

Association for Information Systems AIS Electronic Library (AISeL)

Research Papers

ECIS 2019 Proceedings

5-15-2019

COULD NON-USE BE A REASONABLE DECISION REGARD-ING MODERN INFORMATION AND COMMUNICATION TECHNOLOGY?

Jani Koskinen

University of Turku, jasiko@utu.fi

Follow this and additional works at: https://aisel.aisnet.org/ecis2019_rp

Recommended Citation

Koskinen, Jani, (2019). "COULD NON-USE BE A REASONABLE DECISION REGARD-ING MODERN INFORMATION AND COMMUNICATION TECHNOLOGY?". In Proceedings of the 27th European Conference on Information Systems (ECIS), Stockholm & Uppsala, Sweden, June 8-14, 2019. ISBN 978-1-7336325-0-8 Research Papers.
https://aisel.aisnet.org/ecis2019_rp/154

This material is brought to you by the ECIS 2019 Proceedings at AIS Electronic Library (AISeL). It has been accepted for inclusion in Research Papers by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

COULD NON-USE BE A REASONABLE DECISION REGARDING MODERN INFORMATION AND COMMUNICATION TECHNOLOGY?

Research paper

Koskinen, Jani ,University of Turku, Turku, Finland, jasiko@utu.fi

Abstract

The non-use of modern technology is commonly seen as a result of incompetence, lack of opportunity to use technology or the poor design of technology. However, this view lacks sufficient understanding about the complexity of the issue. This paper considers non-use from the perspective of Heidegger's ontological work on being, together with his criticism of modern technology.

This paper is methodologically based on philosophical argumentation. It illustrates how non-use can be a well-informed choice. Rather than simply accepting modern information and communication technology as a mandatory part of life, it is possible to create a new and more individual relation with technology. This paper suggests giving attention to the ontological understanding of being (or 'self') in this digital era rather than blindly following the expectations commonly placed on people by others.

The ontological analysis of being, together with a critical view regarding modern technology, offers a plausible framework for re-evaluating non-use. Non-use is too commonly approached from an empirical interpretative perspective; hence, this paper enriches the literature concerning non-use by adopting a philosophical standpoint. Heidegger's criticism of technology adds new and fresh insights to the non-use discourse by illuminating the controlling impact of technology on individuals.

Keywords: Digital society, Heidegger, non-use, essence of technology

1 Introduction

The non-use of computers, mobile devices or digital services is in many cases seen as a result of the lack of either capacity or opportunity to use such modern information and communication technologies (ICT) (Sipior, Ward, & Connolly, 2011). The term 'digital divide' is commonly used to categorise people into those who have or do not have access or capability to use ICT although research has shown that the situation is not really so binary as it is usually perceived (Alexander & Jan, 2013; Neil, 2004; Selwyn, 2004). Further, the poor design of technology, unsuccessful implementation and resistance to change are among the reasons that have been given to non-use or reluctance to use information technology (eg. Delone & McLean, 2003; Hirschheim & Newman, 1988; Laumer, Maier, Eckhardt, & Weitzel, 2016). However, many researchers consider use/non-use to be a more complex issue than it initially appears (e.g. Cushman & Klecun, 2006; Friemel, 2014; Thorén & Kitzmann, 2015).

It should be noted that the current literature concerning non-use is spread across many disciplines, not all of which have been regularly connected (Baumer, Ames, Brubaker, Burrell, & Dourish, 2014). The different approaches used in different studies give rise to questions such as: 'What social roles might non-use play? What implicit assumptions about in/appropriateness of technology are evidence by non-use? Under what conditions does non-use become analytically interesting? What is implied when researchers (or study participants) bother to talk about non-use?' (Baumer et al., 2014 p.66). Such ques-

tions show that the topic of non-use requires further investigation about what are hidden rules of using technology as well as a new approach to question those rules; thus, the present paper contributes by adopting a different perspective on non-use. Not all non-users are victims of the digital divide or technophobic, since people may just not want to use technology even if it is well designed and produced.

Haugeland (1982) claimed that we have commonly created and accepted rules – true purposes – for things. Those rules define what is to be “normal member” of society and create norms that we should be following. However, a people themselves are in the central role to combine and put different norms and rules together in specific circumstances – and thus instituting those rules (Haugeland 1982). We, as people, are good at adopting and making ‘rules’ for things and thus for ourselves. Using information technology is conventionally considered normal, whereas non-use is seen as a problematic abnormality that needs to be addressed (Selwyn, 2003). Mobile phones offer a good example of this. Initially, we did not know how to act with them, but then we started to create rules for using such devices ‘properly’, even though those rules are divergent and alternating (see Allred & Crowley, 2017; Forgays, Hyman, & Schreiber, 2014; Lipscomb, Totten, Cook, & Lesch, 2007). Nowadays, it is a commonly accepted norm that it is impolite to use a mobile phone during dinner or, even more so, during a funeral – unless the person being contacted is, for example, a surgeon who is required to save someone’s life. However, other normal way of acting in relation to a mobile phone is that one is expected to answer a call or at least return it as soon as possible.

Instead of sticking to the dualistic premise of incapable non-user and capable user we should begin to look at other option: there may be people who just do not want to use modern technology or some aspects of it, despite their capacity or opportunity to do so – because they have some personal reason for it. There are examples in the literature of people being against the use of digital technology and digital media due to reasons not dependent on capacity (Hutchins, 2016) as well as some studies that seek to differentiate new kinds of digital exclusion (Helsper & Reisdorf, 2016). However, technology seems to have become an imperative, with the problems associated with technology being resolved by adding more technology, which results in the creation of the illusion that we are mastering the world (Petракaki, 2017).

The difference between the contexts of personal and organisational use lies in the fact that in the organisational context, technology use can be mandatory and subject to more strict rules, whereas in one’s personal life technology use is more voluntary and subject to the social rules of different kind as ‘commonly accepted’ ways of behaving. In this paper, we focus on the personal use of technology although it is recognised that the boundary between personal and organisational use in many cases is only a fine line. In the end, it is people’s individual existence and their experience that creates the deepest framework, and that is where the focus of this paper lies. Thus, the aim of this article is to present an alternative perspective showing how non-use or use can be an outcome of very personal insights, that is, motives of an individual to have a different relationship towards the overwhelming technology. In addition, this paper looks for the work of Heidegger to see if non-use could be the meaningful way to cope with modern technology and understand its effect on us.

Heidegger was chosen for use in this paper because of his work on existentialism and his criticism of technology (Heidegger, 1927, 1977). These aspects of his work are particularly relevant in an era characterised by the phenomenon of technology invading every facet of life. Information technology has become part of our everyday lives and we use our mobile devices throughout the day, every day. Our societies can be described as (information) technological and online ones – at least in the first world. Information technology is beginning to have a profound effect on people’s psyches as well as on society as a whole, since technology is becoming pervasive in everyday life (Walters & Kop, 2009). Indeed, it represents a catalyst that is changing our society and altering our commitments to others (Fernando, 1998). Not all people are willing to let this situation – where technology is integrated as an inseparable part of our life – become the status quo.

The non-use of digital technologies cannot be treated as mere incompetence or technophobia, but is instead a much wider and complex issue with other reasons behind it (see Kleine, Light, & Montero, 2012; O’Driscoll, Timms, Brough, & Sawang, 2010; Wagenknecht, 2017). A Heideggerian view on

technology and his work on hermeneutic phenomenology provides a framework for understanding why non-use can be based on a very well-informed understanding about technology and a deliberate choice based on that understanding.

In Chapter 2, we look at Heidegger's view what is the *essence of technology* and what are the consequences of it. In Chapter 3, we look deeper what *being* means in the digital world of ours. In Chapter 4, we start to look a new way of being in the digital world – *home-like-being-in-the-digital-world* – that would be more human and beautiful for us. Finally, in Chapter 5, we end up with the conclusion.

2 Heidegger and essence of technology

Heidegger's work can be seen as a strong ontological basis of considering the meaning of digitalisation for our society as well as for the life choices of individuals. We should see use and non-use as a continuum that is based on different factors and is capable of changing over time instead of creating separate classes into which we try to fit people. The sentiment of this paper seems to run parallel to Selwyn's (2003) concern about a too strict dichotomy between non-users and users – which seems even more apparent today than it was a decade ago – even if the methodology used is different.

Heidegger (1977) was critical of modern technology due to its nature or 'essence'. To him, the *essence of technology* is not technological in a sense that it is commonly perceived: a mere instrument or tool for some purpose. Instead, he claimed that as long as we think that way, we are mastered by the technology and its essence. We may start looking for answers and ask 'what is technology?', but by asking this question, we already accept the notion of technology that Heidegger (1977, p. 288) called the instrumental and anthropological definition. This definition noted by Heidegger includes the idea of technology as used by people as a means to an end (instrumental notion) as well as being part of a human activity we perform (anthropological notion). As Heidegger (1977, p. 288) showed in his clause 'Who would ever deny that it is correct?', this instrumental and anthropological definition seems to be indisputable at first sight.

Nevertheless, there is a clear problem with this instrumental and anthropological view. Even if a certain description is correct, it does not mean that it is the whole truth. Instead, it may be just one aspect of a multidimensional issue, which is the case here. This instrumental view of technology thus does not reveal the *essence of technology*. The *essence of technology* is revealing.

It reveals something about our human nature and how we as human beings relate to technology. We want to gain and maintain control or mastery over technology. (Heidegger 1977) We can exhibit an iron will and a clear aim to use it as a means to serve our ends. However, in many cases we seem to lose that mastery over technology. After losing control, we start to seek to regain control over it more and more determinedly. This result stems from the position whereby we do not see the *essence of technology*. We are used to looking at it only through the *instrumental* and *anthropological* perspectives – technological determinism that is correct but does not present the whole picture

Thus, the *essence of technology* is more akin to a worldview or way of living than a mere tool or technological development as it is portrayed for us. Yet, what is meant by a worldview or way of living when talking about what the *essence of technology* is? It means that technological view has set the game board of our life we live and playing by the rules, those commonly accepted rules (see Hauge-land, 1982) of which we are not fully and consciously aware. People use technology in their everyday lives and this trend is constantly escalating, but still people do not understand what technology does for us at the existential level as we do not see the *essence of technology*. We simply use technology because it is available and because society expects people to use it.

How often do we really think about what technology actually means to us and what impact it has in our lives? Even when we give thought to such issues, those thoughts are usually quite facile, occasional and buried under everyday concerns. Thus, the technological way of living appears self-evident and our world is revealed to us through the frames of the *essence of technology*. The *essence of technology*

provides us with the values of never-ending development that reveals everything – including humans – as *standing-reserve* (Gestell) (see Heidegger, 1977). Standing-reserve is a mode of revealing that sees objects as ready to be used or ordered. Heidegger's river – Rhone – example illustrates this well: a river before modern technology was a river like the Rhone. However, through a power plant, modern technology – that was installed – reveals the Rhone to be a source of energy that can be used, stored and ordered. This kind of revealing is like a never-ending story – it reveals the target as *standing reserve* for technological determinism that aims to identify new ways to use it (Heidegger, 1977).

Sinnerbrink (2006) offered an excellent description how technology is transforming the actual to become a standing reserve:

'The computer is an information interface, the mobile telephone a "personalized" communication resource on permanent standby; we ourselves become communication resources permanently "on-call" within social, electronic, and economic networks.'

Hence, the actual is transformed into an object of measurement and evaluation. Finally, the actual – as the Rhone or human beings – are changed so that they can be used for some purpose – to be ordered when needed and efficiency way, like resources "should" be. People using, for example, social media are changed into resources that are diagnosed, classified and used for economic purposes by companies that offer those services. Another good example is human resource management. Humans are seen as a resource that should be managed in order to become more profitable or efficient. When difficult times arrive, people are outsourced or made redundant based on economic factors – they are lessened by revealing them as the *essence of technology* does – people are seen as standing reserve for the company.

As Wyatt (2003) pointed out, if we focus solely on the users of technology, we neglect other aspects of people. They are actors who shape and negotiate meanings for technology. She further noted that the importance of users in technological development is known and emphasised although it also contains a problem – as by focusing on use we accept the promises of technology, capitalist relations of its production and also common user paths towards the acceptance of technologies (sooner or later)(Wyatt 2003).

Digital technology does the same for humans as a power plant does for the Rhone: it allows humans (users) to be available when needed (ready to order), boosts their efficiency (serving the never-ending development) and diminishes them as part of a digital society (standing-reserve) instead of respecting them as an actual and special kind of beings – human beings. Even when the need to limit technology use is recognised, it is commonly based on the *essence of technology* – the efficiency or performance is lacking (see Tarafdar, Pullins, & Ragu-Nathan, 2015; Tarafdar, Tu, & Ragu-Nathan, 2010).

It is alarming to consider that this is what the *essence of technology* is and that it will not change through our will. It does not matter whether the use of technology is rejected or praised – both of these choices are made due to technology. Nevertheless, as Heidegger stated, there is still hope: 'There was a time when the bringing-forth of the true into the beautiful was called *techne*. The *poiesis* of the fine arts was also called *techne*' (Heidegger, 1977, p. 315p. 339). We can begin to look for beautiful and deeper things rather than mere efficiency, financial benefit and the objectification of everything. As Riis (2011) stated, if we want to challenge the technological revealing of things as standing reserve, we should not concentrate on revolutionising our technology because we cannot change its essence. Instead, we should revise our human existence, which is the focus of the next section.

Concentrating on one's life and one's existence may represent a valid reason for individuals to choose to be non-users: people who want to look for the beautiful in their lives and distract themselves from the invasion of digital technology, to exist as an individual who seeks understanding about themselves and tries to find the deeper meaning of their life in this digitalised world. As Heidegger (1977) did not provide a concrete answer regarding what *art* he was talking about, we need to consider his earlier work in order to continue our quest to understand the non-use or use of technology and make the sense of it. In this way, we can try to find a new and different relationship with technology rather than being dominated by its essence.

3 Being in the digital world

The next question concerning the use/non-use of modern technologies is: what is the role of digitalisation in one's personal life and what does it mean for one's existence? This is particularly important when we consider the aforementioned danger of the *essence of technology*. As we are approaching this question from a Heideggerian perspective, we need to look deeper into what it means to be a human being. For Heidegger, the question about *being* (especially being human) was a journey towards deep and permanent investigation. The fundamental aspect of this existential ontology is the distinction between the human way of being and the being of things (Sandberg & Pinnington, 2009). The human way of being is a central issue that must be understood in order to achieve our aim of identifying the basis of non-use.

However, Heidegger did not offer a strict and explicit answer to the question of being in *Being and Time* – because the project was never fully completed. Instead, he attempted to clarify the question from different perspectives, emphasising the individual comprehension of the idea that only the people themselves can understand their *Dasein* (being-in-the-world) (see Heidegger, 1927).

Dasein is the central term that Heidegger (1927) used to describe human existence that is aware and confronts its own being in this world. *Dasein* is a mode of being that is different from every other mode of being. It is essential to understand that there are three primary modes of being presented in *Being and Time*, namely *ready-to-hand*, *present-at-hand* and *Dasein*. It is notable that for Heidegger being is based on hermeneutical phenomenology and – in simple terms – this means that being can only be investigated from the first-person perceptive. This is why there are only three main modes of being.

The ready-to-hand and present-at-hand are modes that are possible to all objects but third is the mode of being that is possible for human¹ only. The first mode we look closer is *ready-to-hand* (*zuhandenheit*). Heidegger's (1927) hammer example provides some insight into how best to approach the description of *ready-to-hand*. Heidegger explained that something is ready-to-hand if it has some purpose to accomplish – as a hammer is used for some purpose. Usually, we do not give much consideration to the objects we use; we simply use them as we have always used them. We see that they are there, ready for us to use to accomplish some goal, but without active reflection on the object we are using. Thus, we use such objects in the way they are meant to be used or as is proper to use them, such as how a computer is used to write an article. The problem is that, for example, mobile technology is ready-to-hand all the time: social media, remote work tools, leisure applications, search engines etc. This renders it a double-edged sword. Electronic devices allow us to communicate, learn and entertain, but at the same time they bind us to technology through reward-related processes and may even alter our basic cognitive functioning (Wilmer & Chein, 2016). All of this occurs imperceptibly because technology is always *ready-to-hand* and we are used to using it.

The second mode of being that we look is *present-at-hand* (*Vorhandenheit*). It can be seen as a situation wherein we start to view an object consciously and therefore begin to see it more deeply. If one compares this approach to *ready-to-hand*, which focuses on the use of an object for some aim rather than on the object itself, one can see the power of *present-at-hand*. It is concerned with how we concentrate and challenge ourselves and thus begin to see more. This is very similar to how scientists typically do their work – focusing on an object and gaining information about it. Another example of this is a situation wherein an object comes under investigation because it is broken. The item that was ready for use (*ready-to-hand*) is not usable anymore and thus it is looked at thoroughly. By means of its brokenness, the object comes into the sight of the observer. People who experience the failure of modern technology could see how dependent they are on such technology (especially mobile devices)

¹Unless we found other species or mode of intelligence that has such capacity for self-reflection than humans does

as well as the degree to which its presence changes their behaviour (see Salehan & Negahban, 2013; Shalini, Lulu, Jamie, & Miao, 2014).

The third mode of being is *Dasein*, which could also be translated as ‘the individual human mode of being in the world’ although there are many other ways to grasp and present the meaning of the original German term. However, the special character of *Dasein* compared to the other two modes of being is that *Dasein* refers to only that which can have an understanding about its own being and hence can investigate it. Thus, *Dasein* is also about understanding one’s own being in the world, that is, the mode of being only – according to our current knowledge – possible for human beings (van der Hoorn & Whitty, 2015). This understanding about one’s existence is the key factor that separates *Dasein* from *present-at-hand* and especially from *ready-to-hand*. *Dasein* can see the *present-at-hand* and the *ready-to-hand*, but *Dasein* cannot truly be reached as *present-at-hand* or as *ready-to-hand*. Things can be present or ready but only *Dasein* (human) can see other modes and give meanings for those.

The problem inherent in a digital society is that we are expected to live a digital life and take everything that technology gives us as it is *ready-to-hand*. We should use social media, internet banking and mobile devices. In addition, governmental services are transferring into a digital format, for example, healthcare is now subject to digitalisation and voting is becoming electronic. Behind this digitalisation is the aim of making services faster, more cost effective and reliable, etc. – to fulfil the aforementioned *essence of technology*.

Digitalisation is something that we are all expected to adapt to, which means that we should be like all the others – *das Man*. *Das Man* is a term that Heidegger (1927) used to describe a situation wherein people consciously choose to hide or lose themselves and replace themselves with commonly accepted ways of being or acting, whereas *Dasein* is concerned with living a life consciously and making the sense of one’s own, authentic life. The use of digital technologies can have negative consequences to people and their personal life goals, even when the technology could prove very helpful for most of us. It depends on people’s personal backgrounds (see *thrownness* in Heidegger, 1927). This paper aims to help see the digital world that is *ready-to-hand* in the mode of *present-at-hand* where people – as *Dasein* – may seek the new ways to be in this world.

4 Thrownness and the search for homelike-being-in-the-digital-world

Heidegger’s (1927) *Dasein* includes the notion of *thrownness*² (*Geworfenheit*), which means that we are thrown into this (digital) world we live in. We are born in this world along with our biological and social background. We have our genes, a specific premise that has a significant impact on our lives together, with the socio-economic environment and history of ours. Our history and background is fact that we cannot change, but it gives meaning to this present time by giving the circumstances and restrictions that we are facing with our *thrownness*.

Thus, *Dasein* is nowadays situated within the digital world, in the midst of what is there by means of *thrownness*, which incorporates the embodiment of *Dasein* (Overgaard, 2004). This *thrownness* of *Dasein* can be seen as the position from which we should start to analyse digitalisation and the use or non-use decision from a Heideggerian perspective. We are here and need to live this life, but we still have the potential to confront how we want to live it. The importance of *thrownness* is underlined if we look at it from a technological perspective. We are born in this world along with our historical, socio-economical and personal background, and this gives us the point of departure from where we need to begin to look for what we truly want from our lives in this digital world.

Heidegger meant that we are thrown into some situation in this world with a certain precondition and that is indeed an undeniable fact – we cannot change history. This is the situation we have to live in and deal with by ourselves. We are sensemaking creatures because sensemaking is what we do and we cannot stop doing it even if we should or want to (see Withy, 2014). Even if we decide to stop sensemaking by dying, this would actually involve performing sensemaking in a way during the decision and the act itself, and thus it is as inseparable part of being a human being. Sensemaking is the most basic starting point as well as the most fundamental dimension of our *thrownness*. It is a burden laid upon us and we are bound by it. However, it is not a personal burden although it is essential and existential in the way that we are stuck with it (Withy, 2014). Our relationship with world is unquestioned habit where we are making sense with already existing orders, standards and skills that are associated with shared use language. But Heidegger noted that sense is extended beyond habituated framing. We should not only ask “what?” but investigate world with the non-instrumentality, mood and by being open. (Holt & Cornelissen, 2013) We are all here in this world and we have to make the sense of it by ourselves. We cannot choose what we are born with and *thrownness* portrays that quite well. Regardless, this life is mine and I have to live it until the day I die. Only I can find the meaningfulness in it. However, I can neglect or hide my awareness of my possibilities by agreeing to live as all others do – *das Man* (see Heidegger, 1927). As mentioned above, *das Man* is the mode of being whereby people consciously choose to hide or lose themselves by replacing their *Dasein* with the generally accepted and non-disturbing way of being. According to Heidegger, however, we should not be satisfied with this way of living.

Instead of losing our life under the spell of everyone else (*das Man*), we should find meaningfulness by ourselves through seeking the beautiful and all the possibilities for it in our life. The aim is that we should feel we are homelike here in this world we all live in. *Homelike-being-in-the-world* is a term coined by Svenaeus (2001), which describes health in a Heideggerian way. *Homelike-being-in-the-world* is to be whole, to have an attuned understanding and the capacity to act, and to have a meaning in being in this world with the self as well as others.

Health as *homelike-being-in-the-world* is seen as a solid solution for healthcare information systems in modern society because it emphasises the individual (patient) experience of one’s own life rather than focusing on the biomedical side (Koskinen, 2010, 2016, 2019). Nevertheless, we could develop the term into the context of this paper. The new version could be *homelike-being-in-the-digital-world*. We should confront expectations that are laid upon us by others, seek to move beyond those and look for a relation with technology that is suitable of us – a relation that is homelike and beautiful for us.

5 Conclusion

Heidegger’s description of *the essence of technology* and the danger it poses to us enables us to see the risks inherent in our digital world and recognise that we should start to critically consider our relation to it. We can see that technology is surrounding us at an ever increasing rate and that every moment we became more and more dependent on it even if we believe ourselves to be the masters of technology.

In the first section of this article, a question was raised: what is the relation between technology, individual(s), society and common rules when people decide on non-use?

Thus, non-use can be seen as a way of coping with invading technologies. Some people are starting to criticise the values and expectations of our modern society. There are trends such as downshifting, slow food, slow tech, declining to watch television, going back to analogic music etc. All these can be seen as phenomena that show people are not happy with how we currently use technology. Life under the *essence of technology* is hectic and it reveals everything to be an exploitable resource or, as Heidegger would put it, a standing reserve. Hence, there are people who do not want to take technology for granted or use it like others do, but who instead try to reconstruct their relation with technology in a different, individual and beautiful way. This new relation can be derived from Heidegger even

though he did not provide a proper answer but rather only an obscure idea of arts as promising power over technology.

However, even if we cannot change the *essence of technology*, we can change the role that technology has for us as individuals. We are the being – *Dasein* – that possesses the capacity to confront our existence and contemplate it. We can analyse the meaning of technology for ourselves and for our being here. We can refuse to use technology as we are expected to and instead search for a way of living that makes sense for us. When people reflect on their own being as *Dasein* – instead of *das Man*, which can be seen as a manifestation of the average member of society – they can find their own paths for their lives and forge their way of living in this digital world. Hence, it seems that the relation between technology, society and common rules lies in that they are outside factors influencing individuals through their existence. However, individuals create meaning inside of their minds for those outside factors and determine whether they have value – positive or negative – for individual life. Nevertheless, this does not mean that we do not care about society – other people – or abandon it. Instead we should start to look out the more human approach to society where technology does not define us but how we define technology from our human perspectives.

It appears that the non-use of technology could have a solid philosophical basis, grounded on Heidegger, and thus a personal rationale behind it. After all, this is my life and I should be choosing how to live it, since when I die I will face it not as *das Man* but as *Dasein*. There is a need for a new relationship with technology that is founded on the terms of individuals rather than on the terms uncritically adopted by society. However, this means that *essence of technology* is challenged and non-use – even if not fully but partially – may be one way to carry out new relationship

The Heideggerian approach is obviously not the only means of explaining non-use, but it is a new and thus enriching one for this topic. Heidegger's thoughts – even if they may seem obscure at times – force us to concentrate on the issue of digitalisation and provide us with the possibility to find new and personal views of the landscape of the digital world that we may want to live in – or flee from.

In the end, it is better to be able to look back at the time of death and say: 'It is sad to give up this life of mine. It may not be a perfect one but it was mine and mine only.' The reason for this claim stems from the question of what really matters in the end, people or technology. If you were asked, 'if you were to die tomorrow, would you like to spend your time being with people face to face or through technology' what would you answer? If you are likely to answer that you would rather spend time face to face with people, then you should question why you currently prefer technology and establish your own individual relation with technology. Is it the *essence of technology* or art³ that is guiding you?

References

- Alexander, J. A. M. v. D., & Jan, A. G. M. v. D. (2013). The digital divide shifts to differences in usage. *New Media & Society*, 16(3), 507-526. doi:10.1177/1461444813487959
- Allred, R. J., & Crowley, J. P. (2017). The "Mere Presence" Hypothesis: Investigating the Nonverbal Effects of Cell-Phone Presence on Conversation Satisfaction. *Communication Studies*, 68(1), 22-36. doi:10.1080/10510974.2016.1241292
- Baumer, E. P. S., Ames, M. G., Brubaker, J. R., Burrell, J., & Dourish, P. (2014). *Refusing, limiting, departing: why we should study technology non-use*. Paper presented at the CHI '14 Extended Abstracts on Human Factors in Computing Systems, Toronto, Ontario, Canada.

³ Art should here be interpreted as referring to the issues one sees as important, valuable and 'beautiful' in one's own life and existence.

- Cushman, M., & Klecun, E. (2006). How (Can) Nonusers Engage with Technology: Bringing in the Digitally Excluded. In E. M. Trauth, D. Howcroft, T. Butler, B. Fitzgerald, & J. I. DeGross (Eds.), *Social Inclusion: Societal and Organizational Implications for Information Systems: IFIP TC8 WG8.2 International Working Conference, July 12–15, 2006, Limerick, Ireland* (pp. 347-364). Boston, MA: Springer US.
- Delone, W., & McLean, E. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9-30. doi:10.1080/07421222.2003.11045748
- Fernando, F. (1998). Information technology and the institution of identity. *Information Technology & People*, 11(4), 351-372. doi:10.1108/09593849810246156
- Forgays, D. K., Hyman, I., & Schreiber, J. (2014). Texting everywhere for everything: Gender and age differences in cell phone etiquette and use. *Computers in Human Behavior*, 31(Supplement C), 314-321. doi:https://doi.org/10.1016/j.chb.2013.10.053
- Friemel, T. N. (2014). The digital divide has grown old: Determinants of a digital divide among seniors. *New Media & Society*, 18(2), 313-331. doi:10.1177/1461444814538648
- Haugeland, J. (1982). Heidegger on Being a Person. *Noûs*, 16(1), 15-26. doi:10.2307/2215406
- Heidegger, M. (1927). *Originally Sein und Zeit*. Used several translations. Main translation Oleminen ja Aika by Kupiainen R. 2000. Tampere: Vastapaino.
- Heidegger, M. (1977). *The Question Concerning Technology*, in *The Question Concerning Technology and Other Essays*. Translated by Lovitt, W. New York: Harper & Row.
- Helsper, E. J., & Reisdorf, B. C. (2016). The emergence of a “digital underclass” in Great Britain and Sweden: Changing reasons for digital exclusion. *New Media & Society*, 1461444816634676. doi:10.1177/1461444816634676
- Hirschheim, R., & Newman, M. (1988). Information Systems and User Resistance: Theory and Practice*. *The Computer Journal*, 31(5), 398-408. doi:10.1093/comjnl/31.5.398
- Holt, R., & Cornelissen, J. (2013). Sensemaking revisited. *Management Learning*, 45(5), 525-539. doi:10.1177/1350507613486422
- Hutchins, B. (2016). ‘We don’t need no stinking smartphones!’ Live stadium sports events, mediatization, and the non-use of mobile media. *Media, Culture & Society*, 38(3), 420-436. doi:10.1177/0163443716635862
- Kleine, D., Light, A., & Montero, M.-J. (2012). Signifiers of the life we value? – considering human development, technologies and Fair Trade from the perspective of the capabilities approach. *Information Technology for Development*, 18(1), 42-60. doi:10.1080/02681102.2011.643208
- Koskinen, J. (2010). *Phenomenological view of health and patient empowerment with Personal Health Record*. Paper presented at the Navigating the Fragmented Innovation Landscape. Proceedings of the Third International Conference on Well-being in the Information Society, Turku, Finland.
- Koskinen, J. (2016). *Datenherrschaft – an Ethically Justified Solution to the Problem of Ownership of Patient Information*. (Ph.D.), University of Turku, Suomen yliopistopaino oy, Turku. Retrieved from <http://urn.fi/URN:ISBN:978-952-249-467-2>
- Koskinen, J. (2019). The concept of Datenherrschaft of patient information from a Heideggerian perspective. *Journal of Information, Communication and Ethics in Society*.
- Laumer, S., Maier, C., Eckhardt, A., & Weitzel, T. (2016). User personality and resistance to mandatory information systems in organizations: a theoretical model and empirical test of dispositional resistance to change. *Journal of Information Technology*, 31(1), 67-82. doi:10.1057/jit.2015.17
- Lipscomb, T. J., Totten, J. W., Cook, R. A., & Lesch, W. (2007). Cellular phone etiquette among college students. *International Journal of Consumer Studies*, 31(1), 46-56. doi:10.1111/j.1470-6431.2005.00483.x
- Neil, S. (2004). Reconsidering Political and Popular Understandings of the Digital Divide. *New Media & Society*, 6(3), 341-362. doi:10.1177/1461444804042519
- O’Driscoll, M. P., Timms, C., Brough, P., & Sawang, S. (2010). Engagement with information and communication technology and psychological well-being. In *New Developments in Theoretical and Conceptual Approaches to Job Stress* (Vol. 8, pp. 269-316): Emerald Group Publishing Limited.

- Overgaard, S. (2004). Heidegger on Embodiment. *Journal of the British Society for Phenomenology*, 35(2), 116-131. doi:10.1080/00071773.2004.11007431
- Petrakaki, D. (2017). *Technology and authenticity: patienthood in a technological world*. Paper presented at the European Conference on Information Systems (ECIS), Guimarães, Portugal.
- Riis, S. (2011). Towards the origin of modern technology: reconfiguring Martin Heidegger's thinking. *Continental Philosophy Review*, 44(1), 103-117. doi:10.1007/s11007-011-9170-0
- Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. *Computers in Human Behavior*, 29(6), 2632-2639. doi:<https://doi.org/10.1016/j.chb.2013.07.003>
- Sandberg, J., & Pinnington, A. H. (2009). Professional Competence as Ways of Being: An Existential Ontological Perspective. *Journal of Management Studies*, 46(7), 1138-1170. doi:10.1111/j.1467-6486.2009.00845.x
- Selwyn, N. (2003). Apart from technology: understanding people's non-use of information and communication technologies in everyday life. *Technology in Society*, 25(1), 99-116. doi:[http://dx.doi.org/10.1016/S0160-791X\(02\)00062-3](http://dx.doi.org/10.1016/S0160-791X(02)00062-3)
- Selwyn, N. (2004). Reconsidering Political and Popular Understandings of the Digital Divide. *New Media & Society*, 6(3), 341-362. doi:10.1177/1461444804042519
- Shalini, M., Lulu, C., Jamie, G., & Miao, Y. (2014). The iPhone Effect: The Quality of In-Person Social Interactions in the Presence of Mobile Devices. *Environment and Behavior*, 48(2), 275-298. doi:10.1177/0013916514539755
- Sinnerbrink, R. (2006). Ereignis, Technology, Art: Poetic Dwelling in the Later Heidegger. *Literature & Aesthetics*, 16(1), 81-94.
- Sipior, J. C., Ward, B. T., & Connolly, R. (2011). The digital divide and t-government in the United States: using the technology acceptance model to understand usage. *European Journal of Information Systems*, 20(3), 308-328. doi:10.1057/ejis.2010.64
- Svenaesus, F. (2001). *The Hermeneutics of Medicine and the Phenomenology of Health: Steps towards a Philosophy of Medical Practice" (second revised edition)*: Kluwer.
- Tarafdar, M., Pullins, E. B., & Ragu-Nathan, T. S. (2015). Technostress: negative effect on performance and possible mitigations. *Information Systems Journal*, 25(2), 103-132. doi:10.1111/isj.12042
- Tarafdar, M., Tu, Q., & Ragu-Nathan, T. S. (2010). Impact of Technostress on End-User Satisfaction and Performance. *Journal of Management Information Systems*, 27(3), 303-334. doi:10.2753/MIS0742-1222270311
- Thorén, C., & Kitzmann, A. (2015). Replicants, imposters and the real deal: Issues of non-use and technology resistance in vintage and software instruments. *First Monday*, 20(11).
- van der Hoorn, B., & Whitty, S. J. (2015). A Heideggerian paradigm for project management: Breaking free of the disciplinary matrix and its Cartesian ontology. *International Journal of Project Management*, 33(4), 721-734. doi:<http://dx.doi.org/10.1016/j.ijproman.2014.09.007>
- Wagenknecht, S. (2017). Beyond non-/use: The affected bystander and her escalation. *New Media & Society*, 1461444817708775. doi:10.1177/1461444817708775
- Walters, P., & Kop, R. (2009). Heidegger, Digital Technology, and Postmodern Education: From Being in Cyberspace to Meeting on MySpace. *Bulletin of Science, Technology & Society*.
- Wilmer, H. H., & Chein, J. M. (2016). Mobile technology habits: patterns of association among device usage, intertemporal preference, impulse control, and reward sensitivity. *Psychonomic Bulletin & Review*, 23(5), 1607-1614. doi:10.3758/s13423-016-1011-z
- Withy, K. (2014). Situation and Limitation: Making Sense of Heidegger on Thrownness. *European Journal of Philosophy*, 22(1), 61-81. doi:10.1111/j.1468-0378.2011.00471.x
- Wyatt, S. (2003). Non-Users Also Matter: The Construction of Users and Non-Users of the Internet. In N. Oudshoorn & T. Pinch (Eds.), *How Users Matter* (pp. 67-79): MIT Press.