# THE SWEDISH MICROCHIPPING PHENOMENON

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MOA PETERSÉN Lund University, Sweden



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## ABOUT THE AUTHOR

Moa Petersén is Associate Professor in Digital Cultures at the Department of Arts and Cultural Sciences at Lund University. Since her doctoral thesis "Impure Vision: American Staged Art Photography of the 1970s" was published in 2013, she has written several articles and book chapters on the humantechnology/nature relation including "Human-Technology Relationships in the Digital Age: The Collapse of Metaphor in Biohacking." In Agard, J., et al. (2018), Postphenomenological Methodologies – New Ways in Mediating Techno-Human Relationships, Lexington Books.

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### INTRODUCTION

A smiling, leading, Swedish female politician sits with a cotton patch on her left hand. A while earlier, she has placed the same hand on a table where two tattooed hands dressed in lilac plastic gloves have snatched the skin between her index finger and thumb. A man with a beard has bent over her hand, taken out a surgical tool with a decimeter-long and five-millimeter-wide needle that he inserts into the politician's skin, which he has caught between his fingers. The needle has been prepared with a microchip that in an instant is inserted into the hand of the politician, which is then patched. The politician turns to the TV camera and praises the microchip's possibilities to catalyze the transition to a more sustainable and climate-friendly traveling behavior in Sweden by its ability to make train travel more "seamless" and comfortable. "You have to dare to try new things. You have to dare to use new technology," says the politician, giving the viewers an intense look through the TV camera.

Sounds like fiction? It is not. It is a description of a video news reportage made by the Swedish newspaper *Aftonbladet* covering what was happening at the annual Swedish official politicians' week in Almedalen in 2017 (Thornéus, 2017). The microchipping in Almedalen was organized by the Swedish

state-owned train company Statens Järnvägar (SJ), and the politician is Karin Svensson Smith, then chairman of the government's traffic committee.

The fact that approximately 5,500 Swedes have inserted similar microchips into their hands between 2014 and 2018 has attracted great international attention. The chip is either near field communication (NFC) type or radio frequency identification (RFID) type, and can be used to open doors, print on the work's printer, work as passenger identification (ticket) on SI's train, provided that you are SI Prio member, and to pass into certain membership clubs, for example, gyms. The chip is inserted with a large needle, and this is usually performed by a piercer or by one of the two Swedish companies who professionalize in operating chip implants into people. The chips themselves are enclosed in a biocompatible glass container that measures 2 × 12 millimeters. The chip was imported from the US biohacking scene to the Swedish equivalent in autumn 2014 by a Swedish entrepreneur who quickly succeeded in marketing the idea of the chip via great interest from Swedish and foreign media. Subcultural biohacker groups doing microchipping can also be found in other countries such as the United States, Australia, and Germany. But what distinguishes the Swedish context from the international is that microchiping in Sweden has been accepted on a social level, including an entrepreneurial, political, and business level of society, far from the shady subcultural contexts in which it arose, and where, in other countries, it still lives.

There seems to be a general difference between the Swedish attitude to microchips and the attitude found in other countries, which is clearly highlighted by a comparison of Swedish and international media coverage of the Swedish chipping. In the international media, Swedish microchipping of human beings is commonly described in alarmist tones as a threat of future Orwellian societies. The tone of the discussion within

Swedish borders is far from alarmist, but instead neutral, fascinated, or immediately positive.

Besides mapping the previously unmapped Swedish microchipping phenomenon, the aim and purpose of the following investigation is to provide some possible explanations as to why and how the chip has been so relatively normalized in Sweden and even loaded with progressive values about technology and a better future – as in the example of the traffic committee's chairman above.

#### FRAMING THE PHENOMENON

So, why do I call Swedish microchipping a phenomenon? If consulting the *Merriam Webster Dictionary* (phenomenon, 2019), "phenomenon" has three meanings which all apply to this investigation:

- (1) An exceptional, unusual, or abnormal person, thing, or occurrence.
- (2) A fact or event of scientific interest susceptible to scientific description and explanation.
- (3) An object or aspect known through the senses rather than by thought.

In this investigation, Swedish human microchipping is – to some extent – all of those. If we first address the meaning of a phenomenon as something remarkable or extraordinary, this is the way Swedish human microchipping is mediated, especially in international media. I want to make clear from the beginning that international media has magnified this movement greatly when it comes to how far-spread and well known it is in Sweden. While writing this book I had to go to the doctor at one point (getting some health advice on my

cramped chest muscles from too much writing); the doctor asked me what book I was writing and when I told him it was about Swedes who microchip themselves, his jaw dropped.

"Are people doing that? In Sweden?!"

This is the most common response I get when I tell people about my research. International media has been eager to display it as if everyone in Sweden knows human chipping is happening, that everyone has an opinion on it, and that in Sweden you commonly see people pay with their hands in cafés or other official places. In reality the majority of Swedes do not know that this is going on at all - despite the media's frequent publishing on the subject. Even if international media often uses expressions such as "several thousands of Swedes" or the like to make it sound alarming and click bait-ish, it is not the amount of Swedes who carry a chip that makes it into a phenomenon. Only 0.0005% of the Swedish population carries a chip. It is also not the frequent actual usage of chips in Swedish society that makes it phenomenal. The possibilities to use the chip are very limited, as we will see below, and no official payment method using body inserted chips, for example, is possible in Sweden. What turns the Swedish microchip movement into a true phenomenon is the positive, neutral, or accepting – but seldom negative – attitude toward the human microchipping technology that is found in Swedish society, and it is also this phenomenal aspect that will be the focus of this investigation. The deviant Swedish attitude becomes visible in contrast to international reactions, which will be discussed further in Chapter 1.

In this investigation, Swedish microchipping also fulfills the second meaning of phenomenon: a fact or event of scientific interest susceptible to scientific description and explanation. This is the basic definition for an object of scientific investigation and obviously what makes the topic into a subject for

research. The third one: an object or aspect known through the senses rather than by thought refers to the way the word is used in philosophy to describe observed facts distinguished from theories devised to explain them. This explains the methodological points of departure for the investigation quite well. The empirical material has led me to direct the course of the investigation. I thus started by collecting material that I found within the Swedish context, and after analyzing it, I searched for theories to frame my findings. The choice of theories is eclectic and taken from all possible disciplines within social sciences and humanities. My methodological approach. as well as my strategy when it comes to decide on theoretical applications, is sometimes described as "bricolage" - first conceptualized methodologically by anthropologist Claude Lévi-Strauss. The bricolage research method is eclectic and enables the researcher to work from multiple perspectives. As such it allows researchers to embrace conflicting theories within the same theoretical synthesis (Denzin & Lincoln, 2011). Bricolage thereby allows me to articulate a plurality of complexities that influence the Swedish human microchipping phenomenon. The result of this investigation is an essay where I navigate through a field that has never been covered research-wise before. It is a field that is living, shaping, and changing constantly, and that is best understood as part of a whole - an ongoing discussion on the borders between human bodies and technology that humans will have to negotiate. As such, the investigation – just like the chip – relates to several giant contemporary political, ethical, and philosophical questions. To give a fair representation of this thick, complex, and volatile slice of reality within this small book format, I have chosen to work with several different theories and methods, and to cast light on the material from a range of different angles in order to circumvent reductionism. This investigation is thus presented in the form of an essay where I have

deliberately discussed the phenomenon from a broad range of theoretical perspectives and not from any specific central conceptual argument.

Yet, there are some overarching theoretical coordinates that serve as a frame for situating the phenomenon. Through the research process it became clear that the Swedish microchipping phenomenon has not just appeared out of the blue, but is clearly situated in time and space. Thus, this study is framed by the overarching belief that technology and society co-construct each other, as argued, for example, by Bruno Latour and Sheila Jasanoff. In this process of co-construction, technologies are understood as evolving together with the representations and discourses that give meaning to them (Jasanoff, 2004). This means that the technical content (e.g., specific technological capacities) and social context are both equally involved in the process of the implementation of that technology (see, e.g., Latour, 1993). In the case of Swedish microchipping, the border between the social and the technology is very porous. The investigation will show how many dispersed social beliefs and arguments are projected onto the chip. Also, the Swedish self-image, which will be investigated in Chapter 2, is highly present within the definition of this technology. The chip technology, which is not especially advanced and also not new, is not at the center of most of the discussions this book raises. Rather it is the co-construct what narrative is projected onto the chips, what questions they raise, and what arguments they bring out - that fills the costume of the studied phenomenon.

Through analyzing the material it also soon became obvious that without considering the epistemological shift to biology, within biology, and in the general perception of what a biological body is, could be, and should be in the twenty-first century it would be hard to imagine, and to explain, both human microchipping and the movement it was born into:

biohacking. This biological shift has followed the fast biomedical and technological developments, and was further catalyzed by the human genome project in the years around 2000. Nikolas Rose (2007) argues that this biological shift has altered human life, as it has made people understand life at a molecular level, and themselves as biological creatures with ability to engineer, control, and shape their own vital parameters. Biohacking fits very well into this development. The term "biohacking" was first used in an article by Michael Schrage in the *Washington Post* in 1988. In this article, Schrage (1988) predicts the shift that biotech will bring about in the following way:

This diffusion of technology into the public domain stands to transform our perception of living things as dramatically as the automobile changed society's view of travel or as TV and the VCR transformed leisure time. What happens, for example, if future generations begin to see life as something that's manipulable – just another computer program, but one in which the printout isn't on paper but in proteins? If children grow up believing that life is nothing more than organic chemistry?

The basic idea of biohacking, as the very term affirms, is an amalgamation of biology and computing. To explain the attitude toward the human biological body within biohacking this amalgamation can be studied at the metaphorical level. Eugene Thacker (2004) has researched the metaphorical development within biology induced by the formation of bioinformatics during the 1980s, where data science and biological science started to merge to an extent not previously seen (p. 33). Thacker suggests that there has been a collapse of metaphors, for example, in the case of *DNA* and *information* that have almost become exchangeable terms as of

today. In the same way, the metaphor where human bodies are *understood* by comparing them to a computer information system has been substituted by a practice where bodies *are* computers, and DNA *is* information available to hack and tinker with hands-on (Petersén, 2018).

One more thing I want to mention, since it underlies many of the interviewees' dictums, is related to theory of knowledge in the post-truth, post-fact, era. The questioning of established biological facts that is part of the driving force of modern biohacking is not only coming from a general Fitbit-equipped population, but also from within biological science. The vast amount of scientific data sets that is possible to collect with new digital equipment is also challenging traditional reasoning within biological science. Sandra Mitchell (2009) has observed how the traditional cause-effect explanations within biology have lately been challenged by discovered phenomena, such as lateral gene transfer, that can have many different explanations and that can all be "true." Trust, authority, and facts within healthcare and biological science are all concepts that are challenged by easily available vital data that offer a variety of conclusions open to interpret from individual preferences or other contextual delimitations of different sorts. As such, the biological shift together with biotechnological equipment that supply the general population with private data sets possibly make institutions and authorities more vulnerable in the eyes of the individual.

To conclude, the following study will take place within the above sketched frame. I will study Swedish microchipping both as a narrative, or a co-construct, in which society and technology are deeply intertwined; what is being said about the phenomenon, how it is mediated, etc. But I will also study the phenomenon as a practice where I, for example, delve into the questions of what ideas and concepts give the practice its shape, and how the formation of Swedish chipping happened.

# THE STRUCTURE, THE MATERIAL, AND ETHICAL CONSIDERATIONS

Several (overlapping) themes have presented themselves through analysis of the material, and these have been used to create the structure of the book. The investigation is divided into three chapters. In Chapter 1, called "When the Chips Came to Sweden," I map the movement as I tell the story of the origins and formation of the Swedish chip movement, and describe what chips are, and what they can do. I then go on to explain the chip movement as part of the Swedish biohacking scene, and explain how chips professionalized into a business. Lastly, I take a look at how chipping has been covered in Swedish media compared to international media. In Chapter 2, "Sweden and Technology," I shift focus to the Swedish cultural and political contexts, and formulate a range of possible intertwined explanations as to why human microchipping appeared on the Swedish scene in the way it did from a more societal perspective. In "Chipped Swedes" – the third and last chapter – I study the microchipping scene by discussing it with reference to material conducted from interviews with chipped Swedes. Chapter 3 is divided into four sections. In the beginning, I discuss the arguments for chipping oneself that I found among my interviewees. I then go deeper into three specified themes that crystallized from my material, which further contextualize and explain Swedish chipping: Surveillance and the ideas on a future for human chip implants; Science fiction as reality and biological bodies; and lastly Transhumanism (H+). The book ends with a concluding discussion where I sum up my findings.

The collected material consists of semi-structured telephone and face-to-face interviews with 15 chipped Swedish citizens. Three of them are representatives of corporations and companies that in different ways apply humanly inserted

microchips within their businesses. Apart from interviews, I have used blog posts, home pages, audio pods, news articles, and videos to understand and reconstruct the microchipping narrative. The interviewees have been chosen as representative of the Swedish general population. I have thus taken geographical spread, spread of age, and gender into account.

The subject of this investigation stirs up emotions. I have therefore anonymized all the participating interviewees in the study. In the cases where interviewees represent companies, I have also tried to anonymize the companies as best as possible. No immediate references is made to material such as blog posts, home pages, or YouTube videos where the identities of the interviewees might be disclosed, and this material is further not included in the reference list. All materials for the study that could possibly reveal the identity of individuals have been printed and are stored with the author. All the names of interviewees that appear in the study are fictitious, and their ages have been somewhat modified. The interviews took place in Swedish, and all translations are mine. That is also true for all other Swedish untranslated sources.