Fitch-Hauser, M., Välikoski, T., Imhof, M. & Kim, S. (2012) "Listening and privacy management in mobile phone conversations: cross-cultural comparison of Finnish, German, Korean and United States students," *Empedocles: European Journal for the Philosophy of Communication*, 3(1), pp. 43–60.