

The Plasticity of Bildung

Towards a New Philosophy of Education

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PhD Thesis

Department of Education

Faculty of Educational Sciences

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Series of dissertations submitted to the Faculty of Educational Sciences, University of Oslo No. 324

ISSN 1501-8962

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Cover: Hanne Baadsgaard Utigard. Print production: Reprosentralen, University of Oslo.

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Acknowledgements

Although there is only one name attached to this thesis, it wouldn't have come into existence if it were not for the help of a great many people. Heartfelt thanks go to my brilliant supervisors Torill Strand and Nick Peim. Working with you has been an absolute pleasure. Not only am I grateful to have such great philosophers, thinkers and writers comment on my work, I am also grateful for our friendship, and the confidence you have had in me as a philosopher. Both of you have taught me so much and the project would have been very different without you. Thank you Torill for having taken me to conferences and workshops (philosophy does really live and thrive in the Mediterranean), for involving me in numerous stimulating projects and exposing me to the life and works of a philosopher from day one. Thank you so much for your enthusiasm, generosity, and confidence. Nick, thank you for showing me England, where they drive on the left, and for showing me that philosophy is neither abstract nor elongated from daily life, even when it is. Your interest in my project has been continuously uplifting, and I have been looking forward to each and every one of our FaceTime chats. I've learned that Tony Soprano's «eh, waddaya gonna do?» is a great question to ask in the face of philosophical adversity. Torill and Nick, I am happy that our friendship and collaborations can continue.

Catherine Malabou, I sincerely appreciate our friendship, your hospitality and your support for me and my project. I must also thank you for doing the work that you do – it could not be more true to say that this project would not have been the same without you! Benhur Oral, thank you so much for asking the very difficult and very right questions, and for your kind encouragement throughout. Thanks to Niri Talberg for making me realise how much I wanted to pursue this project, and for being an unwavering source of support. I'm not sure I would have embarked on this if it hadn't been for you. I truly appreciate our friendship and banter. Birgitte Ingebretsen, your love, support, and sense of realism have kept me sane. My parents and my sister, thank you for believing in me and supporting me every step of the way. You have always wished me the best, for which I am eternally grateful. My family and friends deserve thanks for their support, for asking about my research, and for patiently listening even when they realised that the answer would be long and confusing to everyone, including myself. Thanks to Caroline Cruaud for being such a talented French tutor and scholar. Thank you, the *Alliance Franco-Allemande pour la caféine* and The Extended Village, for providing

French, German, coffee, brunches, outings, beers, laughs and music. Thanks to Jon Kaurel and Kalisha Wills for the laughs. Thanks to everyone in the HumStud research group and the Department of Education for accepting my proposal, and for their excellent support and impressive academic standards. Marianna Papastephanou, Benhur Oral, Anna Kouppanou, Kaja J. Rathe, the Tilos conference participants and everyone I have met and who has challenged and inspired me, immense thanks to all of you. Thanks also go to The Faculty of Educational Sciences for funding and supporting my stay at the École Normale Supérieure in Paris. Thank you to everyone who hasn't been mentioned but deserved to be.

Preface

Usually, prefaces are about origins. *This* happened, which lead to *this*, which in turn made this work come to be. However, as I am writing these words, I am putting the finishing touches on a doctoral thesis that has as its starting point that origins are illusions. In the thesis, I will be arguing that things don't abruptly come into the world out of nothing, but from the conditions that made them possible. Everything is 'always already' there, as the expression goes. So this preface would be doing the paradoxical job of explaining the origin of a work that doesn't really believe in origins.

What I *can* talk about, however, are inspiration and history. As long as I can remember I have been fascinated by weird animals. Dinosaurs and sharks were obsessions of mine for several years during my childhood, as were whales. I once had one of my preschool teachers show me exactly how long a blue whale were – 30 meters – and the both of us were equally impressed by how much of the playground that whale would cover. To this day I have never seen a blue whale, though I wish I had. When I learned about evolution, I was fascinated by the metaphysical implications and incredible antagonism brought forward by the notion that humans were animals, and perhaps 'only' animals. The idea that we are nothing but animals brings with it the whole spectrum of ideas about what it is to be a human, what it is to be an animal, what the 'human animal' should do, how it should live, and so on. What is at stake is the entire idea of who we are. A small change in the meaning of the word 'human' – a shift in the metaphor – is enough to cause astounding uproar.

At university, I learned about the educational concept *Bildung*¹. From the classic texts, it was clear that it described a specifically human process. For some theorists, the transition from nature into culture by way of education was an ethical necessity. As a parallel, the brain played an indispensable part in my educational psychology courses. I once attended an engaging lecture on dyslexia from a neurological perspective. Nobody discussed Bildung from a neurological perspective, however, or neurology from the perspective of Bildung. It seemed that the idea of the brain as a really important thing entered into educational thinking, but the inverse didn't really seem to be true. Part of the reason, I thought, was an apparent incompatibility between the idea of the brain and the idea of Bildung. The obstacle seemed to

^{1.} If you would like to know more about this concept, I highly recommend the thesis immediately following this preface.

be the idea that the brain was understood as a kind of machine that decides for 'you', and Bildung is very much about the freedom to change.

By fortunate coincidence, I was introduced to the philosophy of Catherine Malabou, who bridged that gap by insisting on the concept *plasticity*. In her philosophy, I found the heritage from the Bildung classics, Hegel in particular, mixed with the contemporary understanding of the brain as a changeable, organic, *living* thing. Plasticity, I thought, was a metaphor that would allow us to combine two vital elements of education, and therefore of philosophy – nature and culture – without privileging one over the other. In this study, I hope to show that there is plasticity to Bildung, and that plasticity can provide us with some Bildung, too.

Kjetil Horn Hogstad Oslo, April 2020

1. Introduction

This thesis reports a philosophical study of some foundational aspects of education. I am examining the aspects *change*, *power*, and *temporality* in Bildung, in light of Catherine Malabou's semiotic materialism. I have chosen to focus on these aspects because they seem inherent in the conceptualisation of education. What would be the task of education if it could not cause change in any way? How would education cause change if there were no form of power involved? How would we expect change to take place, except in time? The general approach of this thesis is to elaborate on these lines of enquiry by identifying instances in educational thinking where either change, power, or temporality are in the foreground, and present a foundation for educational thinking informed by Catherine Malabou's 'plastic' ontology.

In order to make this researchable, I have narrowed my study to concern itself with the concept *Bildung*. I have chosen to focus on this originally German educational concept because it encompasses not only education, but also the wider context of culture, history, and metaphysics, of which education is a part. The concept Bildung is discussed in more depth in all of the articles in the thesis, but it needs some qualification in order to explain how I have approached it.

Bildung

My point of departure is that Bildung remains a relevant concept because it is vague enough to incorporate many lines of thinking, yet remains recognisably the same. Perhaps it is true what Rebekka Horlacher writes, that «Bildung [is] something important and significant; it is on everyone's lips, but no one knows what it really means» (Horlacher, 2004, p. 410). If so, it might be because it allows itself to be continually discussed, challenged, and developed.

The concept Bildung incorporates life-long learning and self-formation (Hegel, 1977), meaning that it is seen as an ongoing process. Some theorists see Bildung as the free interplay between the individual and the culture in which they are embedded, aiming to accumulate humanity (Humboldt, 2000; Løvlie, 2006). This notion of Bildung as free interplay between individual and culture underlies this thesis throughout. As Klafki sees it, Bildung is the combination of the curriculum as it is given, as it is interpreted, and as it is changed (Klafki,

2006). It can be portrayed as the responsibility and power that the individual has to criticise the wrongs in society (Kant, 2009). A hermeneutical view on Bildung sees it as «the element within which the educated [person]» and the sciences move (Gadamer, 2013, p. 14). This view is part of the foundational assumption of this thesis, which I will discuss in more detail in the next chapter. An influential view on Bildung is that it is simultaneously an ideal, a process, and a result, yet also open and free (Gadamer, 2013, p. 10). Bildung as a concept has long roots in European thinking, at least back to the Middle Ages (Hermeling, 2003; Horlacher, 2016), and possibly to Ancient Greece (Løvlie & Standish, 2002a; Nordenbo, 2002), tying it to a particularly Western ontology (Toulmin, 1990). Even so, the concept is used and debated across the world (Gustavsson, 2014; Sjöström, Frerichs, Zuin, & Eilks, 2017).

My contribution to this ongoing discussion is the identification of the three aspects mentioned above in specific instances of educational theory, an examination of how they are expressed, and a challenging of them. In Bildung, change, power, and temporality are more or less unspoken aspects that, when examined, have ontological repercussions. If these aspects are implied in the concepts, it means that there is or can be an ontology of Bildung, or that the ontology of Bildung can be examined or thought.

On this basis, I have chosen to discuss the change, power, and temporality of Bildung from the angle of the philosophy of Catherine Malabou. I will go into more detail later in this text as well as in the articles, but will nevertheless give a brief outline of how I read her philosophy.

Plasticity

Catherine Malabou (b. 1959) is a French philosopher whose contribution to philosophy is a semiotic materialism based on her 'concept' *plasticity*. As plasticity is an ontological principle, it is a concept but simultaneously not. It is a concept that is simultaneously an ontological principle or model, a lens through which to see the world. It is a concept because it can be identified as a concept and allows itself to undergo conceptual analysis, but it simultaneously provides ontological grounds on which such an analysis can stand. In this thesis, the focus is on plasticity as an ontological principle describing the historical situatedness yet open malleability of form.

In Malabou's philosophy, 'form' is all that we identify as separate from other things — concepts, ideas, individuals, institutions, everyday items, and so on. Enlarging and changing the trajectory of Derrida's deconstruction, Malabou positions plasticity between flexibility and stasis. Plasticity explains how form is fundamentally indebted to its history, yet plays a fundamental role in creating it. This deconstructive hermeneutic is powerfully exemplified when Malabou uses a neurobiological metaphor to explain the ontological principle of plasticity: the brain is plastic because it is continually open to change, and the changes that it inflicts on itself become material history. Plasticity is therefore, in brief, the open changeability of form; its resistance to change, that is, its relation to its past self; the reception of form from other forms; and, finally, an ontological principle within a material framework (Malabou, 2005; Malabou, 2008; Malabou, 2010; Malabou, 2012c; Malabou, 2015b).

I chose to facilitate the engagement between Bildung and plasticity for several reasons. One is that this engagement allows us to identify implicit ontological conceptions of change, power, and temporality in Bildung, and to challenge them. Another is that plasticity is a powerful development of deconstructive thinking, approaching a materialist semiotic ontology. Yet another is that such a meeting might challenge Bildung's idealist tradition, even in the cases where this only remains implicit (Hogstad, forthcoming). Most importantly, and the sum of the previous reasons, this meeting can bring about a new way of thinking Bildung, one that examines and challenges fundamental assumptions implicit in the concept. My thesis is in other words an ontological examination and critique of the concept Bildung.

The structure of the thesis

This study is reported in three articles. The general structure is that each article focuses on one of the mentioned aspects of education, and also builds on one another. I am the single author of all three articles. They are:

 «Towards a Plastic Starting Point: Rethinking Ethical-Political Education with Catherine Malabou» (Hogstad, K. H. (2020b). Towards a Plastic Starting Point: Rethinking Ethical-Political Education with Catherine Malabou. In T. Strand (Ed.), Rethinking Ethical-Political Education. Cham: Springer.)

- «Can We Kill the Bildung King? The Quest For a Non-Sovereign Concept of Bildung» (Hogstad, K. H. (2020a). Can We Kill the Bildung King? – The Quest for a Non-Sovereign Concept of Bildung. *Educational Philosophy and Theory*. doi:https://doi.org/10.1080/00131857.2019.1707655)
- 3. «Is (It) Time to Leave Eternity Behind? Rethinking Bildung's Implicit
 Temporality» (Hogstad, K. H. (forthcoming). Is (It) Time to Leave Eternity Behind? –
 Rethinking Bildung's implicit temporality. Accepted for publication in the *Journal of Philosophy of Education*)

The findings reported in the articles are as follows. The first article produces a sketch of a rethought concept of change, based on a selective reading of Malabou's philosophy. The second launches the suggestion that the critical aspect in the concept Bildung can be reinstated if we construe bio-power according to the ontological principle plasticity. The third article suggests a rethought concept of temporality in the concept Bildung, by introducing *plastic time*. Since my exploration of these topics touches on our fundamental thinking of education, my philosophical study should be characterised as fundamental research and not applied educational research.

This extended abstract consists of four parts following this introduction. In the first part, I discuss the thesis's overarching idea and how the articles are related. Next, I discuss methodological considerations. In the third part, I will expand on my findings, and where necessary, clarify issues from the articles. In the fourth part I will discuss potential consequences of my findings.

2. Methodological considerations

This thesis hinges on three fundamental assumptions: Bildung has to be continually rethought; such a rethinking should explore fundamental assumptions in Bildung; and these assumptions must be challenged if required. First, insofar as Bildung is thought to happen temporally, and temporality and change imply each other, the thinking of Bildung has to be constantly renewed in order to find relevance and critical power in the current and future society (Strand, 2005). Second, insofar as Bildung is a phenomenon in the sense mentioned above, its fundamental aspects (in this thesis change, power, temporality) need to be rethought

from a position that takes the question of the human into account (Reichenbach, 2003). Third, insofar as aspects intrinsic to the concept represent obstacles for its renewal, they need to be exposed and challenged (Strand, 2007).

This thesis starts out on the premise that concepts – Bildung included – are fundamentally metaphorical. Concepts, words, *signifiers*, are fundamentally detached from their 'signifieds', leaving us to understand language as a web of difference without a natural link between a word and its referent (Derrida, 1998). To elaborate on this, I turn to Malabou's former teacher and collaborator Jacques Derrida. He supervised Malabou's doctoral thesis at the École des Hautes Études and was a significant inspiration to her philosophy. Although Malabou has aspired to modify Derrida's philosophy, his semiotics and the tradition they both stand in are still fundamental to the development of her theory of plasticity (Derrida, 2005; Hogstad, 2020a; Hogstad, 2020b; Malabou, 1999; Malabou, 2007). In «Structure, sign and play in the discourse of the human sciences,» Derrida suggests that language is fundamentally metaphorical to the extent that «everything [is] discourse» (Derrida, 2001, p. 354). Derrida observes² that the structure of language is a string of substitutions. Concepts change, and they do so in a particular fashion that gets us nowhere nearer to what was previously assumed as the non-changing «centre» of the concept.

Throughout the history of metaphysics, and therefore also the history of the West, the main preoccupation has been with the «coherently contradictory» goal of trying to discover a structure's «centre». Structures must be organised (if not, they are not structures). What allows the structure to be organised is a centre, the structure's element that is continually present throughout history, its *absolute presence*. But there is a telling paradox here: the centre is what allows the structure to change, but itself does not. The centre is therefore both outside and inside the structure (Derrida, 2001, p. 352).

^{2.} I am using the verb *observes* here because of Derrida's careful wording in this text. His discussion has the form of a thought experiment – the very first word of the text is «perhaps». Whether this is Derrida's modesty or a methodological attempt to dethrone the Philosopher King, the position that the philosopher only reports what the fabric of thinking presents, has later been criticised by Malabou. She makes the wider point that by putting pen to paper, the philosopher makes a creative addition to philosophy. I discuss this in more detail in my first article (Hogstad, 2020b).

«Structure» should here be understood in the broadest sense possible. As Derrida argues that there is no natural link between the signifier and the signified, the transcendental signified is no longer seen to be «absolutely present», (Derrida, 2001, p. 354). Thus, «structure» refers to *every sort* of conceptual systems: «The absence of the transcendental signified extends the domain and the play of signification infinitely» (Derrida, 2001, p. 354). And this movement has happened in the human sciences already, allowing fields such as ethnology to occur. Unless a decentring had taken place, a shift away from European culture as «the culture of reference», ethnology as a science would not be possible (Derrida, 2001, p. 354).

Derrida picks as his example the traditionally opposed concepts nature and culture. Reading Lévi-Strauss, Derrida describes a «scandal» that has taken place, that is, a concept or phenomenon that breaks down the formerly accepted demarcation between nature and culture: *incest prohibition* (Derrida, 2001, p. 358). Lévi-Strauss has defined nature as the «*universal* and spontaneous, and not dependent on any particular culture or on any determinate norm» (emphasis in original). Culture is, on the other hand, «that which depends upon a system of *norms* regulating society and therefore is capable of *varying* from one social structure to another» (emphasis in original). Incest prohibition appears to be universal and therefore natural. However, as it is a structure of norms, it is also cultural. This «scandalous» breaking-down of the formerly accepted categories is an example that concepts are incapable of fully describing what they attempt to describe. The condition of their possibility might be that they do not, in fact, describe what they describe; they do not correlate with their signified (Derrida, 2001, p. 358). Structures are thus metaphorical in the sense that they refer to something by way of something else³.

Seeing Bildung as a structure in this sense clarifies the task we are up against. It also goes some way to explain why the concept remains, and why it remains contested. Bildung, seen as a structure defined by its structurality and non-centred centre, where its non-centred centre is what ensures play in the structure, is a structure that refers to another, that refers to another, in a never ending string of substitutions. Bildung is in this sense fundamentally changeable and changing, and only its contours are discernible; its centre is forever elusive. This is also why Bildung can remain relevant as long as we observe its structural play.

^{3.} It should be noted that the verb «to be» here does not imply an ontotheological stance on structures.

What follows this discovery, Derrida suggests, is one of two critical approaches. One is «to question systematically and rigorously the history of these concepts» so as to prepare the critique of philosophy itself. As philosophy is also a web of concepts with delineated meanings (structures without centres), the only way to «step outside of philosophy» would be to question foundational concepts in philosophy to lessen the grip of metaphysics. This is clearly a formidable task with «possibly sterilizing effects» for language and philosophy (Derrida, 2001, p. 359).

The other is to accept the limitations inherent in the structure without a centre and treat concepts as tools. Then they can be used or abandoned as needed, «and they are employed to destroy the old machinery to which they belong and of which they themselves are pieces» (Derrida, 2001, p. 359). The «discourse of this method» as Lévi-Strauss presents it, implicates the French word *bricolage*. A *bricoleur* is someone who takes what is available to them and makes use of it in whatever way seems to best fit the purpose at hand. If needed, they alter the tool or approach. Derrida suggests that using language in this way «is critical language itself» (Derrida, 2001, p. 360) because it folds back onto itself. Language can only be criticised in language, and critical language must accept this.

Indeed, *bricolage* is everywhere:

If one calls *bricolage* the necessity of borrowing one's concepts from the text of a heritage which is more or less coherent or ruined, it must be said that every discourse is *bricoleur* (Derrida, 2001, p. 360)⁴.

While Derrida concedes that stepping outside of philosophy is thinkable, *bricolage* implies that such a stepping-out would imply a total break with language. Lévi-Strauss contrasts the *bricoleur* with the *engineer*, a figure Derrida argues would only be possible as a product of the *bricoleur*'s mythopoetic imagination. Therefore we should «cease to believe in such an engineer». Paradoxically, this would mean that the idea of a *bricoleur* would diminish as it would lose its contrast with what it is not (Derrida, 2001, p. 361).

^{4.} This is the assumption I was working from in Can We Kill the Bildung King? (Hogstad, 2020a).

However, embracing the *bricoleur* at the cost of the engineer reveals that the metaphysical search for a centre, an origin, can never reach its goal. Lévi-Strauss argues that the primary discourse on origins, *myths*, too, is *bricoleur*. Derrida quotes him,

The study of myths raises a methodological problem, in that it cannot be carried out according to the Cartesian principle of breaking down the difficulty into as many parts as may be necessary for finding the solution. There is no real end to methodological analysis, no hidden unity to be grasped once the breaking-down process has been completed. Themes can be split up ad infinitum (Derrida, 2001, p. 362).

As the study of myths is central to ethnography, and myths are centre-less, so too must ethnography be. Not only that, but «the philosophical or epistemological requirement of a center [sic] appear as mythological, that is to say, as a historical illusion» (Derrida, 2001, p. 363). The repercussions of this is that no discourse can escape *bricolage*, and so no discourse can find its centre. The discussion of Bildung, for instance, should therefore not be about what it *is*, but about ways it can be thought, understood, and changed.

In light of *bricolage*, philosophy must be undertaken in a different way than before. It must acknowledge that the absent centre is what gives the structure play, and that this absent centre is replaced by a sign that does not signify the centre (Derrida, 2001, p. 365). The structure's meaning is thus not its origin and/or *telos* but something other than that, something granted it by its outside, by the system of differences that surrounds it.

Derrida's conclusion to this is that replacing *presence* with *play* is embracing the anxiety that uncertainty brings. It urges us to move «beyond [hu]man and humanism, the name of [hu]man being the name of that being who ... has dreamed of full presence, the reassuring foundation, the origin and the end of play» (Derrida, 2001, p. 370).

What Derrida is showing us is a way of thinking ontology. In his text, he notes that the notion of ontology is «suspect» (Derrida, 2001, p. 360). However, if we construe ontology not as the search for presence but rather as a tool for explaining the world, 'ontology' could refer to an examination and careful construction of the metaphors that are central to our way of thinking.

To illustrate how metaphors define what we perceive and how we perceive it, I refer to Lakoff and Johnson's *Metaphors We Live By* (2003).

The American linguist George Lakoff and philosopher Mark Johnson argue that language is fundamentally metaphorical and therefore shapes how we perceive the world and respond to it. To Lakoff and Johnson, «[t]he essence of metaphor is understanding and experiencing one kind of thing in terms of another» (Lakoff & Johnson, 2003, p. 5). This manifests itself, for instance, when we talk about arguments in terms of *defending* or *attacking* a position. These types of formulations are metaphors of war employed to describe a verbal altercation (Lakoff & Johnson, 2003, p. 5). Lakoff and Johnson argue that the use of such metaphors enter us into a mindset of opposition and defeating your opponent, and that use of other metaphors could construe arguments in wholly different ways:

It is important to see that we don't just talk about arguments in terms of war. We can actually win or lose arguments. We see the person we are arguing with as an opponent. We attack his [sic] positions and we defend our own. We gain and lose ground. We plan and use strategies. If we find a position indefensible, we can abandon it and take a new line of attack. Many of the things we do in arguing are partially structured by the concept of war. Though there is no physical battle, there is a verbal battle, and the structure of an argument—attack, defense, counterattack, etc.—reflects this. It is in this sense that the ARGUMENT IS WAR metaphor is one that we live by in this culture; it structures the actions we perform in arguing (Lakoff & Johnson, 2003, p. 4).5

Arguments are obviously fundamentally different from war. Even so, Lakoff and Johnson's «we» understand and organise arguments as if they consisted of the same types of structures, dynamics, consequences, and aims as war. Recognising that «argument is war» is a metaphorical structure tied to a specific cultural context – the USA – Lakoff and Johnson go on to envisage the concept 'argument' as if it might be construed from the metaphor 'dance':

^{5.} In the 2003 edition afterword, Lakoff and Johnson admit that children learn about arguments before they learn about war. They therefore suggest a different overarching metaphor: «Argument Is [physical] Struggle». Otherwise, the metaphor is the same (Lakoff and Johnson, 2003, pp. 264-265). While this is pedagogically pertinent, it should be noted that «struggle», too, is signified-less.

Try to imagine a culture where arguments are not viewed in terms of war, where no one wins or loses, where there is no sense of attacking or defending, gaining or losing ground. Imagine a culture where an argument is viewed as a dance, the participants are seen as performers, and the goal is to perform in a balanced and aesthetically pleasing way. In such a culture, people would view arguments differently, experience them differently, carry them out differently, and talk about them differently. But we would probably not view them as arguing at all: they would simply be doing something different. It would seem strange even to call what they were doing «arguing.» Perhaps the most neutral way of describing this difference between their culture and ours would be to say that we have a discourse form structured in terms of battle and they have one structured in terms of dance (Lakoff & Johnson, 2003, pp. 4-5).

Following the above, metaphors are decentred structures. They stand in for other structures, which stand in for yet other structures. These structures are rich and find their meaning in their relation to and difference from other structures. *Education* is one such structure. The concept evokes a host of references to facilitating and prohibitive social structures, to power relations, to an individual's access to beneficial resources or lack thereof, and so on. We deal with education – as a concept, an institution, an ideal and so forth – so regularly that we often neglect its metaphorical character and social situatedness. Ontological enquiries into education, i.e. «what is the nature of education?» are surprisingly rare. Bildung is another such structure, but one with a commonly discussed history of conceptual contestation (Gustavsson, 2014; Hermeling, 2003; Horlacher, 2016). In the instrumental educational paradigm, structures capturing the «[s]kills that foster lifetime success» have been sought identified under the categories «cognitive, social and emotional skills» (OECD, 2015, p. 45). The Norwegian national curriculum «defines five basic skills: reading, writing, numeracy, oral skills and digital skills» as basic and elementary competencies for the successful future citizen (Ministry of Education and Research, 2019, p. 14). At the meta-theoretical level, the

^{6.} Searches in Google Scholar and SCOPUS yield surprisingly few hits on the phrase «what is education?» This is, of course, not to say that no ontological enquiries into education exist (i.e. Dewey, 1916; Peters, 2010).

scientific discipline of education can also be seen as metaphorical. Let us pursue this idea in some more detail.

Rethinking Educational Research

In his article «The Disciplines and Discipline of Educational Research», David Bridges argues that research depends on clear disciplines because they function as productive and legitimising «communities of arguers». Disciplines depend on having some particular features which align different enquiries along the same line, as this ensures communication between practitioners. It also legitimises research as something worthwhile doing and lending an ear to. These features could be characterised as the centre of the structure called «the discipline» (Bridges, 2006).

Bridges argues that in the early 1970s, educational research was tied to what he calls the "foundation' disciplines … the philosophy, sociology, psychology and the history of education». Now, he argues, we are in a state of hybridisation and even "postdisciplinarity", which to Bridges is a genuine problem because the discipline of the discipline — a "systematic" and shared way of going about research — is what ensures its power and drive. There are in Bridges' view two "huge consequences" if the discipline of the discipline is lost. The first is that if there is no core of shared principles, rules and systems for considering what is good research or not, then the world outside the discipline — arguably the people for whom the research is done — has no real reason to accept educational research as more worthy of their time than, say, the latest social media fad. The second is that there would be no way for researchers within a discipline to communicate (Bridges, 2006, p. 263).

As for the first consequence: Why does research merit attention? Because, in Bridges' view, research does something special: «systematic and sustained enquiry carried out by people well versed in some form of thinking in order to answer some specific type of question» (Peters and White, 1969, p. 2, in Bridges, 2006, p. 263). Most importantly, research adheres to the rules that «discipline the discipline», as it were, in the sense that they «enable us to refer to the system as discipline» (Bridges, 2006, p. 264).

As for the second consequence: Members of a discipline need to be able to enter into what Bridges calls a «community of arguers». This necessitates a shared language, some shared beliefs, and some shared rules of engagement with the other members and the subject matter. Unless these elements are in place, disciplines and thus research as such cannot happen either (Bridges, 2006, p. 265).

With reference to Schwab, Bridges suggests that a discipline has a «syntactical structure» which concerns the following set of problems. Each discipline has to determine «what it does by way of discovery and proof, what criteria it uses for measuring the quality of its data, how strictly it can apply its canons of evidence, and, in general, to determine the pathway by which the discipline moves from its raw data to its conclusion» (Schwab, 1964, p. 11, in Bridges, 2006, pp. 266-267).

In principle, this syntactic structure allows the discipline the status of a discipline, and assures that «its outcomes [are] especially worthy of our attention and credulity». Discipline in research provides some assurance of quality in the work, in the sense that it helps in uncovering the secrets of our world (Bridges, 2006, p. 267). Following the rules enables argumentation because they ensure common ground between researchers, which means that they can be seen as productive restraints. Rules allow ideas to be communicated and understood, and therefore also criticised (Bridges, 2006, p. 267).

Summing up, Bridges returns to a minimal restatement of the main problem in his article: «The claim of enquiry which is honoured as research is that there are features of the conduct of the enquiry which ought to command greater confidence in the beliefs which issue from it than would be expected, other things being equal, from enquiry which lacked these features» (Bridges, 2006, p. 269).

If we were to rephrase Bridges' concerns, he assumes that there is one thing which is the discipline of educational research: that «educational research» is a term or name which can be given to a more or less specific thing in the world. Educational research is venerated by its adherence to certain rules, traditions, and ways of organising action and exchange of ideas. Recently, this «syntactical structure» has been weakened as educational research appropriates

multiple incompatible approaches and reasonings. For educational research to (re)claim its appropriate level of authority, strengthening the «syntactical structure» seems necessary (Bridges, 2006).

However, isolating what exactly educational research might be is not simple. A host of diverse items could be included in the category, each pulling in different directions, perhaps, constituting a greater or lesser overlap with any of the others. Any type of ingredient could fit the category, such as individual researchers, theories, ideas, individual books and articles, whole library sections or libraries, group efforts such as research groups conducting an ongoing study, and so on.

Additionally, Bridges seems to qualify research – a conceptual structure in itself – as that which follows certain rules in certain ways. Of course, Bridges then also qualifies which types of rules are followed and in which types of ways, but it remains difficult to see whether this reductive method explains more than an expansive one might do, seeing as the reduction reveals as many complicating factors as clarifications: What rules, for whom? In what ways should they be followed, and when? Let me immediately make it clear that I am sympathetic towards Bridges' notion of a «community of arguers» and its productivity. This is a useful if not defining feature of research and might be contrasted by Wolfgang Pauli's lament when he read an especially confused physics paper, «it's not even wrong» (Peierls, 1960, p. 186). Being able to say that you think something is wrong, and why, might open up for more edifying exchanges. A perspective that can help us think such exchanges is Malabou's *plastic* forms. Plastic forms are an aspect of an ontological approach that construes ideas and concepts – such as «educational research» – as forms that stand in a plastic relationship, implying continual mutual exchange. Construing educational research as a plastic form could yield a more integrated view on educational research, while avoiding the traps that David Bridges outlines above. Let us begin by clarifying what Malabou means by plastic forms.

Malabou follows Derrida's line of thinking outlined above when she discusses the current status of the humanities. «The humanities» is Malabou's shorthand for Continental philosophy, that is, the line of thinking that can be traced back to Kant (Malabou, 2011a; Malabou, 2016c). In the article «The Future of the Humanities» (Malabou, 2011a), she argues that the

humanities can be thought of as a form, that is, something that on a conceptual level is thought to be different from other things (Malabou, 2010). Such forms – being conceptual and therefore fundamentally an expression of thought – are plastic.

In Malabou's terminology, plasticity is the dialectical, and therefore historical and historicising, process by which form changes itself and simultaneously receives change from outside (Malabou, 2005). It follows then that any form is dependent on there being other forms, as the reception of change is a central part to the structure of plasticity. There are in other words two economies of change in Malabou's plasticity. One is the change happening to and in form, that is, form's history of change. This is Malabou's modified version of Derrida's always already delayed function of change — the structure's centre (Malabou, 2010, pp. 48-50). Another is the change happening between forms, the mutual exchange of influence, the bond between the giver and receiver of change. This latter is what Malabou sometimes calls the «plastic relationship» of forms (Malabou & Butler, 2011, p. 634).

In «The Future of the Humanities», Malabou argues against the notion that the humanities can and ought only to provide critique to the empirical sciences. This notion ignores the plastic quality of the form. Rather, the humanities need to interact with other sciences because they, too, can provide philosophically pertinent knowledge about the human. One such science is the neurosciences, the insights of which represent what Malabou considers a genuine revolution in the way we understand ourselves (Malabou, 2011a). This latter point is pivotal in Malabou's philosophy, and I shall return to it later in this thesis. What I see as important for the question of disciplines is the plastic relationship between forms.

The Non-Centre of Educational Research

As I argued above, Bridges' concern seems to rely on the notion of a centre in the structure of educational research. However, the questions I raise concern precisely the centre: can there be a systematic nature, can there be a collection of rules, can there be a discipline of educational research? This is not to say that I disagree with Bridges' concerns above – I have indicated that I am sympathetic with his main idea – but rather to point out that I am not fully convinced that what he proposes is possible. Bridges warns us that the alternative to a «community of arguers» is the impotency of hybrid communities that lack a sufficient amount of shared

rules, or worse still, postdisciplinarity and therefore no community at all. But I wonder whether it is at all possible to maintain a structure like educational research by asking it to keep certain rules as its centre.

Maintaining educational research as one 'thing' is a difficult task, I believe, primarily because I find it unlikely that it is at all possible to see educational research as one isolable thing. Let us consider educational research as a form that stands in a plastic relationship to forms surrounding it. It then becomes clear that what counts as educational research – what constitutes its borders – will be influenced by a great many things, such as governmental policy (Ulmer, 2015); the number of available positions in educational research and therefore the available time and capacity to do research; the proportion of educational psychologists, philosophers, historians, and so on, which will conceivably put a slant on the amount of research published in each of these sub-disciplines; the finances and models for research incentives (Smeyers, de Ruyter, Waghid, & Strand, 2014); recent discoveries in fields other than education – «neuro-education» has been a topic for several years now (de Vos, 2015; Ferrari, 2011; Flobakk, 2016; Flobakk, 2015; Hinton, Miyamoto, & della Chiesa, 2008; Howard-Jones, 2014; Kitchen, 2017; Kraft, 2012; Pasquinelli, 2013; Sala & Anderson, 2012; Schrag, 2013; Smeyers, 2016; Zimpel, 2013); progress in automation and computer science changing society's projected need for workers and of which type, which might in turn influence policy (Finn, 1957; Means, 2017; Peters, 2001; Ulmer, 2015).

Conversely, educational research has the possibility to not only change itself, but also to provide change to the above forms. This can happen in many ways. For instance, educational research can provide arguments for specific ways of teaching; of understanding the child; of the relation between the child, the curriculum, the institution, the historical and contemporary society, her peers, and the teacher; and countless other issues. In this way, educational research should perhaps be seen as something that is formed by its outside by being subject to material and theoretical constraints. At the same time, educational research forms itself by being one or several «communities of arguers», taking the constraints into account and doing something productive with them. At the same time as being formed and forming itself, educational research forms its outside by subjecting people and ways of thinking to certain assumptions about what teaching is, how we can understand the child, history, contemporary

society, institutional values and further material and theoretical constraints. Understanding educational research as a plastic form, standing in plastic relationships with other forms, could allow us to see the more complex picture of how the discipline is structured and how it develops.

It is clear that educational research needs some recognisable traits in order to fit the category, but it becomes progressively less clear that the structure called «educational research» is one thing. Educational research is rather a structure of structures. This also seems clear in the concession that Bridges makes in the very beginning of his article:

The organisation of educational theory and research under the 'foundation' disciplines of the philosophy, sociology, psychology and history of education ... appeared to offer: differentiation between different kinds of enquiry ...; coherence in terms of the internal consistency of any one of these forms; and the 'systematic' or rigour of enquiry (Bridges, 2006, p. 259).

In other words, what Bridges describes is actually a multi-disciplinary discipline of educational research, or in other words a structure of structures, which is in turn easily construed as structures of structures, and so on. After all, the consistency that Bridges asks for depends on the rules, basic assumptions and other demands of the «foundation discipline», and those of educational research on top of that, i.e. that the research has some bearing on education. Add to this that these structures could be seen as standing in plastic relationships to one another, and the structures become complicated indeed.

Bridges' suggestion that a core of rules is what disciplines a discipline makes intuitive sense, but it becomes difficult to see that these rules could qualify as the lasting core that ensures continuity or consistency over time. Returning to Derrida, it seems that we could explain the development of educational research by referring to the space of possibility opened up by the non-present centre. There seems to be a parallel between the notion that there are some general, basic rules to educational research that make it definitely educational research and not something else, and what Derrida sees as the neutral centre which could equally be called the structure's origin or end. Even though Bridges' argument is at least partly moral, the

notion that it is possible to rein in the discipline by refining its core elements seems to invoke an essentialist ontology of the type that Derrida criticises above.

After all, if the core of the structure «educational research» is its rules, and they are changing, then they, too, must be always already delayed. The question remains whether it is at all possible to stabilise the structure by refining the core. Bridges's wish that we «focus on understanding and refining the conditions—the discipline—under which [educational research is] conducted» (Bridges, 2006, p. 271) thus seems more like a historical project rather than a deliverer of premises. The stability and play of the concept education happen in its structure and not its centre. *Educational research*, like any other science, any other concept, is metaphorical.

The educational research in this thesis is therefore an examination of metaphors. To be specific, it is an examination of some ontological implications in the concept Bildung. As I have discussed, my research articles examine change, power, and temporality as three aspects of Bildung, and engage them with the metaphor that is the ontological principle plasticity. As I have mentioned, although only in passing, Malabou's plasticity can be illustrated with the capacity that the nervous system has for plasticity: the ability to give shape to itself, while receiving it from outside. The similarity between Derrida's decentred structure and the plastic non-presence of the brain is striking. In the paradigm of *neuroplasticity*, the 'present' state of the brain is its plasticity, that is, its openness to change (Malabou, 2008). This paradigm is interesting in this thesis because it challenges deconstruction, transforming Derrida's framework as just described from a semiotic ontology into a materialist semiotic ontology. Discussing Bildung in this framework opens the concept up for new interpretations and new metaphorical constructions. In order to provide some background for the paradigm of neuroplasticity, which will follow later in this text, let us first sketch the historical development of the metaphors of mind and brain.

Metaphors of Mind and Brain

Metaphors, as we have seen, are substitutions that refer to something else which again refers to something else. «Every epoch has its brain», Dimitris Papadopoulos (2011) succinctly puts it, and it appears that the primary method of constructing the metaphor of the brain is

bricolage. John C. Marshall argues that «the mind (brain)» has been construed in terms of machines and mechanistic metaphor «since at least 430 BC», continually hinging on the latest technology (Marshall, 1977, p. 475). In a number of illustrations, he traces the development of the metaphor of the brain.

Plumbing is the basis for the first metaphor, entering the science of the mind with Herophilus around 300 BC. At that time, pipe-laying and plumbing had began to grow as a technology for the wealthy in Alexandria. Herophilus conceived of the soul as placed in the fourth cerebral ventricle – a cavity in the brain, filled with fluid. This metaphor, centred around the idea that the soul communicates with the senses and muscles through pipes carrying «juice, water, steam, air [or] fire», remained the primary metaphor until Kant, who argued that piping is a poor metaphor for memory. Water – or anything that moves through pipes – is not organised and will therefore dissolve into an undifferentiated mass once it is added together. Another metaphor was therefore needed, one that could incorporate the organisation of stored memories (Marshall, 1977, p. 478).

And so *storage* is the framework for the second metaphor. The notion that memories have to be stored appeared around 500 BC with «the poet Simonides [who] identified the crushed bodies at Scopas' banquet by recalling the *places* where the guests had been sitting» (Marshall, 1977, p. 478). From this evolved the idea that memories are distinct objects that are stored somewhere and can be retrieved. Refinements of this idea were tied to the development of tools – the mind as a wax tablet, for instance, easily impressed upon and easily effaced to give room for new impressions. Others, inspired by the recognition that memory is a fragile form of storage, conceived of memory as objects that for some reason get damaged or lost:

Memory may fail because the object never got into the store in the first place; it did get in but then disappeared either through spontaneous decay or natural wear and tear; it got in but was then destroyed by some other object being dumped on top of it; it got in but was pushed out by

^{7.} Marshall writes, «[a]s Popper puts it, water can't even count: 'If you put 2+2 drops into a dry flask, you will never get four out of it» (Marshall, 1977, p. 478)

some later arriving object; it got in and is still there but the storeman can't find it amidst the rest of the junk (Marshall, 1977)⁸.

The realisation that it was possible to be unable to find a memory emphasised the importance of organisation in the metaphor of the mind. As Aristotle had a large library of scholarly texts which he had to organise, he turned the concept of place (*topoi*) into a metaphor for overarching categories – topics. This notion carried over until Kant, who made the metaphor explicit: «the use of topics ... makes remembering 'easier' by dividing the material into classes, as when we arrange the books in a library on shelves with different labels» (Kant, 1798, in Marshall, 1977, p. 479). Marshall claims that at the time of his writing, the place metaphor remains ubiquitous in psychology and neurology (Marshall, 1977, p. 479).

Moving quickly past the metaphor of the mind as a railway or telephone, the next metaphor capable of entailing the increasing complexity that communications theory demanded was the computer. This happened as early as the 1930s when the early mechanical and electronic computers were made. An important feature of the computer was that it could do nothing without a *program*, an algorithm that would tell it what to do and how to do it in a strictly logical fashion. According to Marshall, this led to an increased focus on the logic and formal quality of scientific theories of the mind. On the other hand, since a computer needs to be programmed to function, equating the mind with a computer is to say that it is *nothing* on its own. From Marshall's perspective, the interesting questions that arise from this metaphor is not «[i]s the brain (mind) a computer?» but rather how the computational elements of the brain function and how its internal representations are organised and used (Marshall, 1977, p. 481).

The notion that the brain works in «computational» ways is controversial (Fodor, 2001; Fodor, 2005; Pinker, 1997; Pinker, 2005; Schneider, 2007). Still, there is no real controversy that certain areas of the brain are linked to certain elements of cognitive functioning. Language, for instance, is most often localised in the areas of the brain named after the neurologists Broca and Wernicke (Ansari, 2012; Chomsky, 2006; Christiansen & Chater, 2008; Damasio, 2006; Darwin, 1871; Gazzaniga, 2008; Pinker, 2007; Presti, 2016, pp.

^{8.} For legibility, I have removed the references from the quote. Marshall attributes these different metaphors to Plato, Aristotle, Theophrastus, Aristotle, and Plato, respectively.

211-213; Ramachandran, 2011, pp. 153-191; Tomasello, 2008). However, the localisation of these areas varies slightly between individuals, and they can sometimes change place entirely if an area has been damaged (Pinker, 2002, p. 99). This latter point is referred to as *reparative plasticity* (Martino, Pluchino, Bonfanti, & Schwartz, 2011). Another type of brain plasticity is the ongoing adaptations that happen throughout life. Among other things, these adaptations happen as a response to what we usually call symbolic stimuli: language, music, social interactions, learning in general (Christiansen & Chater, 2008; Dronkers, Wilkins, Van Valin, Redfern, & Jaeger, 2004; Kandel, Schwartz, Jessell, Siegelbaum, & Hudspeth, 2012; Kliemann et al., 2019; Levitin, 2008; Lillard & Erisir, 2011; Patel, 2003; Presti, 2016; Tang, Hölzel, & Posner, 2015).

This recognition allows us to speculate that the brain is continually at work 'making itself' in a certain sense. Even when we accept that we do not choose when, where or to whom we are born (Bordieu, 2010; Derrida, 1998; Heidegger, 2010), a central part of life is making conscious choices that reinforce certain brain structures like the ones mentioned above, effectively converting symbols into matter (Malabou, 2008). This model, I suggest, could represent the beginning of a move away from what Marshall sees as the consistently mechanistic metaphor of the brain (Marshall, 1977) and into a more organic, self-driven and self-constituting one.

This move was only made possible because computers are currently beginning to gain traits that resemble human intelligence, thus partaking in their own deconstruction. From the observer's perspective, an artificially intelligent computer is indistinguishable from an intelligent human because it acts as an intelligent human would. In this particular sense, artificial intelligence (AI) is an opaque mechanism like human intelligence has always been – if it acts intelligently, it *is* intelligent, as far as the observer is concerned. Thus, the change in metaphor that we are observing this time is different. Marshall could rightly claim in 1977

^{9.} This is the main idea of Alan Turing's thought experiment traditionally called the «Turing test». It suggests that if a machine responds like a human would, an observer would be unable to decide whether it is in fact a machine or a human (Copeland, 2000). John Searle's famous «Chinese Room» analogy argues that this still would not mean that the machine is *thinking* – it is only doing what it was programmed to do (Searle, 1980). The discussion whether the point where AI becomes more intelligent than humans (the so-called «singularity») can happen or not, and what its consequences could be, has not died down (Bostrom, 2014; Chalmers, 2010; Dreyfus, 2007). Of course, this is all notwithstanding the difficulty of defining «intelligence» in the first place – particularly if one adheres to deconstructive thinking.

that the brain had always been explained in terms of succeeding mechanistic metaphors. Presently, however, machines are not what they used to be. Artificially intelligent computers need to continually change and learn so as to be perceived as intelligent, meaning that computers have to behave as brains – i.e. plastically (Bostrom, 2014; Malabou, 2019; Searle, 1980). So-called «neural computing» has been a discipline in computer science since the 1980s, developing complex models for processing information on the basis of neuroscience (Beale & Jackson, 1990). The paradigm of the plastic brain is yet another step in weakening the traditional divide between nature and culture that we discussed in relation to the concept *bricolage*¹⁰ (Derrida, 2001, p. 358).

Since brain plasticity is most active early in life, the metaphor of the plastic brain underpins the view that early childhood care, education and nurturing should be highly valued in every sense of the word (Presti, 2016, p. 124). When I started the study leading up to this thesis, the discussion on «neuro-education» was running high. In philosophy of education, the discussion seemed to be centred on critiquing the unrealistic and misunderstood ambitions for education that brain research seemed to provoke. The discussion seemed centred primarily on the utility of brain research on didactics and teaching and not on the philosophical repercussions (de Vos, 2015; Ferrari, 2011; Flobakk, 2015; Hinton et al., 2008; Howard-Jones, 2014; Kraft, 2012; Pasquinelli, 2013; Sala & Anderson, 2012; Schrag, 2013; Smeyers, 2016; Zimpel, 2013). In my searches I found no attempt to reconcile neuroscience and education, let alone Bildung, from an ontological point of view. Studying change, power, and temporality from the angle of a philosophy that aims to integrate the themes mentioned above seemed to be the best promise for rethinking Bildung.

Education and philosophy are concepts that need continual renewing and therefore – to a certain degree – resemble floating signifiers (Derrida, 1998; Derrida, 2001). Furthermore, philosophy and education are not easily separated. A part of philosophy is examining and explaining existence, which is moot unless it is done with someone, and I emphasise *with*, in light of maieutics and hermeneutics (Gadamer, 2013; Plato, 1997). Such a relation might very well be called educational. A part of education is to take seriously the position education has as an institution, as a material arena for development, growth (and, sometimes, decline and

^{10.} See page 6 in this thesis.

despair), and so on (Peim, 2001; Peim, 2005; Peim & Flint, 2009; Peim, 2011). Education cannot escape questions concerning the human, the world, the true, the good, the beautiful and so on – all of which are foundational philosophical themes. Fundamental questions in philosophy are therefore fundamental questions in education (Skjervheim, 1996, p. 228). On this basis, I do not distinguish philosophy from education meta-theoretically in this thesis, but see them as interrelated and reciprocal. In this thesis, I make no attempt to do 'philosophy of education', but rather enter into the discussion of Bildung, an important philosophical concept, using philosophical approaches and terminology. You could say that in doing so, I am assuming both the role of the philosopher and the teacher – I have conducted a study and let the scientific community know what I found.

Catherine Malabou and Semiotic Materialism

To reiterate, my underlying assumption is that a rethinking of Bildung should engage with the relation between the material and the symbolic, with the human as a main focus. It should provide an angle from which change, power, and temporality can be discussed and potentially challenged. As rethinking implies renewal, looking to French philosophy seemed like a pertinent choice. According to Ian James (2012), 'the new' has been a staple of French philosophy since at least 1960. Currently, the most prominent French thinkers tend to concentrate on «how something new might enter the world», and the nature of transformation and change (James, 2012, pp. 1-2). Following John Mullarkey (2006), James identifies 1988 as the year that marks a turn in French thought towards the material. That year produced important publications by Alain Badiou, Michel Henry, François Laruelle and Derrida, aligning French thought more closely with the natural sciences (James, 2012, pp. 4-5)¹¹.

As a characteristic element of this turn, James identifies a «re-engagement with the question of ontology» along with a focused investigation of subjectivity and social change (James, 2012, p. 7). This new paradigm focuses on the material, and has consequently been characterised as a rejection of the linguistic paradigm that preceded it. James argues that Malabou's philosophy represents a break with the «linguistic paradigm» that characterised France during

^{11.} A notable and early predecessor to this turn is Henri Bergson, born the year *On The Origin of Species* (Darwin, 1859) was published. Bergson's *Creative Evolution* (1998), first published in 1907, acknowledges evolution as a historical fact but criticises Darwin's theory for being too mechanistic and un-directed.

the 20th century on the basis that Malabou's inspiration is largely biological, both conceptually and empirically (James, 2016). Kaja Jenssen Rathe argues that Malabou's originality lies in her

insistence on the fact that the material plasticity of the brain as organ is not only a metaphor for talking about plastic subjects, but must on the contrary be understood in the strongest, most concrete sense possible. We are plastic subjects because we are our plastic brain, body, biology (Rathe, 2020).

Whereas Derrida upheld 'writing' as a central philosophical concept designating thought, Malabou argues that writing has lost its position as a leading metaphor to that of plasticity (Malabou, 2010, p. 15). Malabou's work is clearly part of the turn towards the material and ontology (Johnston & Malabou, 2013; Malabou, 2005; Malabou, 2008; Malabou, 2010; Malabou, 2011b; Malabou, 2012a; Malabou, 2012b; Malabou, 2015b; Malabou, 2016c; Malabou, 2016b; Malabou, 2017; Malabou, 2019).

Christopher Watkin argues, with a slightly different focus, that contemporary French philosophy is occupied with «laying fresh claim to the human» (Watkin, 2016, p. 1). This «fresh claim» entails re-engaging with questions of humanity and humanism from new angles, such as Catherine Malabou's rejection of «both the 'cognitivist' reduction of the mind to the brain and also the 'Continental' rejection of any necessary relationship between mind and brain» (Watkin, 2016, p. 3).

Malabou positions herself in this landscape as illustrated in her book *Changing difference* (2011b). There, she uses biological metaphors to explain *recovery*, which carries the multiple meanings «to heal, to repair, to relocate a lost object or normal state, to reclaim, to recuperate» (Malabou, 2011b, p. 67). The metaphors – the phoenix, the spider, and the salamander – fit in with Malabou's tendency to use biological metaphors to challenge and develop Continental philosophy (Malabou, 1996; Malabou, 2008; Malabou, 2012b; Malabou, 2016c). In *Changing Difference*, the metaphors portray three different paradigms of recovery within Continental thought: Hegel's, Derrida's, and Malabou's, respectively (Malabou, 2011b, p. 74).

Malabou's own first work was, in the words of Derrida, an effort to 'invent' Hegel by reshaping his philosophy around her concept plasticity. 'Invent' here means «to rediscover what was there without being there» (Malabou, 2011b, p. 68). As Malabou's work explicitly reworked Hegel, he was not simply 'brought back', but rather 'invented'. In order for that to happen, Malabou argues, Hegel had to 'get with the times' by jumping like a circus tiger through two philosophical «rings of fire»: «the limits of traditional metaphysics» and «deconstruction» (Malabou, 2011b, p. 71). Hegel had to escape the constraints of metaphysics, conform to the mobility of deconstruction, and go beyond (Malabou, 2011b, p. 72).

Malabou illustrates these different paradigms with a sentence from *Phenomenology of Spirit* as the starting point: «The wounds of the Spirit heal and leave no scars behind» (Hegel, 1977, p. 407; Malabou, 2011b, p. 73). Using the wound, healing, and scarring as the metaphor, Malabou calls the paradigm of the *phoenix* the dialectical-metaphysical, that of the *spider* the deconstructive, and the *salamander* the post-deconstructive (Malabou, 2011b, p. 73).

Hegel compares the spirit's process of dialectical sublation with the phoenix, the bird that rises reborn from the ashes, without trace or scar. In other words, recovery for Hegel means «to be present once again ... an annulment of the defect, the mark, the lesion». Recovery, for Hegel, is skin healing without a scar, organs reconstituting themselves without a trace of damage (Malabou, 2011b, p. 75).

The spider weaving a web is a symbol for the weaving of a text, but as Malabou argues, the spiders's paradigm is not really one of erasure of the trace, but of retention of the wound:

If the scar is construed as that which bears witness to the presence of the wound, the presence of the past, then it seems that *différance* also leaves no scar, in that it is neither past nor present ... And yet the tissue, the web of the text are covered with marks, nicks, scratches that are so many scars of the impossibility of reconstituting the origin or taking on a new skin. ... Thus ... *différance* with an *a* is really a wounding of language, which retains the scar of this 'infraction' (Malabou, 2011b, pp. 76-77).

In deconstruction, every engagement – «cut» or «wound» – with the text increases its complexity and ramifications, which to Malabou means that the non-existence of the trace is proof that erasure itself is a trace. In the paradigm of the spider, the web (or tissue-text) regenerates by being repaired by the spider: recovery «refers to the constant return of the web, the repair, the lucky chance … the remedy may create another lesion» (Malabou, 2011b, pp. 78-79).

Malabou's own paradigm is the salamander's. Having studied regenerative medicine, the kind that explores the use of stem cells to enable the body to repair itself in ways previously impossible, Malabou discovered the regenerative capabilities of the salamander. If the salamander loses a limb, it can regenerate it without scar tissue being formed. The regenerated limb, however, is never identical to the one amputated (Malabou, 2011b, p. 82). In the paradigm of the salamander, «[r]egeneration is therefore not a reconstitution of presence, but rather a regeneration of difference» (Malabou, 2011b, p. 83). In closing the wound without leaving a scar, yet still producing difference, the salamander cannot represent neither the dialectical-metaphysical nor the deconstructive paradigm, but rather the paradigm of plasticity (Malabou, 2011b, p. 85). In the same way, 'inventing' Hegel amounts to regenerating him, to engage with him again without simply awakening the phoenix or hoping that the spider accidentally manages to fully repair the web. Rather, Malabou emphasises that philosophers today are not simply recovering scar-less copies of old philosophies, or open wounds that may or may not heal – philosophers today invent old philosophies «as we have never before seen them, reconstituting [them] from their deconstruction» (Malabou, 2011b, p. 88).

With these metaphors, Malabou positions herself as a philosopher with obvious intellectual debts to Hegel and Derrida, but also as a philosopher who emphasises the philosophical repercussions of biological metaphor. Granting philosophy the power and freedom to invent, she differs from some of her nationals who fear that the use of biological metaphors accords the methods and metaphysics of the natural sciences metaphysical superiority over philosophy. Francis Wolff argues that by reducing the human to a solely biological being, only the sciences that can explain biological beings can prevail (Wolff, 2012). As we have seen, this is not Malabou's approach. Her discussion of philosophical recovery above is clearly theoretical, but her metaphor is biological and non-reductive.

This approach is perhaps what Malabou is best known for: engaging with Continental philosophy on the one hand and neuroscience on the other, all the while keeping the focus on the potentiality for freedom latent in strictly material ways of explaining the world. Malabou's approach is in other words ontologically oriented, as it concerns both the nature of our bodies, of thinking, and of forms. By way of her concept plasticity, Malabou argues that philosophy can be understood as one form and science another, and that they are in a «plastic relationship» that allows them to take on shape as well as give shape to themselves and others, and possibly also lose all shape. Plasticity is comprised of this tripartite dynamic and is a constantly recurring model in her oeuvre (Malabou, 2005; Malabou, 2008; Malabou, 2009; Malabou, 2010; Malabou, 2011a; Malabou, 2012a; Malabou, 2012c; Malabou, 2015b; Malabou, 2016c; Malabou, 2016a; Malabou, 2019). Malabou's willingness to bridge what C. P. Snow famously called the «two cultures» (Snow, 1993), here represented by biology and philosophy; her argument that mutability is an originary feature of Being; that neurobiology incorporates freedom; and her opposition to messianic thinking make her philosophy an intriguing starting point for my study. I will in the following give a brief overview in order to show how my study benefits from an exposure to her philosophy.

Malabou's philosophy is, of course, discussed in more detail in the articles, but I will nevertheless give a short overview here. I do this to frame the thesis's theoretical foundation and its general relevance for educational theory. In what follows, I will present what I see as some main lines in Malabou's oeuvre and discuss what they mean to my project. I will begin with her first work, *The Future of Hegel* (Malabou, 2005). I will then present some takeaways from her book *What Should We Do With Our Brain?*, which concentrates on the politics of the ontological repercussions that the concept neuroplasticity might have for Continental philosophy. This book, I argue, can be seen to mark her «neurological turn» as it is the starting point for Malabou's dialogue with neurology and biology. Her aim was to present plasticity as a principle for understanding and emancipating the human as a material and biological being (Malabou, 2008, first published in French in 2004.). A few years later, Malabou allows plasticity to engage with Derrida's concept 'writing', thereby establishing plasticity as an ontological concept representing a mode and model of thinking (Malabou, 2007). A logical consequence of form's capacity to take on and give form is of course that

forms influence each other. Malabou underlines this by arguing that forms – be they bodies or intellectual traditions – stand in a plastic relationship, interacting and changing each other while changing themselves (Malabou, 2011a). Further elaborating her materialist ontology, Malabou connects natural selection and Althusser's *materialism of the encounter* and approaches a materialism that seems to distance itself from any notion of pre-selection (Malabou, 2015b).

As can be discerned from the title, *The Future of Hegel* (Malabou, 2005) concerns temporality. More specifically, Malabou aims to elaborate Hegel's philosophy so as to show that there is a future in Hegel and thus for Hegel as a philosopher with whom we can continue to think. Malabou does this by focusing on plasticity, a word Hegel uses occasionally but that Malabou argues is a powerful new lens through which to read his oeuvre. Plasticity, in the way that Malabou elaborates it from Hegel, is the giving and reception of form and the possibility for total dissolution. The work itself is an example of this: Malabou's reengagement with Hegel's often criticised temporality is a plastic movement. Malabou allows Hegel to answer his critics although their critiques were formulated long after his death. Hegel's philosophy, in Malabou's treatment, contains the means to answer his critics, and this process illustrates Malabou's conception of the plasticity of the form: the philosopher – Malabou – engages with the material – Hegel's philosophy – shapes it and is shaped by it, changing both Hegel, Malabou, and the tradition of philosophy in the process. Hegel after Malabou is a new and changed Hegel. In the same way, form has a creative potential that is sandwiched between total rigidity and total dissolution, and negotiated through dialectics. Malabou's Hegel does not end his philosophy with the stasis of Absolute Knowing, but a plastic Absolute Knowing, that is, one that maintains its plastic condition and is able to differentiate itself from itself through time. What Malabou retains from Hegel is thus a monist ontology centred on change, driven by dialectics and shaped by plasticity in time (Malabou, 2005).

The text *What Should We Do With Our Brain?* (*Que faire de notre cerveau?*) marks a turning point in Malabou's thinking, as it connects political matters with biological matters through her interpretation of Hegel (Malabou, 2011c, p. 34). Familiar to us now, but not a grand topic for discussion in French intellectual life in the early 2000s, the neurosciences describe how the brain physically changes as it responds to its environment, effectively bridging the

theoretical gap between materiality and symbolism. Malabou sees this recognition as a direct challenge to philosophies that position the symbolic and the material as opposites in matters of power and politics and forces us to approach anew the question of what life is. Her response is that the language of substance dualism remains in philosophies that separate matter and symbols. In Malabou's view, this separation is unnecessary if plasticity is seen as the ontological principle. Her claim is that there is «only one life» and that its potential and restrictions are tied to the plasticity of that one life (Malabou, 2011c).

The book opens with a reference to Marx – «The brain is a work, and we do not know it» (Malabou, 2008, p. 1). The references to communism should thus be clear: the book's title is likely inspired by Lenin's political pamphlet What Is To Be Done? / Que faire? (Lenin, 1966; Lenin, 2008; Watkin, 2016, p. 219)¹². Thus it is no surprise that the topic of capitalism and the ethics of profit is one of the main discussions in the book. Even so, Malabou makes the point that she is not one of those «'political' philosophers who ... announce the 'coming insurrection' or try to show that communism is not dead» (Malabou, 2011c, p. 24)¹³. Rather, the politics of plasticity rejects the common definition of political theory: that which acts upon society's pre-existing structures of power¹⁴. In economical terms, this definition nullifies political theory's capacity to overcome capitalism. To the contrary, it reinforces the ethics of profit by mirroring the logic on the theoretical level. «The symbolic supplement is the theoretical equivalent of profit» (Malabou, 2011c, pp. 26-27). As I have shown in my second article, Malabou rejects the notion that theory – the symbolic – is separate from the material (Hogstad, 2020a). Neither are they one: plasticity construes the symbolic and the material as interacting parts of a whole. The subject is established as part of any pre-existing structure and the actor that acts upon it, and the two as mutually interacting elements (Malabou, 2011c, p. 25).

The plastic approach to politics concerns the nature of politics itself. The plastic political subject is deeply and irrevocably embedded in politics: every action is a total engagement with politics as such. That does not mean, however, that the plastic political subject is

^{12.} Thanks to professor Roar Høstaker for making me aware of this connection.

^{13.} All quotes from the second edition of *Que faire* ... are translated by the present author. The second edition has yet to be translated into English.

^{14.} Malabou refers to Deleuze for this definition.

sovereign to do anything. As plasticity entails the simultaneous donation and reception of form, every political action involves not only the actor but every other form at once. There is, then, inertia in every political action. Radicality, total change; and sovereignty, total power are outside of Malabou's philosophy, because politics is not only an enveloping but always already assimilating structure that we cannot transcend. The only way for a political theory to avoid being assimilated by capitalism is to acknowledge the inability to escape or transcend politics. Only then, by trusting the 'epigenetic' potential for change – change 'from within' – can a political theory escape or transgress what it opposes (Malabou, 2011c).

Malabou commits to this idea by establishing the brain as the plastic meeting point for the symbolic and the material. The neurosciences tell us that the brain is far from static, as was thought before, but plastic. It undergoes constant change throughout life, caused by instructions given in the DNA, as well as choices, experiences, outside pressures, and accidents. If damaged, it can rearrange itself to recover. In a certain sense, the brain turns the symbolic into the material, for instance by reinforcing the potentiation of certain cells in certain neuronal networks. Using neural plasticity as the inspiration for a new way of formulating the relation between the symbolic and the material, Malabou hopes to allow the symbolic to «die», so it can give way to new life. This new life is the plastic and organic meeting point between the symbolic and the material. To Malabou, the only way forward is to dismiss the dichotomy of the symbolic and the material. We can do this by acknowledging that there is «only one life», and its character is not difference but exchange (Malabou, 2011c, p. 33).

I chose the idea of «only one life» as the starting point for my article «Can We Kill the Bildung King?» (Hogstad, 2020a). The article is a response to an article called «Do We Still Need the Concept of Bildung?» (Masschelein & Ricken, 2003), in which Bildung is portrayed as a totalising and possibly sovereign concept. The authors Jan Masschelein and Norbert Ricken argue that the institutionalisation of Bildung that happened in modernity reduces the critical element of Bildung to one possible form of critique: the one already deemed acceptable to the institution of education. This view, I argue, rests on the logic I have outlined above. It appears to argue that criticism must come from «outside». The institutionalisation of Bildung places it «inside», and therefore it cannot be critical. Masschelein and Ricken thus seem to define critique in the same way as above: that which acts upon society's pre-existing

structures of power. In my article, I show that plasticity presents a different way of construing this relationship, rejecting the divide between the inside and the outside, between symbolism and materiality. I argue that a plastic power relationship cannot be sovereign in the sense of an «outside» acting in a total way on an «inside» because they are embedded in each other.

Consequently, even an institutionalised Bildung has room for critique (Hogstad, 2020a).

In «The Future of the Humanities» (Malabou, 2011a), Catherine Malabou argues that a pressing issue facing philosophy today is that its capacity to «elaborate and articulate» its limits is diminishing. It should, Malabou writes, take note of science which is «gradually becoming a discourse on frontiers, and has thus begun to deprive the Humanities of their proper content or task: the reflexion upon frontiers and limits» (Malabou, 2011a). Here we can discern Malabou's connection to deconstruction: the Humanities, and therefore also philosophy¹⁵, is about identifying limits and reflect upon them. Malabou then goes on to argue that philosophy, if it is to have a future, it needs to do the same – identify its limits and reflect upon them (Malabou, 2011a).

Malabou argues that philosophy largely ignores or actively opposes interaction with neurobiology. In Malabou's view, neurobiology is a discourse that has had no clear philosophical or theoretical foundation and therefore has had to continually challenge and elaborate its own limits. Recognising that neurobiology concerns topics of obvious philosophical import, such as subjectivity, the engendering of the self, and transcendentality, Malabou argues that (French) philosophy currently shares borders with neurobiology, among others, and as such should spend its reflective energy there. Criticising Derrida's *University without condition*, Malabou argues that he was wrong to claim that the future of philosophy would be dependent on the «impossible», that the future of philosophy would be impossible to predict and could not be produced. She asks rhetorically, «[a]re we then doomed to wait for the future of humanities to happen according to a messianic time in which it may as well not happen? Is it messianism that we want?» (Malabou, 2011a). Necessarily implicit in this is a recognition that both the neurosciences and the humanities are plastic forms.

^{15.} In this context philosophy is the subject, so I discuss Malabou's lecture as though what goes for the humanities, goes for philosophy.

Acknowledging her heritage from Derrida, Malabou examines his transition of the 'narrow' concept of writing to the 'enlarged'. She argues that such a transformation can only take place if the concept was already capable of transformation – if change was its primordial feature (Malabou, 2007). «The concept» refers here to 'writing', but also to the form(s) of thinking itself. Malabou's position is that thinking depends on form:

I do not believe in the absence of form or in a possible beyond of form ... Form is the metamorphizable but immovable barrier of thought (Malabou, 2010, p. 49)

Since form is mutable, mutability precedes form, Malabou argues (Malabou, 2007; Malabou, 2012c). And since mutability precedes form – and insofar as we agree that 'plasticity' replaces 'writing' – plasticity as a concept is also mutable and will be succeeded (Malabou, 2007). This can perhaps be read as Malabou's response to critics who consider plasticity an ontotheological concept, able to grasp everything and transform into anything. If the concept plasticity is plastic, then it will accumulate form and retain its primordial feature, mutability. The logic of plasticity entails that plasticity must be overcome (Malabou, 2010).

Malabou's Althusserian reading of Darwin's theory of evolution is relevant for educational thinking in that it approaches the notion of *social selection* as analogous to *natural selection*. For Malabou, social selection has a distinct note of pre-existing criteria, while her reading of Darwin yields no such taste. By discussing selection as a plastic operation, Malabou provides the grounds for a rethinking of social selection as ateleological. She writes:

Why—in the logic of exams, in competitions, or in professional selection in general, the discrimination of candidates regarding aptitude functions, of competencies, or of specific technical capacities—does selection seem to lack plasticity; that is, fluidity on the one hand and the absence of any predetermined selective intention on the other? Why, most of the time, does social selection give the feeling of being an expected or agreed-upon process, a simple logic of conformity and reproduction, whereas natural selection is incalculably open to possibility (Malabou, 2015b, p. 51)?

Malabou suggests here a functional similarity between «the logic of exams, ... competitions, ... professional selection in general, the discrimination of candidates regarding aptitude functions, of competencies, or of specific technical capacities». This similarity is related to the way they operate, and their way of operating is to Malabou conspicuously un-plastic.

Malabou's understanding of plasticity is in this regard to be understood in a particular way, one similar to her reading of Darwinian natural selection. Or, in Malabou's words, «plasticity constitutes one of the central motifs of Darwin's thought» (Malabou, 2015b, p. 50), because his theory of evolution hinges on an understanding that the form (in terms of a species) «takes» only after it has encountered the environment, and natural selection has taken place.

If we understand a species as an example of a form, what we understand as a form has three features. The first feature is that species have *variability*, that is, a «void» that allows them to change. The second feature is that a species has always already crystallised into something we can understand as a species, that is, when it is stable enough to be recognisable – it needs to have taken form. The third feature is that its reasons for taking this particular form is not to be found in some pre-existing plan or criteria, but in an aleatory encounter between countless contingent factors, both within the species and without (Malabou, 2015b, p. 50). According to my own reading of Malabou's philosophy and the theory of evolution, I find this perhaps slightly overly assertive but otherwise reasonable presentation of the state of things (Darwin, 1859; Dawkins, 2006; Malabou, 2005; Malabou, 2010; Malabou, 2012a; Malabou, 2015b; Malabou, 2016c).

Malabou continues: «Why, most of the time, does social selection give the feeling of being an expected or agreed-upon process, a simple logic of conformity and reproduction, whereas natural selection is incalculably open to possibility (Malabou, 2015b, p. 51)?» We might ask: why not? Need social selection and natural selection be the same? And Malabou would perhaps answer: thinking in material terms means leaving teleological thinking behind. Malabou picks up the thread from Althusser, who argues that it is imperative «to free the materialism of the encounter from th[e] repression of [teleological materialisms]; to discover, if possible, its implications for both philosophy and materialism; and to ascertain its hidden

effects wherever they are silently at work» (Malabou, 2015b, p. 48). Her aim is in other words to discuss the grounds for an ateleological materialism.

I am partial to the notion that education perhaps does not need to incorporate the logic of preexisting criteria. Education might not be best served if we know what we want before education is even started. It might be better not to assume that we know what education is or is not, what it does or does not. We might be better off not thinking that education is about managing knowledge or producing a competent work force.

We need of course not accept that social selection and natural selection should be equal. Perhaps they are best understood as different things. However, as Malabou discusses, misrepresentations of Darwinian natural selection abound in history. We need only mention social Darwinism and its misguided interpretation that «survival of the fittest» means that the strong should prevail and the weak wither. I do not think I am alone in thinking that this perversion of Darwinian thought should not be the model for schools, nor should it be perceived as particularly just.

But what we could potentially gain from Malabou's plastic reading of Darwinian natural selection is a materialism that might hold the space for educational processes that are open and ateleological – in other words, plastic. Teaching, particularly in managerial and competency-oriented understandings, would conceivably have to be rethought, together with the logic of exams and grades, and perhaps also curricular structures. There might, of course, be structures or effects at play in «the logic of exams, ... competitions, ... professional selection» and so on which increase the justness of education, and that total ateleology might not always be the best choice. Discrimination might sometimes be just, and it is hard to imagine contemporary education without a curriculum. However, I am intrigued by Malabou's discussion and fear that at the moment, we risk entering into a totalising, managerial way of thinking justness in education.

In the preceding discussion I have addressed what I see as central elements of Malabou's philosophy. These elements illustrate the ontological foundation that my thesis lays for

thinking philosophy of education. In what follows, I will discuss how my thesis relates to philosophy of education and why an ontological study like mine is important.

3. Philosophy and Education

Working from the premise that foundational problems in philosophy are foundational problems in education, my thesis steers clear of a pitfall that Marianna Papastephanou (2010) identifies. She writes that insofar as we think that «philosophy of education» means that philosophy is the subject and education the object, we risk turning education into an area of specialisation for philosophy. She writes,

As an area of specialisation, philosophy of education becomes the arena in which general philosophical theories compete for applicability, verifiability and vindication through the concrete. Often, the concrete is tailored to the selected theory. The issue—the question that guides research and determines the method—seems to be 'what would x (philosopher) think about y (educational topic)?' or 'how could we make x's theory relevant and fruitful for y?' (Papastephanou, 2010, p. 131).

On the surface, it would seem that this is precisely what I am doing. My study identifies three educational themes that are foundational to education, and, on the surface, asks what Catherine Malabou would think of them: «what would Malabou think about change, power, and temporality?» However, as Papastephanou, I do not accept that philosophy of education is an area of specialisation for philosophy. Foundational enquiries of education are foundational enquiries of philosophy, which should be clear from my chosen themes. Change as a topic for philosophical discussion is as old as philosophy itself (Graham, 2015). Power has been a focal point in philosophy for a long time (Hobbes, 1998; Foucault, 1977; Foucault, 2006; Plato, 1997). Temporality equally (Aristotle, 1984; Bergson, 2001; Heidegger, 2010; Hoy, 2009; Williams, 1990).

My thesis contradicts the definition of philosophy of education as found in the *Stanford Encyclopedia of Philosophy*. It reads,

Philosophy of education is the branch of applied or practical philosophy concerned with the nature and aims of education and the philosophical problems arising from educational theory and practice (Siegel, Phillips, & Callan, 2018).

As my thesis concerns fundamental research, it cannot be understood as applied or practical philosophy. Rather, if we are to follow this line of thinking, it is a work of «pure philosophy» even if its theme and scope is education (Lippert-Rasmussen, Brownlee, & Coady, 2017). In fact, this raises the issue of whether it is possible to separate education and philosophy at all. Socratic maieutics teaches us that thinking and discussion are closely related (Plato, 1997), and Hegelian dialectics argues that subjectivity is null and void as long as there is no Other for whom to be a someone (Hegel, 1977). The notion that philosophy of education is «applied or practical philosophy» would run counter to this and deny philosophy of education to go beyond the borders of the field. Such a view on philosophy of education borders on authoritarianism in the sense that it is only allowed to think the *how* and *why*, but never question what it (or even the concept *education*) is (Peim, 2011). As my thesis is concerned with how we understand the central educational aspects change, power, and temporality, its job is to question the ontology (-ies) at play in education and provide some grounds for rethinking them. This project should therefore be understood as a («purely») philosophical enquiry that approaches key topics in education.

The topics I have chosen to examine are what I consider vital aspects of education. However, simply examining these aspects without posing an alternative would risk reinforcing it – perhaps the weighting between the poles would be changed, but the polar structure would remain (Papastephanou, 2017). Similarly, the story of the Gordian Knot would serve no purpose if the storyteller neglected to tell how Alexander untied the impossible knot with the edge of his sword. Of course, philosophy is not a knot, and our methods are not swords; our problems are seldom obvious to see and our solutions might perhaps be swift and brutal but never final. Therefore, I consider it an ethical responsibility to not simply point out the issues, but also at least propose a different way of thinking that takes them into account. The question then becomes from what angle we should approach the issues.

4. The Findings Reported in the Articles

The first article of the thesis, «Towards a Plastic Starting Point» (Hogstad, 2020b), can be considered a preliminary study, examining Malabou's materialist conception of change. Its implications then carry over into the second and third articles. In the second article, «Can We Kill the Bildung King?» (Hogstad, 2020a), I engage with the duality between 'biological' and 'symbolic' life and the assumed power relations this brings with it. I argue along with Malabou that this dualism grants biological life sovereign power over symbolic life, and that a shift of perspective towards a plastic materialism will put the two in a reciprocal and interdependent relation that might avoid the assumed sovereign structure. In the third article, «Is (It) Time to Leave Eternity Behind?» (Hogstad, forthcoming), I question the assumption that temporality in education, and specifically the concept of Bildung, must collect its drive from a sort of (un)reachable eternity. I argue along with Malabou that it might be possible to construe temporality as driven by the 'synaptic' spacing of the moment instead. These studies of ontological themes are the focus for this thesis and the subsequent findings and discussion are my contribution to philosophy of education.

Article 1

My study began by exploring the concept broadly, by providing a reading of plasticity's emphasis on change and how it might relate to ethical-political education, i.e. Bildung. The result of this exploration is the first article in the thesis, «Towards a Plastic Starting Point: Rethinking Ethical-Political Education with Catherine Malabou» (Hogstad, 2020b). In the article, I outline my understanding of the relation between plasticity and change, from the assumption that change is an indispensable part of any concept of education.

As the title suggests, the aim for the article was to outline a new ontological starting point for rethinking the concept of change in ethical-political education. In doing so, I began by arguing that an ontological study of change is worthwhile simply by the recognition that change is an important element in the thinking of education. The passing of time ensures that society, institutions, and individuals change. As such, an ontological discussion of change seemed ethically important as well as having consequences for the thinking of education altogether.

I structured the article as three «moments» that correspond with studies I find central to Malabou's authorship. The first moment provides an overview of Malabou's study of Hegel, focusing on her development of the concept plasticity. Here, I point out that Malabou's reshaping of Hegel's concept of plasticity was a first attempt to outline an ontological principle that tied together temporality and dialectics: if we read Hegel as though Malabou's plasticity were his core concept, Hegel's temporality, which was previously thought to end with Absolute knowing, would remain dialectically active. This means, I suggest in the article, that with this, change was established as an indispensable element of Malabou's philosophy. Two decades later, Malabou would apply her reading of Hegel to neuroscience, presenting her first thoughts on the ontological repercussions of the plastic brain. Bringing her ontological principle right into the most explosive discussion of the human, the relation between brain and thinking, Malabou positioned her ontology at the heart of philosophical discussions that are important to Bildung. Expanding her metaphor to theory and theorising, Malabou suggested that philosophy itself is plastic, in the sense that the philosopher must constantly reengage with previous thinking in order to make sense of a constantly renewing society. Change is in this sense central to philosophy, metaphysics, and thinking.

The second moment explores Malabou's study of Heidegger¹⁶, focusing on the change in the concept change itself, as well as elaborating Malabou's relationship with Heideggerian metaphysics. Here, I emphasise part of Malabou's reading of Heidegger in order to show how Malabou considers the relation between form, history, and plasticity. Previous studies of Heidegger have concentrated on form's difference from other forms, but Malabou concentrates on form's difference from itself through time. Using the example of Heidegger's reading of Plato, Malabou argues that by discussing Plato, Heidegger changes him. Following this I argue that by the same logic, Malabou changed both Heidegger and Plato – and that I, reading Malabou (and again, those who read my text) continue the cycle. The ontological takeaway from Malabou's Heidegger study is that form and essence are established as something that appears after the fact, as something that *has become*. Form's primordial and foremost feature is, according to Malabou, its plasticity.

¹⁰

^{16.} Heidegger's fascism is important to recognise. However, I suggest with Malabou's terms that Heidegger's philosophy, like any philosophy, is a plastic form. His philosophy is constantly 'invented' and as such there are myriads of ways of reading his texts.

The third moment shows part of Malabou's debt to, and distancing from, Derrida's concept 'writing'. In this moment, I present Malabou's discussion of writing as the predominant ontological concept. Malabou acknowledges that Derrida's act of 'enlarging' writing changes it from a concept describing the marking of words on paper to a concept encompassing language and thought itself. Derrida pointed out that if writing was to be understood only as marking speech on paper, the written sign would have to have a different relation to speech than spoken language has to its signified. However, the relation is equally arbitrary in each step as there is no necessary signifier for a given signified, Malabou argues. The consequence is that the enlargement of writing shows that the ability to change – the plasticity of the concept – was primordial to the act of enlargement. A consequence of this is that, insofar as plasticity is the predominant ontological principle, it, too, must be thought as plastic and therefore surpassable.

Having elaborated these three moments, I concluded by suggesting that change as a concept should be a primary point of discussion for the rethinking of Bildung. In my subsequent articles, I built upon this understanding of plasticity and the primordial mutability of form. The concept of change implied in this study opens up for much philosophical work. A concrete rethinking of the thinking of Bildung – that is, the construction of a theory of Bildung, and perhaps also a meta-theory of Bildung – remains to be done. And along with it, a further enquiry into what this concept of change means for the development of the self, of society and politics. Furthermore, what concrete consequences this line of thinking might have for education as an institution and material meeting place, as well as for didactics, is not fully explored.

Article 2

Narrowing the study, my second article «Can We Kill the Bildung King? – The Quest for a Non-Sovereign Concept of Bildung» (Hogstad, 2020a) approached the question of Bildung, sovereignty and (bio)power. The article is a response to a concern expressed by Jan Masschelein and Norbert Ricken (2003). They worry that the critical aspect of Bildung might have been lost when it became an integral part of education. Their argument is that the criticism and emancipatory thinking that Bildung brought to education has transformed the critical potential of the concept into a sort of sovereign power that produces only a specific (and

therefore not emancipatory) kind of critique. In fact, they argue, the critique that the contemporary concept of Bildung produces is a necessary part of the power accorded to education. Therefore, education – even when emphasising Bildung – seems to take on the shape of a sovereign ruler (Masschelein & Ricken, 2003).

I contrast Masschelein's and Ricken's argument with Catherine Malabou's critique of biopower from the text «Will Sovereignty Ever Be Deconstructed?» (Malabou, 2015a). There, she argues that bio-power tends to take on a sovereign guise whenever it assumes a difference between symbolic and biological life. This divide privileges one type of life over the other, and as such it retains the old model of the sovereign king who wielded absolute power over his subjects. One way to solve this – and thereby perhaps achieve the distribution of power that Foucault envisioned in bio-power – is, according to Malabou, to allow the separation of these two types of life to be deconstructed. In Malabou's argument, the relation between the biological and symbolic aspect of life are tied together in an epigenetic (plastic) relationship that has room for critique and movement from within (Malabou, 2015a).

Putting these two arguments together, I argue that if the productive and potentially critical aspects of the concept Bildung are to be retained, the best solution might be to identify and challenge the problematic elements of the concept. I turn to Malabou's integration of the two types of life and argue that Bildung might still, even if it is an integral and necessary part of education, have the potential to produce change from within (Hogstad, 2020a).

The study reported in this article is a direct engagement with a previous argument and as such it demanded faithfulness to the original. I made the choice to argue against a position that seemed to have gained traction in the field – the argument from Masschelein and Ricken – by taking them seriously and showing what I saw as one reason why they ended up with the conclusion that they did. There are many ways I could have gone about this. I could have chosen to dismiss their position altogether, but that would simply leave the argument that biopower can be sovereign uncriticised. Allowing Masschelein and Ricken to speak as far as I was able, taking their construal of the problem and their concern for the consequences seriously, I aimed to meet their concerns with an argument that contradicted theirs on their own terms. In this way, with the help of Malabou's thinking, my article presents a response to

Masschelein's and Ricken's concerns along with a shift in metaphor that opens up for a new way of thinking (bio-)power in education. I argue that this is a fruitful way of doing it insofar as the current state of research in a way represents the current map of philosophical problems related to the educational themes. While philosophers can choose many approaches to furthering the state of research, a legitimate one is starting with a problem already outlined by other thinkers.

I can see how Malabou's plasticity might seem like an ontotheological aspiration (Thomson, 2000) in the sense that it seems to posit plasticity as an all-encompassing principle, but I do not consider this to be the case. Neither do I consider the injection of plasticity into bio-power an operation of sovereignty. Following what I have discussed earlier, my approach here is to suggest a different metaphor for thinking education with the aim to illuminate aporias and where possible, show how they can be surpassed. I also find it almost self-evidently true that plasticity will be surpassed one day, not least because Malabou is so clear that it will (Malabou, 2007), but also because she constantly provides us with reasons why it will. If plasticity is a concept, then it is also a form, and if it is a form, its primordial feature is plasticity. While this could be seen as a circular argument, I simply take it to mean that an ontological framework such as writing or plasticity does a particular job at a particular time. The notion of the constancy of change is not special – Heraclitus mentioned it 2500 years ago (Graham, 2015; Plato, 1997) – so it would only be reasonable to expect that her philosophy, like that of Hegel, Heidegger, Foucault, and Derrida, will have to be 'invented' sometime in the future. I do believe, however, that plasticity is a powerful rethinking of both change and power in our time.

Questions that remain after this study include a thorough rethinking of sovereignty and power in education.

Article 3

In my third article, «Is (It) Time to Leave Eternity Behind? Rethinking Bildung's Implicit Temporality», I examined some of the foundations for the concept of Bildung. I identified Hans-Georg Gadamer's notion that Bildung contains Bild, which connotes both *Vorbild* (model) and *Nachbild* (resulting image). This structure, which I called the *Vorbild-Bildung*-

Nachbild (model-process-result) structure, seems to remain within the logical framework of Western and specifically Christian temporality. I outlined a history of Bildung that shows how Bildung never successfully escaped the Christian temporality that stretches from Creation, through the radical change afforded by Salvation, into Eternity.

One problem of construing Bildung in this way is that it binds it to a (Judeo-)Christian history, which is a problem for the elaboration of Bildung as a concept fit for a globalised world (Bohlin, 2013; Gustavsson, 2014; Kemp, 2013; Løvlie & Standish, 2002b; Løvlie & Standish, 2002a; Taylor, 2017; Wimmer, 2003). As a response, I introduced a different way of thinking temporality as presented by Clayton Crockett and Catherine Malabou, a model based on plasticity (Crockett & Malabou, 2010).

Crockett and Malabou contrast their model of temporality to the linear and circular models of time. Circular time is centred around a God that provides energy to the movement of time, and it is therefore a passive time. The linear model of time is, in contrast, an active time, grasping and differentiating itself as it passes, but passing along a pre-determined trajectory from the beginning towards the end. Recent expressions of this view tend to move away from the concept of Salvation in letter, but retain it in practice, such as Derrida's «messianicity without a messiah» (Derrida, 2006). Even in Derrida's model of temporality, the notion of the eternal remains, as he understands messianicity as «a waiting without horizon of expectation» (Crockett & Malabou, 2010, p. 17). In other words, the model of Salvation remains even if the message is not to expect it.

Crockett and Malabou suggest instead that time should be construed as plastic. In this view, time is the excess of being, coming together as the production and realisation of the plastic potential in the brain, which is here a metaphor for the self. It is a fragmented time that collects its drive from the plastic process, opening up for thinking in what may be construed as «synaptic gaps» (Crockett & Malabou, 2010). I argued that this way of thinking temporality runs directly counter to most educational thinking in the West, disturbing much of the thinking that lies beneath the idea of curriculum, of transmission of knowledge, and preparation for the future. Finally, I suggested that education construed from the basis of plastic temporality might exhibit greater openness to presence, change, and creation.

Like the two preceding articles, this one reports on a study aiming to examine a foundational concept in Bildung. Having shown that Bildung remains conceptually within a specific metaphysics, and that a different paradigm is possible, it should be possible to embark on a thorough rethinking of Bildung. This, however, remains to be done.

5. The Plasticity of Bildung

In this thesis, I have aimed to show that it is possible to identify and challenge some aspects of our thinking of Bildung. Suggesting a change of foundational metaphor to that of plasticity might provide the grounds for a thinking of Bildung that reconfigures and allows the concept to develop. A plastic conception of Bildung promotes an epigenetic view on development, change, power, and temporality, all of which break with formerly tacitly accepted dichotomies. The epigenetic view emphasises parallel and reciprocal change between forms, challenging the idea of educational ideals, goals, and determinism as such. One might speculate that this would also demand a rethinking of whether improving schooling is enough to combat social inequality and promote the 'latent talent' of every student (Schleicher, 2019, pp. 20-22), one admirable goal of the otherwise unfortunate PISA test regime. In Malabou's view, as we have seen, attempting such types of societal and political change without taking form's epigenetic character into account will ultimately fail (Malabou, 2011c).

What cannot be known, however, are ontotheological truths about the current and future status of education and Bildung. As my thesis is situated in a deconstructive tradition, albeit with materialist leanings, I have omitted any aspiration to posit education or Bildung's poison or cure. Rather, I have pointed to some apparent conceptual 'fault lines' that have stood out to me, and suggested that they be rethought with plasticity in mind. In doing so, I have employed a philosophy that explicitly denies any original or final form, and announces in the same breath that it, too, shall be replaced. Whatever we might say a plastic Bildung is, we cannot say that it is here to stay forever.

Nevertheless, taking my findings from all three themes – change, power, and temporality – under one, a certain figuration of the human, and by extension of Bildung, stands out. Insofar as we think of the human as a plastic form, we also think that change is its primordial feature.

We think this change as partially self-inflicted and self-driven, in the sense that the self is something created. However, seeing as form is thinking's way of sorting the world, the human changes both as an individual and social event. Because I in this thesis have committed myself to a way of thinking that employs biological metaphors and assumes a materialist ontology, change comes not only from the created but also from the given. In other words, change can happen as an expression of excess of power over the self (i.e. self-change) or as an outside pressure, either as an act of power from another form, distortions from within the form itself, for instance, genetic disease, or simply accidents (Malabou, 2012a). Change will happen in time, but insofar as we agree that time is plastic, we must also be wary of believing that we know what the future will bring. Plastic time suggests a shift in emphasis in education from the preparation of children for the future to opening up a space where the student and history – subjects, techniques, ways of thinking – may meet.

In this way, Bildung becomes the sum of self-formation, the formation of the other, and the formation provided by history. An important aspect will be the recognition of one's own and the other's plasticity. In structural terms, the aspect of control so prevalent in education today (Peim & Flint, 2009) seems linked with a linear conception of time and would have to yield to a more open way of thinking education.

The potential contribution of this study is precisely this: a new metaphor for Bildung. The new metaphor 'plastic Bildung' embodies certain conceptions of change, power, and temporality, and also relationality and differentiation. As a philosophical study, the thesis has laid out its game rules as clearly as I have been able. My approach has been philosophical, my object of study has been philosophical, and the repercussions are potentially educational, in terms of its area of impact and, more concretely, in terms of the writer educating the reader on what the study found.

There are clear limitations to this project. Depending on how we understand the concept *philosophy* and *philosophical*, the risk is that the abstraction necessary to join the European philosophical tradition is equally a distancing from the issues at hand. By discussing Bildung in terms of the history of ideas and the concept's philosophical contentions, and not in terms of what currently goes on in classrooms, in people or peoples, I risk not discussing what

matters. A theoretical discussion of the impossibility of sovereignty matters little to the forcefully subjugated. The finer points of temporality in an ancient educational concept might not help a confused student. Elaborating a new metaphor for change might never reach those in power to change education for the better.

The philosophical outlook I have chosen for this project – a semiotically informed approach, considering Bildung a changeable and fundamentally unstable metaphor – implicates a certain way of thinking. I have foregone the search for stable truths and as such I risk the boundary-less uncertainty of relativism. Even so, I have made clear where my feet are planted, metaphorically speaking. I am assuming that language *is* metaphorical. I am assuming that language, thinking, and action are meaningfully yet arbitrarily connected. I am assuming that our understanding of the relation between language, thinking and action can be meaningfully challenged on the basis of diligent and transparent philosophical work. My contribution is in this way both related to Bildung as a concept with a certain history and as a concept that has no inherent meaning and can potentially be developed in many ways. One of these ways is the one informed by Catherine Malabou's semiotic materialism.

My close alignment with Malabou's philosophy allows me to see this problematic through a certain scope. My aim has been to refine this scope sufficiently to provide a novel and hopefully fruitful analysis of and perspective on Bildung as a concept. In doing so, I have assumed that the concept has to be continually rethought, that such a rethinking should explore fundamental conceptual assumptions in Bildung, and that these assumptions must be challenged if required. Aligning my study with Malabou's semiotic materialism has allowed me to examine the concept Bildung with these three assumptions in mind and intact. However, selecting Malabou's philosophy as my scope also means dismissing other possible scopes.

These limitations must be met by studies other than this one. The aim for this study is abstract, and it is supposed to be a contribution to, and an engagement with Continental philosophy in different guises. In order to do this, I have approached what I see as important underlying structures and conditions for thinking in education. These structures and conditions appeared prevalent and under-discussed, and I have presented my sources and

reasoning as clearly and transparently as I have been able. At this stage, I have laid my thoughts bare – I can do nothing but leave it to the reader to decide whether my work has been successful. In the end, if this study can inflict change in one reader; if I have been a teacher for someone, in some way; or if I have been a philosopher who has contributed to the great discussion – I can ask for nothing more.

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Article 1

Towards a Plastic Starting Point

Rethinking Ethical-Political Education with Catherine Malabou

Hogstad, Kjetil Horn. (2020). Towards a Plastic Starting Point: Rethinking Ethical-Political Education with Catherine Malabou. In Torill Strand (Ed.), *Rethinking Ethical-Political Education* (pp. 153-166). Cham: Springer.

10. Towards a Plastic Starting Point: Rethinking Ethical-Political Education with Catherine Malabou

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Abstract

Sometime around 500 BCE, Heraclitus is supposed to have said that it is impossible to step in the same river twice (Plato, 1997, p. 120; Graham, 2015). Since then, the problem of being and change has never left Western philosophy. Evidently important in and to education, change continues to be an important field of inquiry. In this text, I approach the concept of change by way of an examination of Catherine Malabou's philosophy of plasticity. I revisit what I identify as three main moments in her philosophy: Her re-elaboration of Hegelian time and dialectics as the process through which change happens; the open potentiality of the moment as she finds it in Heidegger; and change as driven by, and dependent on, concepts and schematization as she finds it implied in Derrida. By setting change at the center for what might be called her post-post-structural, materialist, yet non-deterministic ontology, Malabou's three moments could open up for a rethinking of the changeable character of the Nordic model, as well as the character of ethical-political education.

Keywords

Change, ontology, Catherine Malabou, plasticity, Ethical-political education

Does ontology matter for ethical-political education?

The title of this book – "Rethinking Ethical-Political Education" – situates it in time and space as well as in a certain theme: We are invited to (re)think ethical-political education as a spatio-temporal phenomenon. If we take this invitation seriously we might have to accept that the various forms of ethical-political education¹ can and perhaps should be rethought; perhaps even that such a rethinking is inevitable. We might also be reminded that *re*thinking something suggests that it is time to reengage with familiar problems but in new ways, or in other words, re-situating the exploration of an old problem in a new time. What we are saying seems to be that there is a tripartite complicity between time, change, and continuity. In this text, I have chosen to focus on change. One reason is that education in many respects purports to produce change in the student in some way, either by eliciting it from her, by supervising change that will inevitably occur, or by causing change in some way. Another is that the projected future changes of the society is often a part of the political project involved in the institution of education. A third is that both ethics, politics, and education as institutions and practices all can be thought of as subject to and product of the changes that time and continuity allow and deny, respectively.

¹ As Torill Strand mentions in her introduction, ethical-political education has worn many guises, and still does. Some of them go by the name of *paideia*, *Bildung*, or progressive (democratic) education.

The context of this book is "the Nordic model". According to Ari Antikainen (2006), an important trait of this model is the focus on lifelong learning. Antikainen explains the Nordic model as based on the belief that good education and schooling takes into account both national and current needs, and international and (so far unknown) future needs. Central to the Nordic model is the assumption that change will happen, both in the student, their relations; national and international conditions and relations; and in the interrelations between them all (Antikainen, 2006).

How can we think this change? We can say with Jacques Derrida that the meaning of 'change' is constantly changing. As he argues in "Structure, sign and play", even the concept 'structure' is unstably structured. Throughout the history of the concept, which is as long as philosophy's, the concept has undergone constant transformation. This leads Derrida to suggest that concepts have no solid or eternal 'center', but that they are organized loosely around a space that allows the concept to remain, yet change (2001, p. 351ff). Derrida thus presents us with the job of examining or rethinking the concepts that we rely on. Torill Strand, in her introduction to this book, argues that the Nordic model is one such concept. The Nordic model has somewhat definable 'contours': education has potential to solve societal issues and should be for everyone. The 'center', however: the details and concretizations of the concept, is subject to continual debate, or in other words, *change*.

My intention here is therefore to present the problem of change as an ontological concept in the context of ethical-political education. This does not entail neither asking *the* question (or even *a* question) of ontology and attempt to bring about an answer, but rather to elaborate how the concept itself might be formulated. Presenting the problem of change in this way might be an intervention for a rethought conception of ethical-political education. The need for such a rethinking is found most fundamentally in the realization that the social and environmental issues we are facing today are, by the simple but inexorable force of time's passing, not the same as anything we have encountered. A more specific concern is expressed in Ole Andreas Kvamme's chapter in this book: The impending force and peril of climate change. Carol Taylor's chapter argues that we have entered a "posthuman" period, where it is no longer possible to uphold the idea of the human as the unbound controller and exploiter of the world's resources. The natural sciences have shown us just how complex and fuzzy the relationship and interplay between individual and environment is, and it seems likely that this now presumably outdated idea is closely tied to the myopic and self-centered imperialist past of the Western world

The present text is structured around three main "moments". These moments are points in Malabou's authorship where she elaborates what I identify as ideas which are intertwined but concern different things. I am using the temporal sense of the word "moment" deliberately because I identify them as points where Malabou's oeuvre itself can be read as transitions from the predicative to the speculative perspective. We will see in the first moment that the concept plasticity is introduced and its relation to time and dialectics are revealed; in the second that the openness and undecidedness that plasticity represents is thought as the perpetual origin of essence; in the third that plasticity understands itself as a mode of thinking capable of causing change, even to change itself so as to make itself obsolete.

Having thus already in the proper Hegelian fashion paved the way for a transition from the predicative to the speculative, let us go into the three moments in further detail.

The Three Moments

In the first moment, I explore Malabou's reading of Hegel as it is presented in her work *The Future of Hegel* (Malabou, 1996, 2005). It is centered around three concepts: Plasticity, temporality, and dialectics. In this work, Malabou suggests a reading of Hegel that's different from the prevalent

French reception at the time, the interpretations offered by Kojève and Koyré. In their readings, inspired by Heidegger, Hegel's concept of time is seen simply as an expression of what Heidegger called "vulgar time", that is, the simple linear sequence of "nows" with no possibility for deviation. In that sense, time is nothing but a realization of what must come, and there is no room for the unexpected or freedom or agency.

Malabou's reshaping of Hegel's concept of time is constructed around the concept *plasticity*, a concept designating the productive space between total rigidity and total dissolution. I find that Malabou's reading produces at least two important results. The first is a contemporizing of Hegel, interpreting him as a thinker with a dialectical yet non-determinist concept of time and futurity. This includes re-reading Hegel in dialog with Heidegger and Derrida. Her engagement with Hegel opens up for a non-transcendental, yet non-deterministic ontology. In this ontology, change and the historization of the moment happen not thanks to an organizing principle outside the System, but as a result of the tension between essence and accident within. In this perspective, the question of the wholly Other "is always in fact a question about an origin that could have been wholly otherwise"; a question which in Malabou's Hegel is answered by a reference to the necessary and "inherent complicity" between that which is and that which could have been (Malabou, 2005, pp. 163-164).

This complicity, to Malabou, reveals the dialectic as the original ontological principle of change: "Everything begins in the same moment, where the becoming essential of the accident and the becoming accidental of essence mutually imply one another. There is nothing beforehand. The dialectic is primordial, indeed, it is the origin" (Malabou, 2005, p. 164). Already here we can discern the beginning of an ontology in which change can be seen as a central element. Her 2004 book What Should We Do With Our Brain (English translation published in 2008) approaches the phenomenon brain plasticity and argues that the brain is plastic in precisely this dialectical and primordially originary fashion. Although she mentions neural plasticity almost 20 years prior in *The Future of* Hegel, What Should We Do With Our Brain marks what could perhaps be called her "neurological turn", refining a critical and productive engagement with the natural sciences (mainly cellular biology and neuroscience) from the angle of Continental philosophy. This turn allows her to bring Continental philosophy into a new era and read neurology as a science of change, self-production, accident, and freedom, instead of a discourse that blocks conversation (Malabou, 2004b, 2008). But in keeping with the original problem of this text, I will not go further into this strand of her thinking but rather concentrate the first moment on her reshaping of Hegel's concept of time and plasticity. The reader should, however, keep in mind that plasticity as it will be understood after the neurological turn takes it upon itself to both describe change as I will be discussing it in this text – in primarily metaphysical terms – and as the gradual (self-)development, deposition, and destruction of the body. Reading the present text in this speculative way might foreshadow a potentially transformative perspective on both ethics, politics, and education.

A second result is the introduction of plasticity as a novel approach to theory and theorizing. This approach is connected to the development of metaphysics as Malabou finds it in Hegel: By doing philosophy, the philosopher changes and influences the course and form of philosophy itself (Malabou, 2005, p. 131ff). It is this feature primarily that we will discuss in the latter two moments of this text.

In the second moment, we will be looking at change as the moment of perpetual origin as Malabou finds it in Heidegger. It's his three terms *Wandel* (change), *Wandlung* (transformation) and *Verwandlung* (metamorphosis) which she sees as a hitherto undiscovered common thread in Heidegger's discussion of change.

The third moment explores Malabou's relationship with and inheritance from Derrida, in seeing the concept plasticity as capable of describing a general tendency in science and society, as well as shaping it at the same time. In this part, she adopts, changes and moves beyond Derrida's concept *writing*. Whereas Derrida argues that the philosopher's job is to describe what's going on and that change will inevitably come, Malabou argues that the philosopher is already provoking change by describing what's going on. Malabou thus challenges one of the main tenets of deconstruction: Even if the text deconstructs itself, the very act of deconstructive analysis is simultaneously a cause of change. In light of this, the concept plasticity – paradoxically, as it functions as an ontological principle – itself must be seen as plastic in the sense that it, too, will be changed and surpassed one day.

Moment I: Hegel

Catherine Malabou's first book, *L'Avenir de Hegel* (later translated to *The Future of Hegel*) is a radical re-reading of Hegel. It was written as an answer to what was the current French mediations: Koyré's and Kojève's. Both had read Heidegger and argue that Hegel's conception of time was merely something "to be passed by", and, consequently, that he could not be thought as a thinker of future and futurity. As Hegel's "Absolute Knowledge" in their interpretation was nothing more than the end point of history and the *Phenomenology* simply a linear developmental narrative, they argued that he left no possibility for variation during the course of the development of Absolute Knowledge. In this perspective, history and time is seen to be locked to a one-dimensional teleological line. What is lost in the process, in Malabou's view, is the energy of the negative. In order to reclaim the negative and consequently also the dialectic, Malabou re-reads Hegel from an ingenious perspective: *plasticity* (Malabou, 1996, 2005).

Malabou observes that Hegel already uses the concept of plasticity in a way that highlights its negative energy. In the Aesthetics, plasticity is used to describe the "plastic arts" such as sculpting. The sculptor's work is to extract the essence of the sculpture from the slab of marble, and by extension Hegel applies the word "plastic individuals" to persons from Greek mythology who have grown up to become free, substantial, independent, self-made; essentially "what they were and wanted to be". Yet in spite of these characteristics, their becoming must also be understood as a mediation between what the Cosmos supposed that they become and what they actually became. Malabou thus sees this as a "middle term" between plasticity as the passive reception of form by the marble and the active and self-encompassing concept philosophical plasticity. The latter has two forms as Malabou reads it. First, it represents the act of philosophizing in that the philosopher engages with philosophical matter as it is presented to her, and causes it to change by the very act of doing philosophy. In dialectical terms, the philosopher is in a way the locus and origin of the negation and sublation of philosophy. Second, philosophical plasticity is a way of conceiving philosophy's form and "rhythm in which the speculative content is unfolded and presented" (Malabou, 2005, pp. 9-10). Hegel's plasticity is thus to be understood as a concept which captures several different but not competing aspects: the reception of form like the marble receives its new form from its sculptor; the (albeit limited) capacity of the subject to self-form; and the dialectical dynamics of thinking.

Martin Heidegger is the one who gets to represent Hegel's critics in Malabou's book. Malabou's interest in Hegel is motivated precisely by the French interpretation of Hegel as a necessary, sequential progression towards some predefined future, thus effectively negating the very concept of future in the process. How can we reconcile the fact that Hegel is something like the foundation of all of the western philosophical tradition and his concept of time being read as having no future? Malabou's rereading takes Hegel's philosophical behest that one should "philosophize in one's

idiom", effectively softening and opening up Hegelian speculative conceptuality by placing two interlinked concepts together: *plasticity* and *voir venir*.

Plasticity is the *mode* which controls the relation between time and the future, she writes – something I understand to mean that plasticity is the process or dynamic by which time and the future are turned into multi-dimensional and variable units with a constant opening to change and accident. She writes, «Indeed, to posit the future as 'plasticity' amounts to displacing the established definition of the future as a moment of time» (Malabou, 2005, p. 5). In other words, the future is *not* defined as just another time like the others, but rather something which is completely open. Drawing this contrast between "the future" and "a moment of time" means that the future is conceptually different from moments of time. Malabou suggests also that time is dialectical in the sense that it historicizes itself by turning future into the now, then to the past.

This opening to the unexpected, but which is still dependent on what went before, Malabou calls *voir venir*, translated into «to see (what is) coming». As the English translation suggests, this French idiom is used to convey that something will happen ("to see what is coming") and what happens won't necessarily be a surprise, but it might be ("to see coming"). Seeing something coming is what you do when you're not actually certain that's what's coming, while "to see what is coming" is a matter-of-factly observation, recalling Derrida's famous separation of *futur* as the programmed, foreseeable future and *avenir* as the future which can't be predicted. In the same vein, *voir venir* is a principle which is able to capture the open variation that the future represents. Whereas the past is what establishes the premises of the moment, the moment is a locus where time historicizes itself by allowing one of several possible futures to turn into the now, then to the past.

Plasticity is in this way an ontological principle based on a certain concept of temporality, as plasticity is defined *as* future, or «the excess of the future over the future» (Malabou, 2005, p. 5) – the possible variation of the suggested future. But this variation is not infinite. Malabou explores how Hegel uses the term and discovers a fundamental duality in the concept: giving shape and receiving shape. This tension is central to Hegelian dialectics, where tension, contradictions or negation is dissolved into sublation (aufhebung). For Malabou, dialectics is a source of energy in a system which can't receive anything from the outside. Dialectics itself she sees as plastic because it constantly «makes links between the opposing moments of total immobility and vacuity, and then links both in the vitality of the whole, a whole which, reconciling these two extremes, is itself the union of resistance and fluidity» (Malabou, 2005, p. 12).

This implies an explicit re-elaboration of the concept of *form*. Malabou sees the form as a plastic unit, contrary to the thought of form as the contour of matter. As Tracy Colony points out, Malabou «envisions form itself as a site of self-dissolution and re-generation: 'Between the emergence and the annihilation of form, plasticity carries, as its own possibility, self-engendering and self-destruction'» (Malabou, 2005, p. 193, quoted in Colony, 2015, p. 104). Form, in this way, becomes its own alterity, where the form of the past is different from the form of the now. Malabou writes, «Form is the metamorphizable but immovable barrier of thought» (Malabou, 2009, p. 49) – thinking in forms is unavoidable, and is therefore a concept which captures both *the human* and *the world*. Malabou suggests that plasticity is a human trait, but also that the human is what understands the human. As we shall see later in this text, Malabou suggests that plasticity is a concept which can be used about human activity as such – and plasticity is dependent on a concept of form.

Through this plastic re-reading of Hegel, Malabou wishes to be able to open up to a Hegelian ontology which allows us – and Hegel – a relatively open future. And one of the motivations for this work was, as we recall, Heidegger's critique of Hegel's narrow concept of time.

Moment II: Heidegger

In a later book, Malabou writes that the reader of *The Future of Hegel* couldn't know whether the book was a reading of the development of Spirit or whether it was a discussion of the fundamental principles of the universe. She writes, «After reading *The Future of Hegel*, it is not clear whether plasticity is a strictly Hegelian notion or whether it is a wider hermeneutic instrument, a smuggler trafficking between dialectic, destruction, and deconstruction. The plasticity of *The Future of Hegel* therefore lies in wait for its own future» (Malabou, 2009, p. 22). What she does in her 2004 book *Le change Heidegger (The Heidegger Change)* (Malabou, 2004a, 2012) is therefore, first, to let Heidegger speak, and second, to connect the concept of plasticity to Being itself. The way she does this is by «interrogating the very concept(s) of change underlying the destruction and deconstruction of metaphysics» (Malabou, 2009, p. 26).

Malabou's reading of Heidegger, as it appears in *The Heidegger Change*, follows the same motive, approach and logic as her reading of Hegel. In the same way that she moulds the concept plasticity into the key for reading Hegel, she turns the concepts Wandel (change), Wandlung (transformation) and Verwandlung (metamorphosis) into the structuring concepts of Heidegger's philosophy. These concepts are "omnipresent in [Heidegger's] texts" (Malabou, 2012, p. 1), which to Malabou is both a reason why the triad has been repeatedly overlooked and why they are interesting to examine more closely. Heidegger's understanding of metaphysics as a changing form becomes the starting point for Malabou's mediation, and she concludes that Heidegger's constant return to the idea of the primordial transformation first of all opens up for a new Heidegger, one whose infamous anti-semitic "Black Notebooks" are not the necessary result of his thinking (Malabou, 2012, p. 273ff). Second, Malabou's study presents a changed Heidegger whose philosophy allows her to claim that "ontology is nothing besides an economy" (Malabou, 2012, p. 270), and that it is the changeability of the form itself which is that "everything depends" on in terms of formulating an ontology and discussing the history and destiny of metaphysics. Malabou's approach is unique, Tracy Colony argues, because former readings of Heidegger have been structured around ontological difference and not the form's difference from itself (Colony, 2015, p. 105).

An example of this structure is Malabou's close reading of Heidegger's text «Plato's Doctrine of Truth». Malabou finds that Heidegger's reading of the allegory of the cave represents several types of change simultaneously. First, the allegory describes a change *in the prisoners*: «the change brought about *in* the soul of the prisoners by their *formation* (*paideia/Bildung*)». Second, it shows the change the allegory itself undergoes when it shows us how Plato changes the contents of the concept of *truth*. Thus the text is under two authorities simultaneously: Plato's and Heidegger's. Heidegger provides a new way of reading Plato, where the very change in the concept of truth is set front and centre (Malabou, 2012, p. 55). And we should of course also recognize that the text is now also under a third authority, namely Malabou's: By showing how Heidegger reads Plato, she uncovers one relation and adds her own. The implication is of course that the present author adds their own as well – and that the present reader does, too. Each reading adds a layer of thinking which is itself changed and changes metaphysics. This (ex)change both constitutes what Malabou calls a fundamental economy, as well as indicates that change precedes form and is thus originary.

The idea of change as the primordial state of form implies that essence only come into being when change has already happened. «The fantastic» in Malabou's terminology is «the visibility of being

granted by the latter's molting, the visibility of the molt of being through which being is revealed to be nothing—but its mutability» (Malabou, 2012, pp. 53-54). In other words, «the fantastic» is the state of becoming visible only after the form has consolidated as a phenomenon of the past. Essence then must be seen as something always already *past*.

In this perspective, metaphysics is also understood as a *plastic form*, because it changes as philosophy develops, and because it represents a history which changes direction but still remains consistent. And change will always be the beginning of thinking because it, too, can only be understood when it has become visible. Malabou explains this by marking the difference between the *image* and the *concept*:

The fantastic: the locus of originary (ex)change can only be invested with images. The concept falls forever short of it. Because ... the commencement of metaphysics—the setting into form and on its way of the first (ex)change—coincides with the vesting of the image as the inaugural event of being (exchanged): idea, essence, face, picture (Malabou, 2012, pp. 71-72).

Malabou's treatment of Heidegger is radical and turns metaphysics into an instance which is always already changing – something which paradoxically also puts Malabou's own ontology under debate, because plasticity as an ontological principle inevitably also becomes *fantastic*, that is, something which is only visible when it has become essence. In several texts (Malabou, 2007, 2009), Malabou underlines that plasticity remains nothing other than a *schème moteur* – motor scheme – which will have to be replaced when its role in metaphysics is over.

Moment III: Derrida

Malabou uses the term *schème moteur* in texts where she discusses Derrida's philosophy. Let us enter into one of these discussions to clarify the term. Examining *Of Grammatology*, Malabou argues that «grammatology» was never meant to be a «positive science» and never had the possibility of becoming one. First, she points to Derrida's own presentation of grammatology as an impossible science, and that *Of Grammatology* was an attempt to show precisely that. Second, Malabou claims that Derrida's concept *writing* constituted a paradox or logical weakness. She suggests – perhaps not surprisingly – to call this paradox *plastic writing* (Malabou, 2007).

This paradox surfaces in a discussion of how Derrida (re)defines the concept of writing. Whereas the «vulgar» or «narrow» definition of writing is the immediate, that is, the connection between sign and graphics, the «enlarged» definition is something that covers «'the entire field of linguistic signs,' which is also to say, the entire field of human practice» (Malabou, 2007, p. 434).

Defining writing as nothing more than the transformation of spoken to written language, as a grammatology would do, would be to accept the idea that there is a natural connection between voice and sign (Malabou, 2007, p. 434) – but such a connection doesn't exist. Writing is therefore not radically different from other forms of human signage, such as spoken language. For Derrida, language and all forms of human practice therefore must be on the same level of logic, and therefore, writing can no longer be seen as something radically new.

Instead of creating a new term, Derrida chooses to *enlarge* writing, because the narrow concept in itself represented a radical break with what was before. «It threatened the desire for living speech from the closest proximity, it *breached* living speech from within and from the very beginning» (Der-

rida, 1998, quoted in Malabou, 2007). Thus no other concept can represent a greater break with the narrow concept than the enlarged one.

Malabou argues that the transition from «narrow» to «enlarged» writing reveals a paradox, because it forces new questions: What allowed this enlargement? Why did the concept allow itself to be enlarged? How can a philosopher change the meaning of a concept? And most importantly: *Can one understand the change of a concept from a different dynamic or logic than the language's own?*

These questions, Malabou argues, suggests a *different logic* than the one suggested by Derrida. She questions (and answers):

If it is true that writing comprises language in its totality, can one argue, given the extension of the meaning of writing, that the passage from the common signification to its original signification may also be ascribed to the work of writing? Or to the contrary, is it necessary to think that an original modifiability, not reducible to the single operation of writing, is initiated from the beginning as well? It is this modifiability that I call 'plasticity' (Malabou, 2007, p. 434. Emphasis in original).

Here, too, she suggests that the form – understood here as the concept *writing* – has a capacity for change which precedes the form – or concept – itself. «If this is true, then modification, the operation of enlarging the concept of writing, would escape the grammatological field: it would be impossible to produce, in the framework of the science of writing, the conditions of the possibility of the plastic re-elaboration of the concept of writing. *The expansion of the concept of writing is not necessarily, or not uniquely, a graphic gesture»* (Malabou, 2007, p. 435).

This is an important point for Malabou because Derrida elsewhere seems to explain changes in language as historical movements or the coming-to-light of always-already-there aspects of the text. Derrida famously claims that "There is nothing outside of the text [Il n'y a pas de hors-texte]". This is because he understands language as relations of difference (différance with an 'a' in his terms) – a word is what it is only because it isn't what it's not. As no signifier has a necessary relation to its signified, the attempt to get to the original and originary signifier is futile. Everything is therefore bound in context, and so there can be nothing outside of it (Derrida, 1998, p. 158). Since a signifier has a necessarily arbitrary relation to the signified, and its meaning is dependent on the signifier's relation to other signifiers, meaning is consistently delayed and deferred. This delay and deference, which Derrida sees as the non-centered center of the structure, is what he calls the *supplement*.

To Derrida, the supplement both *adds to* and *replaces* what it is meant to supplement. To Rousseau's claim that writing is nothing more than a supplement to speech, Derrida answers that «[t]he supplement adds itself, it is a surplus, a plenitude enriching another plenitude, the *fullest measure* of presence. It cumulates and accumulates presence» (Derrida, 1998, p. 144. Emphasis in original). But because the relation between the signifier and the signified is arbitrary, this presence can't be positive, but rather, the accumulated presence of another signifier. And so we have come only so far as to add another supplement to the chain and no closer to discerning the positive meaning of the sign, conceding that the supplement is both an addition and replacement. On the one hand, the supplement is thought to add to and enrich the original sign, thereby also increasing its presence. On the other, the

supplement is dependent on and refers to the original sign, and this relation simultaneously constitutes a replacement. If writing is a supplement to speech, it means that writing adds to speech by producing speech where and when there is none. Us reading Derrida is an example of this. But by the same gesture, inherent in the delay of the sign, writing simultaneously replaces speech because it takes the place of speech where and when there is none: "It intervenes or insinuates itself *in-the-place-of*; if it fills, it is as if one fills a void. If it represents and makes an image, it is by the anterior default of a presence" (Derrida, 1998, p. 145).

To Derrida, this continuous chain of supplements is a feature not only of writing, but of language and thought itself. He writes,

what one calls the real life of these existences of «flesh and bone,» beyond and behind what one believes can be circumscribed as Rousseau's text, there has never been anything but writing; there have never been anything but supplements, substitutive significations which could only come forth in a chain of differential references, the «real» supervening, and being added only while taking on meaning from a trace and from an invocation of the supplement, etc. And thus to infinity (Derrida, 1998, p. 159).

Moving not to infinity but one step further: the act of reading a text is also captured inside this network of difference and chain of supplements. It is in fact not possible neither to avoid discovering tensions like the one present in the word *supplement*, nor to force the discovery: "In the deconstruction ... one does not make a choice" (Derrida, 1998, p. 62).

Malabou disagrees that there is no choice to be made and argues that writing as a concept wouldn't have been enlarged unless Derrida was there to do the job. What Derrida does when he enlarges writing, according to Malabou, is transforming it into a schème moteur, or in other words:

an encounter of a pure image, that is, of a concept—here arche-writing—, or difference—with an existent real, given to intuition ... [it] is a kind of tool capable of appropriating the largest quantity of energy and information from the text of an epoch ... To summarize, the 'enlarged' meaning of writing is at once intuitively given and conceptually constructed (Malabou, 2007, p. 437).

A *schème moteur* is in other words a concept capable of meeting and absorbing the intuitively given, in other words a concept capturing the spirit of the times. The reason why these *schème moteurs* arise is that thinking functions as a «schematizing process». In the same way that *the fantastic* describes the coming into vision only after change has happened, thinking is a synthesis of the intuitively given and the conceptually constructed. We can only understand it after it *has* changed and thus stands out for us (Malabou, 2007, pp. 437-438).

And, Malabou says, what stands out for us *now* is a turn *from* writing as a *schème moteur*, like Derrida described it in 1967, *to* plasticity as the replacement. In genetics, the metaphor of the code is weakened. In neurobiology, *formation*, *transformation* and *reshaping* has become more important than the *trace*. In cybernetics, the program is «no longer even the master word». Everywhere around us, the graphic is being replaced by the plastic (Malabou, 2007, pp. 437-438).

If plasticity is the schema of our time, then logically it would follow that it too would have to make way for what comes after. Malabou's elaboration of the concept is, as she says, «tributary to a historical understanding and thus destined to be transformed, modified and changed. In this sense, the present explanation on the basis of plasticity is not definitive. Plasticity, like writing, is only a supplement» (Malabou, 2007, p. 441). If change is at the heart of ontology, then what will be revealed as the essence of our thinking today and what twists and turns it will take from here on, remains to be seen.

What Changes?

The Hegelian, Heideggerian and Derridean moments in Malabou's philosophy paint one portion of the picture of *plasticity* as an ontological principle. Its importance is found in its upheaval of the concept of change, which could have conceptual repercussions for the whole idea of ethical-political education. As the Nordic model incorporates an idea of ongoing change, the way change is construed should have consequences for how ethical-political education within the Nordic model is thought. I will outline two aspects where this might come into play: the change that a concept undergoes, and change as that which ethical-political education in the Nordic model might facilitate or produce.

Before I describe these two aspects, there are two facets to plasticity that should be emphasized. One is plasticity's incorporation of concepts into the thinking of forms, and the other is plasticity's implicit relationality: if form receives and donates form, *every* form receives and donates form to *every* form.

The first aspect is that the concept "the Nordic model" itself is a changing form. As Alfred Oftedal Telhaug points out, important features of the Nordic model have changed considerably (2006). Yet it remains recognizably itself – form has changed while remaining the same. Oftedal Telhaug's study (2006) as well as others (Antikainen, 2010) show that the Nordic model has changed in a neoliberal direction in recent history. In light of plasticity, we can think that this change is caused by political events and currents, but also that there is at every turn a possibility to change that trajectory. Oftedal Telhaug shows that there has been no lack of criticism towards the neoliberal trend in education, and discusses whether the Nordic model can still serve as an ideal of an educational system for prosperity and equality. He concludes by suggesting that it might (2006, p. 279). Whatever conclusion we reach in this discussion, plasticity urges us to put in the work to keep the good bits and reject the bad. If everything is changing anyway, we might as well influence what we can in the way that we can.

The second aspect is that ethical-political education within the Nordic model should incorporate form's propensity to change and emphasize the student's role in inflicting change. As a contrast, R. S. Peters' well-known metaphor of education as the "initiation" of the children who are "barbarians outside the gate" into the community of education (Peters, 2015, p. 104) can't hold in the paradigm of plasticity. The simple fact that the citadel realizes that there are barbarians outside the gate will change the citadel, not to mention the multitude of changes that will take place once the barbarians enter. Plasticity's relational character implies that everyone can contribute to the development of society. Ethical-political education should thus instill in the student not only that they can contribute, but that they are always already doing it. This responsibility should not be taken lightly.

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Article 2

Can we kill the Bildung king?

The Quest for a Non-Sovereign Concept of Bildung

Hogstad, Kjetil Horn. (2020). Can We Kill the Bildung King? – The Quest for a Non-Sovereign Concept of Bildung. *Educational Philosophy and Theory*. doi:https://doi.org/10.1080/00131857.2019.1707655

Article 3

Is (It) Time to Leave Eternity Behind?

Rethinking Bildung's Implicit Temporality

Hogstad, Kjetil Horn. Is (It) Time to Leave Eternity Behind? Rethinking Bildung's implicit temporality. Accepted for publication in *The Journal of Philosophy of Education*



Is (It) Time to Leave Eternity Behind?

Rethinking Bildung's Implicit Temporality

Abstract

Motivated by Gadamer's identification of Bildung's 'Vorbild-Bildung-Nachbild' (model-process-result) structure, a historical tracing of the Christian messianic heritage in Bildung is conducted. As Bildung grows into an educational concept with global aspirations, this heritage might prove a substantial theoretical obstacle. As an alternative to the Christian messianic conception of time, Crockett and Malabou's concept "plastic time" is presented. Whereas Christian messianic time collects its drive from the eternal which is (not) to come, plastic time collects its drive from the "synaptic gap" instead, the creative and constructive space located and organised in the human body. Crockett and Malabou argue that plastic time might allow the deconstruction of Christianity, and, this article suggests, consequently also of Bildung. A formulation of Bildung that can go beyond Western thinking would be a shift that might have consequences for education generally.

Introduction

A certain model of time appears implicit in the German educational concept Bildung. This model might be called Christian messianic thinking, and thus ties Bildung it to a specific metaphysical history, the present article suggests. The aim is to contour that model and present an alternative called 'plastic time'. Elaborated from Catherine Malabou's ontological principle 'plasticity', 'plastic time' appears as a model of time that might challenge teleological thinking in education.

As Malabou's philosophy is not yet very common in philosophy of education, a few words on her main concept plasticity before we go further are in order. As part of what might be called the post-linguistic materialist turn in French philosophy (James, 2012), Malabou establishes a theory of form on the basis of the concept 'plasticity'. In Malabou's dressing, this concept

represents the meeting point between form's capacity for change, resistance, and accident. Plasticity understands form as neither totally rigid nor totally fluid, but as the dialectical intermediary between these two extremes. Plasticity centres on form's (temporal) difference from itself and not form's difference from other forms (Malabou, 2005). Plasticity is in other words an ontological principle focusing on development and change.

Reading Hegel, Malabou (2005) identifies and elaborates 'plasticity' into a lens through which to read Hegel's oeuvre. From there, Malabou continues to develop plasticity by allowing her to counter his critics Heidegger, Kojève, Kant, and others, informed by deconstructionist theory and neuroscience, Malabou presents plasticity as the material and materialising process where creation, resistance, and accident come together (Malabou, 2008; Malabou, 2010; Malabou, 2012a; Malabou, 2012b; Malabou, 2012c; Malabou, 2016a; Malabou, 2016b Peim, 2017; Peim, 2020). It is the "void" that allows the unexpected, the intended, and the given, to give form to form (Malabou, 2015a).

While this 'void' is relatively new to educational theory, some thinkers have approached plasticity already. Emile Bojesen argues that plasticity's emphasis on changeability opens up for a view on education that extends beyond childhood into all stages of life, and outlines a concept of re-education appropriate for all ages. He insists that our capacity for plasticity should instil in us a certain responsibility in the teacher but also the learner (Bojesen, 2015). Jasmine B. Ulmer has elaborated an approach to policy and methodology where 'plastic reading', a creative, material and materialising hermeneutic. According to this, structures, be they policy, concrete or persons, can be shaped and reshaped, but never return to their original shape (2015). Kaja J. Rathe argues that plasticity's material connotations can provide the grounds for a rethought biological conceptualisation of rationality (Rathe, 2020).

Nick Peim (2020) argues that plasticity forces us to face the ontology of life itself in educational thinking, an approach that lets us understand education in terms of biopower while simultaneously dismissing education's 'redemptive' aspirations. Benhur Oral (2020) puts plasticity's emphasis on changeability together with Buddhist thinking, arguing that plasticity gives us the apparatus to challenge conceptualisations of subjectivity, (non-)humanity, and variations thereof. Anna Kouppanou (2020) conducts a plastic reading on Malabou's

examination of Heidegger and extends this to a rethought conceptualisation of metaphoricity and childhood. While these studies are diverse to the extreme, they convene on a single principle: plasticity as the void that allows for change even in formerly thought static entities.

One example of a formerly thought static entity is found in Malabou's likening of the "I" to the brain. While the brain had previously been thought as an unchanging machine, neuroscience reveals that the brain is continually changing (Malabou, 2008). For Malabou, the "I" is nothing but "[a] brain that changes itself. That is exactly what 'I' am" (Malabou, 2010, p. 82). The prevalence of neurobiological metaphor in our age is one reason why Malabou chose this particular word as her main concept. In a similar reasoning to Derrida's when he "enlarged" writing to an ontological principle (Derrida, 1998, p. 10ff), Malabou identifies plasticity as an already prevalent metaphor in neuroscience and other fields (Malabou, 2005, p. 192; Malabou, 2007; Malabou, 2010). Asking why this metaphor, with all its potential philosophical salience, remains unexplored in Continental philosophy, Malabou 'enlarges' plasticity to a "motor scheme" (Malabou, 2010, p. 12ff). Motor schemes are models or metaphors that resonate in the *geist* of our age and give shape to our thinking. Tying together language, thinking, culture, imagery, imaginaries, mood and materiality, Malabou defines motor schemes thus:

A motor scheme, the pure image of a thought—plasticity, time, writing— is a type of tool capable of garnering the greatest quantity of energy and information in the text of an epoch. It gathers and develops the meanings and tendencies that impregnate the culture at a given moment as *floating images*, which constitute, both vaguely and definitely, a material "atmosphere" or *Stimmung* (Malabou, 2010, p. 13).

In certain ways, Bildung clearly resembles a motor scheme. It relates to our outlook on epistemology, thinking, power, and individuality (Masschelein & Ricken, 2003), and its content is under constant negotiation (Gustavsson, 2014). Rebecca Horlacher writes that "Bildung [is] something important and significant; it is on everyone's lips, but no one knows what it really means" (Horlacher, 2004, p. 410). Even so, Bildung is an explicit part of schooling and school policy around the world (Ministry of Education and Research [hereafter

MER], 2019; Sjöström, Frerichs, Zuin, & Eilks, 2017). Bildung, then, seems to be a concept tightly linked to culture and the thinking of culture, to capture and develop educational thinking. It appears that vague and definite moods, and other material instantiations are gathered in, and emanate from it. It is a motor scheme.

As an educational concept, Bildung incorporates culture, aesthetics, self-cultivation, political awareness and engagement (Gadamer, 2013; Løvlie & Standish, 2002). Its conceptual heritage is Christian, and it is being used around the world in increasingly global conceptualisations (Gustavsson, 2014; Horlacher, 2016; Sjöström, Frerichs, Zuin, & Eilks, 2017; Sørensen, 2015). The concept is often promoted as an alternative to instrumental education (Tröhler, 2012). Bildung can be found as an explicit goal for education in the Norwegian national curriculum (MER, 2019). The concept lends itself to educational thinking and practice that emphasises self-development and self-reflection, with the aim to break up preconceptions and stiffened categories for thinking (Gadamer, 2013). Furthermore, it establishes the individual as embedded in a cultural and social context (Løvlie, 2006; Sørensen, 2015; Vásquez-Levy, 2002).

This article begins from two interconnected premises. The first is that that Bildung can be thought of as a motor scheme. As this premise establishes Bildung as a Malabouian semiotic instantiation, it implies the second premise: that Bildung is fundamentally plastic. It is a concept under continual formation and transformation, unable and unwilling to permanently settle. It reflects the educational thinking of our age, but developing it demands revealing its tacit presuppositions, that is, its undiscussed metaphorical content.

The present article suggests that one such presupposition is a Christian understanding of time. This must be faced if Bildung is to be understood in a cosmopolitan, global, or ecological way, as is an ambition often found in contemporary theorists (Biesta, 2002; Bohlin, 2013; Gustavsson, 2014; Taylor, 2017). The point is not to dismiss the concept's Christian legacy, but to expose it to contribute to the concept's capacity for global perspectivation, examination, and use. Contrary to a common trend in Bildung research (Tyson, 2016, p. 361), the aim for this article is not to arrive at normative conclusions, but to focus on the aforementioned point of contention so as to raise the possibility for new questions and new educational

thinking with other implications. This article should in other words be read as an attempt to set the scene for new questions and new thinking in Bildung and education.

In the following section, what will be called the 'Vorbild–Bildung–Nachbild structure' will be identified as an underlying premise of temporality in the thinking of Bildung. This premise, it will be suggested, has a Christian messianic basis, which ties Bildung to what might be called Western history and thinking. Then, a historical tracing of what could be seen as the messianic metaphorical heritage in Bildung will be drawn. In the subsequent part, that heritage will be contrasted with a 'plastic' way of thinking time, developed by Clayton Crockett and Catherine Malabou (2010). In the last part, some new questions and suggestions for further research in educational thinking will be presented.

Vorbild-Bildung-Nachbild

The Vorbild–Bildung–Nachbild structure refers to the relationship between *Vorbild*, that is, the model or ideal; *Bildung*, the process by which the ideal is sought; and *Nachbild*, the resulting image. This tripartite structure is discussed by Hans-Georg Gadamer in *Truth and Method*:

the word Bildung evokes the ancient mystical tradition according to which man carries in his soul the image of God, after whom he is fashioned, and which man must cultivate in himself. (...) in Bildung there is Bild. The idea of "form" lacks the mysterious ambiguity of Bild, which comprehends both Nachbild (image, copy) and Vorbild (model). (...) In accordance with the frequent transition from becoming to being, Bildung (...) describes more the result of the process of becoming than the process itself (Gadamer, 2013, p. 10).

In Gadamer's presentation, Bildung is what contains, relates and overarches Vorbild and Nachbild. Sven Erik Nordenbo clarifies the relation between the result and the process thus:

"[T]he fact that somebody or something becomes an image assumes, in a certain sense, that somebody or something is depicted. [Bildung] does not, therefore, refer primarily to somebody or something that does something to somebody or something, but to an image — a model — *of*

which somebody or something is to become an image or model (Nordenbo, 2002, p. 341).

According to Gadamer and Nordenbo, the ideal (which resides in the past) and resulting image (which is projected into the future, but is only ever realised as past) meet in the process of Bildung – which happens continually. Both writers agree that the subject's active engagement is required in "the standard German understanding of the concept as an educational idea" (Gadamer, 2013, p. 10; Nordenbo, 2002, p. 341). It seems that a linear temporal phenomenology is assumed in order to make sense of the Vorbild–Bildung–Nachbild structure: the Vorbild must be formulated before it is thought to come to achievement. Thus it resides in the past and the future simultaneously, as it refers to a projected future which was formulated in the past, before they all come together in eternity.

The Vorbild–Bildung–Nachbild structure might be read as concurrent with Christian messianism in the sense that it seems to depend on a future that is (not) to come. In short, this article presents the argument that the structure Vorbild–Bildung–Nachbild depends on what will be called a Christian model of time. Jacques Derrida has challenged and reformulated this as "messianicity without a messiah" (Derrida, 2006). Derrida cautiously considers the notion that "the messianic appeal belongs properly to a universal structure, to that irreducible movement of the historical opening to the future, therefore to experience itself and to its language (expectation, promise, commitment to the event of what is coming, imminence, urgency (...))" (Derrida, 2006, p. 210). The notion that 'the [Christian] messianic' remains in Bildung is the starting point for this article. Let us move to the Christian heritage of the temporality of Bildung.

Bildung's Christian Heritage

In order to be able to discuss Bildung's implicit temporality, it is useful to try to establish a meaningful point of reference. It is of course not possible to distill an element or a temporality that is common to all theories of Bildung or its heritage. Therefore, this article will centre on a point of concurrence between Christian thinking and the thinking of Bildung. As there are many variants of Christianity and Bildung thinking, this article will not be able to represent

them all. Instead, it will focus on what might be called Christian messianic thinking, a common model of Christian temporality.

This model implies linearity from Creation until Salvation, when radical change occurs. Christian messianism is often seen as an integral part of Christianity's history as its radical break with Judaism (Robbins, 2007, pp. 10-11; Barua, 2011, p. 155). Even in radical and liberal theology this appears to be the case. Hans Küng argues, radically, that Christianity is only one among many possible expressions of God: "Christianity appears in world history just as relative as all other religions" (Centore, 1992, p. 400). Küng writes:

"As far as the future goes, only one thing is certain: At the end of both human life and the course of the world Buddhism and Hinduism will no longer be there, nor will Islam nor Judaism. Indeed, in the end Christianity will not be there either. In the end no religion will be left standing, but the one Inexpressible, to whom all religions are oriented, whom Christians will only then completely recognize—when the imperfect gives way before the perfect—even as they themselves are recognized: *the* truth face to face" (Küng, 1988, p. 255).

The pattern remains: At the end of time, time and thinking will not end, but bring about a new reality. Time gives way to salvation, which gives way to "the truth". This minimal version will be called "Christian temporality" in this article.

The claim has been made that Western philosophy in all shapes remains concurrent with this dimension of Christianity (Centore, 1992; Toulmin, 1990). The theologian Clayton Crockett and the philosopher Catherine Malabou argue that

after deconstructing western metaphysics and onto-theology, one sees that the most pervasive, profound and problematic spirit of what we call the West is named Christianity, and the need for its deconstruction coincides with what has been called "the return of religion" in contemporary society and thought (Crockett & Malabou, 2010, p. 16).

The consequence, they argue, is that deconstruction itself needs to confront itself with its Christian heritage, specifically the structure mentioned above. Even in Derrida's later work, where "messianicity without a messiah" is developed (Derrida, 2006), the general structure of radical change on a distant or never-occurring temporal "horizon" is retained as an indispensable feature. The structure of linear time running from Creation to Salvation appears to Crockett and Malabou as the seemingly unshakeable foundation and drive of deconstruction, Christianity, and Western thinking in general. Therefore, it needs to be challenged so as to afford deconstruction, Christianity, and the West to move beyond themselves. Philosophy needs to point out aporetic "knots" that can be untied so as to allow deconstruction to happen. The authors argue that the attempt to separate the West and Christianity will remain unsuccessful as long as the Christian temporal element in Western thinking is left uncriticised (Crockett & Malabou, 2010). If it is the case that the concept Bildung was established and developed within the framework of Christian temporality, and remains within it, it is worth scrutinising this point to open up the concept for a post-Christian, post-Western discussion.

In what follows, I aim to show that the concept Bildung remains within the logic of Christian temporality. This implies that the concept remains geographically and politically Western, impeding Bildung's capacity for renewal and moving beyond itself. A way of solving this might be to criticise its Christian temporal logic.

A History of Bildung

Any remaining connotation of representation, creation and the giving of shape contained in the word *Bildung* has a long etymological history. In medieval times in Germany, Bildung simply meant the shape, form or appearance of a human being (Hermeling, 2003, p. 168), quite literally – for instance, their face (Nordenbo, 2002, p. 342). The word was related to the word *Bild*, which was used for "image" and holy pictures. Today, *Bild* can be translated to "image, picture or metaphor". In the Middle ages, there was a strong relation between *Bild* and *bilden*, which means "to build, to shape, to form and to create" in a Biblical sense: In Genesis 1, 27, God creates man in his image (*Bild*) (Hermeling, 2003, p. 168). As we shall see in the following, a historical tracing shows that Bildung has historically been closely tied to Christianity. It is the suggestion of this article that these ties remain today.

The mystics in the thirteenth century were the first to associate Bildung with creation and rebirth, mirroring their image of God being reborn in the soul of humans. As God gave birth

to himself in Adam, God can be born in us. But after the Fall, there is a gap between God and the humans which has to be transversed if God is to be reborn in the soul. The process to achieve this is tied to a Neo-Platonist tradition which teaches that the soul is capable of receiving both sensual and spiritual impressions. The mystics thought that the only way for the soul to take on the form of God was to free itself from any sensual impressions, by what was called *entbilden*. "This act of rebirth of God and man alike, the mystical process of *inbilden* (imprinting), *überbilden* (transforming) or *bildwerdung* (becoming the image) reverses the separation of God and human being" (Hermeling, 2003, p. 169). To Meister Eckhart (1260-1328), Bildung was a continual shaping and reshaping of the soul that was a result of God's working on the individual. The ultimate hope was that the soul, by divine control, eventually would take on the form of God (Welz, 2011, p. 83).

Gadamer (2013) argues that around the end of the 18th century, "between Kant and Hegel", Bildung underwent a transformation. *Bildung* differentiated itself from *Kultur* into an inwardly oriented form of self-cultivation with clear conceptual undertones of religiosity. This differentiation evoked

the ancient mystical tradition according to which man carries in his soul the image of God, after whom he is fashioned, and which man must cultivate in himself (Gadamer, 2013, p. 10).

This cultivation is not simply about self-forming or self-formation, as Bildung evokes a richer heritage through its etymology. As we have seen, Bildung has the "ambiguity of Bild" and recalls both Vorbild and Nachbild, in contrast with the terms 'form' or 'formation'. In this way, Bildung connotes more strongly "the result of the process of becoming than the process itself" (Gadamer, 2013, p. 10).

During this time, the poet Friedrich Gottlieb Klopstock's (1724-1803) was one of the writers responsible for a religious elaboration of Bildung (Gadamer, 2013, p. 9). He presented the artist as the "god-like" creator and shaper of art, and the lover as giving form to the heart of the beloved. Entering deeper into a synergy between the material and the immaterial, Bildung during Klopstock's time became the "realization of the genuine self" as well as the unification with God. In the words of Friedrich Schlegel, a Klopstock contemporary, "Becoming God,

being human, educating (*bilden*) oneself are expressions that mean exactly the same". From then on, the association of Bildung with self-development remained (Hermeling, 2003, p. 171).

The idea that *Geist* represented the essential medium for thinking, the idea of the collective soul of a society, was pursued by Georg F. W. Hegel (1770–1831). In Susanne Hermeling's interpretation, Hegel proposes a successive development towards the unification of Geist with God, through stages and by the propulsion provided by dialectical doubt. Hermeling suggests his view on history could be said to follow the same pattern: Geist, in the form of The Holy Ghost's apparition, realises itself in the Geist of a people (a *Volksgeist*), which then represents the stage which the development of the world's Geist (*Weltgeist*) has reached. To Hegel, this shows how Geist's development is reflected in secular history (Hermeling, 2003, p. 172).

Since Hegel is such an important figure in the history of Bildung, I will pause here for a moment. Hegel's view on Bildung has been described as a process by which one "overcome[s] nature through the inculcation of beliefs, norms, and customs, which thereby become second nature" (Odenstedt, 2008, p. 559). This inculcation should happen early in life and prepare the child for formal education, which then may give rise to a third nature of 'acquired Bildung'. When this has happened, the individual "no longer simply takes the validity and significance of his [sic] culture for granted through the resources already available to it, he [sic] achieves reconciliation (Versohnung) with it through the adoption of a more reflective, universal point of view" (Odenstedt, 2008, p. 560). At this point, a more active and deliberate self-engendering takes place.

This self-engendering is a dialectical process where the subject encounters contradictions, gradually overcomes and incorporates them, and then run into new contradictions. In the passage "Lordship and Bondage" from the Phenomenology of Spirit (Hegel, 1977, p. 111ff), the dialectic is explained thus:

Self-consciousness is faced by another self-consciousness; it has come *out of itself*. This has a twofold significance: first, it has lost itself, for it finds itself as an *other* being; secondly, in doing so it has superseded the other, for it does not see the other as an essential being, but in the other

sees its own self. (...) It must supersede this otherness of itself. This is the supersession of the first ambiguity, and is therefore itself a second ambiguity. (...) This ambiguous supersession of its ambiguous otherness is equally an ambiguous return *into itself* (Hegel, 1977, p. 111).

The realisation that there is an *other*, someone who is like the self-consciousness but is another, is a contradiction and condition for self-consciousness. It has to acknowledge that there is another, and that the other is the same. In the other, self-consciousness recognises themselves and that they, too, are other to the other. The self-consciousness must resolve this contradiction, and can only do so by reconfiguring its conception of itself, that is, the "ambiguous return *into itself*". Odenstedt structures Hegel's description of this process as three stages:

- (i) Unreflected unity with one's natural state, and a corresponding neglect of otherness;
- (ii) Alienation from one's natural state induced by otherness;
- (iii) Reflective reconciliation between self and other (Odenstedt, 2008,p. 562).

In Hegel's Phenomenology of Spirit, the process continues until the last stage, Absolute Knowing. Here, the Spirit's absolute recognition of itself and its relation to God is posited as the goal:

The *goal*, Absolute Knowing, or Spirit that knows itself as Spirit, has for its path the recollection of the Spirits as they are in themselves and as they accomplish the organization of their realm. Their preservation, regarded from the side of their free existence appearing in the form of contingency, is History; but regarded from the side of their [philosophically] comprehended organization, it is the phenomenology: the two together, comprehended History, form alike the inwardizing and the Calvary of absolute Spirit, the actuality, truth, and certainty of his throne, without which he would be lifeless and alone. Only *from the*

chalice of this realm of spirits / foams forth for Him his own infinitude (Hegel, 1977, p. 493).

By positing the Spirit's insight into "the actuality, truth, and certainty of his throne" as the end point for the development of Spirit, Hegel's Bildung seems both in letter and in temporal structure faithful to the messianic temporality I have outlined above.

If we understand Absolute Knowing as the redemptive moment of the development of the phenomenology of spirit, then (comprehended) History appears as the way to salvation. Alexandre Kojève suggests that the dialectic can be illustrated by the shape of a closed circle (Kojève, 1969, pp. 105, 109) – the Spirit's search for Absolute Knowing closing the circle by dissolving the future into eternity:

This absolute Knowledge, being the *last* moment of Time–that is, a moment without a *Future*–is no longer a temporal moment. If absolute Knowledge *comes into being* in Time or, better yet, as Time or History, Knowledge that *has come into being* is no longer temporal or historical: it is *eternal*, or, if you will, it is *Eternity* revealed to itself (Kojève, 1969, pp. 148-149).

Kojève's Hegel, it appears, sees no possibility for a future after Absolute Knowing, as time transforms from temporal moments into eternity. History describes the line between the beginning and the end, which is eternity, revealed to itself, ending time by transforming it (see also Malabou, 2005, pp. 4-7).

The difference between History and comprehended History appears simply as a difference of vantage points: History as the retrospective view on what has happened, and comprehended History as seen from beyond the end of time, from the point of view of the eternal. Hegel has since been criticised for this exact point, that his "explication of the genuine concept of being (...) is nothing less than leaving time behind on the road to spirit, which is eternal" (Heidegger, 1994, p. 147). By positing a beginning and an end, Hegel's concept of Bildung appears to have an implicit messianic structure in that it follows a necessary path and can only really be understood from the viewpoint of eternity (Kojève, 1969, p. 108).

^{1.} Slavoj Žižek argues playfully that "Hegel really is the ultimate Christian philosopher" (Žižek, 2013, p. 112).

A Hegel contemporary, Wilhelm von Humboldt (1767-1834) distanced himself from a strictly religious concept of Bildung and entered into a more humanistic oriented religious mode of thinking. He saw Bildung as "the true purpose of human existence" (Hermeling, 2003, p. 174). Humboldt's concept of Bildung saw the freedom to pursue one's interests as the "ultimate task of our existence":

It is the ultimate task of our existence to achieve as much substance as possible for the concept of humanity in our person, both during the span of our life and beyond it, through the traces we leave by means of our vital activity. This can be fulfilled only by the linking of the self to the world to achieve the most general, most animated, and most unrestrained interplay (Humboldt, 2000, p. 58).

For Humboldt, Bildung was not about engaging with society, learning a profession, or being reunited with God, but *Selbstbildung* – the development of the self. As Humboldt's concept of Bildung relied on having the choice to follow one's interests freely, without the intervention from the state or professional life, the working class was effectively excluded. Bildung was in his elaboration a non-egalitarian, individualistic concept, tied strongly to a form of higher education which could provide the freedom necessary for such self-developmental pursuits (Horlacher, 2016, p. 61). Moreover, Humboldt's Bildung coincided with a post-enlightenment transition from the idea of "nobility of birth" to "nobility of merit", strengthening the notion that Bildung had to do with the individual's self-development and not only the relation to God, learning, or society (Hermeling, 2003, p. 174). Humboldt's concept of Bildung has thus played an important ideological role for education, particularly for higher education, and continues to do so today (Horlacher, 2016, p. 125).

After Humboldt, Bildung's reliance on individual freedom and subsequent attachment to higher education remained. The emphasis on self-development, however, seemed to strengthen the relation between Bildung and aestheticism at the cost of social responsibility and moralism. In the period leading up to the Great War, Bildung appeared more and more as a nationalist and exclusionary concept. Powerful voices saw German culture, validated, upheld and refined by Bildung, as superior to and unappreciated by other cultures (Tröhler, 2012, p.

156). In the wake of the second world war, it became evident that even well-educated (*gebildete*) people were implicated in atrocities on behalf of Nazism (Adorno, 2003; Fossland, 2012; Hermeling, 2003). The distance between the ideals concocted in the ivory towers and the rest of society was therefore an important theme in the May 1968 protests (Hermeling, 2003, p. 177). Effectively, the time had come for the concept Bildung to recover from a nationalist and supremacist concept into something else.

In the following decades, the philosophical educational discourse in Germany took a two-pronged shape. The 'empirical-analyticals' were those who had a more practical view on education. To them, Bildung in the traditional sense was not useful in the technological race, and as it couldn't resist fascism it should simply be left aside. On the other hand, those who proffered a 'critical-emancipatory science of education' shared the critique of the ideology of the concept and particularly that Bildung both in theory and practice did little to improve social conditions. But they were unwilling to objectivise the individual like the empirical-analytical approach demanded and therefore set out to reform the concept, especially its societally redemptive element (Hermeling, 2003, pp. 177-178).

In "the context of postmodern discourse" of the 1980s, the essence of the human and thus the entire foundation for humanist thinking was put under scrutiny (Hermeling, 2003, p. 180). Jean-François Lyotard's *The Postmodern Condition* (Lyotard, 1984) contested central elements of Bildung, such as "the abandonment of a teleological, normative approach and unity ...; the abandonment of a general, unified subject ...; the recognition of the thought that human reason is unstable and that therefore a complete understanding of reality is impossible" (Hermeling, 2003, p. 180). All of these critical elements seemed to produce their opposites: a radical plurality of norms; the supremely singular individual; and a plural approach to ontology and epistemology.

However, these critiques were pursued only by a minority of theorists. Hermeling mentions Niklas Luhmann, who elaborated an anti-humanist, system theory based Bildung where the *telos* is the process of learning itself instead of the realisation of the properly human. As a consequence, he replaces the word "human" itself with the word "autopoietic systems", meaning systems that have self-sustainment as their only purpose (Hermeling, 2003, p. 180).

Luhmann's Bildung was criticised for being a "subjectivism without subject" (Merz, 1997, in Hermeling, 2003, p. 180). Luhmann's system theory posits a synchronic principle for his concept of time: "everything that happens happens simultaneously", and by extension, "everything that happens does so for the first and last time". According to Luhmann, the basic unit in system theory is not the subject, but the system², which continually and simultaneously interacts with other systems (Luhmann, 1993, p. 34). An implication of this view is that everything that exists will change simultaneously, and none of the elements will be eternal, external or relative to the process of change (Luhmann, 1993, p. 35). Another implication is, perhaps, the one raised by Merz above, that subjective agency seems to disappears in a mess of ever-changing systems. This would constitute a radical move away from former theorists's focus on self-development and creation.

Bildung, The Divine, And Metaphors of Time

Insofar as the Vorbild–Bildung–Nachbild structure has inherited its structure from the motive of reunification with the divine in the eternal, we could perhaps also assume that it relies on a type of constancy that functions as the condition of possibility of change, i.e., the eternal. Considering the eternal as something 'beyond time' means extending the spatial metaphor to at least two spaces: The space that time provides, the 'inside' of time, and the space which surrounds time, the 'outside' of time, i.e. the eternal. The inside of time is where everything happens, and the outside of time is what allows us to consider any temporal aspect but the very present. In order to observe the past and the future, we are bound to remove ourselves from the present, insofar as we are construing the present as part of the unified distinction

^{2.} I understand Luhmann's concept *systems* as, among other things, human beings. The concept appears as a variety of the Aristotelian *form*. See *Metaphysics*, book VII: (Aristotle, 1984, p. 1623ff).

between past and future³. Construing time in this way implies considering the past, the present and the future as aspects of the same, as one 'thing' graspable by our mind.

We are bound to think of time as something that we can grasp with our understanding. To continue the spatial metaphor, time as a concept is 'smaller' than us because it is part of us; of how we think and act. While we conceptualise time to extend beyond our being, this conceptualisation inevitably takes place 'within' our understanding (cf. Gabriel, 2015). Martin Heidegger contends that all philosophical thought is concerned with this conundrum: "[p]hilosophy is the theoretical conceptual interpretation of being, of being's structure and its possibilities. Philosophy is ontological" (Heidegger, 1988, p. 11). Whatever is beyond our grasp, is "nothing" – the anxiety-inducing and productive realisation that we can only interpret what we know to exist. We know the "nothing" as what exceeds our understanding, and this constantly comes back to haunt us (Heidegger, 2011). Thinking is driven by our recognition that outside our knowledge, the "nothing" remains.

Ignoring this, we risk leaving education, Bildung and perhaps time itself as something smaller than us; unexplored. This might conceivably amount to a closing-down of the active, creative and open aspect that is so often desired in Bildung and education in general, because it presupposes a beginning, a process and an end. Assuming that Bildung is a motor scheme, its temporal aspect should not be considered above or outside scrutiny. That said, I am not certain that a *radical* alternative is possible – how, after all, would a concept of Bildung that was somehow 'bigger' than thinking, look or function? Where would it reside outside of thinking itself? Can we posit an alternative by challenging the implicit temporal linearity of Bildung?

^{3.} In what Luhmann calls "the European tradition", time is the unified conception of the distinction between *before* and *after*. This spatial metaphor explains time as a linear shape – a shape that necessitates a past, a future and a distinction between them. It also implies a metaphor of movement, according to which something (i.e. consciousness) moves along the line. This set of metaphors – space, distinction between before and after, and a movement in space – gave rise to a distinction between 'this set' and 'its opposites': between change and non-change; between transitoriness and eternity. The former being the realm of human experience, residing within the latter (Luhmann, 1993, p. 34)

Bildung's *ideal* (Bild) is formulated in the past but is supposed to (not) come to fruition the future. The *process* (Bildung) depends on a starting point and direction which was decided in the past, executed in the present, and has its goal in the future. The *result* (Nachbild) must be formulated in the present, referred to during the process, but can only be experienced once it has occurred, i.e. passed. The relation between past, present and future can only be inferred from an assumed third position, that is, a position that can oversee all three times simultaneously – the eternal. This logic remains religious, local, and restricting. If we consider Vorbild–Bildung–Nachbild an aporia, and its resistance as the heritage of Christian temporality, investigating this might open up for new questions and problems in the thinking of education and Bildung.

Two problems

Going back to the initial problematic, I first assume that Bildung can be thought of as a 'motor scheme'. This implies that Bildung can be investigated in such a fashion that the concept's underlying structures can be brought forth and scrutinised. I suggest that Bildung's structure Vorbild–Bildung–Nachbild is one such structure, which implies that our thinking of Bildung seems to be stuck in a Christian messianic model of time. Second, I suggest that if Bildung is to be meaningful outside of a Western context, either as an educational ideal or an educational concept that can be drawn upon for theoretical purposes outside of Bildung thinking, the temporal thinking implicit to Bildung should be exposed. In doing so, inherent contradictions and incoherencies are allowed to come to light, a move which in itself is a philosophical intervention (Malabou, 2007). But I wish to go one step further and bring together contradictions and incoherencies with an alternative way of thinking. The alternative is a 'plastic' view on time and will be elaborated in the following section.

Malabou's Plasticity

Plasticity appears primarily as an ontological model of change (Malabou, 2005; Malabou, 2007; Malabou, 2011b; Malabou, 2012a; Malabou, 2012c; Malabou, 2016b). In order to clarify what Malabou's model of change looks like and how it might affect the underlying assumptions of the idea of Bildung, I will in what follows give a short overview over Malabou's inspirations and how plasticity has developed over the course of her oeuvre. We

will see that Malabou developed the concept from her engagement with Hegel and his multiple uses of the term in his *Aesthetics* (Hegel, 1998; Malabou, 2005). Her book is titled *The Future of Hegel*, in the explicitly affirmative, seeking to reread Hegel in a way so as to argue that his philosophy and status as a thinker are not things of the past (Malabou, 2005, p. 1).

As we have seen, Martin Heidegger considered Hegel a teleological thinker who left "time behind on the road to spirit, which is eternal" (Heidegger, 1994, p. 147). Heidegger argues that Hegel prioritises the past at the cost of being, on the grounds that "a genuine *being* is what *has returned to itself*". It can "return to itself" because Hegel argues that its essence (*Wesen*) is to arrive at its (eternal) substance. Because of this, Hegel's focus on the past is also a focus on the eternal: "For *Hegel*, being (infinity) is also the essence of time" (Heidegger, 1994, p. 146). Malabou's ambition is to allow Hegel to speak against the criticisms launched at his teleological view on history and the seemingly determinist ("Absolute") quality of his temporality. She does so by negotiating the relation between the concepts *plasticity*, *temporality*, and *dialectics*. In short, plasticity takes place *as* temporality's self-differentiating capacity, and dialectics is what provokes change. Allow me to explain.

Plasticity as a concept takes on different meanings for Hegel, according to Malabou. One is the notion that "plastic arts" are valuable and that they also essentialise. Once marble has been shaped into a sculpture, it cannot go back to the starting point. The work of the artist is to extract this essence. Second is the process that individuals go through when they extract their own essence from their figurative slab of marble and become what Hegel calls "plastic individuals": free, substantial, independent, self-made. Such plastic individuals should be seen as a combined result of their preconditions and efforts, leading to the recognition that plasticity is a combination of reception and creation of form. And the relation between plasticity and temporality seems clear: insofar as change happens in time, the capacity for change must have a temporal element. Additionally, temporality itself is plastic because it self-differentiates. Future becomes present, then past. Time becomes its own other (Malabou, 2005, p. 9ff).

Plasticity gathers three core dynamics: the reception of form, the giving of form, and the loss of form. Put together, these three dynamics allow Malabou to read Hegel as if he anticipated Heidegger's critique that Hegel's concept of history, and therefore time, was locked in an Aristotelian teleology. If, as she writes, the task of Spirit "is to comprehend itself, to anticipate itself in everything that is now and is to come," then it "can never come face to face ... with the *event*" (Malabou, 2005, p. 4, emphasis in original). If the task of Spirit is simply to discover what is already there, it can have no room for the alterity that the unexpected would represent. Construing instead plasticity as the organising principle would emphasise formation instead of negation. Subjectivity would then develop as the result of the active, creative, accidental and destructive meeting of forms, and the incorporation and incarnation of these meetings (James, 2012, pp. 83-109; Malabou, 2005).

In the book that marks what could be called Malabou's "neurological turn" (Hogstad, 2020b), What Should We Do With Our Brain? (2008), she picks up a thread which was only briefly touched upon in The Future of Hegel, namely neural plasticity. There, she elaborates plasticity as a biological counterpoint to the obsolete metaphors of the brain as a machine. Whereas French philosophy continues to rely on substance dualism (Malabou, 2008; Malabou, 2015a; Malabou, 2016b), construing the brain as the static material counterpoint to immateriality and free symbolism, Malabou argues that neurological plasticity allows us to see them as aspects of the same. According to neurological plasticity, the brain is constantly changing throughout life, and in accordance with the choices we make in life. The philosophical repercussions of this new knowledge of the brain, according to Malabou, is that the a new paradigm for thinking the material and the symbolic has started to show itself (Malabou, 2008).

Discussing Heidegger's conception of change, she introduces the concept *the fantastic*, the invisibility of the form in the present and the becoming-visible once it has become past (Malabou, 2012c). Malabou examines a triadic structure in Heidegger's writings that to her surprise has been consistently overlooked: *Wandel* (change), *Wandlung* (transformation) and *Verwandlung* (metamorphosis). In the interest of seeing how these concepts might influence metaphysics, Malabou outlines an idea of form itself as *fantastic*. In her terminology, the fantastic denotes the process of attaining essence only when change has happened. In other words, no form can be thought until it has taken form, i.e. changed, and no form can change

except from its essentialised state. What this gives, in Malabou's thinking, is the fundamental notion that form is plastic: Form's capacity to change is fundamental, but simultaneously fundamentally indebted to its attained essence. Form changes freely, but not without bounds (Malabou, 2012c, p. 270).

Malabou's thinking elaborates a new way of construing the human as a biological, changing and changeable entity (Malabou, 2007; Malabou, 2010; Malabou, 2011b; Malabou, 2011a; Malabou, 2012a; Malabou, 2012c; Malabou, 2012b; Malabou, 2016b), according to which the age-old dichotomy of symbolism and biology are seen as reciprocal and co-dependent aspects of the same (Malabou, 2015b). But plasticity also designates the way the world appears for the human, because "[f]orm is the metamorphizable but immovable barrier of thought" (Malabou, 2010, p. 49) – i.e.: forms change, both how they appear to us and what constitutes them, but we cannot do without them. In this perspective, plasticity becomes an ontological principle with a materialist slant (Malabou, 2010). Plasticity's explanation of how neural pathways change according to experience, i.e. how culture incarnates itself by turning thought into (brain) matter, might represent a powerful critique of the nature/nurture dichotomy as it dismisses that either is sovereign or primary to the other (Malabou, 2008; Malabou, 2015b; Malabou, 2016a).

Approaching this field of problematics, I will turn to the argument developed in the article "Plasticity and the Future of Philosophy and Theology" by Clayton Crockett and Catherine Malabou (Crockett & Malabou, 2010). The authors argue that Christian temporality can be traced back to Aristotle, and that in order to criticise messianic thinking we have to engage with Aristotle and his linear, teleological model of time. Christian temporality, structured as the line between Creation, through Salvation, to Eternity, remains in Western thinking, they argue, even in conceptions that apparently challenge it. By contrasting Christian messianism with Malabou's concept plasticity, Crockett and Malabou suggest a different model of temporality. Their model does not depend on the Creation-Salvation-Eternity structure, but construes time as an "epigenetic" process in which temporality is a materialised and materialising, subjectivised and subjectivising process that finds its energy in its "synaptic spacing" (Crockett & Malabou, 2010).

Deconstructing the Linear Conception of Time

Malabou's self-appointed task is to reflect on whether "a genuine philosophical vision [would] be possible in the wake of deconstruction" (Crockett & Malabou, 2010, p. 16). To begin this reflection, Crockett and Malabou read Jean-Luc Nancy and Jacques Derrida who might both be understood as implying that the end of deconstruction and the deconstruction of Christianity are one and the same. After the deconstruction of metaphysics and onto-theology, Christianity remains the "most pervasive, profound and problematic spirit of what we call the West" (Crockett & Malabou, 2010, p. 16). What constitutes "the West" is often described in historical terms, as a trajectory from "ancient Greece and/or ancient Israel", a trajectory that has been described "in its vulgar form as progressive, in a more modern way as dialectical, or ... in its postmodern version ..., as messianic" (Crockett & Malabou, 2010, p. 17). As we have seen, Bildung represents one such trajectory.

Derrida is one of those who have thought the West in messianic terms. He construes messianicity as "an urgency, imminence but, irreducible paradox, a waiting without horizon of expectation" (Crockett & Malabou, 2010, p. 17; Derrida, 2006). For Derrida, messianicity should be thought of as without a messiah. It represents the waiting for something that is impossible to predict; something good which will not happen, and if it does, it will be by pure coincidence. Messianicity without a messiah retains the structure of the proposed messianic event, but attempts to do away with its deterministic element (Derrida, 2006). Derrida has thus not challenged the concept of time as the unified difference between the past and the future, and as such it seems that the problematic structure Vorbild–Bildung–Nachbild remains in the logic of "messianicity without a messiah".

The authors suggest that "messianicity without a messiah" has become popular recently because it coincides with what seems to be "a strategy to defend Eurocentrism". "Messianicity without a messiah" presents the historical European cultural development as an isolated event, unaffected by other cultures, even when such a development is demonstrably false. This strategy appears as a "desperate effort to 'save' the West by delinking a spirit of Christianity from western metaphysics" so as to allow Christianity to play the role of *Ereignis*, of "opening or inauguration as such" (Crockett & Malabou, 2010, pp. 17-19). Christianity is unfit to play this role (Crockett & Malabou, 2010, p. 20).

Derrida's "messianism without a messiah" occupies the same logical space as Christian temporality. The connection between deconstruction and Christianity is according to Crockett and Malabou not coincidental, but "essential". Deconstruction is embedded in a Christian heritage, and Christianity is built around a self-deconstructive structure. Heidegger's concept *Destruktion* was a part of his attempt to rid philosophy of preconceptions that concealed the true nature of the world. *Destruktion* is

a critical process in which the traditional concepts, which at first must necessarily be employed, are deconstructed down to the sources from which they were drawn. Only by means of this destruction can ontology fully assure itself in a phenomenological way of the genuine character of its concepts (Heidegger, 1988, p. 23)

Destruktion connotes the Lutheran concept destructio, which meant "destroy[ing] the outer shell in order to liberate the living kernel within" (Crockett & Malabou, 2010, p. 18). Furthermore, as the authors find in Derrida's On Touching – Jean-Luc Nancy, only Christianity can fulfill Christianity, that is, move beyond itself by way of producing its own salvation and thus subvert its own determinism. In this sense, Christianity is its own *pharmakon* – its own poison and cure. Poison because it represents a closing-down; cure because its openingup can only be provided by its self-deconstruction. If we accept Nancy's claim that Christianity and the West are "co-extensive" in the sense that any Western metaphysical thinking remains embedded in a Christian cultural heritage, we accept that both are "in and through [themselves] in a state of overcoming", that is, engaged with overcoming Christianity (Crockett & Malabou, 2010, p. 17). There seems to be no plausible way of delinking Christianity from metaphysics as Christianity doesn't appear other neither to metaphysics nor deconstruction (Crockett & Malabou, 2010, p. 19). The fundamental opening that Christianity would have to provide is already delivered by presence, parousia, Being (Crockett & Malabou, 2010, p. 20). In order to deconstruct Western temporality, apparently Christianity must be deconstructed; in order to arrive at the fundamental opening, apparently Christian temporality must be deconstructed – which has yet to happen (Crockett & Malabou, 2010, p. 21).

"Aristotle's definition of time in *Physics* IV remains the only framework within which any further western concept of time can be developed", the authors claim (Crockett & Malabou, 2010, p. 21). While messianic time is "conceived as non-temporal, or eternal" (Crockett & Malabou, 2010, p. 21), its assumption of eternalness reveals a structure of time as infinite and therefore Aristotelian. Messianic time is structured around the promise of salvation: "The God to come is thought as a being or a phenomenon who can only occur in an indefinite future" (Crockett & Malabou, 2010, p. 21), and of course only an endless future can provide indefinite possibilities for God to arrive (Crockett & Malabou, 2010, pp. 21-23). Perhaps Vorbild–Bildung–Nachbild operates within this same logic, as it too depends on an ideal that is not guaranteed or expected to arrive, or is guaranteed not to arrive.

Crockett and Malabou suggest that considering *Destruktion* and deconstruction from the angle of plasticity would establish both concepts as evolving, one derived from the other. The possibility for this evolution – their deconstruction – is granted by their originary plasticity "and not the other way around" (Crockett & Malabou, 2010, p. 27). What this brings is a temporal difference between *Destruktion*, deconstruction, and plasticity: *Destruktion* is tied to a linear conception of time and the Hegelian heritage. Deconstruction, on the other hand, considers time as spacing, or "the becoming-time of space and the becoming-space of time" (Derrida, 1998, p. 68). The incorporation of space into time is what paved the way for plasticity. From the perspective of plasticity, Being's originary feature appears to be change, which incorporates and keeps both *Destruktion* and deconstruction in motion. Plasticity thus sublates *Destruktion* and deconstruction. In Malabou's plasticity, subjectivation seems parallel to this movement because the brain, too, can be said to be originarily open and capable of incarnating time. The brain exhibits continual, material change as time passes (Crockett & Malabou, 2010, p. 27).

The plastic outlook on time brings a new perspective to subjectivity and the openness of the future. According to plasticity, time also has a form and should be considered as such. Crockett and Malabou argue that there are (at least) three recognisable forms of time: Circular, linear and plastic time. Circles are always relative to a centre, the (metaphorical) "God as that around which everything turns" (Crockett & Malabou, 2010, p. 27). Characteristic of this form of time is the eternal return and the implication that time itself is passive

compared with its centre. Linear time, on the other hand, is active in the sense that it grasps itself in consciousness as it passes, but *only* as it passes. Hegel gave us the modern expression of linear time, which originated in Christianity. Time as "plasticity itself" opens up these constricted geometrical forms and reconfigures time as a fragmented and "fractalized" form which "bifurcates" and exceeds what the subject is able to grasp, provoking and stimulating the brain's plastic capability, that is, "the ability to set up parallel networks, loosely connected inference-systems that do not run through a central processor or programmer" (Crockett & Malabou, 2010, p. 27).

Plasticity understood in this contradicts the idea that the brain is a vessel or tool for the mind. From the view point of plasticity, a radical integration takes place in which the self is constituted by the interplay between choice, habit, the will of others, social structures and other environmental factors, the forgetting and letting go of past experiences, and accident (Johnston & Malabou, 2013; Malabou, 2005; Malabou, 2008; Malabou, 2012a). Subjectivation, or the "originary fashioning of Being", should then be understood as a material process by which the material constitution of the body is given form. Form and its "originary ontological plasticity" also represents the limit of Being itself: "there is no Being outside an originary fashioning of Being. We have to think of the priority of the fashioning of form upon Being" (Crockett & Malabou, 2010, p. 27). If the limit of Being has been identified, then presumably it can be challenged.

By construing time as plasticity, the possibility opens up to deconstruct and move beyond messianic thinking and thus Christianity as such. The plastic form is an active, receptive and destructive branching, which provides time itself with creative power. Messianic time, in Crockett and Malabou's view, is understood in terms of the metaphor of death: Its potential is only realised when it has reached its definite end. It collects its drive from that which is not-yet-here. Plastic time is understood as the active, material and materialising process happening continually, "bring[ing] nothing to an end" (Crockett & Malabou, 2010, p. 27). Plastic time generates its own drive by opening up the "synaptic" gap (écart), the spacing which allows form its shape; a traversable threshold and not an absolute break; a gap where thinking can be born (Crockett & Malabou, 2010, p. 27).

Bildung, Education, and Plastic Time

The aim for this article has been to focus on Bildung's apparent reliance on Christian messianic time and present an alternative, represented by Crockett and Malabou's plastic time. This approach was chosen to open up for the possibility for new questions and new educational thinking, based on different conceptions and with different implications. Construed as an alternative to Christian messianic time, plastic time can problematise our concept of Bildung as it supposes that plasticity is the driver of time instead of the pull towards eternity. This might challenge messianic time's implicit fatalism in that it attempts not to presume a future. In what follows, I will outline some types of educational thinking that might have to be rethought in light of plastic time, and some new questions for further research.

I suggest – with some audacity, I suppose – that plastic time might flip our conception of education altogether on its head. It seems likely that the most fundamental notion inherent in the thinking of education is the belief that we can, to some extent or other, know the future. We observe that children become adults and understand that living in the way that we do, there are some things that adults need to have learned. In this sense, educational time integrates this realisation with the notion that we can form a curriculum that will meet both society's and the student's future needs, thereby presuming some knowledge of the future. Plastic time does not presume knowledge of the future in the same way, but focuses on the opening that allows for the unexpected, the new, the created, instead.

Educational time knows something about the future, but the ontology of education goes further and presumes more. Education can in some ways be said to have grown into a capillary type of power that integrates questions on the personal and societal level concurrently. Examples are hygiene and personal health, which both are taken to affect the public health; and technical and theoretical learning which are taken to affect economical and political stability and growth (Peim, 2020). In the Norwegian context, mental health auto-regulation techniques is a recent addition to education, with the ambition that the students learn "mastering [their] own life" (MER, 2019). This appears as a dramatic development of control following the Foucauldian "biopolitical" line that education has changed from being primarily

concerned with controlling the body to controlling the mind (Foucault, 1977; Peim & Flint, 2009).

Some theorists argue that a "biopolitical" development is also valid for the concept of Bildung. Over the last few centuries, (German) educational thinking has established Bildung as an ontological necessity for society, they argue. Bildung appears necessary because society as we know it depends on it existing. It seems, then, that Bildung cannot guarantee that education can be the redemptive or critical institution that it is usually thought to be (Masschelein & Ricken, 2003). This position has already been challenged on the basis of Malabou's plastic ontology which undermines the idea that education can be totalitarian in this way (Hogstad, 2020a).

Bildung's inherent ontological ties to Western thinking is a challenge to its usability as a global concept. Bildung has already been argued to be "a global and postcolonial concept" (Gustavsson, 2014). The question remains, however, whether this is actually possible as long as the concept remains reliant on Western metaphysics. One might also fear that Bildung's ties to Western metaphysics causes Bildung to disqualify itself from participating in what Torill Strand has called "[t]he cosmopolitan turn" in education (Strand, 2010). I suggest that it is this point that is currently the biggest hurdle for Bildung to remain relevant and productive.

Conclusion

In this article, the temporal structure Vorbild–Bildung–Nachbild, inherent in the thinking of Bildung, has been identified and contrasted with the metaphor 'plastic time'. The article has suggested that Bildung and education follow a sort of Christian messianic logic, supposing itself to mediate between past and future that is (not) to come. Plastic time, on the other hand, focuses on the plastic process of the coming-together of strands and fragments of time. Contrasting the Vorbild–Bildung–Nachbild structure with plastic time might allow us to think education as where the present is created. In this view, education's role in preparing the student and society in general for a future, could be construed wholly differently than in traditional Christian thinking.

One consequence could be that the *Bild* (ideal) of education had a completely different status. Plastic education and plastic Bildung would have to concentrate on the coming-together of time instead; an openness to the unexpected and the creation of the never before thought, of that which takes and creates time. Time understood as a materialising process would retain the idea of Bildung because it too represents a generative threshold between the particular and the general. It would, however, position Bildung outside of the Vorbild–Bildung–Nachbild structure, representing a new way of thinking Bildung in general. A plastic Bildung would have less to do with the ideals and expectations of parents, politicians and teachers, and more with what is actually happening – and what it might create.

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Errataliste

Doktorkandidat: Kjetil Horn Hogstad **Avhandlingstittel:** The Plasticity of Bildung – Towards a New Philosophy of Education

Side / linje	Originaltekst	Korrigert tekst	Kommentar
3 / 18	where this only remains implicit (Hogstad, Under review)	where this only remains implicit (Hogstad, forth- coming)	
4/6	Hogstad, K. H. (2020).	Hogstad, K. H. (forthcoming).	
5 / 9-10	doctoral thesis at the École Normale Supérieure	doctoral thesis at the École des Hautes Études	
36 / 22-	Hogstad, Kjetil Horn. (2020b). Towards a Plastic Starting Point: Rethinking Ethical-Political Education with Catherine Malabou. In Torill Strand (Ed.), Re- thinking Ethical-Political Education. Cham: Springer. Hogstad, Kjetil Horn. (Forthcoming in The Jour- nal of Philosophy of Edu- cation). Is (It) Time to Leave Eternity Behind? — Rethinking Bildung's im- plicit temporality.	Hogstad, Kjetil Horn. (Forthcoming in <i>The Journal of Philosophy of Education</i>). Is (It) Time to Leave Eternity Behind? – Rethinking Bildung's implicit temporality. Hogstad, Kjetil Horn. (2020b). Towards a Plastic Starting Point: Rethinking Ethical-Political Education with Catherine Malabou. In Torill Strand (Ed.), <i>Rethinking Ethical-Political Education</i> . Cham: Springer.	coming»