

On Originary Technical Mediation

A synthesis of Stiegler and Post-Phenomenology

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Master Thesis
Philosophy of Science, Technology, and Society
Track: Philosophy of Technology
University of Twente
Faculty of Behaviourial Sciences
Enschede, the Netherlands.

April, 2011

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Preface

Writing this thesis has been an absolute joy. This is not to say that it has been a walk in the park, which it has not, unless one is talking about a park that turns post-apocalyptic every now and then. In the end, however, I have found it to be thoroughly enjoyable. I would like to extend my gratitude to the following persons, who made both writing this thesis as well as being a student in the PSTS program a walk to remember.

First of all, thanks to Peter-Paul Verbeek who I regard to be a terrific philosopher. The sheer breadth of knowledge as well as his seemingly endless enthusiasm were of great help to me in writing this thesis. I have enjoyed all of our discussions and hope that we will continue with these types of discussions in the future. Indeed, such a continuation is likely to occur in some form, since Peter-Paul helped me to find a position in Nijmegen where I can proceed with some of the research described in this thesis. It may be clear that I am truly grateful for this.

Secondly, thanks to Steven Dorrestijn for inspiring discussions and useful comments. Our opinions seem to diverge at least somewhat with regard to the final chapter of this thesis, and I am looking forward to seeing how this friendly dispute will evolve.

Thanks to Pieter Lemmens who wrote a beautiful dissertation entitled 'Gedreven door Techniek', which first got me interested in the work of Stiegler. Additionally, his valuable comments on early versions of my thesis proposal helped shape this thesis.

Thanks to my colleagues and friends, some of whom maybe helped me defend the future of something in the famous and partly good-looking Ideefiks band 'the high daggers': Dominic, Gijs, Jasper, Philip, Pim, Vincent, and Wessel. My time in the PSTS-program would not have been the same without these people, which really is an awful platitude. I dare claim, however, that if it weren't for these good people, my studies in Twente would have been a lot less enjoyable.

Thanks to my friends and family for support.

Finally, and most cheesily, thanks to Josien, who listened to my ramblings on Heidegger and Stiegler, helped shape these ramblings into something more organized, corrected a multitude of spelling errors, and is a thoroughly awesome person.

If there is anything that is good in this thesis, it is thanks to all of the above. If there is nothing good to be found whatsoever, it is because I have not listened to them well enough.

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Introduction

That “electric things have their life too” is only one of the things I learned from Rick Deckard in Philip K Dick’s terrific ‘Do Androids Dream of Electric Sheep?’. Of particular interest to me is how ‘their life’ corresponds with mine. A quick glance around me at the moment of this writing shows that our lives must quite closely relate in one way or another: I am currently writing on a laptop whilst my phone is displaying a text-message from a friend who wants to have lunch. The light above my head with build-in (and not properly functioning) movement-sensor demands that I weave at the light source every five minutes or so, in order to keep myself illuminated. Additionally, there are plenty of non-electric ‘things’ before me that are currently playing a part in my life: the desk, the books around me, the plastic mug that holds something that is supposed to be coffee – I will go no further than to claim that it certainly looks like coffee – a couple of pens, pencils and so forth. Quite clearly, the life of technical things and my life have something to do with one another. Yet, how are we to regard this relation exactly? This will be the subject of this thesis.

Such subject matter is obviously not entirely new. In fact, a multitude of people have spent a multitude of hours deliberating this issue. One could go back as far as (and probably beyond) Aristotle to read about human thoughts on technics. In more recent years, particularly after the Industrial Revolution, thoughts on techno-logy have emerged. These thoughts vary widely in content, from upholding technology as the saviour of mankind to recognizing it as the harbinger of doom.

No matter what perspective one takes, it may be clear that technics and technology are of great importance for human beings. But how great is this importance? Are technical things something that human beings use to lead comfortable lives, or do they rather alienate us from what we truly are? I believe there may very well be answers to these sorts of questions, but that such answers will necessarily incorporate a perspective on what a human being is, and on how technics relates to this.

It is at this point that I want to catch on to the already driving train of thoughts on technics. I intend to think about the fundamentals of the relation between humans and technical things. This means thinking in terms of philosophical anthropology as well as philosophy of technology. Indeed, to cut to the chase, the purpose of this thesis is to investigate the philosophical anthropological work of Bernard Stiegler, and relate it to the Post-Phenomenological movement in the philosophy of technology. This will involve a journey backwards, attempting to shed light on the origins of what we consider to be properly human, as well as investigate how technical things devised by such proper humans have a role to play.

Research questions

I thus intend to investigate two theories that are concerned with the fundamentals of humans and technics, being Post-Phenomenology and Stiegler's anthropological thought. An attempt shall be made to bring these two theories together in a synthesis, thereby showing where they can solidify one another. Given this aim, the main research question can be posed as follows:

Can Stiegler's philosophy of 'originary technicity' provide a way to fundamentally think the 'fundamental intertwinement' of humans and technology that Post-Phenomenology posits?

Put in this way, the formulation already incorporates some terminology from within the theories themselves. In order to address the main research question, it will undoubtedly be necessary to approach it one step at the time. The steps that I will take in tackling the main problem correspond to the following four sub-questions:

How does Post-Phenomenology think the relation: human - technology?

How does Stiegler think the relation: human - technology?

Are the two perspectives compatible?

Does Stiegler's analysis fall victim to what Verbeek calls 'Transcendentalism'?

Answering to these inquiries will necessarily involve explicating what the theories amount to and how they operate. Only after a detailed explanation of the principles of each theory is in place, can the main research question be addressed.

Already anticipating elaboration on this main question, it will ultimately be claimed that the question must be answered *positively*. That is, I will show that a synthesis between Stiegler and Post-Phenomenology is both possible and necessary. What follows from this is that the very possibility of any form of human relation is a technical affair. I shall elaborate on this in terms of 'originary technical mediation'. Yet, this also means that the human moral relations are a technically mediated affair. It is at this point that a second research question is posed:

If human morality is necessarily technically mediated, how must one ground arguments in moral deliberation?

These are the questions that I aim to tackle in this thesis. Let me give a short overview on how elaboration on the subject matter will be structured throughout these pages.

Outline

The first chapter 'Post-Phenomenology and Anthropology' is mainly about the sub-question how this particular theory thinks the relation between humans and technology. The basic ingredients of the theory will be explicated here. This, however, will also bring to the surface some ambiguities from within the theory, which serve to highlight the necessity of a more fundamental analysis.

The second chapter 'Stiegler on Origins' is somewhat longer than the other three chapters, since the contents are relatively complicated. It is in this chapter that I try to tackle the sub-question on how Stiegler thinks about the relation between humans and technics. His work will be analyzed from three perspectives: the mythical, the anthro-biological, and the existential-analytic. What this will yield is a fundamental and founding intertwinement of humans and technics, where the one cannot be separated from the other.

When the main insights regarding both Stiegler's philosophy and Post-Phenomenology are in place, the first main research question can be addressed. In the third chapter 'Originary Technical Mediation' I intend to do just this. A synthesis shall be made between the two theories, thereby showing how they can solidify one another. At the same time, such a synthesis will bring to light that one must never think of technics as some sort of perversion from a 'natural' or 'naked' human state. 'Originary technical mediation' means that there has never been such a state, and that it is only because of technics that one can construe such a fictional state. Indeed, it will be argued that any form of relations that humans have (with the world, with one another, with technics itself) cannot be thought without taking technics into account.

In the final chapter on 'Morality and Mediation' I will focus on the second main research question. The theme of 'originary technical mediation' will be brought into connection with morality, thereby bringing forth what I hold to be a fundamental difficulty. I shall call this difficulty 'the problem of perspective' and elaborate on how it is both fundamental and inescapable. Additionally, two ways of dealing with this problem will be described; a pragmatic and a transcendental path. I shall conclude with a lack of conclusion, argue in defence of this lack, and lay out four possible avenues for moving forward.

Chapter I – Post-Phenomenology and Anthropology

Introduction

In order to conduct an investigation into the anthropological consequences of Post-Phenomenological philosophy of technology, it is first necessary to clarify the features of this theory. This is the first and foremost aim of this chapter. I will start by introducing Post-Phenomenology (P-P) as a theory, by using the work of Don Ihde and Peter-Paul Verbeek. I will explain three distinct features of the theory, being its *anti-essentialism*, its focus on *praxis*, and the way in which it provides a framework to think about *human-technology relations*. The theme of *mediation* will be shown to play an important role in all these features, and thus in P-P as a whole. An explanation such as the one put forward here necessarily involves explicating the relation that P-P has to its ancestors. The ‘post’ in Post-Phenomenology already suggests that the theory stands on the shoulders of other theories, eminently that of Phenomenology and what Hans Achterhuis (2001) calls ‘classical philosophy of Technology’. I will mention the ancestor-theories of P-P, and elaborate where necessary. This is not the place, however, to provide a thorough analysis of these theories, and they will be disclosed only insofar as deemed necessary for proper explanation of Post-Phenomenology¹ and for further discussion of the theory.

In the conclusion of this chapter I will put forth a set of remarks and accompanying questions that relate Post-Phenomenology to philosophical anthropology. These questions shall pave the way for what I hold to be a more fundamental theory of the relation between humans and technologies. This additionally means that – in this chapter at least – we shall only partly be able to answer the research question concerned with Post-Phenomenology, being the question how Post-Phenomenology thinks the relation between humans and the world. The attempt to provide an answer to this question in this chapter will lead to further questions that will have to be dealt with in chapters II and III.

Post-Phenomenological Theory

In introducing the basics of Post-Phenomenology, I heavily rely on the work of Don Ihde, one of Post-Phenomenology’s founding fathers. His ‘Postphenomenology and Technoscience – the Peking University Lectures’ (Ihde, 2009) provides a succinct overview of what P-P is.

¹ For a more elaborate overview of the history and movements within philosophy of technology, please refer to Achterhuis ‘De maat van de Techniek’ (1992) ; ‘American Philosophy of Technology, the Empirical Turn’ (Ibid, 2011); Scharff & Dusek (2003) ‘Philosophy of Technology: the Technological condition – an Anthology’.

The first characteristic of P-P that Ihde mentions is that of *anti-essentialism*. P-P takes this characteristic from the Pragmatic philosophy developed by John Dewey. Anti-essentialism applies to notions such as 'knowledge', 'truth' and 'morality'. Of interest for my purposes is that it also applies to the 'human'. The point is that Pragmatism (and P-P along with it) does not view the above notions as abstract Platonic 'ideas' or 'essences', but is much more interested in how these notions are played out in practical human experience. It is not the case, Ihde explains, that Pragmatism and P-P have new answers to how we should question the essence of (for example) the 'human', it is rather the case that they think these questions "have outlived their usefulness." (Ibid, p. 10). As such, Post-Phenomenology is not so much interested in a study of objective 'essences' that are somehow thinkable by subjective humans; it is more involved with how (human) practice is formed and transformed in relation to its environment. As such, the modernistic *opposition* between object (as in: objective world) and subject (as in: conscious subject) is replaced by a *composition*: organism/environment. Ihde, after Husserl, simply calls this 'the lifeworld' (Ibid, p. 11). In sum, the anti-essentialism characteristic of P-P means that it does not view the human subject as an a-priori (essential) given, nor does it see the world as essentially objective. As Verbeek puts it: "the objectivity of the world and the subjectivity of those who are experiencing it and existing in it are constituted..." (Verbeek, forthcoming). This 'constitution' is always thought as a co-constitution: the human and the world are not pre-given, but co-constitute one-another in a certain manner. Anticipating the following chapter, we shall see that in Stiegler's philosophy this co-constitution can be illuminated more fundamentally. Post-Phenomenology relies on the concept of *mediation* to think the anti-essential relation between humans and their world. Technologies mediate our perception of the world. The specifics of mediation will be depicted in more detail in the description of human-tech-world relations.

A second characteristic of P-P, partly derived from the first, is a focus on praxis. This part of P-P is clearly indebted to the work of Martin Heidegger. The famous tool analysis from 'Being and Time' is expanded within Post-Phenomenological theory. Heidegger's tool analysis shows how the world is discovered through (taken quite literally here) a tool. The person operating a hammer is not really focussing on the hammer itself; rather, the world (here: as manipulable matter) comes into focus *through* the hammer. Heidegger calls the tool as such 'ready-to-hand' (zuhanden): the ready-to-hand withdraws in use and because of this fact "the environment appears as a 'world'." (Ihde, 2010, p. 47). The important point here is that this praxis, via the 'ready-to-hand', constitutes the world in a particular way. Recalling the anti-essentialist treat: the world is not a pre-given objective, it rather comes into being through praxis. Heidegger's tool-analysis is much richer and deeper than put forward here², and we shall return to it in the second chapter. For present purposes however, I want to limit the scope and solely emphasise that through praxis, through the use of 'ready-to-hand' tools the world becomes visible in a particular way for the user. Ihde sums it up as

² There are numerous books on Heidegger's tool analysis and its role in the context of Being and Time. For an approach from the perspective of philosophy of technology, see Ihde's (2010) 'Heidegger's Technologies'.

being an 'action theory of ontology' (Ibid, p. 44). We can thus say that the tool *mediates* the way in which the world is perceived.

As mentioned, P-P expands Heidegger's tool-analysis. Ihde has developed a more detailed framework of how humans relate to the world through praxis, through the ready-to-hand technologies. Ihde follows Husserl's adagio 'to the things themselves (cf. Verbeek, 2005) and as such analyses 'tools' in the specific role they have in human-tech relations. He comes up with four different kind of relations³:

The *embodiment relation* is a human-tech relation where the technology is embodied by the human being. This is quite similar to the above explication of Heidegger's hammer. Indeed, Ihde admits this much in his "Technology and the Lifeworld – From Garden to Earth": "withdrawal of the technology from direct experience is what I will later term the 'embodiment relation.'" (Ihde, 1990, p. 32). He provides the example of glasses: The person wearing glasses is not really 'using' glasses-technology: the glasses are rather embodied. The world becomes visible through the embodied technology, which has itself 'withdrawn'. The used technology itself is not at the centre of attention, but rather *mediates* the way in which the world is – in Heidegger's terminology – 'dis-covered'.

The *hermeneutic relation* is a relation where the technology 'interprets' the world for the user in a way that would be impossible without the particular technology involved. The standard example is a thermometer: the device 'interprets' temperature into a number (e.g. -10°C). If we recall the theme of mediation: the thermometer plays a mediating role in the human-world relation. I do not 'feel' that it is -10°C outside; only through the mediating 'interpreter' (i.e. the thermometer) can I know that it is in fact that cold. My perception of temperature is thus hermeneutically mediated by thermometer technology.

In the *alterity relation* the user does not so much correspond with 'the world' 'through' the technology, but rather with the technology itself. The example of an ATM machine befits this relation. When I use the ATM I am dealing with the technology, and not directly with a world of value, money, coins etc. Obviously, this does not mean that this world of value and coins is not there, it rather subsides in the background. My attention is directed at the technology itself, and as such underlying phenomena become invisible.

The final type of relation that Ihde distinguishes is the *background relation*. In the background relation, technologies are not 'directly' used or observed by humans, but play a role in the background. Ihde (2009, p. 43) provides the example of the operation of a thermostat in the background: the device is not directly perceived, but does help constitute a certain (warm) lifeworld. In other words, the thermostat plays a mediating role in my affairs with the world (e.g. I can do whatever activity without even thinking about room-temperature). In a way, I think the *background relation* can be seen as a reversal of the *alterity relation*: In the latter, the user's attention is directed at the technology itself and

³ The examples here are all taken from Verbeek's 'what things do' (2005).

'the world' resides in the background; in the *background relation* it is the technology itself that resides in the background, thereby dis-covering 'the world' in a particular way.

Post-Phenomenology as Post-Classical

If we return to the overall story of Post-Phenomenology and its three main characteristics, it can be claimed that P-P is fundamentally different than what Hans Achterhuis (2001) calls 'classical philosophy of technology'. There are two major differences. The *first* pertains to the focus on 'things themselves'. Thinkers in classical philosophy of technology did not so much focus on particular technological artefacts, but were rather thinking about Technology as a massive, all encompassing phenomenon. Examples of major thinkers in this tradition are Jacques Ellul and Martin Heidegger⁴. Post-Phenomenology is Post-Classical in the sense of it taking an 'empirical turn': It does not view technology as one abstract massive structure, but rather focuses on the roles, (the human-tech relations) that pertain to particular technological artefacts in the empirical world. Differently put, classical philosophy of technology was 'looking backwards in a transcendental way'⁵, to use Verbeekian (2005) terms. P-P is 'looking forward' to how technologies shape human relations with the world. This shaping process falls under the heading of 'mediation'.

The *second* difference between classical philosophy of technology and post-empirical-turn philosophy is that the evaluations of technologies in use are more positive. Classical philosophy of technology tended to view Technology as a threat to human existence. P-P does not necessarily take such a critical perspective and is more focussed on how technologies help constitute the human lifeworld.

A final characteristic – which was implicitly present in P-P's three main feats – is a taking into account of what Ihde calls *multistability*. This feat is derived from both the previously mentioned *anti-essentialism* characteristic and the focus on the role of particular 'artefacts themselves'. Multistability basically means that the way in which technologies operate in human-world relations is never singular and stable. Ihde derives the concept from Husserl's Phenomenology, and more particularly from his variational theory. Husserl showed how phenomena that 'show themselves' to the perceiver are not necessarily stable by nature. Ihde provides the example of the famous Necker Cube. The way in which this cube can be perceived is multistable: It has five three-dimensional 'variations' (gestalt switches).



Ihde uses this example to claim that technologies are intrinsically multistable in their use - similar to the Necker Cube's way of 'showing itself'. The anti-essentialist characteristic of P-P is quite clearly apparent here. The technology of, for example, a pen is not 'essentially' a tool for writing; in a different 'variation' or 'stability' it is also an object that carries advertising which I can read from the

⁴ Cf. Achterhuis, 1992.

⁵ That is: looking back at the conditions of possibilities for Technology's being.

body of the pen, or it can be used to reset a Smartphone⁶. The theme of multistability perhaps sums up the entire Post-Phenomenological project: It is anti-essentialist (P-P is not interested in the 'true' essence of technology), its focus on praxis (the particular 'stability' of the artefact in practice is studied), and the focus on human-tech-world relations (the particular 'stability' that discovers a particular 'stability' of 'world' is studied). Additionally, multistability shows the difference between classical philosophy of technology (as an attempt to study Technology as one (stable) phenomenon) and post-empirical-turn philosophy (attempts to study the various implications and uses of actual artefacts in their various (read: multistable) applications).

Conclusion: some questions concerning Post-Phenomenology

Now that the basics of Post-Phenomenological theory are in place, I shall move on to critically examine some of its aspects. This examination will be guided along lines of anthropology, which is the main pillar of this thesis. The remarks and questions put forward here shall lead us towards chapters II and III, in which I will attempt to synthesise Post-Phenomenology with Stiegler's philosophy – and its fundamental anthropological claims.

It is firstly on Ihde's *background relation* that I would like to place some remarks. It may be clear, to recap, that Ihde here follows the anti-essentialist feat, and blurs the boundary between 'essential world' and 'technology'. In the *background relations* specifically, 'the world' is co-constituted by technologies (e.g. the thermostat) that are not by themselves at the centre of attention. It is thus not entirely clear where 'the world' ends and 'technologies' begin. Indeed, Ihde contends that "technologies are simply part of our environment" (Ihde, 2009, p. 44). In terms of anti-essentialism, we can see a blurring between what is 'essentially artificial' and what is 'essentially natural': both are 'part of our environment'. A radical opposition of essences (artificial vs. natural) is thus objected to.

Yet, if the above 'blurring of essences' holds true, one may question how Ihde can recognize the thermostat as a technology separate from the world, and consequently describe it in terms of the *background relation*. Furthermore, if 'background-technologies' such as the thermostat mediate my perception of the world, can we not similarly claim that plants and trees 'mediate' (in this case even: make possible) my experience of the world by, for example, producing oxygen 'in the background'? It seems to follow that when the background relation is taken to its limit, the technologies involved are pushed so far into the background (i.e. the environment) that one could not even distinguish them from the 'environment itself', and that one has thus lost the central object of the very analysis. Issues such as these are, I think, not easily dealt with. They do, however, provide an access point for more fundamental questioning of what 'world' and 'technology' refer to within Post-Phenomenological theory. It seems to me that in order to approach these kinds of questions, the problem of *origin* must be faced.

⁶ Phones often have a reset button that is well 'hidden' within its body, so that one can only press it with a pen-like artefact. This is to keep users from accidentally pressing the button.

Could one speak of an 'original environment' into which 'background-technologies' are fitted? Or – already anticipating Stiegler's view – is the 'original' environment already a technical environment? But how must we then regard the human being that is anti-essentially related to this environment? I shall return to the specifics of this. For now, it is relevant to note that in Post-Phenomenology – and most explicitly in the *background relation* – the blurring of the 'natural' and the 'artificial' ultimately poses inescapable questions about origins, questions that Post-Phenomenology does not elucidate too well. I shall attempt to tackle these 'original questions' in the following chapters.

A *second* interesting object of examination was already hinted at in the previous paragraphs: it concerns the question of the human. As we have seen, Ihde's *background relation* blurs the distinction between 'world' and 'technology'. I believe something similar occurs with respect to the 'human' and 'technology', most eminently in the case of the *embodiment relation*. When 'embodying' glasses, the world is brought into focus through the composite of human and technology: It is not entirely clear where 'the human' ends and 'technology' begins; or where 'the natural' ends and where 'the artificial' begins. Yet, there seems to be a distinction: the glasses are placed on my head and I can remove them. They are embodied, but there is a relatively clear border between the two.

Are such borders always clear? According to Peter-Paul Verbeek they are not. In his paper on Cyborg intentionality (2008) – as well as in his (forthcoming) 'Moralizing Technology' book – Verbeek argues that Ihde's four human-tech-world relation variants are inconclusive, particularly with respect to certain state-of-the-art technologies which blur the border between 'human' and 'technology' even further than is covered by the *embodiment relation*. Verbeek therefore provides what he calls a supplement to Ihde's theoretical framework, consisting of – among others – the *cyborg-relation*.

This cyborg relation, according to Verbeek, is a specific kind of human-tech-world relation that exists next to Ihde's *embodiment, hermeneutic, alteration and background relations*. The *cyborg-relation* can be seen as 'one step further' than Ihde's *embodiment relation*. Mentioned examples are where "microchips are implanted to enhance vision..." and "artificial heart valves and pacemakers help to make people's heart beat..." (Verbeek, forthcoming, p. 175) Verbeek then argues that the use of this type of technology should be viewed as dissimilar to embodiment-technologies such as Ihde's example of glasses. What the difference amounts to is that although glasses are embodied and disappear in their use, they can also be removed from the user's head, and thus be dis-embodied. A built-in-chip cannot so easily be removed. In fact, it would be easier for users to, say, remove one of their fingers. There is a reason for this somewhat bleak comparison: what Verbeek wants to get to is that the built-in-chip becomes part of the human body: "technologies actually *merge* with the human body, rather than being embodied." (Ibid, emphasis in original) It is not merely 'worn' *by* the body (like glasses) but forms an intrinsic part *of* the body. As such it constitutes not so much an em-bodiment relation, as it does an in-bodiment relation. For Verbeek the human being within this cyborg-relation is positively different:

“[the] cyborg association actually results in a *new* entity” (Ibid, emphasis in original).

In examining the consequences of Ihde’s *background relation*, questions were posed concerning the nature of ‘world’ and ‘technology’ within Post-Phenomenological theory. I think similar questions can be posed when the *Embodiment-relation* and *cyborg-relation* are involved: how should one here regard ‘human’ and ‘technology’? This question must also – I believe – be approached in light of the problematic of *origin*. As we have seen, for Verbeek, the *cyborg-relation* “results in a *new* entity” (Ibid). It is questionable whether and how this entity – which in one way or another involves a human being – is new. But whether it is or not, the broader problematic of how one should regard the origins of the human being that (anti-essentially) relates to the world through technologies is in need of elaboration.

By posing such questions we have clearly strayed into anthropological territory: we are enquiring into ‘the human’, its origin, and its originality as a cyborg-entity; topics that remain somewhat obscure within Post-Phenomenological theory. Chapters II and III are entirely dedicated to this problem. In these chapters I shall attempt to furnish Post-Phenomenology with a deeper and more fundamental understanding of these matters, by looking at the philosophical work of Bernard Stiegler. I believe such a fundamental elucidation is necessary for the following reason: P-P takes anti-essentialism as a starting point and in doing so tries to overcome a modernistic deadlock between ‘natural’ and ‘artificial’, as well as between ‘subject’ and ‘object’. In doing so it provides a good and refreshing understanding of human-world relations; an understanding that does justice to the role of technological artefacts in human existence. However, P-P remains somewhat vague on the fundamentals of the actors within this anti-essentialistic ‘lifeworld’. One may wonder how the ‘background-technologies’ – which, in Ihde’s (2009, p. 44) terms, are “part of [the] environment” – can still be recognized as separate from this environment. Or, anthropologically speaking, if, and how, a human actor is (not) to be separated from ‘technologies’ and ‘world’.

At a more fundamental level, we can ask how it is that humans are able to think the human-tech-world relations and reflect on their own place in the world, as well as their own place in human-tech-world relations. Must we read the Post-Phenomenological elaboration on Heidegger’s ‘zuhanden’ in such a way that it is only through technologies, only through the ‘zuhanden’, that humans gain a relation to the world? Differently put, are human-world relations always somehow human-tech-world relations? It seems that this is indeed the perspective of the post-phenomenologists: Ihde claims that “human activity from immemorial time and across the diversity of cultures has always been technologically embedded” (Ihde, 1990, p. 20) Verbeek also states that “[human] action is always mediated” (Forthcoming, p. 134). To my knowledge, Post-Phenomenology does not go into the (origin)-details of such matters to any large extent, and seems to simply assume this perspective as the starting point for analysis. Perhaps this is the case because explication of the origins of the human-tech-world framework would involve too much ‘looking backwards’ and too little emphasis on the role of actual technological artefacts. We have seen, however,

that looking for origins may prove necessary. In the following chapter an attempt will be made to approach this problematic, and to provide an anthropological furnishing of Post-Phenomenology.

“But then the memory, not yet of the place in which I was, but of various other places where I had lived, and might now very possibly be, would come like a rope let down from heaven to draw me up out of the abyss of not-being, from which I could never have escaped by myself.” – Proust

Chapter II – Stiegler and Origins

Introduction

Near the ending of chapter I, questions surfaced on the origin of the human as a being that is anti-essentially related to the world through technology. I pointed out that Post-Phenomenology proves valuable in highlighting the particulars of such an anti-essential relation, but that it does not shed too much light on the specifics and origins of the affiliated relata (i.e.: ‘the world’, ‘technical artefacts’, and ‘the human’).

In this second chapter, I will try to show how the philosophical-anthropological work of Bernard Stiegler can be helpful in illuminating such questions about origins. In order to make this claim, it will be necessary to establish an overview of what Stiegler’s claims amount to. I shall explain his major theme of ‘originary technicity’ via three paths: the *mythical*, the *anthropo-biological*, and the *existential-analytic*. These explanations will show how in Stiegler’s thought, humans and technics share an origin (hence: ‘originary technicity’) and should not be taken apart. I think an elaboration of this perspective will help to fill in some of the lacunas that Post-Phenomenology has left us with. This filling in, however, will be extensively dealt with in chapter III, and requires us to first analyse what Stiegler’s thoughts concerning ‘originary technicity’ actually amount to. This is not necessarily an easy task. Stiegler admits as much by saying that “The answer is complex, and the question full of knots.” (Stiegler, 1998, p. 107).

Stiegler and Technics: A story of memory

For the sake of overview and clarity, I will approach Stiegler’s work from the thematic starting ground of ‘memory’. I think this point of departure is justified, since the overarching topic is that of technics in the philosophy of Stiegler, who holds that “a tool is, before anything else, memory ...” (1998, p. 254) It must be noted that Stiegler has proved to be a highly prolific author (thereby perhaps treading in the footsteps of his mentor Derrida). He has released well over 10 books in recent years, which cover much more ground than can be dealt with here. I will therefore focus on his thoughts on technics, and approach this topic in relation to memory. A consequence of this is that the topic of technics will not be thoroughly laid bare; Stiegler approaches it from a multitude of angles. The description here is fitted for present purposes, which – as was mentioned – centre around the relation between Stiegler and the Post-Phenomenologists.

Epimetheus: the forgotten figure of forgetfulness

Memory's antithesis is forgetfulness. Stiegler bases much of what he has to say on the mythical figure of forgetfulness: Epimetheus. For the sake of brevity I will put forward a truncated version of the Epimetheus/Prometheus myth, as described by Plato in the *Protagoras*⁷, thereby leaving out many details that are not immediately relevant for present purposes. It is important to note that – according to Stiegler – the figure of Epimetheus has largely been forgotten in Western Philosophy. Prometheus receives quite a lot of attention, particularly – and most obviously – in the philosophy of technology. It is striking, then, that Prometheus' forgetful brother is himself forgotten. Stiegler connects this to a general forgetfulness of technics within philosophy: "Philosophy has repressed technics as an object of thought." (Stiegler, 1998, p. IX)

In the myth, Prometheus is charged by the gods to supply qualities to the living. Epimetheus successfully proposes to Prometheus that he will take this task upon himself. He thus starts dealing out qualities to the living creatures: birds receive wings, lions receive claws, tortoises receive shielding, leopards receive speed etc. Epimetheus distributes qualities and the receivers – the living animals – are furnished in such a way that they are fit for survival. But Epimetheus is forgetful. At some point all the qualities have been distributed and all animals have been taken care of. All except one: humans are left, they have not received any qualities from Epimetheus, who has now ran out of qualities to bestow. Epimetheus has forgotten the human species, who are now there, naked and vulnerable. When Prometheus discovers his brother's fault, he goes and steals fire and technics from the gods, giving these qualities to the humans. Prometheus thereby makes up for his brother's mistake; technics makes up for the fact that humans have been forgotten.

As remarked, the figure of Prometheus is no stranger to philosophical anthropology⁸, where he is sometimes brought into play to describe human nature. He is the figure that gives human beings technology, and – if one is to follow this view – human nature should be regarded in terms of technology. Put crudely: if, in order to survive, birds have received wings (quality of flight), then humans have received technics (quality of technics). If one takes such a stance, Epimetheus is not of great relevance: the important point would be that Prometheus supplies humans with technics, effectively turning *Homo Sapiens* into *Homo Faber*; Epimetheus – that forgetful figure – can then largely be forgotten.

⁷ Please refer to Stiegler's 'Technics and Time I – The Fault of Epimetheus' (1998) for his complete reading of the myth. See (Lemmens, 2008) for a thorough depiction of the myth from Stiegler's perspective.

⁸ Quite interesting is the role of Prometheus in the work of Günter Anders. Although not explicitly philosophically anthropological, his work clearly centers around anthropological themes (cf. Achterhuis, 1992, pp. 98 – 139).

According to Stiegler, however, we cannot properly understand Prometheus and the origins of humans and technics when we forget about his brother Epimetheus. It is this latter, as we have seen, who forgets humans in dealing out qualities. For Stiegler, it is this being forgotten that is essential (we shall see: essential as lack of essence) to the question of what a human being is. When Prometheus steals technics in order to furnish the quality-less humans, this is because they have been forgotten, they are lacking.

Stiegler locates in this being forgotten, in this lacking, the very origin of humanity. He points out that animals have (received from Epimetheus) binding qualities that help them live (e.g. horns, claws, wings etc.): their essence has been fixed by Epimetheus. Humans, however, have been forgotten; they lack this essence, which is made up for by Prometheus' gift. The very fact that they have to make up for something, puts humans in a different category altogether. Their essence is first a lack of essence – Stiegler calls this a 'panne d'essence': "Man is ... caused by a default of essence [*une panne d'essence*, a "lack of fuel", an "empty tank"]" (1998, p. 121, emphasis in original). He goes on to point out that the human state is 'défaut'. This is a wonderful play on words, where 'défaut' can be translated both as 'default' (as in: default, 'original' mode) and 'lack'. The origin of the human must then be thought of as an original lack ('défaut'). "[a] de-fault of origin or the origin as de-fault [*le défaut d'origine ou l'origine come défaut*]" (Ibid, p. 188, emphasis in original). This is why Epimetheus is important: the story of humankind does not start with Prometheus' gift of technics; by then it has already begun. Epimetheus' forgetting of humankind is what constitutes the start, the origin of the human: an origin as lack, a défaut origin.

From mythical forgetfulness to physical memory: interior and exterior

So, following the myth, humans are essentially 'défaut': essentially lacking essence – whereas (other) animals are essentially essential, so to speak. Shifting from mythical to anthro-po-biological territory, Stiegler connects the idea of défaut essence to three different kinds of memory that are operational in all the living. For all animals (including humans), there is *first* the *genetic* memory. This is the genetic information that defines the essence of the creature – one could see this information as being handed down by Epimetheus, or – in more scientific terms – through evolutionary schemas. The genetic memory is an interior memory: it resides *in* the organism.

Secondly, there is the '*epi-memory*'; epi stands for individual experience. This may be me remembering a certain poem or talk, or could be a bird remembering the location of its nest. The epi-memory is also an interior memory: it is saved in the organism, albeit in a different location (in the nervous system) than genetic memory. From biology we have learned that experiences cannot alter the genetic makeup of an organism (the phenotype cannot inform the genotype). This is referred to as the Weismann axiom (after August Weismann, the famous biologist and discoverer of this phenomenon). So if I were to memorize a poem (I 'save' an experience: epi-memory) it is not possible that this memory alters my genetic makeup, and it is thus impossible that I genetically pass on the memory

of this experience to my offspring. What follows is that the epi-memory dies when the creature dies. Genetic memory may be passed on, but the epi-memory (which cannot inform the genetic) is lost in death.

Humans – with *défaut* essence – have another type of memory, next to the two types described previously. This *third* memory is constituted in Prometheus' technical gift of prostheses: it is a technical or artefactual memory. As we shall see, it is this type of memory – which Stiegler calls *epiphylogenetic-memory* – that proves to be of fundamental importance for humans. Epimetheus' forgetfulness – leading to Prometheus' technical amendment – thus ultimately translates into a specific external kind of memory: forgetfulness leading to epiphylogenetic-memory.

According to Stiegler it is epiphylogenetic-memory, which is technical and external memory, that goes to the core of the human origin: “... the exteriorization of memory is itself the origin of mankind” (2008a, p. 136). Stiegler thus locates the very origin of humanity in technics – in external memory. It is here that Stiegler's theme of ‘originary technicity’ can first be brought to the fore. From the myth it seems to follow that technics and humans share an origin: both surface at once because of Epimetheus' fault. There is a fundamental, even founding intertwinement between the two. The mythical figures of Epimetheus and Prometheus have served to put this perspective in place. Yet, it remains a myth, and the fundamental claim that was born out of the myth is in need of further evidence. Stiegler attempts to provide this evidence via two paths: the *existential-analytic* (to which we shall return) and the *anthropo-biological*. This latter path has already been followed to some extent in describing the various kinds of memory that are operational in the living, with epiphylogenetic-memory serving as the particular human variant. By using the work of Leroi-Gourhan, Stiegler tells the non-mythical story of the origin of this kind of memory, which is also the story of shared origins, of ‘originary technicity’.

Leroi-Gourhan was a philosopher, palaeontologist, and anthropologist¹⁰. One of his main focuses was on the relation between technology and humanity. This part of his work is of fundamental importance for Stiegler's philosophy. The main pillar of Leroi-Gourhan's theory is that the human being evolved as a product of technics. This is a radical reversal of the popular view where humans invented technologies as a product of their intellect. In Leroi-Gourhan the opposite is rather the case: the human intellect is invented because of the use of technics.

Stiegler nicely condenses Leroi-Gourhan's point by stating: “Everything begins with feet” (1998, p. 143). Leroi-Gourhan showed that the evolution of the human brain was not solely a biological affair: it was driven by technics. The beginning of this occurred when human ancestors attained an upright posture. Because they started to walk upright, hands were – in some way – ‘liberated’ from

⁹ My translation of: “... l'extériorisation de la mémoire est l'origine même de l'homme”

¹⁰ I heavily rely on (Lemmens, 2008) in the description of Leroi-Gourhan's work.

supporting the body; they could now be used for gesture, artefact use, and to grasp food – thereby additionally liberating the mouth from this task, giving rise to the possibility of language¹¹. Hence Stiegler's claim that everything begins with feet¹². Following this story, the possibility for language (liberated mouth) and artefact use (liberated hands) results from the first attainment of an upright posture. Furthermore, it is the possibility for using artefacts that opens the gates to epiphylogenetic memory. The point is this: the first used artefact (which must be regarded an accidental occurrence, resulting out of the accidental occurrence of the upright posture) was not solely an instrument but also an implicit memory-vector¹³. We are talking here of lithotechnics, that is, of 'simple' stone and bone artefacts such as hand axes etc. – first appearing around 3.5 million years ago. These artefacts were invented by their user, but when their user died the artefacts remained and could be picked up by a following generation. For that generation, the artefact served as a proto-type and could be used again, or improved upon. It becomes apparent that the artefact implicitly constitutes a memory-vector: the first user projected his experience into the artefact (e.g. by sharpening a stone or bone) and this sharpened object survives the death of its creator, thereby holding fast some of the experience of its creator. Another user could then pick up the artefact and gain access to (some of the) memory of the original creator. It is in this way that human ancestors started to make use of a specific kind of memory. Before the arrival of the first artefacts, the organisms were solely constituted by means of genetic memory and epi-memory. Now, they started to make use of a third kind of memory – this is the previously described epiphylogenetic memory. Until the Neolithic, technical artefacts implicitly 'carried' epiphylogenetic memory. In the Neolithic the memory-vector became explicit, because the first writing practises occurred there. Writing makes the point about the specificity of epiphylogenetic memory absolutely clear: an author can save experience by writing it down, by exteriorizing it. In written form, the experience survives the death of the author and is accessible by following generations.

Stiegler points out that what follows from this story is that artefacts (as externalized memory) form a specific group of matter. Next to the familiar schemes of 'organized organic matter' (i.e. the living) and 'unorganized inorganic matter' (i.e. world of objects) a third group now occurs, which Stiegler (1998, p. 17) calls the 'inorganic organized beings' (i.e. technical artefacts). What is crucial with regard to this third group is that it exists apart from human beings, albeit in relation with human beings: it is 'organized' because humans organized it, but it survives the organic individual human because it is itself inorganic. Technics is accordingly viewed as a quasi-organism. Stiegler claims that the organized inorganic forms a "pursuit of life by means other than life" (Ibid).

¹¹ It is worth noting that the ancient philosopher Diogenes of Appolonia already upheld a similar position. "Nur der Mensch, so wird etwa gesagt, geht aufrecht, hat dadurch freigewordene Hände, (Diogenes von Apollonia, Anaxagoras) kann mit ihnen Werkzeug benutzen und lebt so aus dem "Körperausschaltungsprinzip (Alsberg)" (Landman, 1982, p. 124).

¹² It may be clear that – in the name of brevity and overview – giant steps are taken in this description. Please refer to (Stiegler, 1998) for a more elaborate overview of these claims, as well as a criticism on Leroi-Gourhan that I cannot go into here.

¹³ As mentioned, Stiegler claims that "A Tool, before anything else, is memory" (1998a, 254).

What Leroi-Gourhan shows is that onwards from the first use of artefacts, the evolution of the human as 'organized organic' responded to the 'organized inorganic' artefacts. That is, the human body adapted (in the evolutionary sense) to the artefacts that it used. The artefacts themselves, on the other hand, also entered this evolution, and co-evolved with the human body. Leroi-Gourhan supplies evidence wherein he shows that the evolution of the brain took a radically different direction onwards from where the first artefacts appeared. We can speak here of a tandem evolutionary process with 'humans' and 'technics' co-evolving, ultimately leading to (and likely beyond) the human being that we know today. Stiegler refers of this tandem-evolution as the 'flint/cortex connection': "A double emergence of cortex and flint, a convention of the two, an arche-determination ..." (Stiegler, 1998, p. 155).

Darwinist evolutionary theory can be thought of in terms of memory: it then primarily concerns the genetic-memory: particular information is 'saved' in genetic memory, and natural selection determines which genetic-memories survive and which go extinct. The tandem-evolutionary process with humans and artefacts involved adds epiphylogenetic memory to this picture. What ultimately survives is neither a sole 'organic' entity, nor an 'inorganic' object, but rather a particular composition of the two. As the German biologist Paul Alsberg puts it:

"In the case of man, evolution appears to have taken a new direction in which adaptation to environment was no longer entrusted to the body but was implemented by artificial tools. Tools became the dynamic principle of human evolution." (Alsberg, 1970 p. 35 - 37, as quoted in Lemmens, 2008, p. 460).

I cannot go into more detail concerning this evolutionary process here¹⁴. The important point for present purposes is that – following Leroi-Gourhan and Stiegler – we must regard the human organism as fundamentally intertwined with technics: the occurrence of the human is a co-occurrence, a co-evolution of human and technics. Humans must then be thought of in terms of interior (biology) *and* exterior (technology), where the one informs the other and vice versa: the interior first made possible the exteriorization of memory (through attaining the upright posture) but the exterior subsequently started to influence the interior set-up (the brain, and human body in general), which started evolving in relation to the once exteriorized 'organized inorganic'. As Stiegler (1998, p. 158) puts it:

" ... a mirror effect whereby one, looking at itself in the other, is both deformed and formed in the process [l'un se regardant dans l'autre qui le déforme s'y forme]."

The exterior is thus just as much part of the human as is the interior.

¹⁴ Please refer to (Stiegler, 1998) or (Lemmens, 2008) for more elaborate description.

Returning to Prometheus and Epimetheus, we can see how Stiegler, through Leroi-Gourhan, supplements the mythical version of 'Originary Technicity' with anthropo-biological theory. The human *défaut* essence – as a product of Epimetheus' forgetfulness – is translated into a specific kind of external memory (i.e. epiphylogenetic memory), which occurs with artefacts – with Prometheus' amendment. The beauty of Stiegler's play on words when referring to the *défaut* state as a 'panne d'essence' now becomes apparent: Humans lack essence, they lack fuel; Prometheus' amendment – technical tools – make up for this lack as these drive forward the evolution of mankind (recalling Alsberg: "Tools became the dynamic principle of human evolution."). This is, again, why Epimetheus must not be forgotten: It is not so much humans that drive technology forwards; humans rather lack the fuel to drive because of Epimetheus' forgetfulness. It is human technicity fueling the engine that ignites the evolution of humans and technics in a tandem process. What follows is that humans are originally technical ('originary technicity'), and that the genesis of mankind should be regarded as what I would call *anthropo-techno-genesis*. In chapter III we shall see that this anthropo-biological supplement to the Prometheus/Epimetheus myth has interesting consequences for Post-Phenomenology, particularly with respect to Verbeek's *cyborg-relation*.

Existence and Technics – Stiegler and Heidegger

The nature of the human has thus far been brought into a fundamental – even *founding* – relation with the technical. However, if the fact has been established that the human organism is indeed a product of an interior/exterior mirroring process, one could still ask how it is that this human has indeed become human; how it has become – when put as broadly as possible – a being that can think about Being, that somehow stands open to Being: the being of the world and its own being as existence. In short, how it has become a conscious creature that has a certain relation to his own existence and the world that it inhabits. I have already betrayed the existentialist undertone of such questions, and what is needed in addition to the mythical and anthropo-biological stories of human origin is exactly an existential layer: If we wish to investigate into the origin of humanity, we must explicate the coming about of the arguably most important aspect of human being: its existence. Such is the challenge that Stiegler faces head on in his *Technics and Time* books¹⁵. Here he attempts a fundamental re-reading of several major philosophers in Western history. This project stretches from before Plato up until Heidegger and beyond, and meets Husserl, Kant and Rousseau along the way. We have already seen that Stiegler bemoans the 'forgetfulness of technics' within Western Philosophy: "Technics is the unthought" (Stiegler, 1998, p. IX). Attempting to make up for this forgetfulness, Stiegler wants to lift technics from its repression – thereby making like Prometheus himself. By a close reading of Leroi-Gourhan, technicity was

¹⁵ The first three books have been translated from French and have been published by Stanford University Press. Cf. (Stiegler, 1998, 2008b, 2010). Stiegler has announced more volumes, but these have yet to appear as of the moment of this writing.

imported into the core of philosophical anthropology. Stiegler performs a similar feat with respect to Heidegger's existential-analytic philosophy of being.

Heidegger's philosophy circles around an analysis of the problematic of being. Indeed, the above assertion concerning an 'ability to think being' as what makes the human specifically interesting, is already cast in Heideggerian language. I will presently put forward an extremely trimmed version of some of Heidegger's thoughts on being human and the being of the world. It is not my intention to provide a more-or-less complete introduction to Heidegger's philosophy¹⁶. However, it will be necessary to dig into some of Heidegger's (complicated and beautiful) thought quite extensively for the sake of the purpose here, which is to bring to the fore some of Heidegger's (in my view absolutely ingenious) thoughts on human existence, and bring this into relation with Stiegler's (also ingenious) critical interpretation of Heidegger, emphasizing (the by Heidegger undervalued) importance of technics.

Being...

Heidegger wanted to explicate the human way of being in the world in the most original form. He believed that, for example, biology, anthropology, but also many instances of philosophy did not regard the being of the human originally – in the sense of primordially – enough. He argued that these fields of thought regarded the human being ontically. The human being is then understood as a certain being, with particular qualities (e.g. reason, language, spirituality etc.). For Heidegger, such a view is not necessarily incorrect, but it misses the 'truth' of the human being. Since he was aiming for the most primordial perspective on human being, he needed to jettison terminologies that had historically incorporated particular meanings. The term 'human' is one of the terms that falls victim to this. Heidegger therefore uses the German term Dasein instead. Dasein means 'being-in-the-world', and Heidegger goes on to analyse the 'truth' of Dasein, which I will attempt to explain in the following paragraphs.

Truth is understood in a very specific and careful way by Heidegger. He refers to it in accordance with the Greek 'Alatheia' which is best translated as 'disclosedness'. This 'disclosedness' is the truth of Dasein and means that Being is dis-closed to Dasein. Irreverently put, Being (the Being of beings) is not simply assumed to be always 'da' ('there'), but is more carefully treated: the fact that something is (that something is dis-closed), rather than that there is nothing (that everything is 'foreclosed' or hidden¹⁷), receives the fullest attention. When

¹⁶ There exists a multitude of such introductions. See for example (Achterhuis, 1992) for an introduction to Heidegger's thoughts on Technology. Inwood (2002) provides a succinct and relatively clear overview of Heidegger's complex philosophy.

¹⁷ The use of 'thing' in some-thing, no-thing, and every-thing is somewhat paradoxical. One would not be able to speak of 'any-thing' when 'no-thing' is dis-closed. Nonetheless, I run with this paradox in the hope of illuminating the fundamental point concerning dis-closure, which is not in the first place the disclosure of any-thing (as in: any-entity), but rather is the very phenomenon that the being of 'things' occurs at all.

something *is*, this means that this something *is* 'visible'¹⁸ to Dasein. Dasein recognizes it as something that is 'da' – that 'is' – rather than 'is not'. Dasein engages in a certain relation with whatever there is, so is primordially in a relation (is open to) the Being of beings. In other words, Being is dis-closed to Dasein. The truth of Dasein is hence understood as an openness to Being; Being dis-closes itself in Dasein. Heidegger can hence say that only through Dasein "do beings have the opportunity of entering the world"¹⁹ (Heidegger, 1984, p. 193).

Now we can understand Heidegger's critique on the viewpoint wherein the human is understood ontically. Although it may be correct that humans are certain organisms with reason, language, politics etc., this misses the primordial truth of Dasein, which is first of all that the 'Lichtung', the 'Clearing' of Being happens in Dasein. Hence the human must not first be *ontically* understood as one type of being among others, but *ontologically*: in terms of Dasein's possibility of thinking (being-open-to) Being. As an additional explanation, it may be fruitful to pay attention to Heidegger's use of the Aristotelian conception of 'what-being' versus 'that-being'²⁰. 'What being' is the ontic way of looking at being. The biologist, for example, will look at 'what' the human organism is in terms of 'what' the various specifics of its body are. The philosopher, on the other hand, analyses 'that-being', which is the ontological way of looking. The philosopher asks how it is 'that' something 'is', which is a question that is implicitly assumed to be 'just there' by the biologist. For Heidegger, the ontological question is rooted in Dasein, since Being is disclosed to Dasein. Heidegger uses the German 'Verstehen' which translates as 'Understanding' for the ontological openness of Dasein. Dasein understands the world, not immediately in a theoretical 'what-being' fashion, but first stands under the 'that-being' of the world.

This is one of the various philosophical reversals that Heidegger makes throughout his work: he does not start with the ontic, consequently deduce a certain logic to the ontic, to finally arrive at ontology; Heidegger rather begins with the ontological (the dis-closure of Being) and argues that the organization of beings (the ontic) derives from this more primordial ontology. It may have become clear that Dasein plays a pivotal role in ontology as such. Dasein is unique amongst the living, since it is only in Dasein that Being is disclosed. This is not to say that there would not 'be' anything if humans would not be in the world; in that case there would simply be beings, but no Being. As Heidegger himself puts it:

"Entities are, quite independently of the experience by which they are disclosed, the acquaintance in which they are discovered, and the grasping in which their nature is ascertained. But Being 'is' only in the understanding of those entities to whose Being something like an understanding of Beings belongs (Heidegger, 2008a, p. 183).

¹⁸ 'visible' in the sense that Dasein can somehow (not necessarily through sight) perceive the visible as visible, as an instance or a happening of Being.

¹⁹ "Und so ist denn das Dasein, von diesem In-der-Welt sein her metaphysisch gesehen, als faktisch existierendes nichts anderes als die seiende Möglichkeit des *Welteingangs* von Seiendem" (Heidegger, 2007, p. 249)

²⁰ cf. Inwood, 2002, p. 17

In other words, without Dasein there would be no place where Being is disclosed as a meaningful phenomenon. Only because of Dasein is “there a unitary world at all, rather than a collection of entities”, as Michael Inwood puts it (2002, p. 22). So with Heidegger, humans are truly (when read literally: from ‘Truth’ in Heidegger’s sense) different from animals. In his famous letter on humanism (cf. Heidegger, 2008) Heidegger points out that although humans and animals may be biologically alike, there is an ontological abyss that separates them. We shall later see how Stiegler criticizes Heidegger’s emphasis on the ontological, since this – according to Stiegler – forgets the role of that ontic artefacts play in establishing Dasein’s ontological openness towards being.

If one accepts Heidegger’s perspective on the primordial ‘openness towards Being’, the next thing to ask would be in what manner of fashion Being becomes visible to Dasein. Here too, Heidegger produces a reversal of the commonly held viewpoint. This viewpoint is perhaps most eloquently and certainly most famously defended by Descartes and alternately appears in Husserl²¹. In basic terms, that position boils down to the view where the human subject (*res cogitans*) is separated from the world of objects (*res extensa*). Accordingly, the thinking subject can perceive this world and hence synthesise theoretical knowledge about the object. One could sum it up by saying that the way in which the world is encountered is through theoretical knowledge about the world. Additionally, the way in which the subject encounters itself (as an existing subject) is also through thought (Descartes’ famous ‘*cogito ergo sum*’). As mentioned, Heidegger puts this picture upside down. We have already touched upon his tool-analysis in chapter one, and can now investigate it somewhat further. The story is quite similar to the ontic/ontological reversal that was previously described. For Heidegger, theoretical knowledge about objects may be correct, but it is not the original – primordial – way in which objects show themselves to Dasein. Theoretical knowledge is based upon the world as ‘*vorhanden*’, as ‘present-at-hand’. For Heidegger, the primordial way in which Dasein approaches the world is not by inferring the objectivity of the world, but is first through the ‘*zuhanden*’, through the ‘ready-to-hand’.

Heidegger famously put forward the example of the hammer. The expert carpenter who uses the hammer is not focussing on the hammer as a certain piece of wood with an iron head attached to it. Rather, as we have seen in the description of Ihde’s embodiment relation in chapter I, the world (i.e. the being of the world) becomes visible through the hammer in a particular way. The hammer itself withdraws from attention and the operator of the hammer focuses through the hammer on the nail and from there – for example – on the roof of the house that he is repairing. This then brings together the fact that the roof will keep out the rain, will keep the family of the workman dry, will keep the cold out and so forth²². The point is that through the tool, through the hammer the world

²¹ An extensive introduction to these fields of epistemology, ontology and phenomenology is beyond the scope of this thesis. Please refer to Inwood (2002) for a succinct comparison between Descartes’, Husserl’s, and Heidegger’s perspectives.

²² This already hints at the temporal nature of the way in which Being is disclosed. I shall return to temporality in Heidegger’s thought shortly.

is disclosed in a particular way. However, this is not all happening because the workman is consciously theorizing all these memories and possibilities. An expert carpenter does not really focus on his actual activity: he may – for example – be holding a conversation with a colleague while he is hammering away. Through the use of the hammer, a certain web of significance appears, which is not so much immediately cognized as a world of objects with particular theoretical qualities, but is first encountered as a certain ‘Lebenswelt’, a ‘life-world’ that Dasein (the carpenter in this case) inhabits²³, and that has a certain significance for Dasein. Of importance is that the very coming-into-being of such a world is not an immediate product of Dasein’s conscious activity; the process itself is not at the forefront of Dasein’s attention, mirroring the withdrawn position of the used hammer.

Another example concerns a table. From the Cartesian and Husserlian perspectives, this table is perceived as a certain object with a certain height, length, core material, colour etc., in short, as an object with qualities (*res extensa*). For Heidegger, such a theoretical way of looking at the table is already an abstraction; the table first has a particular place in the room, is big enough for the family to have dinner on, was once bought from a certain craftsman, bears marks of kids playing at the table, and reminds the perceiver that s/he has to write a certain letter at the table²⁴. In short, the table first discovers the world as a particular life-world, and not in the first place as an object with certain qualities.

This all is not to say that the theoretical way of looking at things does not have a place. Heidegger was not anti-scientific or anything, but argued that the theoretical way of being-in-the-world is not the most primordial way for Dasein. It is when the ‘zuhanden’ breaks down that it demands attention for itself: When I am writing a letter at a table, the table itself withdraws from the attention. But when the table suddenly breaks, it demands attention for itself. Only when the ‘ready-to-hand’ breaks down, is missing, or is malfunctioning in some other way does it become ‘un-ready-to-hand’ and as such appears ‘before’ Dasein as a (malfunctioning) self-contained object. Furthermore, Dasein can also ‘gaze’ upon the tool that can consequently become ‘Vorhanden’ (present-at-hand): the object of (theoretical) investigation. The radical point here is that knowledge is ‘only’ one type of human-world relation, and for Heidegger not the primordial way in which Dasein relates to the world. To be sure: theoretical knowledge is not devalued here. Heidegger rather shows how theoretical knowledge is not the primal type of human-world relation, and that some quite special occurrences are needed before theoretical knowledge can first appear. So in sum, the difference between Heidegger’s use of ‘ready-to-hand’ and ‘present-at-hand’ is that the life-world does not first appear as something that lies before Dasein as ‘present-at-hand’ entities with certain qualities to be theorized, but is first ‘ready-to-hand’ as a significant world.

²³ Husserl (and Ihde after him) uses ‘Lebenswelt’ (Life-world). Heidegger himself simply speaks of ‘Welt’ (world). (Cf. Inwood, 2002, p. 32).

²⁴ It may have occurred to the reader that these examples have quite a nostalgic ring to them. Heidegger is often accused of being romantic in his selection of examples. For an interesting critique on this see the chapter 4 ‘Deromantisizing Heidegger’ in Ihde (2010, pp. 74-91).

It is questionable whether Heidegger's tool-analyses should be read as a proper epistemology, and if it is correct to claim the 'Zuhanden' is more primordial than the 'Vorhanden'. This is not an issue that I aim to address here. What is insightful in Heidegger's analysis is that the being of the world is not a-priori thought as a world of theoretical quality-bearing objects, but that – through the 'zuhanden' tool – the world is meaningfully disclosed in a particular way. In the first chapter we have already seen how Post-Phenomenology departs from this perspective. The tool is then viewed as not simply being a particular object with certain qualities, but as having an active role in how the world is brought into focus – a phenomenon that the Post-Phenomenologists refer to as *mediation*. I will return to the theme of Post-Phenomenological mediation in the following chapter, where a comparison shall be made concerning the role of ontic artefacts in two philosophical movements that derive from Heidegger: Post-Phenomenology and Stiegler's philosophy.

Shifting the focus towards Dasein itself, it becomes apparent that Heidegger's analysis of being-in-the-world resists a Cartesian way of positing the subject. The human way of being in the world is not in the first place a cognitive 'knowledge-based' way of being. In emphasising the primacy of the praxical way of being in the world (through the 'zuhanden'), Heidegger takes a different perspective than Descartes. His perspective – wherein a conscious subject somehow infers the objectivity of the world – runs into the problem of scepticism. This problem – when put in basic terms – puts to question how a subject can attain certainty concerning the existence of the 'outside world' – that is: of objects. According to Kant, it was the scandal of Philosophy that this sceptical challenge had never been met in all of Western thought. Heidegger poses that the real scandal is that people are still asking for such a proof²⁵. In Heidegger's philosophy, Dasein is already in-the-world. The world is then not thought of as something separate from Dasein; the world rather becomes visible to Dasein through Dasein's activity. Demanding a proof for the existence of the 'outside world' is hence a demand miscast, since the only way in which the question can be posed at all is because Dasein is already in-the-world. Additionally, it is at this point that the genius of Heidegger's choice for the word Dasein becomes apparent: Dasein in German means 'being-there' but also refers to the activity of subsisting: Earning one's daily bread would be earning one's daily Dasein in German. So Dasein is not simply an individual person; it is also an activity. This activity is the activity of being-in-the-world, which is first of all an activity that is pronounced through 'zuhanden' tools, which actively co-shape the way in which Dasein is in-the-world. As the Heideggerian philosopher Hubert Dreyfus explains: "[Dasein] is actively being a situation in which directed activity is going on". (Dreyfus, 2008) So Dasein, understood in such a way, is open to being, but this open-ness is always an activity: a 'Lichtung': a 'Clearing' in the verbal sense. This is the ontological feature of Dasein that we have previously touched upon. Of great

²⁵ Cf. Inwood, 2002, pp. 59-63

importance is that Being is not understood in a static way, but as an ongoing active process that 'happens' in Dasein²⁶.

... and Time

The way in which Dasein 'clears' the clearing has a threefold structure, which is at the same time a temporal structure. Up till now, I have mainly focused on 'Being', whereas Heidegger's magnum opus is titled 'Being and Time' for a reason. In fact, the temporality of Dasein is of equal fundamental importance as is its ontology. Heidegger states that "the central problematic of all ontology is rooted in the phenomenon of time" (2008a, p. 18). By looking closely at the triad structure of being-in-the-world, one will see that being can indeed not be thought without time – and vice versa. *Firstly*, Dasein is in-the-world as 'being-already-in', *Secondly*, Dasein is 'being-amidst', or 'being-alongside, and *thirdly*, Dasein's being is 'in-order-to' or, 'being-ahead-of-itself'. This is exactly the structure of time as 'past', 'present' and 'future'. Returning to the example of the hammer: in the hammering-activity, Dasein is *presently* 'amidst' a workshop-context where hammers, nails, and so forth are present. Dasein can only articulate his activity of hammering amidst a world that is already there, a world wherein the activity of slamming nails into pieces of wood makes sense. As Heidegger says: "one tool is ontologically impossible" (Ibid, p. 353), since the tool only makes sense 'amidst' a larger web of significance (nails, the roof to be repaired, pieces of wood etc). Furthermore, Dasein is only amidst the world, because Dasein is always already-in the world. That is to say that the world (in the example: the workshop-context, which in turn is part of a larger world-context) already has a certain meaning for Dasein. Heidegger uses the German term 'Stimmung' ('Mood') to stipulate the way in which Dasein is always already in the world. 'Stimmung' must not be understood as a certain emotional state that Dasein has about some event, but rather as the way in which Dasein corresponds to Being, to the being of the world. Stimmung is literally translated as 'Tuning': Dasein already finds itself in tune with the world in a particular way. This primordial tuning – which corresponds to the previously described 'Truth' as the disclosedness of Dasein – is not of Dasein's own making. To use Heidegger's terminology, Dasein is 'thrown' into the world, and this world – already at-tuned to Dasein – constitutes a *past* for Dasein. Finally, the activity of hammering is always directed at the *future*, the hammering is 'in-order-to' make a certain piece of furniture, or 'in-order-to' repair the roof (in-order-to keep the rain out etc.). Dasein is thus also 'ahead-of-itself', since – in its present activity – it already takes the future (the roof must keep out the rain) into account. Absolutely crucial is that in Dasein's present activity, the present is not understood as somehow isolated from the past and the future. The entire triad-structure of time is always present in the present activity. The present activity of hammering is always necessarily involved with the 'already-there' context in which hammering has a certain meaning, and with the 'in-order-to' at which the hammering activity is projected.

²⁶ Heidegger uses the German 'währen' for being, which must be read as a verb and can best be translated as 'lasting'. (Cf. Inwood, 1999). Being, then, is viewed as actively 'lasting' in Dasein. (Cf. Lemmens, 2008, pp. 145 – 146).

Taken altogether, Dasein's ways of being in the world is characterized by 'Sorge', by Care. The German link to 'Besorgen' (to fetch, to bring) is mostly lost in translation, but perhaps not entirely: Dasein is Care, and as such it has an active role in the happening of being, in the 'fetching' of beings into Being; Dasein is caring for being, so to speak. It may have become clear that Care has a fundamental temporal dimension, as 'being-already-in', 'being-alongside', and 'being-in-order-to'. Indeed, Heidegger describes Care as follows:

The formally existential totality of Dasein's ontological structure whole must therefore be grasped in the following structure: the Being of Dasein means ahead-of-itself-Being-already-in-(the-world) as Being-alongside (entities encountered within-the-world). This Being fills in the signification of the term 'care' [Sorge], which is used in a purely ontological-existential manner. (Heidegger, 2008a, p. 192)

What follows is that Dasein – in Care; in the activity of 'clearing' – is not somehow external to the world or to time, but is always in-the-world, which means that Dasein is also in-time. Heidegger goes as far as to say that "Time is Dasein" (1992, 21E). The argument follows a similar structure as with the primacy of ontology over the ontic: Dasein's 'Zeitlichkeit' (Temporality) has primacy over time. This makes sense considering the fact that Heidegger fundamentally intertwines being and time. So only because Dasein is ontological and temporal in 'Sorge', does time appear as time for Dasein. To be sure, it is not claimed that without Dasein events would not happen before or after another, but it is because of Dasein's Temporality that events appear as meaningful events: that time appears as time. This mirrors the point where the ontic only appears as ontic because of Dasein's ontology.

We have thus seen that in Heidegger's analysis Dasein is not external to an objective world or time. Dasein is in-the-world, and thus in-time. However – and this is important – neither is it the case that Dasein *is* the world: Dasein is not completely absorbed in the world. Such an absorption would be at odds with Heidegger's fundamental starting point, which is that Dasein stands open to Being (Alathea). Dasein is in-the-world, but can at the same time 'think' the being of the world, and can 'think' its own being-in-the-world. Dasein is ecstatic, which is to say that Dasein is itself, but also 'standing-outside' of itself. Now, Ecstasis has the same root meaning as existence, and we can thus finally see why Heidegger's analysis is an existential-analytic.

"Dasein is an entity which does not just occur among other entities. Rather, it is ontically distinguished by the fact that, in its very Being, that Being is an issue for it.²⁷" (Heidegger, 2008a, p. 12)

"the essence of Dasein lies in its existence." (Ibid, p. 42)

²⁷ "Das Dasein ist ein Seiendes, das nicht nur unter anderem Seienden vorkommt. Es ist vielmehr ontisch dadurch ausgezeichnet, daß es diesem Seienden in seinem Sein *um* dieses Sein selbst geht."

When over-viewing Heidegger's existential-analytic, one could say that ecstatic Dasein is both in-the-world and finds the world before itself. This simultaneously means that Dasein is both in time and stands open to time. Being – as understood both ontologically and temporally – is an issue for Dasein. However, we have seen that Heidegger does not want to characterize the existence of Dasein in a more-or-less Cartesian 'constantly conscious' manner, where: "being in the world is characterized far too explicitly and sharply" (Heidegger, 2008a, p. 318). Heidegger therefore speaks of Authentic and Inauthentic ways of being in the world: "the self of everyday Dasein is the they-self, which we distinguish from the authentic Self" (Ibid, p. 129). To illuminate the point, we can once again return to the tool-analysis. We have seen how Dasein in his daily activity (in the example: carpentering) is dis-closing the world in a particular way, which involves the triad-structure of time: the present activity of hammering is 'in-order-to' fix the roof, and only makes sense because the workshop-context is 'already-there'. However, as the tool 'itself' withdraws from the attention, so does this 'dis-closure' or 'clearing' activity itself withdraw. In simple terms, the carpenter is not constantly thinking about the way in which the hammer only functions in a given (past) context and so forth. All such reflections withdraw from the immediate attention. The carpenter's self – that is to say his existential (ec-static) reflection – also withdraws: the carpenter is not ec-static in the sense of constantly thinking: "I am a carpenter who is hammering in order to fix the roof ...": such reflections are not at the foreground in – what Heidegger calls – the 'everydayness' of Dasein, that is, when everyday Dasein is earning its daily dasein. In such everydayness, Dasein's activity is 'Verfallen' as Heidegger calls it: Dasein has 'fallen-away' from the primordial truth of Dasein, which is its part in the dis-closure of Being. This is not an ethical judgement about Dasein:

"We would ... misunderstand the ontologico-existential structure of falling if we were to ascribe to it the sense of a bad and deplorable ontical property of which, perhaps, more advanced stages of human culture might be able to rid themselves." (Ibid, p. 176)

So Heidegger does not argue that this 'everyday' mode of being should be avoided: it is rather a description of the way in which Dasein 'usually' is in the world: it is not constantly consciously reflecting on the Being of beings and its own existence, but is mostly just earning its daily dasein, as one does, as 'they' (the 'they-self') do.

However, Dasein can also be Authentic. In the authentic mode of Dasein, Dasein *does* reflect on its own being-in-the-world, that is: on its existence. Heidegger uses the German 'Eigentlich' for 'Authentic', which also means 'originally' or literally: 'self-like'. In authentic mode, Dasein is most original, which – as we have seen – corresponds with Dasein being open to the disclosure of Being. So in authentic mode, Dasein reflects on Being, and this also – by necessity – has a temporal structure. Heidegger beautifully explains this by using the present as a locus for authentic Dasein. He refers to present as 'Gegenwart', which literally

means something like 'waiting-towards'²⁸ – and refers to the present activity of Dasein as 'gegenwärtigen', which must be understood as a verb and translates as 'making-present'. Well, this making-present – in analogue fashion to the 'zuhanden'-activity – always involves the past and the future. That is to say that it always involves a certain *past*, an 'already-there' in which the world appears as significant to Dasein. It also involves a projection into the *future*: current actions are geared towards certain future states. Authentic existence, then, must not be interpreted as a project in which one transcends everydayness by means of completely isolating oneself from such everydayness. For Heidegger, Authentic existence cannot be understood without also taking Dasein's inauthentic 'Verfallen' mode of being into account. The two modes of being (authentic and inauthentic/'verfallen') must not be thought in *opposition*, but in *composition*. Let me use the example of writing a book: I may reflect on my own existence and write a certain book about this. Such an activity quite obviously befits the authentic way of being. Yet, writing can only happen when the concepts of 'book' and 'writing' are already-there with a certain significance. Furthermore, I would make use of words that are used in the 'everyday' world, because otherwise the book would not make any sense at all. So the authentic mode of existence must not be understood as somehow opposed to the everyday 'verfallen' mode of being. In fact, all this follows directly from Heidegger's careful choice of words: If Da-sein is originally being-there (in-the-world), then authentic Dasein is closest to this origin, which is obviously in-the-world, yet at the same time ec-static to the world. The world, then, is already-there and thus constitutes the *past* for Dasein. This already-there does not determine Dasein, since Dasein is also ec-static to this past. Dasein can relate to this past, and makes it its own in his activity of making-present. Heidegger can therefore say that the past does not lie behind Dasein, but rather lies before it:

"Its own past – and this always means the past of its "generation" – is not something which *follows along after* Dasein, but something which already goes ahead of it." (Heidegger, 2008a, p. 20)

Once again we can see that the mode of being for Dasein is not characterized as static, but ec-static, as the making-present activity of 'clearing'. It may be clear that this 'making-present' always involves the triad-structure of temporality. Hence Heidegger can say that "Dasein's being finds its meaning in temporality" (Ibid, p. 19).

Since Dasein existentially relates to its past, this past is also projected at the future. This is – once again – the triad-structure of temporality, where Dasein's activity of making-present involves an already-there, but is projected into the future. Heidegger talks about Dasein's future in terms of Dasein's possibility. Since Dasein is ec-static and not wholly determined by its past, Dasein can never be a determined actuality, but is always a possibility. Dasein's own being (in all its temporality) is an issue for Dasein, and Dasein thus always has the possibility of giving a certain direction to the way in which Dasein makes-present. Such a possibility thus ultimately stems from the ontological 'Truth' in Dasein. Dasein

²⁸ Cf. Inwood, 1999, p. 173

runs ahead of itself – to put it in Heideggerian language – by which he means that the present Dasein runs ahead to its future and lets this projection into the future have an impact on the way in which it currently ‘makes-present’. In the ‘verfallen’ mode of being, the carpenter ‘runs-ahead’ to the days where the rain will come, and lets this inform his ‘present’ activity of fixing the roof. Authentic Dasein also runs-ahead of itself, but is not concerned with ontic roofs and tools, but with ontological open-ness towards Being. Running ahead in authentic mode finds its ultimate possibility in the point after which there are no possibilities any longer: death. The death of Dasein – or more precisely put: Dasein’s knowledge of his own death – is of fundamental importance in Heidegger’s analysis. Dasein stands open to being and its own being – it exists; this also entails that Dasein stands open to the ending of its own being, to the point where all possibilities of ‘making-present’ find their ultimatum: in death.

“The end of my Dasein, my death, is not some point at which a sequence of events suddenly breaks off, but a possibility which Dasein knows of in this or that way.” (Heidegger, 1992, 11E)

For Heidegger, it is because of this knowledge of its own end that the making of present choices acquires meaning and weight for Dasein. As Inwood puts it: “A life without death would be a life of perpetual postponement” (Inwood, 2003, p. 69). The possibilities that Dasein fills in (i.e. the choices that are made) acquire weight because Dasein already knows that such choices are finite. Dasein is aware of the fact that certain choices cannot be revisited or revised, since it knows it will one day end being a possibility, it knows that it will one day die. The “future closes one’s ability to be; that is the future itself is closed” (Heidegger, 2008a, p. 330). The ontological ‘Truth’ in Dasein, which means its partaking in the coming-into-being of the world, also means a ‘dis-closure’ of Dasein’s own finality to itself: its death. Inauthentic Dasein is only dimly aware of the fact that it will one day die, but authentic Dasein faces the inescapable possibility of its own death, and lets this ultimate possibility inform the way in which it presently organizes its own life. Heidegger is not the ethicist who will preach how authentic Dasein should make certain choices. He is the philosopher who shows that the meaning and weight of such choices stem from Dasein’s knowledge about its death. Dasein’s death is thus of fundamental importance to Dasein’s authentic existence. The main character Moses wonderfully points this out in Saul Bellow’s (2003) beautiful novel *Herzog*:

“But what is the philosophy of this generation? Not God is dead, that point was passed long ago. Perhaps it should be stated Death is God.”

For the purpose of Stiegler’s critical reading of Heidegger to which I shall turn shortly, it is perhaps fruitful to sum up the difference between inauthentic and authentic ways of ‘making-present’: In the inauthentic, everyday mode of making-present, Dasein is lost in the making present of the “today”. This concerns ontic issues, such as a leaking roof. The way in which authentic Dasein makes-present, concerns its ontological partaking in the disclosure of Being, which finds its ultimatum in the end of this partaking: Dasein’s own death. We shall see how Stiegler criticizes the way in which Heidegger positions the ontic

on the inauthentic side, and does not include it in the authentic ontological side. Let me then – before turning to Stiegler’s critique – conclude this description of Heidegger’s existential analytic by quoting a passage from Heidegger in which I think all of the above is beautifully summarized. Heidegger here gives a definition of Dasein in its average everydayness, which also explains the possibility of the authentic²⁹. Dasein is here described as follows:

“Being-in-the-world which is falling and disclosed, thrown and projecting, and for which its ownmost ability-to-be is an issue, both in its Being alongside the “world” and in its Being-with-others.” (Heidegger, 2008a, p. 181)

Stiegler and Heidegger’s forgetfulness of technics

Now that some of Heidegger’s thoughts on the human way of being in the world have been put forward, we can turn to Stiegler’s reading of Heidegger. Pieter Lemmens nicely summarizes Stiegler’s position by saying that “Stiegler thinks *with Heidegger against Heidegger*³⁰” (Lemmens, 2008, p. 451, emphasis in original). This means that much of what has been covered in the previous paragraphs on Heidegger’s existential analytic is revisited by Stiegler, who will emphasize the importance – as well as Heidegger’s neglect – of technics. Indeed, what Stiegler’s criticism of Heidegger amounts to is that he finds Heidegger to think in metaphysical terms about Dasein, thereby neglecting the fundamental and founding role that technical artefacts play in Dasein’s existence. Stiegler thus accuses Heidegger of falsely constructing a metaphysical divide between what Stiegler calls the ‘what’ (‘quoi’, the ontic) and the ‘who’ (‘qui’, ontological Dasein).

We have already seen that ‘zuhanden’ tools play an important part in Heidegger’s existential analytic. However, with Heidegger they remain in the realm of the ontic, and will have had no part to play in the coming into being of Dasein’s ‘Truth’ (Alathea). In other words: tools are not viewed as constitutive of ontological Dasein, but ‘merely’ as ontic tools that give shape to Dasein’s (*who* is already ontological) manner of being in the world.

“[Technics] will have done nothing but follow the logic of the temporal fall into the historical forgetting of being qua the actuality of the forgetful and dissimulating attitude of concern. It will never have had the least properly unconcealing quality. In Heidegger the ‘what’ has no other dynamic than that of an inversion of the “authentic” dynamic of the who.” (Stiegler, 1998, p. 244)

In his ‘Technics and Time’ books, and most explicitly in book I: ‘the Fault of Epimetheus’ (Ibid), Stiegler shows how technical artefacts (the ‘what’) must be thought of as constitutive of Dasein’s (the ‘who’) very ontological way of being, which is also Dasein’s temporality (Zeitlichkeit), and thus of Dasein’s existence

²⁹ In order to be ‘falling’, one must ‘fall’ from somewhere. I take it that this ‘somewhere’ refers to Dasein’s primordial and original openness towards Being.

³⁰ My translation of: “Stiegler denkt *met* Heidegger *gegen* Heidegger”.

altogether. Stiegler's theme of the forgetfulness of technics thus also applies to Heidegger, since even though he granted the 'ready-to-hand' an important role – forgot about the fact that this role was originary – in the sense of Dasein's world-openness originating in technics.

In order to elucidate Stiegler's argument, it is useful to take a step back into the mythical territory that was described previously: Epimetheus' forgetfulness leading to Prometheus' amendment, which are technical prostheses. Prosthesis literally means 'put-before', and Stiegler goes on to interpret this 'before' in two ways: as '*devant*' and as '*d'avance*', referring to both the spatial and the temporal way in which 'before' can be understood³¹. *Devant*, then, means before in a spatial way. In the second part of this chapter on the anthropo-biological aspect of Stiegler's 'originary technicity' theme, I have already shown how Stiegler regards technics as constituting a tertiary type of memory, being epiphylogenetic memory. This tertiary memory – which enters into a tandem evolution process ultimately leading to Homo Sapiens – is external: it lies *before* the human individual. For Stiegler, it is because human ancestors started to make use of tools – started to exteriorize part of themselves – that human beings live in a relation with the external. In other words, it is because of technics that humans evolved as being ec-static to the world³². This is a radical re-interpretation of Heidegger. We have seen how Heidegger starts with the ontological: he starts with Dasein's primordial openness towards being, from which the ontic follows. Stiegler radically reinterprets Heidegger by pointing out that it is because of tertiary memory that Dasein gains access to the ontological. The ontological springs from the fact that part of Dasein is put-before (pros-thesis as *devant*) itself.

With Heidegger, being and time (ontology and temporality) are essentially intertwined. This is no different in Stiegler's reading. As mentioned, he also interprets the 'before' in 'pros-thesis' as *d'avance*, which is 'before' understood in a temporal way. To reiterate: similar to the primacy of ontology over the ontic, Heidegger argues that Dasein's temporality has primacy over experienced time-events.

“Dasein is not time, but temporality. The fundamental assertion that time is temporal is therefore the most authentic determination – and it is not a tautology, because the being of temporality signifies non-identical actuality.” (Heidegger, 1992, 21E)

Stiegler does not necessarily disagree with this perspective, but argues that Heidegger fails to see the constitutive role that technics plays in the coming

³¹ Stiegler uses the by Derrida invented term Différance, which is understood both as 'differ' (spatial) and 'defer' (temporal): “this temporization is also temporalization and spacing, the becoming of time and space and the becoming-space of time” (Derrida, *Margins of Philosophy*, as quoted in Stieger, 1998a, p. 139). Unfortunately, I cannot go into the rather complicated concept of Différance. Please refer to Stiegler (1998a) for Stiegler's use of différance. I refer Dutch readers to (Lemmens, 2008, pp. 465-472) for a good description of différance, as well as its use in Stiegler's philosophy.

³² Which of course must also mean: being-in-the-world

about of Dasein's temporality. Heidegger metaphysically shoves ontic artefacts to the realm of the *zuhanden/vorhanden* 'world', and radically (taken literally as: at-root) separates this from Dasein's ontological world-openness. In Stiegler's reaction to this, the theme of memory is – once again – at the centre of the argument. He points out that Dasein's temporal way of being with respect to the *past*, is founded on the artefactual construction of this past. We have seen Heidegger describing how (in Care) Dasein's 'making-present' activity always involves the 'already-there'. Well, Stiegler points out that the 'already-there' is in fact only 'there' because it has been recorded in epiphylogenetic memory, that is to say: in artefacts. It is because experiences have been saved in artefacts (epiphylogenesis) that they are accessible to present Dasein.

“... transmission [of knowledge, i.e. Tradition] is determined by explicitly technological forms recording forms of knowledge, by the conditions of *access* they provide” (Stiegler, 1998, p. 210)

For Stiegler then, the 'Tradition' that is 'already-there' for Dasein – into which Dasein is thrown – is accessible only because it has been recorded as epiphylogenetic memory. Taken this far, it seems that Heidegger would not necessarily disagree. In his analysis, the 'already-there' also has an ontic grounding. However, Heidegger – as mentioned – grants ontology primacy over the ontic, and temporality primacy over time as tradition-recordings:

“Our going back to 'the past' does not first get its start from the acquisition, sifting, and securing of such material; these activities presuppose historical Being towards the Dasein that has-been-there – that is, they presuppose the historicity of the historian's existence.” (Heidegger, 2008a, p. 394)

So for Heidegger, there must first be a temporal 'historical Being' towards what 'has-been-there', and only from that basis does the recorded 'already-there' acquire a meaning for Dasein (i.e. in Dasein's activity of 'making-present'). There are two (related) problems with Heidegger's position here. *Firstly*, it begs the question about how such a 'historicity' (i.e. temporality, 'Zeitlichkeit') has emerged and where it originates. It seems to follow that the emergence of Dasein's temporality can only be thought as an abyss, that is, as a more-or-less miraculous happening that suddenly invents the human, and suddenly makes possible the questioning of time and origins. Stiegler, for one, does not accept such a sudden emergence of what can be properly called human:

“the very idea of the emergence of a forthrightly recognizable humanity must be challenged. The tracing of any simple boundary between humanity and animality must be seriously called into question.” (Stiegler, 1998, p. 151)

Such a 'forthright emergence' would constitute a second origin: the biological organism that the human ancestor was, is suddenly invented with 'temporality' and 'ontology', and hence encounters a second origin. *Secondly*, Heidegger's primacy of the temporal seems to run into a paradox. If, for the sake of argument,

one accepts this perspective, a problem occurs when one thinks about the first instance (whenever and however it occurred) of such temporality: the making-present at that first instance of temporality would take as the 'already-there' something that has in fact never been there. As Stiegler – rather complicatedly but also accurately – puts it: “A past that was never present gives rise to a present linking onto no past present.” (Stiegler, 1998, p. 138). Heidegger will quite simply have to take this paradox at face value, since Dasein’s temporality is thought of as the condition of possibility for approaching the past as already-there. In more simple terms, one could wonder what this ‘already-there’ looked like for the very first instance of Dasein. Stiegler can elucidate this paradox to a much larger extent than Heidegger can, and in fact locates the origin and genesis of Dasein’s temporality here. He argues that the human ancestors that first started to use tools brought into being the temporality of the human. They started to make use of protheses, and hence the generation in their pursuit already gained some access to the experience of the former (through epiphylogenetic memory). Stiegler points out that with that first exteriorization, a qualitative border was passed; a rupture occurred. This rupture, however, is not thought of as immediately inventing that first tool user with Dasein in all the ontological and temporal glory that Heidegger describes. It is, nonetheless, an important qualitative rupture that starts up the tandem-evolutionary engine, of which the fuel is not simply located in the ‘who’, but in the relation between ‘who’ and ‘what’. The fact that – onwards from the start of this rupture – the human ancestors placed part of themselves outside of themselves (prosthesis) provides access to a past, albeit a meagre past. Nonetheless, Stiegler insists that some temporality – some ‘anticipation’ as he calls it – must already have been present. Onwards from that point, the genesis of temporality can be envisaged: epiphylogenetic memory survives the death of its author, and can hence accumulate over time, ultimately providing an ‘already-there’ that befits Heidegger’s existential-analytic. The ontic prosthesis, put-before as *d’avance*, hence are located at the origin (thought of as rupture) of Dasein’s temporality. It is for these reasons that Stiegler can say that “there is only time because memory is artificial” (Stiegler, 1998, p. 172), and that “technics ... far from being merely in time, properly constitutes time” (ibid, p. 27).

In sum then, we can say that Stiegler allows a role of much more precedence to the ontic than one would find in Heidegger. Stiegler rereads Heidegger’s existential analytic, and combines it with his own (already by Derrida inspired) reading of Leroi-Gourhan. This leads him to questioning Heidegger’s point of departure, which can only start with ontology and temporality. Stiegler shows how the ontic, the artefacts as prostheses, are part and parcel of the exteriorization-rupture that gives rise to Dasein as Care, that is, as having part in the dis-closure of being. We have seen how this ‘clearing’ of being necessarily has a temporal structure. In Stiegler, Dasein’s partaking in this temporality originates in the first exteriorization-rupture, which is the ‘passage outside’:

“There is no anticipation, no time outside of this passage outside, of this putting-outside-of-self and of this alienation of the human and its memory that “exteriorization” is. (Stiegler, 1998, p. 152)

It is this passage that brings into being the being of time:

“time itself both deploys prostheticity in its concrete effectivity and deploys itself within it.” (Stiegler, 1998, p. 219)

What follows is that if Heidegger is right in stating that “the central problematic of all ontology is rooted in the phenomenon of time” (2008a, p. 18), and Stiegler is right in stating that “it is *tecknè* [...] that gives time” (Stiegler, 1998, p. 220), then we must indeed speak of ‘originary technicity’, since it is technics that brings Dasein into being.

Technical Everydayness and Authenticity

Stiegler’s emphasis on the ontic basis of the ontological results in the claim that Dasein’s very existence – in both everyday and authentic modes – cannot be thought without taking technics on board. In Heidegger, authentic existence means that one resolutely relates to one’s own being, which automatically means relating to the ‘already-there’ in which Dasein finds itself thrown, and furthermore relate to one’s own death. It is important to note – and I will here return to some of the points previously made – that authenticity in Stiegler’s terms cannot be thought without taking technics into account. Remembering the story of memory: creatures that are defined on the basis of genetic memory and epi-memory *are* this memory. Their genetic make-up, as received from Epimetheus, constitutes their essence. We have seen that humans must be regarded in a different light, because of their ‘*panne d’essence*’, their *défaut* essence. Prometheus’ prostheses amend Epimetheus’ fault, but in the specific way that they are put-before (*d’avance* as well as *devant*) humans as exterior, as epiphylogenetic memory. Now, for Stiegler, it is this aspect of exteriority that grants Dasein the space for existence. Epiphylogenetic memory – which we granted a fundamental part in human being, next to the genetic and epi-memories – does not immediately belong to Dasein. It must be re-membered, a term that must be read literally here³³. That is, Dasein is not essentially determined or rather essentially not-determined, by cause of Epimetheus’ forgetfulness leading to a *défaut* of essence. Part of Dasein’s self then – a ‘member’ if you will – lies outside of itself, and must be re-membered. What Dasein remembers is in fact the ‘already-there’, as recorded in artefacts. Heidegger sometimes refers to the ‘already-there’ as ‘*Erbe*’, a heritage – and Stiegler explains that such a heritage constitutes “a gift as well as a debt” (Stiegler, 1998, p. 140³⁴). In other words, Dasein has to make this heritage part of itself again by relating to it in one way or another. The ‘already-there’ itself can never completely determine the way in which it is remembered, since the appropriation (the re-membering) happens in a new context – a different world, in a different time. Stiegler – borrowing from Derrida – therefore refers to this

³³ The Dutch (and German) words for remember display this characteristic even better in my opinion. The Dutch ‘*her-inneren*’ literally means to ‘re-inner’.

³⁴ Stiegler quite nicely points out that “*Epimetheia* means heritage. Heritage is always *épimathésis*” (1998, p. 207)

heritage as a 'chiffre', a cryptical message that needs to be disentangled, the outcome of which is not fully contained in the 'chiffre' itself³⁵. Ultimately then, Dasein has a certain space of manoeuvre, a certain freedom of interpretation in its present-making activity, which is always a re-membering activity. When Dasein actively engages in a relation with its 'heritage', and re-members this heritage with conscious respect to its own future, we are speaking of authentic Dasein in the way Heidegger describes it, albeit with a radically different ground.

Yet, we must be careful not to characterize Dasein's re-membering 'far too explicitly and sharply'. Dasein is not always authentic, but is mostly inauthentic, 'fallen away', and lost in 'everydayness'. Its present-making activity is then mostly determined by 'what one does', and 'what they do'. I have already described how this inauthenticity must not be evaluated as an ethical judgement. What Stiegler can do from his perspective, is additionally show how this 'everydayness' roots in technics. From the description of Heidegger's existential-analytic it has already become clear that Dasein's being-in-the-world always happens in-the-world, and not in a void. Well, this 'world' that Dasein encounters is filled with all kinds of past-experiences, precisely because these experiences have been exteriorized (i.e.: epiphylogenesis). Crucial to this is that these epiphylogenetic sedimentations (in artefacts) are accessible by more than one individual. The recorded experience is not directed at a single person, but a group of people can share the experience. I have already referred to Stiegler's use of the term 'Tradition' when talking about the 'already-there'. Tradition clearly points to a cultural past, a shared past, a shared 'heritage'. Simple examples would be religious artefacts, but also books – perhaps law-books most distinctly – architecture and so forth. The shared 'heritage', or tradition, describes how 'one does things', which is exactly what Heidegger is getting at with Dasein's inauthentic 'fallen-away' way of being (i.e. being-with-others): it does what one does without reflecting on it too much. I think Stiegler's interpretation of the 'already-there' as technics makes even clearer that Dasein can never re-member in a void: Dasein can only re-member its 'heritage' in one way or another. This heritage is not of its own making, but is already-there (in-the-world), as epiphylogenetic memory it is prosthetically 'put-before' Dasein. The world then, is the world of things, but also the world of others, which is the factual world that constitutes how 'one does things' in a given culture. However, Dasein can never be completely determined by this factual world: there is always some space of manoeuvre in making-present; Dasein is always ec-static to itself, due to its *défaut* of essence: it relates to its own relation with the world³⁶. This is the space that enables Dasein's authenticity. Stiegler's radical (and in my opinion fundamentally inspiring) point is that Dasein's existentiality, be it in everyday 'verfallen' mode, or in authenticity – when understood as Dasein relating to its own re-membering activity, directed at the future with death as the ultimate horizon – indeed originates from the externalization of memory, which is to say that it roots in technics.

³⁵ Cf. Lemmens, 2008, p. 469

³⁶ Here one can clearly see Heidegger's (and subsequently Stiegler's) inspirator Kierkegaard, one of the founders of existentialist thought, who says quite beautifully: "The self is a relation which relates itself to its own self, or it is that in the relation that the relation relates itself to its own self; the self is not the relation but that the relation relates itself to its own self."

Concluding remarks

In this chapter, I have attempted to show how Stiegler's theme of 'originary technicity' operates on *mythical*, *anthropo-biological*, and *existential-analytic* levels. In doing this the research question on 'how does Stiegler think the relation: human - technology?' has been dealt with. Epimetheus' fault constitutes the origin and essence of the human being, an origin of being-forgotten, resulting in a lack of essence, a *défaut* of essence. I have shown how Stiegler uses the work of Leroi-Gourhan to think this *défaut* human state in an anthropological and biological way, which resulted in the explication of a tandem evolutionary process where humans invent technics, and technics invents the human.

Additionally, I have tried to bring to the surface Stiegler's adaptation of Heidegger's existential analytic. Stiegler shows how Heidegger follows Epimetheus, and is forgetful. He forgets technics, even though he does grant it an important role. Yet, in Heidegger, the ontic tools are in no way constitutive of Dasein's world-openness in both its ontological and temporal guises. Stiegler points out that it is technics that first grants Dasein access to temporality and ontology, by means of its epiphylogenetic nature. It is technics then, that makes Dasein possible as the being that can 'listen' to Being. From Heidegger we thus learn that "the essence of Dasein is its existence" (2008a, p. 42) and from Stiegler we learn that this existence has a technical underpinning. What follows is that the essence of Dasein is a technical affair.

What we are left with is a story of human origins, which now appears as a story of technics. The human organism surfaces as one part of a tandem evolutionary process, driven by technics as the other part. Moreover, the human being as Dasein – as the being that relates to Being – emerges out of Epimetheus' forgetfulness and Prometheus' amendment: technics. The coming-into-being of the human can only be referred to as an anthropo-techno-genesis. One consequence, at least, is that it becomes extremely problematic to make any radical separations between what is human and what is technical: if it is possible to separate humans from technics, this can only happen at the cost of forgetting the shared origin – a project of forgetting that Stiegler diagnoses the entirety of Western Philosophy with. Stiegler then, makes like Prometheus and attempts to amend this forgetfulness in his philosophical work. Here, the human interior is (in)formed by the exterior, and the reverse also holds true, a composition as opposed to an opposition.

In the following chapter, I shall return to Stiegler's philosophy and attempt to synthesize it with the Post-Phenomenological perspective on humans and technology. We shall revisit the Post-Phenomenologists framework of human-world relations, and answer the questions that were posed at the end of chapter I.

Chapter III – Originary Technical Mediation

Introduction

Now that we have established some of the fundamental properties of both Post-Phenomenological theory and Stiegler's philosophy in chapters I and II, I will here attempt to synthesize these theories. I believe this is necessary, in order to address some of the issues that have emerged at the conclusion of the analysis of Post-Phenomenology. I will revisit these issues in the current chapter, and now look upon them from the perspective of Stiegler's 'originary technicity'. It will thereby be shown that Stiegler's philosophy can contribute to Post-Phenomenological theory, in the sense of providing an elucidation concerning question of origin. As such, the first main question³⁷ on whether Stiegler's philosophy can cement Post-Phenomenological theory shall be positively answered. Subsequently, I will make a detour to see the consequences of such a synthesis for philosophical perspectives that somehow involve the thought of a 'pure' non-technological 'nature', and accordingly view technics as a perversion of this 'nature'. Such perspectives will be rendered defunct in light of the here attempted synthesis. Subsequently, a return to Verbeek's cyborg-relation will be made, putting to question the novelty of the cyborg-entity involved. I will argue that in light of the addition of Stiegler's philosophy to Post-Phenomenology, the description of a cyborg-relation does not – strictly speaking – involve a new entity. Verbeek's analysis may, however, prove fruitful in assessing the actual use of body-merging-technologies. I shall conclude the chapter by returning to the properties of Post-Phenomenological theory, showing that these are compatible and even cemented when Stiegler's thoughts on 'originary technicity' are synthesized with Post-Phenomenology. What we are left with is a fundamental intertwinement of humans and technics. Explicitly thinking this intertwinement – which is precisely what is attempted here – paves the way for fundamental questions concerning morality and technology – the subject matter of the final chapter.

Post-Phenomenological lacunas

For the sake of overview, let me reiterate some of the problems that occurred during the critical assessment of the Post-Phenomenological framework of human-tech-world relations, as brought to the surface in chapter I. *Firstly*, we have questioned whether Post-Phenomenology asserts that all human-world relations are somehow human-tech-world relations. Must technology, in other words, be regarded as a transcendental condition towards human being-in-the-world? *Secondly*, and partly following from the first, one may wonder what has ever happened that enabled humans to become humans, that is, to enter into some kind of relation with the world (be it through technologies or not). In other

³⁷ Can Stiegler's philosophy of 'originary technicity' provide a way to fundamentally think the 'fundamental intertwinement' of humans and technology that Post-Phenomenology posits?

words, how must one think the origin of this being that enters in an (anti-essential) relation with something that it calls 'world'? *Thirdly*, and in parallel, how must one think the origin of this 'world' as something that the human being relates to, and how is it part of human existence?

Mythologies: Adam's Garden and Epimetheus' forgetfulness

The obvious choice is to start with the *first* question. It is perhaps fruitful to elaborate somewhat on the perspective that Post-Phenomenology takes concerning this matter. I think that the question as posed would have to be answered *negatively* when one is to follow along the lines of Post-Phenomenological theory, although I find some ambiguities concerning the matter, also between Ihde and Verbeek, to which I shall turn shortly. In chapter II, we have seen how a large chunk of P-P is indebted to the work of Heidegger, particularly with respect to the primacy of the praxical. To quickly repeat: Heidegger argues that the way in which Dasein is primordially 'da' is not so much in conscious theoretical activity, but first in a praxical activity, through which – by means of 'zuhanden' tools – Dasein 'clears the clearing'. We have seen how Ihde (2010, p. 44) refers to this as an "action theory of ontology". In Post-Phenomenology, the tools that are used within this 'action' do not constitute a neutral access point into 'being', but actively shape the way in which being is disclosed: the phenomenon of *mediation*. This means that we can reformulate the question that we are dealing with here, by asking if P-P holds that *mediation* in one way or another must be seen as a transcendental condition for human experience. Or put differently: can the term 'im-mediate' be literally applied to human-world relations?

Ihde explicitly approaches this question in his book "Technology and the Lifeworld, from Garden to Earth" :

"What is needed is a ... story of the structures and limits of human-technology and of the non-technological possibilities of a relation to an environment, or "world.". (Ihde, 1990, p. 17)

In attempting to provide a solution for this problematic, he comes up with a Genesis-inspired mythological story of 'the Garden', as opposed to 'Earth'. Ihde paints a more-or-less romantic story of the Garden, in which life is lived nakedly in pure nature (i.e.: non-technologically), where "... food supply must be constant and easily available, [where] there would be fruit, edible plants, easily hand-caught frogs, fish, grubs, and the like" (Ibid, p. 13). The inhabitant of such a Garden, Adam, would solely have pure perceptions of the Garden, in no way mediated by technologies. Let me immediately remark that Ihde is using all this as a thinking tool, and is clearly pointing out that a "return" to such "natural existence" is "likely neither possible nor desirable" (Ibid, pp. 17-20). Quite contrarily, Ihde wants to use the Garden-case as a "limit-idea" to investigate how some of the aspects of human experience are not technologically mediated, to ultimately show how technical artefacts mediate human experience. As an example, he talks about the 'naked perception' of wind-chill on one's body, a

perception that is transformed – *mediated* – if one is to wear the technology of clothing.

“The technology (clothing), however, transforms this immediately experienced environment; and it is that transformation which must be investigated.” (Ibid, p. 17)

In the first chapter, we have already laid out the fundamentals of how Post-Phenomenology proceeds in investigating such transformations or mediations. Unfortunately, this does not address our current problem all too well. One may accept Ihde’s analysis of the mediation of perception through technologies, and yet question if immediate perception is possible altogether, and how such perceptions acquired a certain meaning or significance.

It is probably unfair to critically dissect Ihde’s story of the Garden in an extreme way, since he openly admits that it must be seen as a “imaginative contrast ... for heuristic and suggestive purposes” (Ibid, p. 20). Let it thus be clear that I am reading it in precisely this way: for heuristic and suggestive purposes. Notwithstanding, I hold that such a heuristic method positively shows the ambiguity concerning the coming-into-being of the *relata* within the relation human-(tech)-world in Post-Phenomenological theory. On the one hand, it seems that naked ‘im-mediate’ relations to the world are possible, but are scarce. “Not much of my life is lived nakedly; when it is so lived, it is never far from the material clothing that is our technological embodiment” (Ibid. p. 46). This necessarily means that there are “degrees in which our experience of the world is not technologically mediated ... ” (Ibid. p. 17). On the other hand, Ihde contends that “human activity from immemorial time and across the diversity of cultures has always been technologically embedded” and that “there is no such [Garden-like] empirical-historical human form of life because long before our remembering, humans moved from all gardens to inherit the earth.” (Ibid. pp. 13-20).

I believe that in this latter two formulations, Ihde is more correct than he is perhaps aware of. I will return to the point right away, but regard it as relevant to first locate the ambiguity with respect to the ‘im-mediate’. I believe this arises from the fact that Ihde strives to bring the point across that technological artefacts mediate human experience. In order to make his case as strong as possible, he aims to show the ways in which this mediation happens by comparing a ‘naked’ to a ‘mediated’ version. I contend in his claims about mediated perception as a transformation, but believe mediation can and should be granted a more fundamental role: not only that of a trans-formation process, but of the very formation of human-world relation.

This is precisely the point at which Stiegler’s philosophy can serve Post-Phenomenology. When we recall Stiegler’s claim that “the exteriorization of memory is itself the origin of mankind.” (Stiegler, 2008a, p. 136) which basically stands for the concept of ‘originary technicity’, we see that Ihde is almost correct in claiming that “human activity from immemorial time ... has always been

technologically embedded” (Ihde, 1990, p. 20). We must here subject the concept of ‘immemorial time’ to a critical glance. In the previous chapter we have seen how both Heidegger and Stiegler show how before time can appear (to Dasein) as a significant phenomenon, there must first be ‘Temporality’ (Zeitlichkeit). What is more, with Stiegler, we have seen how this ‘temporality’ is grounded in the exteriorization of memory, which is the start of technics: “it is *tecknè* ... that gives time” (Stiegler, 1998, p. 220). One can consequently only speak of ‘immemorial time’ *after* one can speak of time as a significant phenomenon. When I am to speak of ‘immemorial time’ then, this must be a certain projection made possible by the fact that I can think time – that I somehow stand open to time – that, in Heidegger’s terms, I am Temporal. Given Stiegler’s interpretation of Dasein’s Temporality, it can be claimed that one can only speak of ‘immemorial time’ *because of* human activity – or more precisely put: because of human *technical* activity. It is this activity (seen as the exteriorization of memory put-before – *d’avant* – Dasein) that gave rise to Dasein’s temporality. Following a similar schema, I believe that Ihde is also almost correct when he states that we have moved from the mythical Garden to the mediated Earth “long before our remembering” (Ibid, p. 13). If I am allowed a slight alteration of the above quote, I would rather put it like this:

“there is no such [Garden-like] empirical-historical human form of life because we started *re-membering externally*”.

It is through epiphylogenesis that we can investigate into ‘empirical-historical human forms’ who have left some of their experiences to us (by means of exteriorizing them). Ihde’s ‘move to the Earth’ can best be viewed as the ‘rupture’ that led to the exteriorization of memory. What follows from all this is that if we take an ontic perspective, Ihde is probably quite correct in claiming that “not much of my life is lived nakedly...” (Ibid, p. 46). Ontologically speaking however, there is no such thing as ‘nakedness’ or ‘naked-perception’ when this is viewed as somehow non-technical. Ihde is quite clear on his Garden-ideal: it must be used as a thinking tool, a “limit-case”, and is not depicted as some sort of desirable utopia. I hold that Ihde is correct in pointing out that such a Garden is neither “desirable nor possible”, since “we have left the Garden and inherited the Earth³⁸” (Ibid, p. 20). Now that Stiegler’s ‘originary technicity’ has been brought into the arena, the additional claim can be made that the Garden cannot and must not be regarded as some sort of ‘original state’. The Garden is only possible because of the inheritance of the Earth, which is to say that the story of the Garden can only be constructed by those that inhabit the Earth – an inhabitation that is made possible because of the exteriorization of memory: the origin of technics, or the origin *as* technics. Adam in the Garden can only be invented because of Epimetheus’ forgetfulness. It is at this point that Post-Phenomenology and Originary-Technicity solidify one another; let me here take a detour into ideas of non-technical human ‘natures’.

³⁸ Ihde’s choice of words must be applauded here: The world indeed appears as a heritage, an ‘Erbe’, the ‘already-there’ into which Dasein is thrown.

Detour into the defunct: technology as perversion of the natural

Whereas Ihde's Garden is merely used as a thinking-tool, such Garden stories are not always regarded in such fashion. In the description of Post-Phenomenology in chapter I, we have already noted that it is also Post-Classical, for – among other asymmetries – taking a different angle on the evaluation of technology with regard to meaningful human existence. To recap, some of the classical philosophies of technology tended to regard Technology a treat to human existence. One could think of the (earlier work of) Karl Jaspers who pictured Technology as constituting a giant machine that turned human beings into mere part of this machine³⁹. Some others that can be named when listing philosophers that were highly suspicious with regard to technology are Marcuse, Adorno, Habermas (although to a lesser extent), and Heidegger (mostly the later Heidegger, although I believe Stiegler (1998, p. 7) is correct in stating that “the meaning of modern technics is ambiguous in Heidegger's work”).

This is not the place to provide an introduction to the work of all these philosophers⁴⁰. I rather want to focus on the way in which Post-Phenomenology moves away from them. The basic strategy that P-P takes⁴¹ is to show how these 'classical philosophy of technology' theories are simplifications; not in the sense of being simple (they are widely recognized as extremely complex at points⁴²) – but rather in the sense of neglecting a large chunk of the phenomenon of technology: the role that technologies play in actual human existence. Verbeek perhaps most eminently gives voice to this strategy by means of his critique on what he calls 'transcendentalism'. In his 'What Things Do' (2005) he casts this critique at both Karl Jaspers and Heidegger's later thought on Technology⁴³. What the critique amounts to is that Verbeek charges these philosophers with *reducing* technology to its conditions of possibility, thereby solely taking a 'backwards thinking' perspective. Verbeek's point is that in giving in to such an orphic temptation, transcendentalists forget to look forward, which is to say that they forget to look at the constructive and *mediative* role that technologies play in actual human existence. Such a Post-Phenomenological 'forward-looking' perspective shows that Technology does not simply turn humans into 'wheels of the machine' but can also help humans have a meaningful existence by – to take a random example – granting them digital access to a certain musical record that will touch upon their deepest emotions. I think it is accurate to deem this

³⁹ Verbeek supplies some haunting quotes out of Jaspers' 'man in the modern age' and 'Philosophy': "the individual is no more than one instance among millions; why then should he think his doings of any importance?" "The only freedom left to men by the calculable course of this endless productive machinery would be the freedom to watch" (Cf. Verbeek, 2005 pp. 15- 38).

⁴⁰ There is a multitude of introductory books to these thinkers. See, for example, Achterhuis (1992, 2001), Scharff & Dusek (2003).

⁴¹ This builds on what I have already described in the first chapter

⁴² A good example of the complexity of some of these theories is nicely illustrated in an interview with Marcuse, in which he openly admits that he can also not understand some of the work of his colleague Adorno (cf. Marcuse, 2009).

⁴³ Cf. Verbeek, 2005

critique an ontic critique: it focuses on the neglected aspects of actual ontic technological artefacts in human existence.

Taking on the role of devil's advocate for a moment, I think one could accept the Post-Phenomenological critique on transcendentalism, agree with the analysis of technological mediation, but still maintain that such mediations are to be placed outside of what is to be considered properly or originally human. In other words, one could regard Post-Phenomenological claims on how technologies help bring a world into focus as correct, but still argue that such mediations must be viewed as (desirable or detestable) *additions* to some kind of 'pure' human existence. Mediation, as proposed within Post-Phenomenological theory makes such an account difficult to sell, but does not necessarily disprove it. This, I hold, is a product of Post-Phenomenology's ambiguity concerning the possibility of unmediated human-world relations. Already anticipating chapter IV, I believe this ambiguity makes the project of developing an ethics of Post-Phenomenological mediation all the more difficult.

Rousseau's origins

However, I think mentioned ambiguity can be overcome if one is to add Stiegler's thought on technics to the picture. If the Post-Phenomenological method is ontical, a further critique geared towards ontology can be construed. The starting point here is that if one views technology as somehow constituting a threat to human existence, this tends to posit some form of non-technological human existence as a superior, perhaps more 'pure' alternative. Such a perspective can be found in Rousseau, and Stiegler rigorously processes Rousseau's 'Discourse on the Origin of Inequality'. I shall not go into extreme detail here⁴⁴, but part of the argument is, I believe, quite interesting for our purposes. Rousseau's argument is ultimately geared towards political philosophy – which is not our concern here – but in order to arrive at this, he needs to begin at the beginning, which is to show how inequality is not a part of original man. He therefore treads along anthropological lines:

“How shall we know the source on inequality between men, if we do not begin by knowing mankind?” (Rousseau, 1923, p. 159)

Rousseau's thought thus involves a large amount of anthropology, for which the famous anthropologist and philosopher Claude Lévi-Strauss regards Rousseau as the founder of modern scientific anthropological discourse. Be that as it may, Stiegler shows how Rousseau's anthropology must be viewed a transcendental anthropology, and I believe that this type of thinking about human origins is proto-typical for many other perspectives, including what today perhaps is the commonsensical one. Once again, it is forgetfulness of technics that holds sway.

Rousseau attempts to tell the story of 'original men' between whom no inequality, no difference did exist. In order to do so, he necessarily has to construct a difference between 'original' and 'modern' man who has *fallen* from the original state, although he immediately admits that such an original man

⁴⁴ Please refer to (Stiegler, 1998, pp. 100 – 133) and (Roberts, 2006) for a detailed description.

“perhaps never did exist” (Ibid, p. 160). Here it instantly becomes apparent that Rousseau’s approach is transcendental, since he is not so much interested in contingent aspects of human origin, but in

“[distinguishing] what is fundamental in [man’s] nature from the changes and additions which his circumstances and the advances he has made have introduced to modify his primitive condition ...” (Ibid, p. 159)

Rousseau is perfectly clear on his transcendental approach, as he found that previous approaches based on “comparative anatomy” had made “too little progress” (Ibid, p. 164)⁴⁵. Stiegler recognizes in this approach a metaphysical opposition between (transcendental) necessity and contingency, not unlike the one that permeates Heidegger’s thought, which we have previously touched upon in terms of (transcendental) ontology and the (contingent) ontic. This simultaneously implies some kind of opposition – and this is more explicit in Rousseau than in Heidegger – between modern man and natural man.

The remarkable thing is that this opposition is – according to Stiegler – already problematized in Rousseau’s own text. On the one hand, he wants to think ‘original man’ as being in harmony with nature:

“I see him satisfying his hunger at the first oak, and slaking his thirst at the first brook: finding his bed at the foot of the tree which afforded him a repast; and with that, all his wants supplied.” (Ibid, p. 165)⁴⁶

“[Rousseau’s] originary man is originary only because he is not contaminated by the artificial, the mediate, the technical and the prosthetic ...” (Stiegler, 1998, p. 113)

On the other hand, it is striking that in Rousseau’s version of the ‘natural man’, several contingent factors are already there. Given his disappointment with the little progress of the comparative anatomy approach – from which he distances himself – Rousseau simply supposes that original man has “always walked on two legs, made use of hands as we do” (Ibid, p. 165). In relation to the subject matter of chapter II, we see how such an assumption is contradictory with regard to the point where all man’s wants are supplied. Leroi-Gourhan’s analysis showed how the anatomy of the human being is closely interwoven with its prostheticity. The skeleton and the tool co-evolved – invented one another. Both prosthetics and the skeleton are formed in a particular fashion because all man’s wants are not immediately supplied: Dasein has to earn its daily dasein, which is also reflected – as Leroi-Gourhan showed – in its skeletal configuration. As Ben Roberts thus correctly concludes:

⁴⁵ “Let us being by laying facts aside, as they not affect the question. The investigations we may enter into, in treating the subject, must not be considered as historical truths, but only as mere *conditional* and hypothetical reasoning’s, rather calculated to explain the nature of things, than to ascertain their actual origin; just like the hypotheses which our physicists daily form respecting the formation of the world” (Rousseau, 1923, p. 164, my emphasis).

⁴⁶ As a quick remark: It is not unlikely that Ihde’s Garden is inspired by a Rousseauian account, as the analogies are evident.

“... that original man is lacking nothing and therefore has no need of any artifice or prosthesis ... makes a nonsense of his anatomical specificity. (Roberts, 2006, p. 386)

Yet there is more to say on original man. For Rousseau, original man lived in harmony with nature (listened to “the voice of nature”⁴⁷), but is still portrayed as differing from animals. Rousseau regarded that latter basically as automata⁴⁸. Roberts quotes a passage from Robert Wokler that succinctly describes the peculiar position of original man in nature within Rousseau’s thought, part of which I shall reproduce here:

“Rousseau also supposed, however, that mankind had a unique capacity to change its nature. While every other species of animal has been provided by Nature with the instincts and capacities needed to sustain its life, human beings are by contrast free agents, capable of choice. [He] thought it was because humans in their natural state were able to *make* themselves distinct from other animals, rather than because they were endowed with any specific or distinct attributes from the beginning, that our forebears must always have had an advantage over every other type of creature.” (Wokler, as quoted in Roberts, 2006, p. 387)

As Roberts lucidly points out, it is this ability to “*make* themselves” as well as to “change nature” that turns Rousseau’s story defunct and simultaneously all the more interesting for Stiegler. What is implied here is a certain degree of freedom, a possibility: humans are not automata that simply respond to a certain input, but involve a possibility. What this means is that original man does not simply follow the ‘voice of nature’, but ‘makes’ something out of the voice: it freely relates to it. “The [animal] chooses and refuses by instinct, the [original man] from an act of free-will” (Rousseau, 1923, p. 169). This, for Rousseau, is of great advantage to the original man, since it enables him to “partake of fruit in the absence of meat, of meat where there was no fruit, of grain in the absence of both meat and fruit” (Stiegler, 1998, pp. 119-120), whereas “a pigeon would be starved to death by the side of a dish of the choicest meats, and a cat on a heap of fruit or grain” (Rousseau, 1923, p. 169). The remarkable thing then, is that the original man is both one with nature, but can also actualize a freely chosen possibility that transforms himself and nature. What follows then, is that as soon as the original man actualizes such a possibility, he deviates from his origin as ‘one with nature’. Accordingly, this possibility of deviation must already have been present within its origin in order to be actualized. This is particularly fascinating for Stiegler, who can consequently observe that “[man’s] nature, his being, his origin, is ... what will upset the state of pure nature” (Stiegler, 1998, p. 120). To make a long story short, it becomes clear that original man’s essence essentially contains the possibility to ‘denaturalize’ this essence. In the first appearance of this essence, original man disappears (as original ‘on-with-nature’-man). His essence de-faults: “*son essence se fait défaut*” (Ibid, p. 121). The

⁴⁷ The famous: ‘la voix de la nature’. (cf. Rousseau, 1923, p. 161).

⁴⁸ “I see nothing in any animal but an ingenious machine, to which nature hath given senses to wind itself up, and to guard itself, to a certain degree, against anything that might tend to disorder or destroy it”. (Rousseau, 1923, p. 169)

story of the human as a 'panne d'essence', a lack of fuel, is already implicitly present in Rousseau's account of the human origin. Stiegler explicitly brings it into relation with Epimetheus' forgetfulness and the rupture of epiphylogenesis.

What follows from Stiegler's reading of Rousseau is that "he will have been right, *almost ...*" (Ibid, p. 133). Rousseau is almost right, because he almost pointed to the core issue: that natural man is essentially lacking essence (*défaut essence*). In his attempt to think the origin of the human being as a 'pure' origin that in no way involves technics, technics was there all along: in the skeleton of original man, as well as in its *défaut essence*. Technics leading to a lack of origin enabled 'original man' to deviate from the 'voice of nature'. Indeed, technics was forgotten once again, even though it appears that it was most proximal; a phenomenon that Stiegler recognizes in the whole of Western thought, and which he nicely points out elsewhere by alluding to Aristotle:

"There is always already a milieu, but this fact escapes us in the same way that "aquatic animals", Aristotle says, "do not notice that one wet body touches another wet body" (423ab): water is what the fish *always* sees; water is what the fish *never* sees. (Stiegler, 2008c, p. 14, emphasis in original)

In light of the above, we can read 'technics' as this 'milieu'⁴⁹. Even more so, Rousseau can only construct the original state of man as a fiction, and Ihde can similarly compose the idea(l) of the Garden only as a fiction. "But what is a fiction, if not an artifice? An artifice will be needed to distinguish the artificial from the natural" (Stiegler, 1998, p. 108). Technics is even at play in the very construction of a non-technical 'natural' state, and this remarkable tension is precisely what is brought out in Rousseau's discourse.

No fall

All this has serious consequences for any perspectives that contain non-technological 'pure nature' as an element. I believe that both the above depiction of Rousseau's defunct 'original (voice-of-nature) man', as well as the Post-Phenomenological insights regarding *mediation*, make such arguments thoroughly problematic. To stick with the theme of memory and forgetfulness, I think both theories point to different areas in which technics is forgotten. Firstly, Stiegler's philosophy of 'originary technicity' shows that perspectives wherein technics is placed as constituting a fall from (i.e.: a perversion of) some previous more original state, forgets technics. Fall-stories necessarily incorporate what Stiegler calls a 'second origin'. In the case of Rousseau, the first origin is 'natural man', that somehow falls into the type of human that we are today: a second origin. Such a second origin begs questions on how such a second origin occurred and how it relates to the first. In Stiegler, and most eminently in his reading of Leroi-Gourhan, such a second origin is opposed to. As surfaced in the case of Heidegger as well as of Rousseau, the second origin sets up an opposition

⁴⁹ Stiegler elaborately uses Simondon's terminology about 'milieus' throughout his work. For the sake over brevity and overview, I leave Stiegler's use of Simondon to others, or at least to some other time.

between 'what' (the ontic in Heidegger – the contingent historical in Rousseau) and 'who' (ontological Dasein in Heidegger – the free-willed man in Rousseau). We have seen how such an opposition becomes untenable, made most explicit in Stiegler's reading of Leroi-Gourhan's work⁵⁰, where the 'what' has a fundamental part to play in the constitution of the 'who'. For Stiegler, any given fall-story is precisely what it is: a story, which is an artifice, a technique. Accordingly, "there was no fall, but a fault ..." (Stiegler, 1998, p. 190). This fault is Epimetheus' fault, which also means a de-fault of the human.

Additionally, due to Post-Phenomenological analysis of technologies, viewing technology as a fall and a perversion can hardly be maintained all the way through. Such a critique runs into the charge of transcendentalism, which in a way also involves forgetfulness of technologies, as it skips over the role that artefacts play in human experience. The Post-Phenomenological theme of *mediation* shows that even if one is to accept something as naked-experience for the sake of argument, technologically *mediated* experience may be just as good or even superior. To use a simple example: looking at parts of the human body through a microscope brings to the eye a 'world' with a richness that cannot be met by something as naked perception. All stories of technology as a perversion, as a fall from nature must thus somehow take account of the *mediative* qualities of technologies, that may constitute a leap into 'nature', rather than a fall from 'nature'.

Given these deliberations, I doubt if it is fruitful to maintain any oppositions between 'natural' and 'technical', or to posit a pre-fall 'natural' state that is non-technological, and therefore more 'pure'. I claim that such oppositions are complicated but untenable constructions of thought, which tell a story of origins by forgetting about what is most proximal in such a story: technics. Prometheus' prosthesis must not be read as an addition to an already existing human being, they must rather be regarded as an *original supplement*. A supplement that does not stem from a 'nakedly perceiving' human being, but invents this human being, as the human invents the supplement: a mirror-process. This is the rupture we have seen in chapter II, whereby a tandem evolutionary engine is fired up. Stiegler sometimes refers this co-inventive rupture as the "Epimethean complex" (1998, p. 155). Once again, we see the human being not in opposition to technics, but as the ongoing outcome of an anthropo-technical composition.

Revisiting and revising Post-Phenomenological lacunas: some conclusions

If there has been no fall, we can answer the question concerning the possibility of im-mediate human-world relations *negatively*. Strictly speaking, there is no such thing as im-mediate 'naked' perception, since this nakedness has *from the start* been clothed in technics. Stiegler shows how the very possibility of relating to something that we call 'world' cannot be thought without taking technics into account. Additionally, if Leroi-Gourhan is right about the human body as a product as well as a producer of the 'what', then technics has always been

⁵⁰ But also in Stiegler's reinterpretation of Heidegger's existential-analytic, such as described in the previous chapter.

literally in-corporated by humans. 'Naked perception', when understood as completely isolated from the technical, is an illusion.

We thus see Stiegler's philosophy cementing Post-Phenomenology, without – I think – taking anything away from the Post-Phenomenological method: one can still emphasize and explicate the mediative role that technological artefacts play in human-world relations. What one cannot do after this synthesis, however, is pose that human-tech-world relations are human-world relations of a perverted kind. Indeed, all human-world relations are necessarily human-tech-world relations. The 'tech' in 'human-tech-world' not only mediates, but forms the condition of possibility for the relation itself. It may be clear that Stiegler's is a transcendental way of reasoning. However – and hereby we answer one of the research sub-questions – Stiegler is not a transcendentalist. This is actually one of the reasons why I think the synthesis of Stiegler and Post-Phenomenology is possible and fruitful. Stiegler is clearly looking at conditions of possibility for what can be called 'human', 'world', and 'technics'. It is true that he is 'looking back' at such conditions of possibility, but at no point is he reducing technics to these conditions. One could hardly speak of any reduction in Stiegler's account, since technics is placed at the start and centre of human existence. He tells the story of how something like mediation could have occurred, and how it can operate in the manner of fashion that Post-Phenomenology analyses. When mediation is regarded from the perspective of the Stieglerian and Post-Phenomenological synthesis, I think it is correct to refer to it as 'originary technical mediation'. Verbeek (forthcoming, p. 134) hence turns out to be absolutely right in claiming that: "[Human] action is always mediated".

Now that the *first* question that was posed at the beginning of this chapter has been answered, we can turn to the *second* and *third*. When one thus synthesizes Stiegler's thoughts on 'originary technicity' and Post-Phenomenological theory, several of the remaining ambiguities concerning the latter can be addressed. We have questioned into the nature and origin of the relata within Post-Phenomenology's human-tech-world relations. The concept of 'originary technical mediation' such as developed in the previous paragraphs shows that an all too sharp separation of these relata is problematic. It may be clear that this insight is heavily indebted to Heidegger's analysis of being-in-the-world, where the 'world' or Dasein as the being that is in-the-world can only be separated by means of a complex theoretical structure that forgets the primordial being of Dasein. Further, Stiegler's interpretation of being-in-the-world show that the human way of being-in-the-world cannot be thought without thinking technics. In fact, Stiegler's emphasis on the epiphylogenetic rupture that has started the co-evolution of humans and technics, enables us to think the ec-static position that Dasein has to itself and its world. To reiterate some of the subject matter of chapter II: Prometheus' prosthesis in the sense of both ontical/ontological *devant* as well as temporal *avance* are brought in relation with Dasein's world-openness (the Truth as Alatheia in Dasein) and Dasein's Temporality. Only through technics as epiphylogenesis does the world appear as something to relate to, in whatever mediated way this will happen. The 'world' part in any human-tech-world relation has everything to do with technics. Simultaneously, it is technics that lies at the core of human (temporal) ec-stasis and ec-sistence.

The 'human' part in any human-tech-world relations thus also has everything to do with technics.

What follows is that Post-Phenomenology need not leave open questions concerning the nature and origin of 'world', 'tech', or 'human'. When Stiegler's philosophy is added to the equation, these questions can be addressed by pointing out that technics cannot be forgotten. Technics does not constitute a fall from a Garden into the Earth, it rather constitutes a condition of possibility for any kind of being-in-the-world. The relata within human-tech-world relations, must thus be viewed in terms of what I have called 'originary technical mediation'. The way in which the relata then appear within the relation must never be regarded in terms of oppositions. Technics as epiphylogenesis lies at the core of human existence, which is also the human ec-static (i.e. non-oppositional) position with regard to 'world' and itself. Dasein is always in-the-world but is not itself the world: Dasein relates to the world due to what Heidegger called Dasein's 'Clearing'-activity. Post-Phenomenology can depart from this perspective – which given the here attempted synthesis roots in 'originary technical mediation' – and further analyse the way in which this relation is technologically mediated. The same holds for the existential relation Dasein has to itself. 'Originary technical mediation' cannot be forgotten when the origin of this self-relation is investigated. Post-Phenomenology can additionally describe how this human-human relation is further mediated through the technologies that are involved in particular instances of the relation.

Of Cyborg Origins

Having established the concept of 'originary technical mediation', out of which follows that there is strictly speaking no such thing as 'naked experience', it must be pointed out that this does not result in the absurd claim that, say, looking through glasses is exactly the same as looking with the 'naked'-eye. There obviously may be differences in how one's experience is mediated. The point was simply that we must not use the concept of 'nakedness' any further than it allows for. It may be used as an explanation-aid (this is how I regard Ihde using it), but 'nakedness' should not be regarded as some original human-world relation that is perverted by technics. We have seen how such an account is thoroughly problematic: technics does not belong to a 'second origin', but has from the start been incorporated.

This incorporation has interesting consequences for Verbeek's cyborg-relation. I have already introduced the concept of the cyborg-relation at the ending of chapter I, thereby putting to question whether Verbeek is correct in arguing that the cyborg-relation "results in a *new* entity" (Forthcoming, p. 175, emphasis in original). I dare to call into question the novelty of this entity.

Much of what I have to say on the subject has been implicitly covered in the previous and current chapter, so let me cut straight to the core of the argument: for Verbeek, it is the *merger* of human body and technology that results in a new

entity⁵¹. Given Stiegler's 'originary technicity' and most particularly his reading of Leroi-Gourhan's work, I doubt whether such a merger constitutes a new entity. Can we not say that technics has always been in-corporated by humans? With Leroi-Gourhan, the human skeleton literally in-corporated (in-bodied) the use of artefacts, ultimately leading to the body we are familiar with today. When one is to view the cyborg as the merger of (wo)man and technics, and Leroi-Gourhan's analysis is correct, then humans are necessarily of cyborgian nature. Read in such a way, Verbeek's cyborg-relation is not so much a supplement to Ihde's *hermeneutic, embodiment, background, and, alterity* relations, but it rather points to the condition of possibility for all these kinds of relations. In other words – and this is the consequence of synthesizing Stiegler with P-P – all of Ihde's human-tech-world relations are possible because of Epimetheus' fault. This fault leads to the rupture that initiates epiphylogenesis, which means a mirror process of technical ex-corporation and in-corporation. This is a *merger* of technics and the human, or more accurately put: an original and originating merger of (wo)man and technics. Verbeek cyborg-relation relation then, does not "result in a new entity" as much as it makes possible the human entity in the first place. Let me be quick to add that this does not mean that Verbeek's analysis can be jettisoned altogether. Such a conclusion would be far too hasty, and would conjointly be an act of throwing away lots of babies with the bathwater. I think that the cyborg-relation can be theoretically useful, but I simply do not think that – anthropo-techno-genetically speaking – Verbeek is on to a new entity.

That having been said, I do sympathize with Verbeek's attempt to bring to light specifics concerning the explicit merger of human and technology. I think that, from a 'use' perspective, Verbeek's emphasis on the cyborg-relation as an individual human-tech-world relation is defensible. When not making any claims regarding the novelty of the entity within the cyborg-relation, I can see that the cyborg-relation may help to describe new types of use, which are also new (practical) ways of being-in-the-world⁵².

Conclusion: A Post-Phenomenological and Stieglerian Synthesis

To conclude this chapter, I deem it fruitful to provide an overview of the merits of the here constructed synthesis between Post-Phenomenological theory and Stiegler's philosophy of 'originary technicity'. Going back to the subject matter of chapter I, Post-Phenomenology's main traits are: 'anti-essentialism', 'praxis-emphasis' and the framework of 'human-technology' relations. The theme of *mediation* is at play in all of these traits. I have shown how this theme is not only compatible with Stiegler's 'originary technicity' but can actually be extended into 'originary technical mediation', thereby establishing a transcendental backing to the concept of *mediation*. Consequently, all of the various human-tech-world relations that Ihde describes in fact rely on the primordial human-tech-world relation that Verbeek incidentally describes when talking about the cyborg-

⁵¹ "technologies actually *merge* with the human body, rather than being embodied." (Verbeek, forthcoming, p. 175, emphasis in original)

⁵² Although I am unsure how Verbeek's cyborg-relation differs from Ihde's background and embodiment relation in such a description. Ihde himself mentions (and unfortunately does not elaborate on) the birth-control pill - which arguably is a cyborg technology in the sense of merging with the body - as "a kind of internal background relation" (Ihde, 1990, p. 113).

relation. This all does not challenge other types of human-tech-world relations. On the contrary, Ihde's relation-framework remains intact, but human-tech-world relations can no longer be viewed as simply one type of human-world relation, as technics has a fundamental and founding role in any way of being-in-the-world. Further, the 'anti-essentialism' in P-P has been brought into relation with Stiegler's thought on 'défaut essence'. This proved to be compatible, and I think Post-Phenomenology's anti-essentialism has been solidified in the synthesis, through explicating the originary story of how this anti-essential human-world relation has come about. Already implicit in this is that the 'praxis-emphasis' is equally compatible, and has also acquired a more fundamental or primordial tone.

What we are left with then is a synthesis of two theories that no longer allows for any oppositions between what is properly 'human', 'technical' or 'worldly'. But what does such a composition mean for one of the main ingredients of being-in-the-world: morality? If all human-world relations are somehow technical, then morality must also be a technical affair. This leaves open plenty of questions; questions that may take on huge proportions. I shall dig into these matters in the following and final chapter.

"I favor any skepticism to which I may reply: "Let us try it!" But I no longer wish to hear anything of all those things and questions that do not permit any experiment."
- Nietzsche

Chapter IV – Morality and Mediation

Introduction

From the synthesis of Post-Phenomenology and Stiegler's philosophy of technics, it has become clear that terms like 'human', 'world', 'nature' and also 'technics' must not be thought in schemes of opposition but of composition. To recap: Stiegler shows that human being – in its relation to the world and itself – must be viewed as a thoroughly technical affair. Post-Phenomenology can then solidify this perspective by showing how technological artefacts have an active role in giving shape to these relations. An important consequence with regard to the current chapter is that the term 'morality' must be added to the equation. Put in Post-Phenomenological terminology: morality is also a mediated affair, whereby mediation must be understood in the light of the synthesis described in the previous chapter as 'originary technical mediation': both a condition of possibility for moral world relations, and at the same time the process that actively shapes this morality. The problematic faced here is that of mediated morality.

I will begin this chapter by elaborating on this concept of mediated morality by revisiting some of the insights that derive from the synthesis between Post-Phenomenology and Stiegler's philosophy. The emphasis here will be on the moral aspect of human-world relations, and I will attempt to make a case against any form of im-mediate morality, which I believe is illusory.

Yet, if it proves to be true that morality is a techno-mediated affair, the very way of thinking about morality runs into a problem. This problem, I fear, takes on extremely vast proportions and, unfortunately, cannot be circumvented. I have no illusions whether I will be able to solve it altogether in both the limitations imposed upon me with regard to space, ability, as well as the nature of the problem itself. This is not the kind of problem that can be solved in the way one could solve a mathematical problem. Anyhow, what is necessary in the first place is to put the difficulty in perspective. Hence, I will attempt to put to paper what I view to be the fundamental difficulties with regard to the concept of mediated morality, always keeping in mind that a flight towards the un-mediated is not an option. This will lead us to what I have dubbed the problem of perspective.

Additionally, I will put forth two points of departure for facing the problem of perspective: one pragmatic, one transcendental. It is perhaps fair to warn the reader that this latter shall involve a circular argument, which I believe is nonetheless defensible. I shall conclude with this starting point, indicating what this all could mean for further thought about mediated morality and technological artefact design.

Originary moral mediation

In the previous chapter, we have seen how the Post-Phenomenological theme of *mediation* was transferred into the realm of the transcendental. Stiegler's 'originary technicity' shows how the im-mediate 'natural' or 'pure' is an illusion which only can be made at the cost of forgetfulness of technics. What follows from this is that any human-world relation is a mediated human-tech-world relation, where the three relata cannot be sharply pulled apart. Given such Post-Phenomenological analysis, it has become clear that the way in which the 'world' appears to us, is co-dependent on what technologies are used in rendering the world visible. The same applies to how we ourselves – the 'human' – appear to ourselves. Human existence is ec-static, which means that the human is outside itself and has a relation to itself. We have seen how given the Stieglerian and Post-Phenomenological synthesis, this human-human relation is also mediated in one way or another. I deem it correct to claim that all these relations are also moral relations. One of the ways in which this is (perhaps most beautifully) exemplified, is in Heidegger's thought, where the relation that Dasein has to itself and to its world can be Authentic. This is to say that it somehow involves a possibility. This possibility is the necessary condition for any moral reflection. Put in basic terms, morality is about the question what one should do. The possibility to actually 'do' something, that is, to actualize a possibility, is necessary based upon a possibility. Put rather simply: without a possibility, there would be no possibility to be actualized. Put in Kantian terms: "ought implies can"⁵³. Furthermore, the fact that humans face possibilities when it comes to their own existence, intrinsically means that the relations involved in existence are moral relations in one way or another. By reading Stiegler's work, we have seen that mentioned possibility⁵⁴ cannot be thought without taking technics as epiphylogenesis into account. What follows is that morality, understood as an intrinsic part of human-world relations, is a thoroughly mediated affair: made possible and tailored through technics.

Let me elaborate on this somewhat further, starting with an example. As mentioned before, one of the strong points of Post-Phenomenology is its emphasis on 'things themselves'. This once again proves to be of use with regard to the subject matter here. The following example is borrowed from Verbeek (forthcoming) and concerns the technological practice of obstetric ultrasound. Verbeek shows how the moral deliberation has undergone a tremendous change with the arrival of ultrasound technology. Our moral deliberations concerning the life of the unborn, acquires a distinct colouring because of the mediative qualities of the technology involved. He points out that the appearance of the embryo is mediated in an important way:

“... these technological mediations generate a new ontological status of the foetus. Ultrasound imaging constitutes the foetus as an *individual*

⁵³ Kant argued with respect to the moral law that “we ought to conform to it; consequently we must be able to do so”. (Kant, 1960, p. 55)

⁵⁴ As described in the second chapter: in Heidegger's thought, this possibility acquires its weight due to Dasein being knowledgeable of its ultimate possibility: death. Morality and mortality are thus closely related.

person; it is made present as a separate living being, rather than forming a unity with its mother, in whose body it is growing. [Ultrasound] does not only constitute the foetus as a person, but also as a *patient*.” (Verbeek, forthcoming, p. 35, emphasis in original)

Verbeek thus illustrates how ultrasound technology “helped to shape ... the frameworks or interpretations that guided ... actions and decisions” (Ibid, p. 6). This patient, accordingly, demands some kind of care. If the ultrasound scan provides the information that the unborn will have down-syndrome, parents will have to take some kind of action based upon that information. The point is that this demand for moral action is made possible because of ultrasound technology, and would not arise as an issue if such technology were not available. In short, ultrasound technology *mediates* the way in which the unborn appears as an entity, including specific moral questions that come along.

There are at least two important points to be made with respect to Verbeek’s example. The *first* is on what I would call the *impossibility of isolation*. It may be clear that the demand for moral action such as surfaced in this case cannot simply be circumvented. One cannot ignore the fact that the possibility for scanning for down-syndrome is there. This is obviously not to say that one cannot decide not to have the scan. Yet, this would actually be a non-isolated moral decision, based upon the specific situation. The situation in which moral action is demanded is, I claim, exactly what we have previously referred to as ‘world’. This ‘world’ has been shown to appear because of technics. The way in which the ‘world’ appears, which is also the way in which moral questions concerning the ‘world’ appear (since Dasein is in-the-world), is technologically mediated in one way or another. If the ‘world’ appears in mediation, and we are in-the-world, it is quite impossible to fully isolate oneself from the (mediated) moral questions that are part of the ‘world’. This impossibility of isolation is, I think, well illustrated in Verbeek’s example of the ultrasound case. Parents can decide not to have a scan, but this *is* a moral decision with regard to the ‘world’ in which the decision has to be made. Not making any decision is simply deciding for the standard procedure (passively taking the ‘world’ as it is), which is also a moral decision – or, more accurately: a moral non-decision. As Sartre famously put it: “no choice is also a choice”. In fact, the point concerning what I have called the ‘impossibility of isolation’ is a variant on the title of Sartre’s play ‘no exit’ (cf. Sartre, 1989). I shall return to the impossibility of escaping the moral world shortly; I think attempts to do so are grounded in illusions concerning an un-mediated ‘pure’ world, which proves to be a problematic ground for several reasons.

Secondly, and this is a more radical point, I believe Verbeek’s case illustrates that it are not only the moral-situations that alter along with technological change, but so do value-frameworks themselves. In other words, value-systems are not isolated from the world. The argument is again similar to how (Post)-Phenomenology treats this notion of ‘world’: The world is not regarded some ‘pure’ essence into which one has (mediated) access; rather, the way in which the world appears *as world* is already a mediated affair. In light of the synthesis of P-P and Stiegler’s philosophy, this point can be radically constructed: with

reference to Heidegger, it can be claimed that mediation is not solely at play in *what* the world looks like; the very fact *that* the world appears is an affair of technical mediation. The same holds true for morality: The fact *that* we have a moral relation to the world stems from what I have called 'originary technical mediation'.

We have learned from the previous chapter that stories of im-mediate 'pure' worlds (e.g. Ihde's Garden or Rousseau's 'natural state') become untenable in the face of Stiegler's philosophy, since these stories hinge on forgetfulness of technics. I claim that the same holds true for questions of morality: viewing moral values as somehow 'pure absolute values' existing isolated from the world, becomes problematic in the face of a phenomenological analysis of being-in-the-world, most eminently when read from the perspective of the P-P/Stiegler-synthesis. This synthesis yields the impossibility of the im-mediate, which also means the impossibility of im-mediate access to un-worldly moral values or norms – analogous to what I have called the impossibility of isolation. All stories that involve such a field of 'pure moral values' must account for questions concerning the origin of such purity. Such stories will necessarily involve a 'second origin' where humans have somehow fallen away from the field of absolute values. We have seen in the previous chapter how Stiegler's thoughts on anthropo-techno-genesis make the idea of a sudden 'second origin' problematic. In the genesis of humankind, essential moral values are not immediately 'accessed', but come into being as a shared heritage, which is always itself in-the-world and cannot be thought without technics. Furthermore, it is only because of its technical nature that morality is an ec-static affair. In other words, the fact that humans relate to their own morality – which I regard a necessary condition for morality altogether – cannot be thought without taking into account the epiphylogenetic rupture which I have described in chapter II.

Morality must therefore be viewed as a heritage (as already-there) and Dasein must re-member this heritage. As we have seen, this re-remembering involves a possibility for authenticity. In my view, it involves the possibility for morality in parallel – where this latter term read in the broad sense of the ability to relate to moral situations. Moral values then, are not absolute in the sense of being out-of-this-world, but are sedimented in the artefactual already-there, which is always in-the-world. This is not the place to provide a genealogy of morals – which is to say a historical account of how human moral heritage has developed over time⁵⁵. The point simply is that human morality is not to be viewed as some access point into un-worldly absolute values. Such a view cannot account for its inherent difficulties concerning a 'second origin'. Morality has developed over time, has a history, forms a certain 'heritage' as already-there – all of which cannot be thought without taking along the technical (epiphylogenetic) fundament of such 'heritage'. This also means that morality is not a static, but is part of the anthropo-techno-genesis, which is an ongoing happening of ec-stasis.

⁵⁵ Although I think such a genealogy with emphasis on technical (epiphylogenetic) sedimentation would be tremendously interesting, it would exceed the scope of this thesis by miles.

Revisiting some of the subject matter of the first chapter, one can see that when mediation is brought into relation with morality in such a way, the Post-Phenomenological theme of anti-essentialism is fully operational. Following along these lines, one would not so much be investigating the 'essence' of moral values, but pointing out that such questions into essences "have outlived their usefulness" (Ihde, 2009, p. 11). Even if – for the sake of argument – one is to accept that there are absolute 'pure' values 'out-of-this-world', it is still the question how these values appear in-the-world. If mediation is read as 'originary technical mediation', it follows that moral values necessarily appear in a mediated fashion, thereby further rendering questions into the absolute essence of certain values largely useless. So if one can not, strictly speaking, disprove eternal absolute values, it can be shown that it is of little use to refer to such immediate (un-worldly) values as 'pure' or 'eternal', since what matters is how such values are played out in actual human existence, which is always a mediated happening in-the-world. Verbeek's example of the ultrasound scan shows this: the technology has an active role in bringing moral values and accompanying questions into being. In this specific example, values of 'life', a 'good life', a 'living person' or to what degree one is 'responsible for life' undergo a tremendous change, now that one attains the possibility to prenatally determine whether this (un-born) life will be severely handicapped. It is not my intention here to put forth how one should act with regard to these matters. My intention is to show that the way in which the values are presented in-the-world is an affair of technical mediation, and that problems such as these gain little from reliance on absolute values derived from 'nature' or some other source of purity.

To illuminate the case with another short example: Digital technologies that allow users to make exact copies of goods put values concerning property and stealing in a different light. Before the arrival of reproduction-technologies⁵⁶ stealing something meant taking some product from someone else, resulting in that other person not having the product any longer. With the advent of reproductive-technologies (and most clearly with the digital variant), I can now 'steal' some digital good (e.g. a digital book, an audio CD, a movie etc.) without actually removing that particular good from its original owner. It is questionable whether one should refer to this copying-practice as stealing. Again, I do not currently intend to provide any judgements on whether this should be the case or not. The point to be taken is that it indeed becomes questionable what 'stealing' and 'property' amounts to. Once more, it seems not very fruitful to solely rely on an absolute value-system that was geared towards property before the age of mechanical reproduction⁵⁷, since these values appear (and must thus be interpreted) in a differently mediated way now.

In sum then, I believe dependence on an absolute isolated un-mediated or immediate value-system cannot properly account for the fact *that*, as well as in *what* manner of fashion these absolute values are presented in-the-world. Post-

⁵⁶ These are obviously not necessarily digital, but I shall stick to digital examples because I think these illuminate the case most clearly.

⁵⁷ The hint may be obvious: Walter Benjamin has famously written about value and mechanical reproduction, with an emphasis on the value of the work of art.(cf. Benjamin, 2010).

Phenomenological analysis shows that the *what-being* of moral values is dependent on the way in which their presentation is mediated. Additionally, and more fundamentally, the previously attempted synthesis resulting in what I have called 'originary technical mediation' shows that the *that-being* of moral questioning itself is an affair of technical mediation. In other words, the very fact *that* we can pose moral questions – *that* we are moral beings – roots in originary technicity, which must always be thought in terms of *défaut* essence. Due to Epimetheus' forgetfulness, human beings lack essence. We do not have access to 'pure moral essence', but face a lack of essence that we have to make up for. In my view, this 'making up for' must refer to our moral deliberation itself – our ecstatic relation with our own morality – the activity of being in the sense of the Heideggerian 'clearing' – driven forth with technics fuelling the engine.

Morality designed

One of the interesting consequences of regarding morality from the perspective of originary technical mediation, is that morality cannot be separated from technical artefacts. I have already described how oppositions between 'nature' and 'artificial' cannot be maintained and that the two must instead be regarded as compositions. Morality is to be viewed as part of this composition. What follows from this is that artefacts themselves have moral aspects – an insight of great interest for Post-Phenomenologists. I will now take a quick look into the realm of morality and artefacts in order to arrive at the idea of techno-moral design, which will in turn serve to highlight a difficulty with regard to the concept of mediated morality.

I shall now tread in the footsteps of a great many philosophers of technology and refer to Winner's bridges. Langdon Winner famously published an article under the title 'Do Artifacts have Politics?' (1986) in which he told the story of low-hanging overpasses in New York. In this story, the designer of these overpasses – Robert Moses – is said to have been somewhat of a racist, a political perspective that he literally incorporated into the design of the bridges. These bridges were designed in such a low-hanging fashion, that only cars could pass underneath them, resulting in the fact that only wealthy white people with cars could reach certain beaches behind the overpasses. Busses could not pass underneath, so poor African-Americans who could not afford a car and had to take a bus could not reach those particular beaches. The bridges, in effect, rendered the beaches white. Now, Winner's portrayal of these affairs has been criticized on being historically and factually false (cf. Joerges, 1999). Yet, it (somehow) remains to be one of the most famous examples of a 'politics of artefacts'. The bottom line is that Moses' political views were incorporated into architecture, and that the architecture itself must thus be seen as a political and moral entity.

It is worth noticing that Moses' bridges as such form one of the most clear-cut examples of what Stiegler calls epiphylogenetic memory, and is of delineative use with regard to our purposes here. Assuming that Moses' literally in-vented the architecture with racist values, one perceives what is at play in Stiegler's and Heidegger's use of the already-there as 'heritage': The bridges – invented with

moral values – will remain standing (or more precisely: remain hanging-low) after the author has expired⁵⁸. Generations of people born after Moses' own lifetime can never experience Moses' politico-moral views first hand, but do run into these values because Moses' exteriorized them into architecture. In other words: the architecture is part of the 'heritage' that generations of people are faced with. The example also distinctively illustrates that such exteriorized values do not simply determine Dasein who faces this 'heritage'. Dasein must remember the values from its own (present) being-in-the-world, which is a different perspective than the one Robert Moses had when exteriorizing the values. I have already pointed out how Stiegler uses the Derridaian term 'chiffre' – a cryptic message – to refer to a heritage that always stands open to interpretation. This may mean that a present-day Dasein would take down the bridges, since other parts of its moral 'heritage' would render racist values completely revolting. Another possibility is that Moses' aim has been utterly undermined, since all people can nowadays afford cars that can pass underneath the bridges because – for example – the technology of car-production has evolved. This latter possibility showcases the way in which (moral) mediation can happen on a large scale: technological advancements in car-production may mediate the way in which racist-values in bridges are perceived. This is of course all fictional, but I think it nicely illustrates issues of artefactual morality, mediation roles, as well as the already-there-structure in which morality appears to Dasein.

It may be clear that viewing artefacts as somehow incorporating morality is of great interest to Post-Phenomenologists, given their emphasis on anti-essentialism (also concerning morality as have seen) and a focus on 'artefacts themselves'. Indeed, the larger part of Verbeek's forthcoming 'Moralizing technology' book is written along lines of the theme of artefactual morality. I believe at least a large chunk of the project of establishing a morality of artefacts is geared towards undermining any radical oppositions between 'human (moral) subjects' and 'technical (non-moral) objects'. My synthesis of Stiegler's philosophy and Post-Phenomenology also fundamentally undermines such an opposition, and I shall not repeat these matters here. Of greater interest for present purposes is the focus that Post-Phenomenology places on particular technological artefacts, and consequently on the morality concerning artefact design. Verbeek succinctly iterates:

“If ethics is about the question of how to act, and designers help to shape how technologies mediate action, designing should be considered a material form of doing ethics.” (Forthcoming, p. 111)

The way in which technologies can mediate the morality has already been stipulated. What is interesting then, is that the technical design of artefacts also has an important moral aspect to it. Moses' bridges are but one example, and Verbeek supplies a nice collection of other examples⁵⁹. It follows that designers

⁵⁸ Robert Moses died on 29-07-1981

⁵⁹ Cf. (Verbeek, forthcoming). One of the examples Verbeek mentions is that of speed bumps. These technical entities heavily influence the way in which people drive, and can thus not be ignored when one is considering affiliated moral questions on driving.

of technologies are thus not solely designing functional artefacts, but are also inventing these artefacts with moral values, congruous with Moses inventing the low-hanging bridges. It is for this reason that Verbeek can claim that “designers are in fact practical ethicists” (Ibid, p. 109).

Before turning to a fundamental (and inevitable) difficulty with this way of ‘designing morality’, I want to revisit Heidegger’s thought on Authenticity, since he wonderfully brings this into connection with ‘design’. In the example of Moses’ bridges, it has been pointed out that these bridges constitute part of a moral ‘heritage’, but can never totally determine the way in which Dasein remembers this heritage. Given Dasein’s primordial world-openness (Dasein’s ability to think Being), Dasein can always enter into an Authentic relation with itself, including its own re-remembering activity. Yet, this can never mean that Dasein can completely isolate itself from the world or this heritage: We have seen how Heidegger uses ‘Eigentlich’, which is ‘self-like’ for Authenticity⁶⁰. Now, being self-like means being closest to what Dasein primordially is, which is not isolated-from-the-world, but in-the-world. It thus proves to be quite impossible for Dasein to isolate itself from the world. This has also been implicitly present in the example concerning ultrasound technology, where parents face ‘no exit’. It is because of these reasons that Heidegger can say that Dasein is “thrown into the world” (Heidegger, 2008a, p. 174) where the ‘world’ presents Dasein with a certain inescapable past that is not its own lived past: the heritage recorded in or as epiphylogenetic memory. As mentioned, Stiegler views such heritage as a “gift as well as a debt” (Stiegler, 1998, p. 140). A gift in the sense of providing the ability for authentic existence; a debt in the sense of being inescapable – leaving ‘no exit’.

Dasein is thus thrown into the world, but its primordial world-openness allows Dasein to authentically relate to this being-thrown. Heidegger speaks here of the ability to ‘un-throw’ one’s being-thrown (cf. Verbeek, forthcoming, pp. 38-53). The play on words does not work all too well in English, but in German throwing is ‘Werfen’ and un-throwing is accordingly ‘Ent-werfen’. Now, ‘ent-werfen’ is ‘designing’ in English, and what follows is that authentic Dasein striving to un-throw its being-thrown is in effect designing its own existence. Hence Dasein can be a designer of its own existence, although this does not necessarily concern technical or artefactual design. Yet it may be clear that actual technology-designers are indeed constructing (part of) a ‘world’ that appears as ‘already-there’ to others. These artefact-designers do not completely prescribe the way in which others will design (un-throw) their existence, but the artefact-designers do have a role in establishing the way in which this ‘already-there’ is established. Winner’s example of Moses’ bridges illustrates that this establishment is a politico-moral affair, which brings along a fundamental difficulty.

⁶⁰ In fact, Authenticity stems from the Greek Authentikos: ‘authos’ as ‘self’, and ‘hentes’ as ‘being’. Taken in such literal fashion, it corresponds well to Eigentlich as self-like. However, since the term is so often used in a more-or-less romantic way (e.g. ‘authentic buildings’ ‘an authentic forest’ and so forth), I explicitly refer to the German ‘Eigentlich’.

Driving on ‘what’? On the lack of moral ground

From all of the above, it may have become clear that human morality cannot be viewed as something that exists as separate from technicity. Both the fact ‘that’ human pose moral questions, as well as ‘what’ the questions look like is an affair of technical mediation, always and necessarily happening in-the-world. However, if it is true that morality is not to be viewed as a pure ‘un-worldly’ affair, but is somehow part of anthropo-techno-genesis driven forth by technics; and if Verbeek is right in stating that “designers are in fact practical ethicists” (forthcoming, p. 109) it follows that designers of technologies fulfil an important role as navigators, giving direction to the tandem evolutionary engine that is fuelled by technics. Designers should here not necessarily be viewed as people in greasy coats operating hammers and wrenches: plenty of contemporary design projects are colossal, and involve a multitude of actors, including political actors and thus voting-actors. An example of this would be the development of the Joint-Strike-Fighter aeroplane, which entangles actors from varying companies, countries, and disposition. If political parties take on a certain perspective on how the design process should be given shape, and if I as a layman vote in favour or against this party’s outlook, then I am – to a certain extent – co-designing the technology. I readily leave further elaboration on how such social and material interactions are to be investigated to others – probably from the field of STS. The point I want to make is less intricate, but at least equally important: If designers – in whatever way they actually contribute to the actual artefact-design – somehow have a role in shaping the direction of what I have referred to as a co-evolutionary engine of humans and technics, what direction should be taken, and on what ground should one make decisions about the choice of direction? In other words, if morality is a mediated affair in terms of ‘originary technical mediation’, and technology design gives shape to how mediation actually operates, how must we then evaluate what mediations are desirable and which are not?

The problem of perspective

This is by no means a simple question. The main problem is that if one holds that there has been no fall from an absolute moral state – if there has been no second origin – one is necessarily appointed to the ‘world’ of the first origin in a quest for moral values. We have seen that these values are necessarily mediated, and that the appearance of these values in-the-world is dependent on the type of mediative technologies that are involved. Technology design is (like any of Dasein’s activities) ‘in order to’, that is, it is directed at the future. Technology design is also – as has been shown – what gives shape to this future. The fundamental question then, is how to evaluate what types of navigations into the future are desirable and which are not. The core problem with this question is that presently accepted value-systems may be different from future value-systems. Present-day value-systems are relative to the present-day techno-mediated stage, and future-day value-systems are likely to be different, since it will involve a techno-mediated stage based on future technologies. Verbeek’s example of ultrasound-technology illustrates how such transformations or

moral-systems (of moral-heritage) can have a far reaching impact. As the Dutch philosophers Boenink, Swierstra, and Stemerding explain: “[new technology can] kiss to life ... obligations and responsibilities by supplying new ‘cans’ which result in new ‘oughts’ (Swierstra et al, 2009). The problem is thus that one can only evaluate future states from the present perspective, and it is precisely this perspective that may be differently mediated in the future state. I call this the problem of perspective. It is not unlike measuring the length of a line, whereby the index on the used ruler changes in the process of measurement.

Now, this all may have raised the reader’s suspicion, since what seems to surface is a complicated way of visiting the well-known problem of relativism – a not too welcome guest in most discussions on ethics and morality. To a certain degree, I shall have to concede. The theme of mediation operates in human-tech-world *relations*, and it is thus no wonder that mediated morality is a relative affair. However, and this is vital, it does not follow that one should therefore turn its back on the problem. For one, this would be an exit-strategy, whereas we have seen that there fundamentally is ‘no exit’. The case here mirrors the position of parents in Verbeek’s example on ultrasound. There is ‘no exit’ in the sense of simply turning one’s back on the problem, since this will also influence the direction of navigation. Put simply: if ethics is about acting, and not acting is a type of act, it follows that not acting is an ethical act in itself, and should be evaluated as such. Secondly, there is ‘no exit’ into the im-mediate. We have seen how the im-mediate cannot be accessed, except through the artifice of fiction. Such a fiction will still have to account for why that particular (fictional) interpretation of moral values is superior, and tends to ignore the possibility that a future interpretation (read: mediation) may be superior. It may now become clear why I have referred to the currently presented problem as both fundamentally difficult and at the same time impossible to circumvent. Such is the cost of the lack of essence.

Two perspectives on the problem of perspective

There are *two* ways to deal with this difficulty that I will present here. The *first* can be regarded pragmatic, the *second* transcendental. The pragmatic account explicitly faces the situation of ‘no-exit’ and strives to face the problem of perspective head on. The most explicit version of this pragmatic take can be found in what is called NEST-ethics. This is an ethics involved with New and Emerging Science and Technology. This approach openly recognizes that new technologies affect and sometimes help change morality⁶¹. The basic way of dealing with this is what Swierstra calls ‘robust imagination’. The bottom line of this is that although morality may change, it is unlikely that our entire value-system will collapse all at once. I think this fits well with the Heideggerian approach to value-systems as a heritage: although new technologies may radically call for a re-interpretation of familiar values (such as in the case of ultrasound-technology), it is not the case that such new technologies wipe out the entire heritage. Certain values are so well embedded in the ‘world’ as

⁶¹ “... technology regularly interferes with morality. By opening up new practical avenues, technology can make some norms and values more realizable ...” (Swierstra et al. 2009, p. 133)

heritage (e.g. in books, in architecture, in educational institutions, in the law etc.) that it is unlikely that they will suddenly be jettisoned when new technologies come into play. In other words, when it comes to future-mediated morality: “not all thinkable outcomes are equally plausible” (ibid, p. 133). I view this account as pragmatic, since it is not concerned with the essence of all these values, but is more concerned with the stability of values in their use in-the-world. For certain well-embedded values, “it is a reasonable bet that they will [be stable] in the foreseeable future” (Ibid). Boenink, Stermerding, and Swierstra give examples of such ‘relatively stable’ values by mentioning ‘non maleficence’, ‘benevolence’ and ‘autonomy’ (Ibid). I shall promptly return to this latter term. To allegorize, one could think of staring out of the window of a moving train: objects that are close to the train will move by rapidly, whereas objects in the further distance will creep along in a much slower fashion. If the train is seen as technological change, then certain stable values ‘in the distance’ will change only slowly and gradually, whereas close-by values will be more prone to change.

I partly sympathise with this pragmatic NEST-approach for three reasons: *firstly* the approach circumvents dependence on an absolute value-system; a circumvention that I can but applaud in light of my view on the impossibility of the im-mediate. *Secondly*, the approach based on the stability of values enables one to conduct a proper genealogy of (affiliated) values, and as such make room for empirico-historical arguments in debating what moral design choices should be made. *Thirdly*, the NEST-approach seems to acknowledge the situation of ‘no exit’ and consequently makes what it regards to be the best possible attempt to influence the way in which (moral) mediations are given shape. It seems that this would harvest Nietzsche’s approval, since it is in line with his words that I quoted at the beginning of this chapter.

However, since I admitted to only partly sympathise with the NEST-approach, it follows that I must also have some objections. The starting point here is that we will never be able to predict the future. Although this latter sentence is self-contradictory, I think it illustrates the difficulty with the NEST-approach well. The problem roots in the idea of the stability of certain values. I agree with both the claim that particular values are embedded (in-scribed in Stiegler’s terms) in more stable fashion than others, and that the assumption on their future stability may therefore be ‘a reasonable bet’. Nonetheless, I dare to put to question how reasonable such a bet in fact turns out to be. The problem is that contemporary technology-design seems to run in constant overdrive, which is to say that it is tremendously fast. Returning to the example of the train, this train can sometimes move so quickly that the relatively stable values ‘in the distance’ also drift by at a tremendous pace.

Turning once more to Post-Phenomenology for an illustration in point: In his latest book Verbeek (2011) tells a story of deep-brain-stimulation technology. A patient suffering from Parkinson’s disease was fitted with a chip inside his brain, which repressed the effects of the disease. The technology seemed to operate properly, and the ‘chipped-patient’ was able to live a more or less normal life, whereas he could not even get out of his bed before the chip was implanted. However, the chip presented some serious side-effects: the behaviour of the man

radically changed. He was now living much more frivolously, engaged in a relation with another man's wife, heaped up debts by buying several houses and cars, and lost his driver's licence due to irresponsible driving. To make a long story short⁶², the man – after he found out about his erratic behaviour – had to make the following inconceivably difficult decision: Either he would have the chip enabled, which allowed him to go about, but additionally altered his behaviour to the worse; or he could have the chip disabled, have his 'normal' personality, but suffer from the effects of his disease. In the end, the man (in non-chipped mode) decided to be locked up in a 'safe' space with the chip enabled. This also meant that he had to sign a contract in which he vowed that when his chip-enabled-self would demand to be let free, this demand was to be ignored. Now, returning to one of the exemplary stable values that was put forth by NEST-ethics, one sees how 'autonomy' is regarded one of the values about which it is 'a reasonable bet' that it will remain stable. But is it not precisely this concept of autonomy that is at stake in Verbeek's example? Does the autonomy (taken literally as self-law) apply to the chipped-self or the non-chipped-self? I am not interested in answering this particular question, but do wish to point out that Verbeek's case shows how certain (contemporary) technological developments can construct a short-cut towards stable values 'in the distance'. Values of which it seemed such a 'reasonable bet' to assume their stability, are suddenly destabilized via the shortcut that a technological artefact constitutes. Speaking of reasonable bets, I believe it is a reasonable bet to hold that technologies that are currently on our doorstep (e.g. nanotech, biotech, etc.) will provide more of such short-cuts, thereby rendering values that were once relatively stable instantly volatile.

Perhaps I am exaggerating somewhat when talking about how new and emerging technologies can render stable values volatile. It is not at all my intention to paint a gloomy picture of tomorrow where all our values have gone to dust. Nonetheless, I do think that reliance on values that have historically acquired stability is – to say the least – not watertight. It is for this reason that I now turn from the pragmatic response concerning the problem of perspective to a *second* trajectory, which is the transcendental.

A transcendental approach to moral mediation: drawing virtuous circles

Returning to Heidegger's thought once more, I deem it correct to view the previously described NEST-approach an approach that refers to the 'what-being' of moral values, as it investigates 'what' the stability of particular values or value-networks are. The now following transcendental approach takes the 'that-being' of morality as a starting point. It seems that this basis of 'that-being' has been forgotten in NEST-ethics; the most proximal being most invisible, once more mirroring Aristotle's fish in the water, or Stiegler's humans in-the-(technical)-world.

⁶² And I advise the reader to actually read the entire (positively interesting) story in (Verbeek, 2011, pp 10 – 15).

The point of departure here is the fact *that* humans view the problem of mediated morality as a problem. At the beginning of this chapter I have laid out the 'that-being' of moral world-relations, which cannot be thought without taking technics on board. To summarize: If morality necessarily involves a possibility of action, and technics has a founding role in establishing this possibility in terms of human ec-stasis, then the 'that-being' of moral world-relations is a technical (and therefore mediated) affair in one way or another. It is relevant to revisit Stiegler's critique of Heidegger here. One can then observe that the 'that-being' of morality is not solely an Ontological concern (of the 'who' in Stiegler's terms), but also involves the Ontic (the 'what' as technical artefacts). What follows from this reinterpretation of Heidegger, is that Dasein's world-openness – which involves an ecstatic relation to Dasein's morality – is a product of a particular configuration, a particular structure of the who and the what. The particular structure leading to Dasein being-in-the-world (which always involves morality) is the moment of Epimetheus' fault in Stiegler's thought, which is also the rupture of epiphylogenesis, and the start of anthropo-techno-genesis. Human morality is thus observed as produced through particular structure involving organized organic matter, inorganized inorganic matter, and – perhaps most importantly yet mostly forgotten – organized inorganic matter. To finally get to heart of the matter: human morality – and ultimately the human as an existential being altogether – have thus strictly speaking not been necessarily. Morality has developed out of a particular structure and forms an enormously intricate structure itself, where epiphylogenetic value-memories are cornerstones.

To claim that the 'that-being' of human morality has not been necessary, is not to disparage morality in any way. On the contrary, I believe the 'that-being' of morality is the most precious gift that the sons of Lapetus have left us with⁶³. The point I am trying to get across is that morality should not be regarded a historical necessity, but the accidental⁶⁴ outcome of an enormously complex structure. The organizational specifics of such a structure is what Post-Phenomenologists refer to as 'mediation'. The structure leading to Dasein (as being-in-the-world, which is ecstatic and thus moral) is what I have called 'originary technical mediation'. Put radically: morality exists by the grace of technical mediation.

If the 'that-being' of morality is an accidental affair of originary technical mediation, it follows that it is not impossible that this 'that-being' will no longer be possible in future techno-mediated structures. In other words, if morality has certain origin or beginning, it may also have a certain ending or termination. For this reason, I want to defend the position wherein the 'that-being' of morality is amplified into an absolute moral ground on which to think about morality. Accordingly, we arrive at a transcendental reaction to the previously observed problem of perspective: the condition of possibility for the 'that being' of moral

⁶³ In Greek mythology, Lapetus is the father of Epimetheus and Prometheus. He is often brought in relation with mortality. We have seen how mortality Heidegger's thought is of fundamental importance when it comes to being-in-the-world, from which it follows that mortality is of fundamental importance to morality.

⁶⁴ Taken literally here: as Epimetheus' accidental forgetting of humankind.

human-tech-world relations is not taken for granted, but viewed as having occurred as some evolving structure; this accidental structure is consequently made to be the absolute starting point of morality. So in the end, the argument is rather simple: If the 'that-being' of morality is an accidental historical outcome of technical mediation, and if future technical mediations may result in the undoing of this 'that-being', we should presently take care that this undoing does not happen. The emphasis is thus not in the first place on 'what' we should do when it comes to design of technics; the primary locus is 'that' we inquire about 'what' we should do. In what-ever way the question on future mediations is approached, the anchor point must be 'that' the question occurs as a question, and will occur as a question in the future. Such an approach to ethics does not start at absolute or even 'merely' stable values. This approach starts from the transcendental condition for thinking values – for being able to do ethics in the first place. The (mediated) way in which further ethical deliberation is exercised is obviously important, but one should always take the 'that-being' of morality as a fundament. Ethics must thus first of all be about conserving the structure that makes ethics possible.

Now one may ask: why should I conserve the structure that allows for the 'that-being' of morality? Why is such an open (in the sense of allowing for world-openness) structure superior to a closed structure? I would be at a loss here, since I would only be able to answer that question by concluding with the premise: 'It is good to be able to have a structure that enables ethical deliberation, because such deliberation can help us conserve and expand this structure in a good way'. My argument is admittedly circular. However, the question on why a structure that allows for morality is superior to another, is in itself already a moral question. Such a question can only challenge the 'that-being' of morality out of a 'world' in which the 'that-being' of morality already holds sway. Such a question is thus part of the circle, as it must presuppose that what it calls into question. Yet, these types of circular arguments do not constitute vicious circles. By alluding to Aristotle, I maintain that what is drawn here are virtuous circles. Is it logically necessary to pass into such a virtuous circle? No, but one certainly should.

Conclusion as a lack of conclusion: To do and the possibility to do

Finally then, I readily admit that this story is incomplete and leaves upon plenty of questions. The transcendental approach to the problem of perspective (born out of originary technical mediation) does not provide palpable handles for (moral) guidance of technological development. It does not find, in other words, a direct application with regard to artefact design – which I have shown to be an ethical affair. My claims thus remain in the realm of the abstract, and a further elaboration on these matters is not presented here. If this is the conclusion of this chapter and thereby of this thesis, it seems to be a conclusion as a lack of conclusion. I ask of the reader to allow me a few last words in my defence of this present lack.

First of all, I believe the more abstract analysis based on the synthesis of Post-Phenomenological and Stieglerian theory has been necessary. The two theories solidify one another leading to what I have called 'originary technical mediation'. From here the insight emerged that any oppositions between what is properly human and what is properly technical cannot be maintained. I have approached this in terms of the impossibility of the immediate, which in this chapter has been argued to apply to moral values. If I am correct in claiming that the emergence of morality is an accidental techno-mediated affair or structure, and that this particular structure should therefore be conserved (this is the virtuously circular argument), it is of fundamental importance to properly think about the cornerstones of this structure: technicity. When one forgets about technicity, one may also forget about its fundamental and founding function, thereby running the risk of re-structuring future mediations in such a way that an ec-static relation to this structure itself is no longer possible. I do not mean to sound overly dramatic, and do not see such closing of world-openness happening any time soon. Yet, if the structure allowing for world-openness in (or as) Dasein has once appeared through a specific (techno-mediated) rupture, it is not impossible that this can be undone. In order to avoid this, I believe it is thoroughly relevant to try and understand this structure – a thing that cannot be done without thinking technics. We must not forget about technics, and the synthesis leading to 'originary technical mediation' presented in this thesis serves as a point of departure that necessarily remembers the importance of technicity.

Besides, the fact that what I have attempted to construct here is a departure point means that it allows for – and in fact demands – further elaboration. I presently see four trajectories of thought that can be taken from here⁶⁵. The *first* is a further philosophical transcendental exploration on that rupture that invented humans and technics. Although I have read Stiegler's analysis of 'originary technicity' in quite some detail, there remains much to be said on the matter. Stiegler's own work is likely to be of use here, but I also expect that new technological and scientific developments – most eminently in fields of neuroscience and biotechnology – can be sources of illumination. *Secondly*, further building on the first, I think further analysis of technological artefacts will prove fruitful. I have argued that technical mediation must be seen as what has made possible the human way of being-in-the-world, also always tailoring the way in which this 'clearing' activity of being happens. It is likely that a Post-Phenomenological inspired analysis of 'artefacts-themselves' will lead to further insight on how we should think about our ec-static relation to the world, and how we should conserve it. *Thirdly*, an approach along sociological lines will prove valuable. We have seen in the case of Winner's bridges that there exists a close interplay between socio-political values and technological artefacts. It may have become clear that one must never sharply separate the social from the artificial. Yet, this is not to say that one cannot distinguish between the two, and a sociological analysis could perhaps speak about broader structural mediations than a focus on artefacts themselves can do. The one does not exclude the other. On the contrary, I think they must be in constant conversation with one another.

⁶⁵ I intend to occupy myself with all of these trajectories in the years to come.

Both the artefact-oriented and the broader sociological perspective could also take on a historian's role, which could serve to trace the history of how certain technical mediations (and resulting value-systems) have occurred and stabilized. Something like a NEST-ethics could perhaps be brought into the equation here. *Fourthly*, I view it as imperative that a critical perspective in line with all of the above is developed with respect to new and emerging science and technology. Not critical in the sense of opposing such developments, but in the sense of aiming to critically accompany the development of new technologies. This is perhaps the most complex of all trajectories, since it will need to take along insights from all of the above, and add a critical voice to them. In his later work, Stiegler has laid a basis for articulating a critique such as this, and I expect that this opens doors to further development – perhaps as critique of his critique.

These then, are four trajectories of thought that depart from the here presented synthesis of Post-Phenomenology and Stiegler's 'originary technicity'. By virtue of the virtuous circle as described in this chapter, I deem elaboration along these trajectories of thought not only possible but obligatory. It may have surfaced, however, that none of these paths are simple. In fact, I would not be surprised if one would be able to write an entire thesis on each single perspective. This is the reason why I have not further elaborated on these matters in this thesis. I maintain that if one should attempt to think these matters through, one should do it thoroughly. An integral treatment of any of the matters exceeds the scope of this thesis by far. What I have rather attempted is to begin at the beginning, resulting in what I view as the fundamental starting point of all these matters. I readily admit that there is much work to be done. The in these pages presented synthesis resulting in the concept of 'originary technical mediation' – which must mean a constant re-membering of technics – grants all these 'to do's' the possibility of being done.

Postscript

It may have become clear that this thesis in the end suffers from Epimetheus' mistake, since it ends with a lack of conclusion as conclusion. One would not be in the wrong to critically inquire into what is to be done with the analyses that are put forth in these pages. I have pointed out several paths along which further research can be developed. Yet, these paths themselves currently remain unwalked. I have talked about the moral mediation of technology-design, but have not supplied any feasible solutions to actual empirical problems. Would it thus in the end be correct to pose that this thesis ultimately forms an exercise in abstract philosophy, one that is far too remote from what is actually happening in-the-world?

I daresay that this would in fact be incorrect. Although I have readily admitted that the story told in these pages is incomplete, I maintain that the fundamental point of departure as developed in these four chapters is of cardinal importance. Whatever further inquiries are made into related subject matter, I hold that we must never forget about Epimetheus' forgetfulness. I must tread carefully here to avoid sounding like a prophet of doom, but if it has been technics that has thrown us into-the-world, and if our relating to this world is thus an affair of originary technical mediation, then it is our duty to maintain this structure of technical mediation where the world appears as world. Bringing to light this structure is what has been at stake in this thesis, and I believe that this must be the starting point and ultimate ground.

Finally then, is this to be read as a conservative stance towards new technologies that threaten the way in which being-in-the-world is structurally made possible? Well, in a way it is, but in a particular way. My position is conservative in the sense of emphasizing the importance of *conserving* whatever it is that makes being-in-the-world possible. Yet, this activity of conservation can never be thought in terms of isolating oneself in the present and wholly opposing oneself to new technological developments. Not only does this deny the possibility of superior technical mediations that may arise with the advent of new technologies; such a position would also forget the nature of technics, as it would forget that technics supplies the fuel to the tandem-evolutionary-engine that I have described as anthropo-techno-genesis. I deem it an illusion to think that this engine can simply be stopped. Its direction, however, has yet to be determined. My aim has been to provide what I hold to be an essential navigational beacon.

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